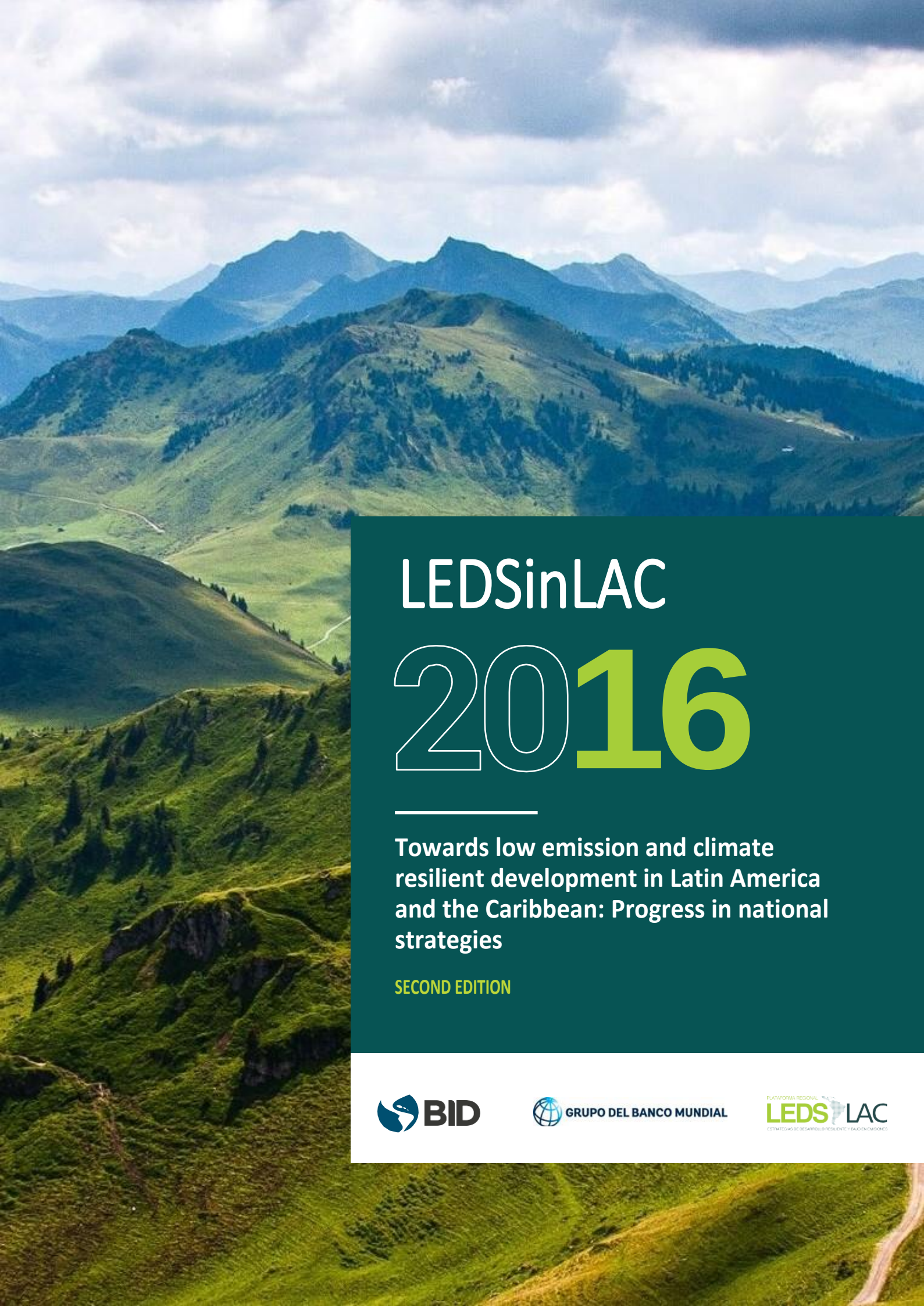

LEDSinLAC 2016

Towards low emission and climate resilient development in Latin America and the Caribbean: Progress in national strategies

SECOND EDITION

BID

GRUPO DEL BANCO MUNDIAL

PLATAFORMA REGIONAL LEDS LAC
ESTRATEGIAS DE DESARROLLO RESILIENTE Y BAJO EN EMISIONES

LEDSinLAC 2016

Towards a low emission and climate resilient development in Latin America and the Caribbean:
Progress in the national strategies

SECOND EDITION

IDB Inter-American Development Bank

WORLD BANK GROUP

REGIONAL PLATFORM LEDS LAC RESILIENT AND LOW EMISSION DEVELOPMENT STRATEGIES

LEDS LAC Secretariat is operated by Libelula with the support from CATIE:

libélula Gestión en Cambio Climático y Comunicación

CATIE Solutions for environment and development Soluciones para el ambiente y desarrollo

This report has been elaborated by the LEDS LAC Platform Secretariat with the contribution of representatives from several organizations. The findings, interpretations and conclusions hereby expressed do not necessarily reflect the opinions of the Inter-American Development Bank or the World Bank, their executive directors or the governments they represent.

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01

INTRODUCTION

According to the United Nations Environmental Program (UNEP), although the signing of the Paris Agreement during the 21st Conference of the Parties to the Framework Convention on Climate Change (COP21) in December 2015, and its corresponding entrance into force on November 4th, 2016, are important signs of the commitment of most countries around the world with climate actions, the truth is that humanity has not yet defined a line that enables a transition towards a stringent route for low emission development consistent with the maximum temperature goals established (UNEP, 2016a). "The emissions projected for 2030, even in the case all the commitments from Paris are fully implemented, will [still] lead the world to an increase in temperatures of between 2.9 and 3.4 degrees during this Century" (UNEP, 2016b).

This situation demonstrates the urgent need of working harder and more efficiently in moving from "climate" projects and programs parallel to the traditional development policies to a real transformation of the current development model, looking for one that fosters the accomplishment of the economic and social aspirations of all the nations of the world, taking into account the challenges imposed by climate change. The Regional Latin American and Caribbean Platform for Resilient Low Emission Development (LEDS LAC) has undertaken the commitment of supporting the countries in the LAC region and its partners in the international community throughout this transformation process through knowledge management, exchange, collaboration and mutual learning.

As part of its knowledge management tasks, the LEDS LAC Secretariat, with the support of the Inter-American Development Bank and the World Bank, presents the second edition of the report **LEDSinLAC: Towards a low emission and climate resilient development in Latin America and the Caribbean: Progress in the national strategies (LEDSinLAC 2016 from now on)**, as part of its efforts to systematize and disseminate information regarding the progress and the challenges of the countries in the region in designing and formulating strategies to move towards a climate compatible development.

The first edition of this report (LEDSinLAC 2015), which systematized the information of primary and secondary sources of 14 countries, was launched during the 21st Conference of the Parties of the United Nations Framework Convention on Climate Change (COP21 of the UNFCCC) in December 2015. The edition 2016, published in January 2017, includes the analysis of 17 countries: Antigua and Barbuda, Argentina, Belize, Chile, Colombia, Costa Rica, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Panama, Paraguay, Peru, Dominican Republic and Uruguay. Additionally, the new edition goes deeper into the analysis in a special section that summarizes a supplementary research on the inter-institutional coordination mechanisms.

In terms of the scope, the goal of this research is to portray the situation of the countries studied regarding design, formulation and implementation of LEDS. It is not aimed towards evaluating or comparing the progress of each country against an assumed "optimal" route or against the progress made by other countries. It does not intend to quantify the efforts of mitigation and adaptation for each sector in each country, but rather to identify the sectors where most of the mitigation and adaptation efforts are focused.

In the next pages, the readers will find a description of the background for this paper (Chapter II), the conceptual framework in which the analysis is included (Chapter III) and the methodology used in the research (Chapter IV). Then there are summary cards per country, which synthetize the relevant information compiled from primary and secondary sources during the research (Chapter V). Chapter VI includes a description of the main regional cooperation programs that are currently supporting the design and implementation of LEDS, followed by the analysis of the current situation and the trends (Chapter VII), and a chapter that is especially focused on the inter-institutional coordination mechanisms (Chapter VIII). Finally, Chapter IX contains the main conclusions of the progress analysis of LEDS in the region.

1 The acronym LEDS comes from the term in English for Low Emission Development Strategies; however, in this document and in the LEDS LAC work, it is interpreted as Resilient Low Emission Development Strategies, given the emphasis of the platform on the integration of climate change mitigation and adaptation agendas with development agendas.

Regional LEDS LAC Platform

The Regional Latin American and Caribbean Platform for Resilient Low Emission Development Strategies (LEDS LAC) is one of the regional platforms that belongs to the LEDS Global Partnership (LEDS GP), an international initiative founded in 2011, which aims to enable climate resilient and low emission development through coordination, information exchange and cooperation between countries, organizations and individuals.

LEDS LAC pursues this same objective but keeping its focus on the countries of Latin America and the Caribbean (LAC), seeking to become a regional point of encounter for a network of governments, cooperation institutions, non-governmental organizations, academy, enterprises and individuals that are working or could work in the development and implementation of LEDS. Currently, the LEDS LAC Platform has over 900 active members including governments, multi-lateral institutions and non-governmental organizations that are working in the development and the implementation of LEDS.

LEDS LAC supports its members by opening more opportunities for coordination, collaboration and synergy in the development and implementation of LEDS, which supplement the work done in this area and build on the progress of the active initiatives and networks in Latin America and the Caribbean, as well as in other regions. In turn, its objective is to contribute in capacity building and strengthening by promoting learning and information exchange, best practices and lessons learned between relevant stakeholders in order to raise awareness and improve the process for the elaboration and implementation of LEDS. Additionally, the Platform has publicly available tools for analysis, case studies, methodologies and other mechanisms that facilitate the implementation of LEDS in the region.

LEDS LAC is part of LEDS GP, but with independent governance structure, led by a Board of Directors that is in charge of guiding the work of the Platform. This Board of Directors is integrated by representatives from the following organizations:

ORGANIZATIONS	
Ministry of Environment Chile	EMBARQ Global Network
Ministry of Environment Peru	Asociación Sustentar – Argentina
National Institute of Ecology and Climate Change Mexico (INECC)	National Council on Climate Change and Clean Development Mechanism – Dominican Republic
United Nations Economic Commission for Latin America and the Caribbean (ECLAC)	United States National Renewable Energy Laboratory (NREL)
United Nations Development Program (UNDP)	Inter-American Development Bank (IDB)
UNEP DTU Partnership	Libélula–Climate Change Management and Communication - Peru
Latin American Development Bank - CAF	World Bank

The planning and implementation of the activities of the Platform are under the responsibility of a Secretariat operated by Libelula - Climate Change Management and Development, based in Peru, with the support of the Center for Agronomic and Tropical Investigation and Education (CATIE), based in Costa Rica. The Secretariat operates with funds from several partner institutions, including the United States Department of State through the National Renewable Energy Laboratory (NREL), acting as the Secretariat of LEDS GP; the Inter-American Development Bank (IDB), the World Bank Group and the European Union through its program EUROCLIMA.

02

BACKGROUND

By the end of 2015, the Secretariat of the LEDS LAC Platform published the first edition of the report LEDSinLAC – Towards a low emission and climate resilient development in Latin America and the Caribbean: Progress in the national strategies. Such report presented the results of about five months of research that were possible thanks to the support from the program CF-Assist from the Group of the World Bank.

The objective of the report LEDSinLAC 2015 was to provide a non-exhaustive overview of the work done by the countries of the region in terms of LEDS. However, the study was not limited to systematizing the information about the strategies as public policy instruments, but it also assessed the conditions of the institutional structure, the mechanisms for inter-institutional coordination, the nationally appropriate mitigation actions (NAMAs), and other initiatives that the countries did not identify as LEDS but that contributed to changes in the development pattern towards one that generates less greenhouse gas (GHG) emissions (GHG). It also approached the issue of funding and the link of the strategies with the Intended Nationally Determined Contributions (INDC).

The 2015 study included the analysis of 14 countries from the region: Argentina, Belize, Brazil, Chile, Colombia, Costa Rica, El Salvador, Guatemala, Jamaica, Mexico, Panama, Peru, Dominican Republic and Uruguay. An in-depth interview was done for each country (via telephone in most cases) with a person working in the government institution in charge of leading the climate policy. The information gathered from these interviews served as supplement to the information compiled from secondary sources, such as websites, laws, policies, climate strategies and plans, national communications, Biennial up-date reports (BURs), and other sources.

Given the good acceptance of the Report LEDSinLAC 2015, the Inter-American Development Bank offered the LEDS LAC Platform support to expand the analysis and formulate the current second edition. At the same time, the Program CF-Assist from the World Bank offered continuous support by financing supplementary research to go deeper into the status of the inter-institutional coordination mechanisms towards an effective climate policy, which would, in turn, contribute in the compilation of information for LEDS LAC 2016.

The financial support from IDB and from the World Bank, together with the contribution from the United States Department of State through the National Renewable Energy Lab (NREL) for the operation of the LEDS LAC Secretariat, allowed a team of professionals from CATIE, Libélula and independent consultants to work for a period of approximately 6 months, including over 80 interviews to government officials and other stakeholders from 17 countries, and the review of a large number of documents, web pages and other sources of information to elaborate the current document.

It is important to highlight that, although in 2015 the LEDS LAC Platform had incorporated the concept of resilient low emission development in its mandate, the research in 2015 had a strong emphasis in mitigation strategies and actions, even when the link with adaptation efforts had been investigated. The current edition tries to keep a better balance between the areas of mitigation, adaptation and the way in which they are linked to the development strategies.

03

BRIEF CONCEPTUAL FRAMEWORK: WHAT ARE LEDS?

The term LEDS appeared for the first time in the official documents of UNFCCC in the Cancun Agreement (2010), urging the countries to propose long term strategies to lead development through a low emission pathway. This agreement states that the low emission development strategies are critical to achieve a sustainable development (UNFCCC, 2010).

The introduction of the concept of LEDS in the international political discourse on climate change has promoted the creation of international initiatives that support the governments in the formulation of this type of strategies. As mentioned above, LEDS GP was founded in 2011 and LEDS LAC was constituted in 2012; both entities with the objective of favoring a greater coordination and collaboration between the countries and the cooperation partners in this field.

There is no universally accepted definition for LEDS, therefore, the LEDS LAC Platform works with a very broad vision on the concept, avoiding any restriction of its field of action by limiting definitions, and understanding that each country can have a different interpretation of this concept. In general, LEDS LAC accepts as LEDS all those plans or strategies developed by the countries with the objective of promoting low GHG emission and climate resilient development. In line with the analysis of the OECD, one LEDS can be "primarily a development strategy with a strong component of climate change, or vice-versa", depending on the national circumstances and priorities" (OECD, 2010).

The International Partnership on Mitigation and MRV (n.d.) provides three essential elements of LEDS:

- A LEDS is a policy instrument that identifies the sources of GHG emissions of a country and prioritizes options for their mitigation.
- A LEDS focuses on reaching development through mitigation actions.
- A LEDS helps improve the framework of conditions for private sector investments in the mitigation actions.

In turn, the UNDP (2011) states that "climate strategies are designed to supplement and reinforce the existing development strategies and plans […] operating within the relevant local, national and regional planning and coordination frameworks". The Low Emission Development Strategies Gateway – LEDS Gateway proposes a process of 5 global steps for the generation of LEDS (Fig. 1).

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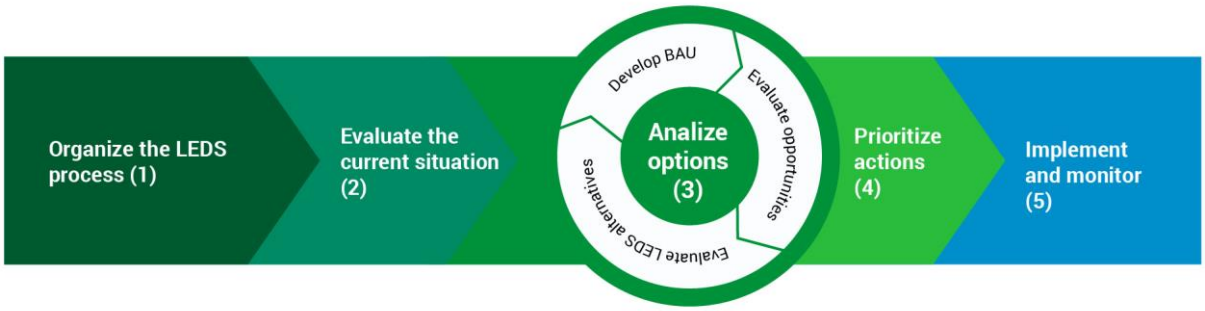
Figure 1 – Steps for the generation of LEDS

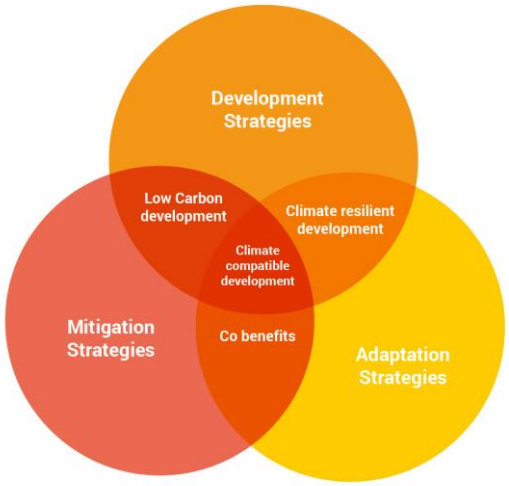


Source: LEDS Gateway, EC LEDS and LEDS LAC.

Usually, the concept of LEDS makes reference to the efforts made purely in mitigation; however, LEDS LAC has incorporated also the concept of resilience in order to promote climate compatible development; that is, both low emission and resilient. The inclusion of the adaptation component to climate change in LEDS LAC is based not only on the high level or prioritization given by the countries of the region, but also as a response to the mandate of the LEDS LAC membership from its beginning.

LEDS LAC agrees with Mitchell and Maxwell (2010), who defend the idea that the development, mitigation and adaptation agendas are and should be inter-related with one another through the goal of climate compatible development, in order to reach an "ideal point" to focus their efforts, considering triple win strategies that result in low emissions, construct resilience and promote development (Fig. 2).

Figure 2 – Climate Compatible Development



Source: Mitchell and Maxwell (2010).

In Latin America and the Caribbean there are abundant efforts towards low carbon development and climate resilient development which are usually implemented in parallel and even by government entities and different communities of practice. Despite this reality, it is increasingly clear for the governments, the international cooperation, the academy and other stakeholders that there is a huge need to integrate the efforts in both fields and jointly strengthen the link between the mitigation, adaptation and development strategies. The promotion of this integration has been a priority in the work of the LEDS LAC from its creation, in response to the mandate from its members.

For the analysis of the progress of countries towards climate compatible development, it is essential to take into account, in addition to the concept of LEDS, a series of instruments and notions from the framework of the UNFCCC that could be key in the transformation of development patterns if they are adequately linked to the long term policies. One of those concepts is the Nationally Appropriate Mitigation Actions (NAMA), defined as "mitigation actions adapted to each country by the Parties that are developing countries in the context of sustainable development, supported and facilitated by technologies, financing and capacity promotion activities in a measurable, noticeable and verifiable way" (UNFCCC, 2007). Another concept is that of Intended Nationally Determined Contributions (INDC), which refers mainly to the national mitigation commitments that will be implemented as of 2020 in the framework of the Paris Agreement, resulting from COP21 (2015). Both are considered in this analysis as elements that contribute to the LEDS.

04

METHODOLOGY

In order to be consistent and to allow for comparisons through time, this report takes, as reference, the conceptual framework and the research methodology of the first edition of LEDSinLAC (2015), which contemplates the compilation of information through primary and secondary sources, in order to prepare summary files per country – main component of the study – and to make an aggregated analysis of progress and challenges at the regional level.

This time, the **first step** in the methodology was the collection of a set of data that provide a general characterization of each country and its corresponding climate change profile. Such information includes population, geographical area, economic and social indicators, total greenhouse gas (GHG) emissions, per capita emissions and the main emitting sectors, among others.

As much as possible, the sources of information for these variables were uniform in all the countries, on the one hand, due to consistency reasons at the source and, on the other hand, due to the difficulty to get more accurate official data from the governments. Some examples of these sources include the World Bank's "Data Bank", the Human Development Report 2015 from the United Nations Development Program (UNDP), and the Global Competitiveness Report 2016-2017 (Insight Report) from the World Economic Forum, and more.

The **second step** was the information search on LEDS and climate governance through secondary sources – printed and online – for each of the countries in the study. This process was done as a supplement to the review of the documents that had been analyzed and studied for the LEDSinLAC 2015 report; therefore, the bibliography included in such report is taken as reference.

For the countries included in this new edition for the first time, a complete documentation review was performed. In order to organize the information gathering process, a database was generated to identify the existing documents and data from the previous effort and what was missing in order to complete the information for each country.

In general, Biennial Update Reports (BUR), national communications, greenhouse gas (GHG) inventories and Nationally Determined Contributions (NDC)[2], laws, decrees, policies, strategies, plans, programs and official websites were reviewed, among others.

The **third step** consisted in the implementation of telephone interviews with one or two representatives of the institution in charge of leading the climate policy in each country, in order to enhance the information coming from secondary sources and to go deeper into areas of special interest for this research. These were in depth interviews, based on the application of an instrument with 35 questions (see Annex I). Each interview lasted approximately 1.5 hours per person.

It is important to mention that, as part of the research, between 2 and 5 representatives of relevant sectors were interviewed in each country (including ministries, the sub-national sector, the private sector, organized civil society and academy, among others) to use their answers as input for the policy paper ***Inter-institutional Coordination Mechanisms for an Effective Climate Policy (LEDS LAC 2017),*** for which a summary is presented in Chapter VIII. The results of this study complement the understanding of the climate governance structure in each country, providing a broader perspective of the situation.

The **fourth step** was the elaboration of a datasheet that summarizes the available information from each country, using a common format. These datasheets were shared with the people that provided information on behalf of the authorities in charge of the climate policy, for them to review, comment and approve.

The **final step** was the aggregated analysis of the countries' results, to identify the progress, challenges and common areas of improvement and the preparation of this report. This step incorporated the results of the parallel analysis on the inter-institutional cooperation mechanisms described above and which methodology is described in the document indicated.

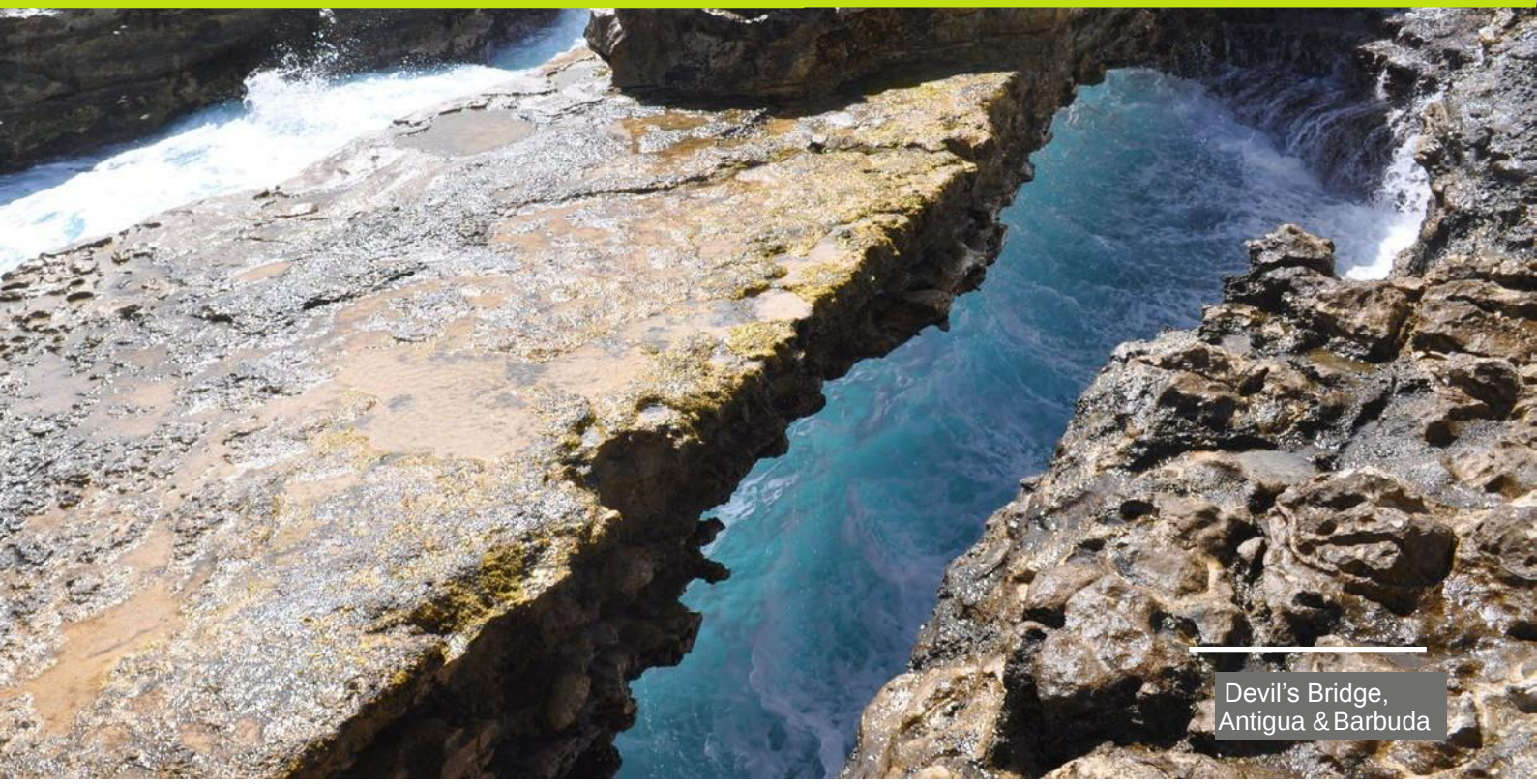
2 The term NDC is generally used for Nationally Determined Contributions, but in the cases where they have not been ratified, the term used is INDC for Intended Nationally Determined Contributions.

05

PROGRESS OF LEDSinLAC[3]

3 This section has been elaborated with information collected from interviews with representatives from the institutions in charge of the climate policy in each of the countries and with the support of documentation obtained through secondary sources. See the sources used for the general information and the climate change profile for each country at the end of the Bibliography.

5.1 ANTIGUA & BARBUDA



Devil's Bridge, Antigua & Barbuda

ANTIGUA & BARBUDA				
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**	
POPULATION	Total (No. of inhabitants)	91,818	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq}) 552,747 (WB, 2012)
	Urban (%)	24		CO_2 per capita emissions (tCO_2) 5.8 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		440		Growth rate 48.5% since 1990
GDP	Value (US$)	1,259,259,259 (WB, 2015)		Last update of GHG inventory 2006
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 58 of 188 (2014)		Previous inventories 1990 and 2000
	GINI Index	N/D		Main emitting sectors Energy, Forestry and Other land uses, Industrial, Agriculture, Waste
	Governance Index	N/D	VULNERABILITY	Climate risk index Position 72 of 138 (2014)
	Global Competitiveness Index	N/D		
LAND USE (%)	Forest area	22.3 (2015)		Priority sectors Bio-diversity, Agriculture, Water, Health
	Agricultural land	20.5 (2013)		
	Urban areas	N/D		

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIE RELATED TO CLIMATE CHANGE	Framework policies	National Energy Policy (2011). Climate Change Policy (in process).
	Other relevant instruments	Sustainable Island Resource Zoning Plan (SIRMZP), supported by the Physical Planning Act (2003). National Biodiversity Strategy and Action Plan (NBSAP). National Environmental Management Strategy (NEMS), supported by the Environmental Protection and Management Act (EPMA) (2015). Environmental Protection and Management Act (2015). Sustainable Island Resource Fund (SIRF). Medium Term Economic Development Strategy 2016-2020 (2015). Sustainable Energy Action Plan (SEAP) (2013). Renewable Energy Act (2015). Antigua and Barbuda (APUA) Act. Land planning Act. Physical Planning Act. National Solid Waste Management Authority Act. National Comprehensive Disaster Management Policy and Strategy for Antigua and Barbuda 2011-2017.
	Policies and regulations that promote private investment in mitigation and adaptation	Antigua and Barbuda Investment Authority Act. Sustainable Island Resource Framework Fund (SIRF Fund) - Private Sector Window.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General Coordination	Department of Environment, Ministry of Health and the Environment.
	Inter-institutional Coordination	National Coordinating Mechanism (NCM): responsible of coordinating the management and implementation of multi-lateral environmental agreements, and to solve disputes related to the environment (this mechanism was legislated in 2015 and is in process of being officially established). Technical Advisory Committee (TAC): this is a committee that includes 15 government entities, three NGOs and community interest groups, and a representative from the private sector. It is integrated by representatives from the Ministry of Tourism, Economic Development, Investment and Energy; Ministry of Agriculture, Lands, Fisheries and Barbuda Affairs; Ministry of Works and Housing; Ministry of Public Utilities, Civil Aviation and Transportation; Ministry of Social Transformation and Human Resource Development; Ministry of Health and the Environment; and Ministry of Financing. Cabinet of Antigua and Barbuda: this is the implementing entity from the Government of Antigua and Barbuda, and includes the State Ministers from several of the Ministries.
	Other coordination entities	Energy Advisory Panel. Sustainable Energy Unit. Eastern Caribbean Regulatory Authority. Eastern Caribbean Energy Regulatory Authority (ECERA).
	National stakeholders	Ministry of Tourism, Economic Development, Investment and Energy. Ministry of Agriculture, Lands, Fisheries and Barbuda Affairs (Forestry Unit, Development Control Authority, Fisheries Division, Land Division, Agricultural Extension Division, Plant Protection Unit). Ministry of Works and Housing (Public Works). Ministry of Public Utilities, Civil Aviation and Transportation (Water Division of Antigua Public Utilities Authority APUA). Ministry of Social Transformation & Human Resource Development. Ministry of Health and the Environment (Central Board of Health CBH, National Solid Waste Management Authority, Department of Environment DoE). Development Control Authority (DCA). Antigua and Barbuda Bureau of Standards. Antigua and Barbuda Transport Board; Antigua and Barbuda Airport Authority.
	Stakeholders from the private sector	West Indies Oil Company.
	Civil society stakeholders	Marine Ecosystems Protected Areas Trust (MEPA Trust). GEF Small Grants Programme (GEF SGP) . Non-Government Organisations (NGOs) and Community Based Organisations (CBOs).
	Other stakeholders	Meteorological Department. National Statistics Division. German Technical Cooperation (GIZ).

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
MITIGATION EFFORTS	National LEDS	Medium Term Development Strategy 2016-2020.
	Sector LEDS	Technology Strategy and Roadmap, to reach adaptation and mitigation goals. According to the Third National Communication it is already in development. National Energy Policy and Strategic Action Plan, which aims to reduce the costs of energy, diversification and efficient use of energy sources, environmental protection and encouragement of new business opportunities.
	NAMA (NAMA Registry)	There are no NAMA in this registry yet.
	Other NAMA	NAMA Energy
	Other mitigation initiatives	Energy: Wind Mills Park in the Crabbs Peninsula. A program has been developed to support the development of wind power in Antigua and Barbuda, under the framework of the project "Introduction of wind power into the network", for the installation of 15 MW of capacity in the industrial area of the Crabbs Peninsula.
	Existence of MRV	Development of metrics for the elaboration of national GHG inventories.
	Main working sectors	Energy, health, tourism, agriculture, waste, transportation, forestry, land use changes.
ADAPTATION EFFORTS	National Plans and Strategies	Antigua and Barbuda Development Strategy, under the Physical Planning Act (2003). Sustainable Island Resource Management and Zoning Plan (SIRMZP). National Comprehensive Disaster Management Policy and Strategy for Antigua and Barbuda 2011-2017.
	Sector Plans and Strategies	Environmental Protection and Management Act (EPMA) 2015.
	Main working sectors	Bio-diversity, marine resources, agriculture, health.
FUNDING SOURCES	International	They seek direct access to the Green Climate Fund (GCF) through the Department of Environment, GEF and the Adaptation Fund. To fulfill the Medium-Term Development Strategy 2016-2020, the main funding sources for the Government will be the People's Republic of China, the Government of Mexico, the Government of Turkey, the European Union, the Government of Canada, CARICOM's Development Fund, the World Bank, the Caribbean Development Bank, the European Investment Bank, and the International Development Fund
	Domestic	The objective is to promote the financial environment through the Sustainable Island Resource Framework Fund (SIRF Fund). Pollution Permits (EPMA, 2015). Disaster Risk Fund. Public-Private Partnerships.
(I)NDC	Status of the (I)NDC	The country presented, on October 19th, 2015, its INDC to UNFCCC and ratified the Paris Agreement on September 21st, 2016.
	Mitigation goal	Total reduction of 348 thousand tons of CO_{2eq} by 2025 (35% compared to BAU) and 450 thousand by 2030 (38% compared to BAU).
	Relationship of LEDS with the (I)NDC	The NDC is focused on reaching the Medium Term Plan. The NDC of the country focuses both in adaptation and mitigation of climate change and, although it has conditional goals that depend on the support of the international community, it maintains its unconditional nature to enable the correct environments for its goals.
	Inter-sector nature of the construction process and focus of the (I)NDC	The initial draft was developed by mandate from the Cabinet. The Technical Advisory Committee (TAC) was the main editor and reviewer. Other consultations were performed through meetings, public awareness and publications on line with the stakeholders from the public and private sectors and from the civil society.

N/D: Information not available
N/A: Not applicable

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5.2 ARGENTINA

Los Andes Mountain Range, Argentina

ARGENTINA					
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**		
POPULATION	Total (No. of inhabitants)	43,416,755	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	429,437,000 (nat. inv. 2012)
	Urban (%)	92		CO_2 per capita emissions (tCO_2)	4.5 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		2,780,400		Growth rate	42.6% since 1990
GDP	Value (US$)	583,168,571,071 (WB, 2015)		Last update of GHG inventory	2012
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 40 of 188 (WB, 2014)		Previous inventories	1990, 1994, 1997, 2000
	GINI Index	42.28 (2013)		Main emitting emissions	Energy 43%; agriculture and livestock 28%; changes inland use and silviculture (LULUCF) 21%.
	Governance index	Position 40 of 179 (2011)	VULNERABILITY	Climate risk index	Position 68 of 138 (2014)
	Global Competitiveness Index	Position 104 of 138 (2016)			
LAND USE (%)	Forest area	9.9 (2015)		Priority sectors	Agriculture
	Agricultural land	54.5 (2013)			
	Urban areas	2			

INFORMATION RELATED WITH LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	National Climate Change Strategy (2012) (there is a draft of a new National Climate Change Strategy).
	Policies and regulations that promote private investment in mitigation and adaptation	The Cabinet has as its functions the elaboration of Sector Action Plans at the ministry levels, for mitigation in key sectors and for adaptation in the sectors that are most vulnerable to the impacts of climate change, all within the framework of sustainable development. The elaboration of such plans will contribute to promote private investment, since they generate a regulatory and political framework needed for that. The new Law for the promotion of renewable energy provides specific incentives for private investment in mitigation.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	National Climate Change Direction.Depends on the Climate Change and Sustainable Development Sub-secretariat, which belongs to the Secretariat of Environmental Policy, Climate Change and Sustainable Development from the Ministry of Sustainable Development.
	Inter-institutional coordination	National Climate Change Cabinet (which substitutes the Government Climate Change Committee). It is coordinated by the Head of Cabinet of Ministers and integrated by the Ministry of Energy and Mines; Ministry of Production, Ministry of Agro-industry, Ministry of Transportation, Ministry of Environment and Sustainable Development, Ministry of Social Development, Ministry of Foreign Affairs and Cult, Ministry of Education and Sports, Ministry of Science, Technology and Productive Innovation, Ministry of Internal Affairs, Ministry of Public Works and Housing, Ministry of Finance and Ministry of Culture.
	Other coordination entities	Argentinean Office for a Clean Development Mechanism (MDL). Argentinean Carbon Fund – technical assistance with ideas for MDL projects (although so far there is no demand for assistance because there are no MDL projects).
	National stakeholders	The Members of the National Climate Change Cabinet.
	Sub-national stakeholders	There is work in coordination with the provinces through the Federal Council for the Environment (COFEMA).
	Private sector stakeholders	There is work with different stakeholders of the sector, especially representatives from entrepreneurial chambers like the Argentinean Industrial Union, the Argentinean for Sustainable Development and the Argentinean Rural Society.
	Civil society stakeholders	There is work with a network of civil society organizations, including the Environment and Natural Resources Foundation (FARN) Greenpeace and Wildlife Foundation, among others.
	Other stakeholders	Organizations of workers.
MITIGATION EFFORTS	National LEDS	There are different efforts related to emission reductions, some of them accompanied by the regulations mentioned in the item called “Other mitigation initiatives”..
	NAMA (NAMA Registry)	There are no NAMAs in this registry yet.
	Other NAMA	NAMA on Pro Biomass from the Ministry of Energy and the Ministry of Agro-industry, which intends to generate electrical and thermal energy through agricultural and forestry waste. NAMA on Urban Solid Waste, managed by the National Climate Change Direction. There are other NAMA ideas, many of them elaborated within the framework of the Third National Communication (2015); some of them are: » Energy Efficiency in Industrial SMEs. » Renewable Energy connected to the Network in the Wholesale Market. » Recovery of the Argentinean Railroad System. » Ground Cargo Transportation System.
	Other mitigation initiatives	Law No. 26.093 on Bio-fuels – It provides the mandatory cut of at least 5% of nafta and gasoil as of 01/01/2010. This goal has been accomplished and a new cut of 10% has been defined. Law No. 26.190 on the Energy Grid – It promotes the use of renewable sources for the production of electrical power. Its objective is to reach 8% of the national electrical power consumption from renewable sources by 2016. Decree 140/07 Energy Efficiency – It strengthened the measures related to the use of lighting from alternative sources and prohibited the commercialization of incandescent light bulbs. Law 25.080 – CUSS – It promotes the investments made in new forest entrepreneurships and in the expansion of existing forests. Law 26.556 Energy Grid – Re-activation of the Argentinean Nuclear Plan. This is a short and mid-term plan with two main areas of work: a) the consolidation of the nuclear option as a source of electrical generation and b) the expansion of development regarding the applications of nuclear technology to public health, agriculture and industry. Law 27.132 Transportation – This is a policy for the re-activation of the passenger and cargo trains; renewal and improvement of the railroad infrastructure; and incorporation of technologies and services. Partial recovery of the Belgrano Cargas RR network; investments in the inter-urban services with more density, and investments in the metropolitan railroad of the AMBA. Law 27191 – Modifies Law 26190. This is the National Promotion Regime for the Use of Renewable Energy Sources for the Production of Electrical Power, which increases the goal of renewable energy to 20% by 2025. Law 26.331 – Law for Minimal Budget for Environmental Protection of Native Forests, or Law for Native Forests. This is a national Argentinean law that rules the use of native forests and is aimed towards promoting sustainable forest management.
	Existence of MRV	The framework of the BUR includes an outline for a systematized MRV for inventories.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
MITIGATION EFFORTS	Main working sectors	Mainly energy and LULUCF. The energy sector presents most of the targeted efforts, mainly targeted to the diversification of the energy grid, transportation and the promotion of the rational and efficient use of energy. The transportation sector presents efforts mainly in the optimization of the railroad system; the agricultural sector has adopted "direct plating" as a predominant system in extensive crops; the LULUCF sector has developed the political and institutional framework in forest management.
ADAPTATION EFFORTS	National Plans and Strategies	National Adaptation Plan (in process).
	Main working sectors	Agriculture. There has been work in terms of water access and management. There are efforts in the coordination of a single meteorological and hydrological monitoring network that integrates the networks in a consistent way providing easy public access.
FUNDING SOURCES	International	Some international stakeholders are UN-REDD, the Adaptation Fund and the GEF. Historically, international funding has been concentrated in consultancies for capacity building, technical support and preparation of processes and reports, among others. The international funding projects have national counterparts. For example, there is a sustainable housing initiative that has been developed with the financial support from the State and the GEF. Additionally, the NAMA ProBiomass has received important financial support from the Ministry of Agriculture, Livestock and Fisheries of the Nation.
	Domestic	Domestic funding is difficult to estimate because the categories of the national budget do not have the necessary detail to know if an action contributes to mitigation or to adaptation to climate change. The Third National Communication of Argentina includes a study of the "Capacity of the Argentinean Financial System with regards to Climate Funding", which evaluates the public and private potential to finance mitigation and adaptation measures.
(I)NDC	Status of the (I)NDC	The country presented, on October 1, 2015, its INDC to the UNFCCC and ratified the Paris Agreement on September 21, 2016. A revised NDC was officially presented on November 17, 2016.
	Mitigation goal	Argentina should not exceed the net emission of 483 million tons of CO_{2eq} by 2030. The goal should be accomplished through the implementation of a series of measures throughout the economy, focused on the sectors of energy, agriculture, forests, transportation, industry and waste. Conditioned measure: not to exceed the net emission of 369 million tons of CO_{2eq} by 2030.
	Relationship of LEDS with the (I)NDC	The NDC will be an essential input for the development of the low emission and climate resilient country strategies. The strategies, policies and measures to this date are inputs for the elaboration of the contributions. The existing institutional arrangements and the work done for the Third National Communication are being used. For the elaboration of the NDC, a committee was constituted with the main sectors that generate emissions (energy, transportation, agriculture, industry and land use change) working in a cross-cutting way with the Ministry of Foreign Affairs, the Ministry of Economy and with the support of specialist consultants in the sectors involved.
	Inter-sector approach in the construction and focus of the (I)NDC	In the elaboration of the NDC there was participation from organizations of the national and province public sector, as well as of some representatives from the private sector, the civil society and the academic sector. The public sector – in consultation with the rest of the stakeholders – is in charge of the formulation of the NDC; the Government Climate Change Committee (then substituted by the National Climate Change Cabinet) was in charge of elaborating it. During the presentation of the NDC, there were two public consultations, one at the beginning and one as a mid-term consultation for the project. In addition, there was a final presentation before making the presentation to the UNFCCC.

N/D: Information not available

N/A: Not applicable

File created by: Ana Ruth Gutiérrez Murillo
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File reviewed by: Nazareno Castillo Marín. National Climate Change Direction, Ministry of Environment and Sustainable Development.

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5.3 BELIZE

English Key Light Tower, Belize

BELIZE					
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**		
POPULATION	Total (No. of inhabitants)	359,287	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	1,536,850 (WB, 2012)
	Urban (%)	44.1		CO_2 per capita emissions (tCO_2)	1.5 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		22,970		Growth rate	148% since 1990
GDP	Value (US$)	1,752,861,127 (WB, 2015)		Last update of GHG inventory	2000
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 101 of 188 (2014)		Previous inventories	1994, 1997
	GINI Index	N/D		Main emitting sectors	Land use, land use change and forestry (97.8%)
	Governance Index	Position 48 of 179 (2011)	VULNERABILITY	Climate risk index	Position 138 of 138 (2014)
	Global Competitiveness Index	N/D			
LAND USE (%)	Forest area	60 (2015)		Priority sectors	Agriculture, fisheries, tourism
	Agricultural land	7 (2013)			
	Urban areas	2.2			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	Belize Climate Change Policy, Strategy and Action Plan 2015-2020 (NCCPSAP) (2015). Regional Framework for Achieving Development Resilient to Climate Change 2009-2015.
	Other relevant instruments	Growth and Sustainable Development Strategy 2016-2019
	Policies and regulations that promote private investment in mitigation and adaptation	National Energy Policy Sustainable Energy Action Plan
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	The Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development (MAFFESD) is the directing entity, supported by the National Climate Change Office (within MAFFESD).
	Inter-institutional coordination	Belize National Climate Change Committee (BNCCC), established in 2011. Members: MAFFESD (Agriculture and Environment); Ministry of Finance, Public Service, Energy and Public Utilities; Ministry of Economic Development, Petroleum, Investment, Trade and Commerce; Ministry of Health (NHI, Primary Health Care); Ministry of Works, Transport and NEM (Works and Transport); Ministry of Tourism and Civil Aviation; Ministry of Natural Resources and Immigration (Natural Resources); a representative from the private sector (Chamber of Commerce); one representative of the civil society NGO/CBO Umbrella Group (APAMO); a representative from the University of Belize.
	National stakeholders	Ministry of Works, Transport and NEM; Ministry of Natural Resources and Immigration; Ministry of Finance, Public Service, Energy and Public Utilities; Ministry of Economic Development, Petroleum, Investment, Trade and Commerce; Ministry of Health; Ministry of Labour, Local Government Rural Development; Ministry of Tourism, Culture and Civil Aviation; Ministry of Housing and Urban Development.
	Private sector stakeholders	The Belize Chamber of Commerce and Industry (BCCI)
	Civil society stakeholders	Association of Protected Areas Management Organizations (APAMO)
	Other stakeholders	Caribbean Community Climate Change Centre (CCCCC), National Meteorological Service.
MITIGATION EFFORTS	National LEDS	Growth and Sustainable Development Strategy (Launched in April 2016). Low Carbon Development Roadmap, revised in 2015, aligned with the Growth and Sustainable Development Strategy mentioned above.
	Sector LEDS	According to the "Belize Climate Change Policy, Strategy and Action Plan 2014", the following strategic objectives are set at the sector level: » Agriculture (crops and livestock): development of climate resilient crop / livestock agricultural systems. » Forestry: ensure the conservation, utilization of the forest resources by mainstreaming climate change into the Revised Forest National Plan and supporting the development of a low-carbon economy, by limiting GHG emissions resulting from deforestation and forest degradation while also enhancing GHG sinks. » Fisheries and Aquaculture: To guide the short, medium and long-term processes to sustain the Fishing Industry of Belize from the impacts of climate change and strengthen the resilience of the reef and associated habitats » Coastal and Marine Resources. Promote the adoption and implementation of the Belize Integrated Coastal Zone Management Plan which will ensure responsible and sustainable use of Belize's coastal and marine resources in the face of climate change. » Water Resources. To enhance the protection and restoration of forest ecosystems and build the resiliency of water catchment areas. » Land Use and Human Settlements. Promoting the adoption of integrated land tenure, land classification and housing policies and programmes which enhance climate change adaptation and are resilient to climate change. » Tourism. Assess the vulnerability of Belize's tourism system to climate change and ensuring the mainstreaming of climate change throughout the sector to enhance ecosystem resilience, equitable distribution of tourism activities and fostering of sustainable tourism development, at a local and national scale. » Human Health. Strengthen and improve public health, disease prevention and environmental sanitation and reduce human exposure to climate change-related health risks » Solid waste management: Nation-wide improvements in the management of solid waste and reduction in the generation of GHG emissions. » Energy: To "Plan, promote and effectively manage the production, delivery and use of energy, through Energy Efficiency, Renewable Energy, and Clean Production interventions for the sustainable development of Belize." » Transportation: To take necessary measures to reduce vulnerability of critical transportation and communications infrastructure to Climate Change impacts and increase the resilience of the transportation/communication sectors. Additionally, the Ministry of Energy, Science & Technology and Public Utilities (MESTPU) Strategic Plan 2012-2017, which provides guidelines for the Sustainable Energy Strategy in the development of a low-carbon economy by 2033.
	NAMA (NAMA Registry)	There are no NAMAs registered.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
MITIGATION EFFORTS	Other NAMA	Several initiatives are being planned: » NAMA on waste management » NAMA on transportation » NAMA - solar heaters in industrial and residential areas
	Other mitigation initiatives	The following is a list of policies that have been developed up to this date, mentioned in the Climate Change Policy, Strategy and Action Plan and that, to some extent, address the challenges of climate change in their sectors: » Integrated Coastal Zone Management Plan 2013. » Sustainable Energy Action Plan for Belize (draft document more as a recommendation. » Integrated Water Resource Management Policy 2009. » Food and Agriculture Policy 2012. » Belize Health Sector Strategic Plan 2013-2017. » National Sustainable Tourism Master Plan of Belize 2010. » National Development Framework 2010-2030. » National Agenda for Sustainable Development 2013. » The National Climate Resilience Investment Plan 2013. » Enhancing Belize's Resilience to Adapt to the Effects of Climate Change - Vulnerability and Adaptation Assessment 2014. » Management and Protection of Key Biodiversity Areas.
	Main working sectors	Energy and LULUCF.
	Sector Plans and Strategies	National Adaptation Strategy in the Agriculture Sector (awaiting approval by the Cabinet). Coastal Zone Management Plan. The fisheries sector is developing an adaptation project.
	Main working sectors	Water, agriculture.
FUNDING SOURCES	International	The World Bank sponsors the development of the REDD+ project. The European Union and the Global Climate Change Alliance have supported the Government of Belize in the elaboration of the Belize Climate Change Policy, Strategy and Action Plan.
(I)NDC	Status of the (I)NDC	Belize INDC was presented to the UNFCCC on October 01, 2015. The country ratified the Paris Agreement on April 22, 2016.
	Mitigation goal	Belize's mitigation potential is framed into an approach based on specific sectoral actions that cover the sectors of forestry, electricity, waste and transportation.
	Relationship of LEDS with (I)NDC	Belize's NDC proposes the use of existing policies to reduce the emissions in the country.
	Inter-sector approach in the process of (I)NDC construction and focus	In November 2015, there was a validation workshop where the different stakeholders were presented with the actions established in the NDC in order to take their comments into account. The sectors of energy, forestry and water, and the private sector were invited to the workshop.

N/D: Information not available

N/A: Not applicable

File created by: Ana Ruth Gutiérrez Murillo
Interviewee: Ann Gordon. National Coordinator. Belize National Climate Change Office.
File reviewed by: Ann Gordon. National Coordinator. Belize National Climate Change Office.

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5.4 CHILE

Parinacota Volcano, Chile

CHILE					
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**		
POPULATION	Total (No. of inhabitants)	17,948,141	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	70,054,400 (nat. inv., 2013)
	Urban (%)	89.5		CO_2 per capita emissions (tCO_2)	4.7 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		756,096		Growth rate	120% since 1990
GDP	Value (US$)	240,796,388,428 (WB, 2015)		Last Update of GHG inventory	2013
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 42 of 188 (2014)		Previous inventories	Period 1990-2010
	GINI Index	50.45 (2013)		Main emitting sectors	Energy (74.7%, where the energy industry represents 39.7% and transportation represents 30.5%) and agriculture (15.1%)
	Governance Index	Position 25 of 179 (2011)	VULNERABILITY	Climate risk index	Position 62 of 138 (2014)
	Global Competitiveness Index	Position 33 of 138 (2016)			
LAND USE (%)	Forest area	23.4 (2014)		Priority sectors	Water, forest, agriculture, bio-diversity, infrastructure, cities, tourism, energy, fishing and aqua-culture. health.
	Agricultural land	21.2 (2013)			
	Urban areas	1.62			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC P9OLICIES RELATED TO CLIMATE CHANGE	Framework policies	National Climate Change Strategy (2006). National Climate Change Plan of Action 2008-2012. National Climate Change Plan of Action 2017-2022 (PANCC-II) (Pre-project in Public Consultation). National Climate Change Adaptation Plan (2014). Forestry Policy 2015-2035 (2015). Energy 2050: Chile's Energy Policy 2015
	Other relevant instruments	Law 20417 (delegates in the Ministry of the Environment the power of "proposing policies and formulating the plans, programs and action plans regarding climate change"). Sector Adaptation Plans. Green Growth Strategy (in process of update). There is a plan to make a Law Project to strengthen institutionality to address Climate Change.
	Policies and regulations that promote private investment in mitigation and adaptation	Chile has created an incentive to Non-Conventional Renewable Energies (ERNC) where, through Law 20698, it is required that by 2025, 20% of the injections for contracts subject to the law come from ERNCs.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Climate Change Department (former Climate Change Office; the department was created in 2015) from the Ministry of the Environment (MMA).
	Inter-institutional coordination	Council of Ministers for Sustainability and Climate Change (chaired by the Minister of the Environment and integrated by the Ministers of 11 additional ministries: Agriculture, Finance, Health, Economy, Promotion and Reconstruction, Energy, Public Works, Housing and Urbanism, Transportation and Telecommunications, Mining and Planning). International Negotiation Committee (chaired by the Ministry of Foreign Affairs and also integrated by the Ministry of Energy, the Ministry of Agriculture and the MMA; it works on processes of national agreement for the negotiations in the COPs). Advisory Committee on Climate Change (integrated by representatives from 15 ministries. It holds its sessions substituting the National Advisory Committee on Global Change, created in 1996). Inter-Ministry Climate Change Committee. Inter-Ministry Technical Team (ETICC) (part of the Inter-Ministry Technical Committee, integrated by focal points for climate change from the competent ministries). National Designated Authority (AND), Focal Point and Technical Secretariat for the Green Climate Fund. AND is part of the Sub-secretariat of Finance, supported by a Technical Secretariat made up by representatives from the Ministry of Finance, the Ministry of the Environment, and the Ministry of Foreign Affairs.
	Other coordination entities	Ministry of Energy. National Designated Authority for the Clean Development Mechanism Regional Ministry Secretariats (SEREMIS) Regional Climate Change Committees (CORECC)
	National stakeholders	The competent Ministries in terms of climate change represented by the focal points in the ETICC. The ministries that make up the Advisory Committee on Climate Change: Ministry of Internal Affairs and Public Security, Ministry of Foreign Affairs, Ministry of National Defense, Ministry of Finance, Ministry General Secretariat of the Presidency of the Republic, Ministry of Economy, ¨Promotion and Tourism, Ministry of Social Development, Ministry of Education, Ministry of Public Works, Ministry of Health, Ministry of Housing and Urbanism, Ministry of Agriculture, Ministry of Mining, Ministry of Transportation and Telecommunications, and Ministry of Energy. Sectoral NAMA developers (Ministry of Energy, Center for Innovation and Promotion of Sustainable Energy, Ministry of the Environment – Section of waste, National Forest Corporation, Clean Production Council, Agricultural Research Institute and Agricultural and Livestock Service, Ministry of Housing and Urbanism and Ministry of Transportation.
	Sub-national stakeholders	Honorable Municipality of Santiago, Chilean Network of Municipalities working in Climate Change.
	Private sector stakeholders	Represented by the Consultative Council at the central level and through the Regional Consultative Councils at the regional level. Climate Leaders Group, Global Agreement Network Chile.
	Civil society stakeholders	Represented by the Consultative Council at the central level and by the Regional Consultative Councils at the regional level. NGOs: Terram, WWF Chile, FIMA, Adapt Chile.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
MITIGATION EFFORTS	National LEDS	The National Action Plan on Climate Change 2017-2022 has a Mitigation axis supported by four specific objectives: » To maintain the National Inventory System and update the National Greenhouse Gas Inventory in Chile » To develop and implement Mitigation Actions and Policies » To implement Accounting Systems and MRV » To implement the international commitments in terms of climate change mitigation.
	Sector LEDS	Energy 2050: Chilean Energy Policy 2015 A Sectoral Mitigation Plan for Energy is expected for the second half of 2016.
	NAMA (NAMA Registry)	NAMA – Design and Implementation of the National Climate Change Strategy and Vegetal Resources (ENCCRV), including the Platform for the Generation and Transaction of Carbon Bonds from the Forestry Sector. NAMA on Renewable Energy for Self-Consumption. NAMA – Clean Production Agreements in Chile. NAMA – Green Zone for Transportation in Santiago. NAMA – National Industrial and Commercial Catalytic Program for Organic Waste Management.
	Other NAMA	NAMA – Carbon sequestration through sustainable soil management. NAMA – Mitigation of GHG emissions from Industrial, Commercial and Institutional Boilers. NAMA – National Sustainable Construction Strategy. NAMA – Assisted phyto-stabilization of mining tailings.
	Other mitigation strategies	PANCC-II, in its objective to develop and implement actions and policies in mitigation, provides seven lines of action for mitigation in different sectors. The relevant aspects of these are the following: » Energy Sector: A Sectoral Mitigation Plan is Expected for Energy in the second half of 2016. » Transportation Sector: Planning of Urban Transportation and the Public Transportation System in Santiago (Transantiago). » Agriculture and Forestry Sector: The National Forestry Corporation (CONAF) from the Ministry of Agriculture is designing the National Climate Change and Vegetal Resource Strategy (ENCCRV). » Housing and Urbanism Sectors: They try to reduce and mitigate the associated GHG emissions. » Public Works Sector: the Ministry of Public Works contemplates the generation of measures like the reduction of GHG in its buildings and machinery through energy efficiency. » Environmental mitigation actions; implementation of the Program HuellaChile. » Cross-cutting and multi-sector mitigation actions: elaboration of a set of regulations related to taxes for fixed emission sources; development of the MRV system and development and implementation of NAMA. Green taxes: these are taxes imposed to local contaminating emissions from vehicles and fixed sources and a specific tax to CO_2 emissions from thermal sources (this latter will enter into force in 2017). MAPS Chile: this is a government project with the active participation of seven ministries. It is aimed towards identifying, evaluating, discussing and proposing efficient, effective and feasible options to reduce GHG emissions and progress towards national low-carbon development. LECB Chile National GHG Inventory System in Chile (SNICHILE).
	Existence of MRV	Not yet. One is being developed at the sector level for the NAMA on Cement and Co-processing of Waste to then implement it at the national level (together with the DDT from Copenhagen and UNEP).
	Main working sectors	Energy, forestry and transportation. In addition, there is work in the agricultural sector, waste, cement industry, mangroves, porcine breeding industry, tourism, refrigeration and air conditioning.
ADAPTATION EFFORTS	National Plans and Strategies	National Adaptation Plan 2014.
	Sector Plans and Strategies	Sectoral Climate Change Adaptation Plans published for the silvo-agricultural sector (2013), bio-diversity (2014), fisheries and aquaculture (2015) and health (2016). As of 2017, the plan is to publish the Sectoral Adaptation Plans for infrastructure, cities, tourism, energy and water resources. PANCC-II proposes different lines of action for three specific objectives regarding adaptation; they, in turn, are made up of measures that must be implemented. Each of these lines of action implies the creation of the Sectoral Adaptation Plans.
	Main Working Sectors	The sectors of silvo-agriculture, bio-diversity, fisheries and aquaculture and health have approved adaptation plans, and these are currently in the stage of implementation. The sectors of infrastructure, cities, tourism, energy and water resources are generating information and creating the technical working teams for the construction of the corresponding adaptation plans. During the second half of 2016, the First Annual Report of the National Adaptation Plan was presented, including the results of the sectoral plans.

FUNDING SOURCES	International	There are international funding projects like MAPS-Chile, LECB-Chile, 3CN, PMR and BUR. According to the first Biennial Update Report for Chile (2014), during the period 2011-2014, the country received international support mainly in financial resources and capacity building, as well as in technical transfer, where some of the donors included the European Commission, the Federal Republic of Germany, the Australian Commonwealth, the World Bank, the Swiss Confederation, The Children's Investment Fund Foundation (CIFF), the Kingdom of Denmark, the IDB, the United Kingdom, NAMA Facility, GEF, Republic of South Africa, Republic of Korea, Canada and CAF, among others. The most outstanding were the contributions from the United Kingdom, the Swiss Confederation and the GEF.
	Domestic	A National Financial Strategy for Climate Change is expected by 2018. This is a commitment included in the Financing Pillar of the INDC from Chile.
(I)NDC	Status of the (I)NDC	Chile presented an INDC to the UNFCCC in September, 2015
	Mitigation goal	Reduction of CO_{2eq} emissions per GDP unit in 30% with respect to the levels reached in 2007, excluding the LULUCF sector (unconditional goal). Reduction of CO_{2eq} emissions per GDP unit between 35% and 45% with respect to the levels reached in 2007, not including the LULUCF sector (goal conditioned to international funding). Contribution for the LULUCF sector: The country is committed to the sustainable management and recovery of 100.000 hectares of forest, mainly native, representing captures and reduction of GHG of around 600.000 tons of CO_{2eq} per year as of 2030 (commitment conditioned to the approval of certain laws). Chile is also committed to reforesting 100.000 hectares of forest, which represent captures of between 900.000 and 1.200.000 tons of CO_{2eq} per year as of 2030 (commitment conditioned to the extension of a decree and the approval of the new Forest Promotion Law). This includes an adaptation contribution based on two cycles: the first one, to end in 2021, includes the implementation of actions within the National Plan and the Sector Adaptation Plans, identification of funding sources, creation of synergies with mitigation initiatives, strengthening of the institutional framework and preparation of metrics and measurement mechanisms for the plans. The second one ends in 2030 and includes the beginning of a second cycle of sectoral plans, the update of the National Plan and the development of a national evaluation exercise by 2026.
	Relationship of LEDS with the (I)NDC	The INDC has five pillars: Mitigation, Adaptation, Construction and Capacity Building, Development and Technology Transfer, and Financing. The axis of Mitigation in the National Climate Change Action Plan 2017-2022 supports the preparation for the implementation of the INDC as of 2020, in addition to the evaluation of early mitigation actions in the framework of volunteer country commitment. The National Climate Change and Vegetal Resource Strategy (ENCCRV), the Energy Policy 2015 (Energy 2050) and the Forestry Policy 2015-2035 are key instruments to meet the forestry goal contained in the INDC.
	Inter-sector nature of the (I)NDC Construction Process and focus	The reduction goal was sustained on: sectoral analysis and the mitigation scenarios elaborated within the framework of the MPAS-Chile project (Phase 2); the results of the National Greenhouse Gas Emissions (1990-2010); additional information provided by the Ministries of Environment, Energy, Finance and Agriculture; and the observations received in the Public Consultation process for the Intended Nationally Determined Contribution.

N/D: Information not available
N/A: Not applicable

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File reviewed by: Fernando Farías. Head of the Climate Change Department, Ministry of the Environment.

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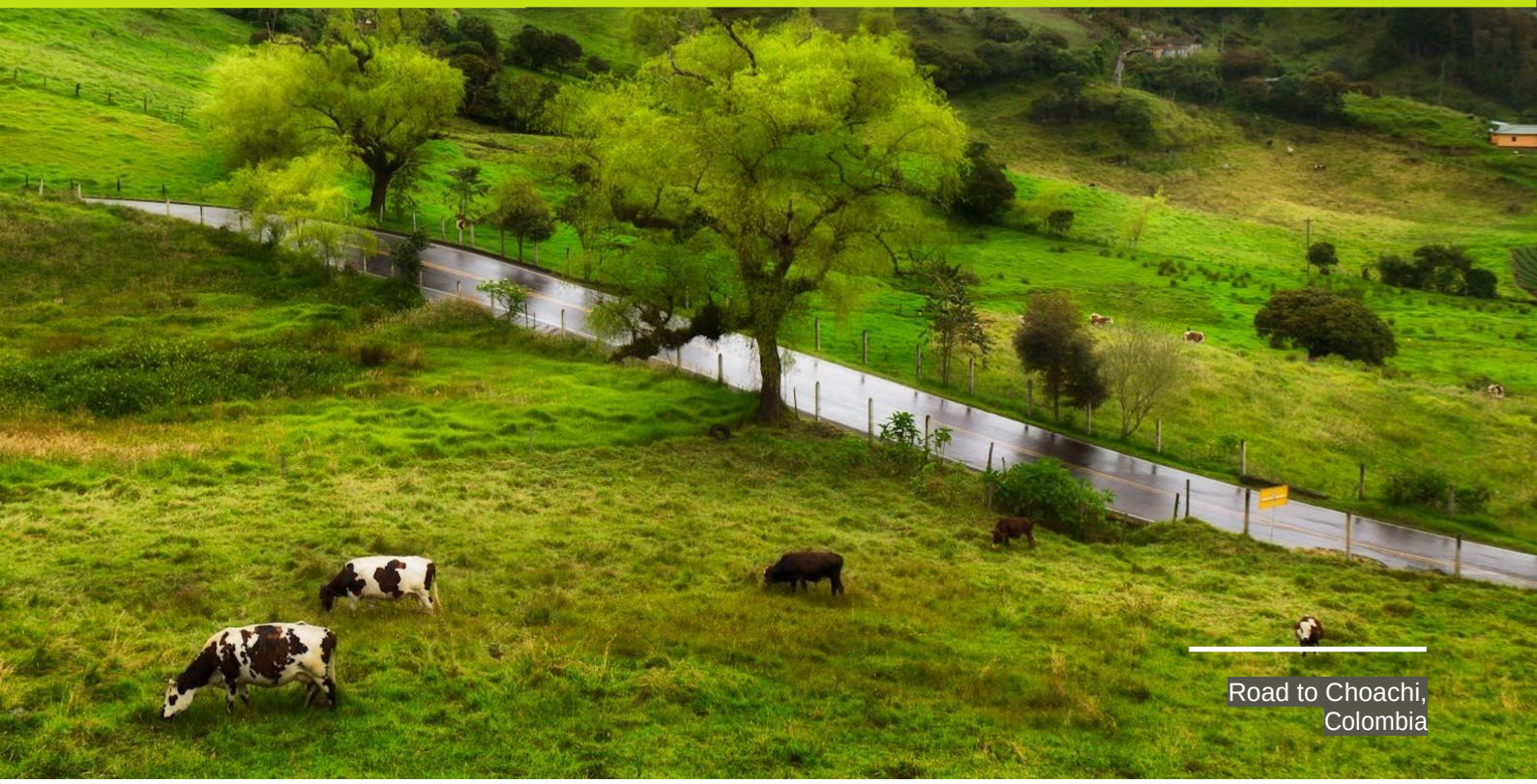
5.5 COLOMBIA



Road to Choachi, Colombia

COLOMBIA					
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**		
POPULATION	Total (No. of inhabitants)	48,228,704	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	178,258,000 (Nat. inv., 2012)
	Urban (%)	76.4		CO_2 per capita emissions (tCO_2)	1.9 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		1,141,749		Growth rate	-0.5% since 1990
GDP	Value (US$)	292,080,155,633 (WB, 2015)		Last update of GHG Inventory	2012
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 97 of 188 (2014)		Previous inventories	1990, 1994, 2000, 2004, 2010
	GINI Index	53.49 (2013)		Main emitting sectors	Energy (44%, where the transportation sub-sector represents 38%), agriculture, silviculture and other land uses (43%), waste (8%)
	Governance Index	Position 177 of 179 (2011)	VULNERABILITY	Climate risk index	Position 32 of 138 (2014)
	Global Competitiveness Index	Position 61 of 138 (2016)			
LAND USE (%)	Forest area	52.7 (2015)		Priority sectors	Transportation, housing, energy, agriculture, health.
	Agricultural land	40.4 (2013)			
	Urban areas	3.3			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	CONPES 3700 – Institutional Strategy for the Formulation of Policies and Action in Climate Change in Colombia (2011). Colombian Strategy for Low-Carbon Development (ECDBC). National Climate Change Adaptation Plan. Financial Strategy to Reduce the Fiscal Vulnerability of the State in case of a Natural Disaster. National REDD+ Strategy.
	Other relevant instruments	National Development Plan 2014-2018 (green growth as one cross-cutting theme). Proposal of the National Climate Change Policy (in phase of approval). National Climate Change Law (in process of approval).
	Policies and regulations that promote private investment in mitigation and adaptation	Program for the Efficient Use of Energy (PROURE), Ministry of Mines and Energy. CONPES for Entrepreneurial Development (Ministry of Trade, Industry and Tourism).
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Direction of Climate Change of the Ministry of Environment and Sustainable Development – MADS (the Direction is the focal point).
	Inter-institutional coordination	Inter-sectoral Climate Change Commission. Financial Management Committee that operates since 2013 and which objective is to give technical viability and manage funding sources – public, private, national and international – for mitigation and adaptation projects. The committee is made up of over 10 public institutions. Committee for International Affairs in Climate Change (started operations in 2014 by engaging in the preparation of the INDCs from Colombia. Its secretariat is under the Ministry of Foreign Affairs and has representation from eight entities from the State).
	Other coordination entities	National Planning Department with the Sub-Direction of Sustainable Environmental Development.
	National stakeholders	Ministry of Transportation, Ministry of Mines and Energy, Ministry of Trade, Industry and Tourism, Ministry of Agriculture and Rural Development, Ministry of Housing, Cities and Territory, Institute of Water, Meteorology and Environmental Studies (IDEAM), Energy Planning Unit (UPME), National Planning Department (DNP).
	Sub-national stakeholders	Regional Climate Change Nodes
	Private sector stakeholders	Associations (ASOBANCARIA, ANDI, CCCS, National Association of Public Services and Communications (ANDESCO)).
	Other stakeholders	Academy (Universidad de los Andes). NGO's and project developers
MITIGATION EFFORTS	National LEDS	The country has the Colombian Strategy for Low-Carbon Development (ECDBC) which defines strategic sectoral lines (see Sectoral LEDS).
	Sector LEDS	The ECDBC provides the following Sectoral Action Plans for Mitigation (PAS): PAS for Transportation, PAS for Mines, PAS for Electrical Power, Pas for Hydrocarbons, PAS for Industry, PAS for Agriculture, PAS for Territorial Development and Housing, PAS for Solid Waste and Water (including waste water and potable water). Each PAS is supported by a "set of actions, programs, measures and policies that will be prioritized taking into account four main aspects: contribution to the development objectives of the sector, potential to reduce GHG emissions, economic, social and environmental co-benefits, and implementation costs" (MADS, n.d.) Some of those actions have been stated in NAMAs. In parallel, the MADS is working in the regionalization of the guidelines from the ECDBC in order to reach other parts of the country, in consistency with the conditions and the opportunities for mitigation in each region.
	NAMA (NAMA Registry)	NAMA Transportation-Oriented Development (DOT), dealing with energy efficiency, public space and transportation. NAMA on Integrated Improvement of the Cargo Sector in the Roads. NAMA Panela – Technological and productive re-conversion of the panela sector. NAMA on Energy Supply with Renewable Sources in non-inter-connected Zones. NAMA on Bovine Livestock NAMA on Energy Efficiency in Public Lightening. NAMA on Substitution of Domestic Refrigerators.

	Other NAMA	NAMA – Carbon sequestration through sustainable land management. NAMA – Mitigation of GHG emissions from Industrial, Commercial and Institutional Boilers. NAMA – National Sustainable Construction Strategy. NAMA – Assisted phyto-stabilization of mining tailings in Chile.
MITIGATION EFFORTS	Other Mitigation Initiatives	The sectoral implementation plans are under development, derived from the PAS. In the private sector, they are working in the volunteer GHG report in the enterprises, the measurement of the carbon print and the reduction actions taken. There are initiatives in the different sectors that were not necessarily contemplated in the PAS, but they offer mitigation and adaptation co-benefits. Many of the initiatives in the forestry sector are not contemplated in the ECDBC, but they are contemplated in the REDD+ Strategy. There is currently a project for the recovery of navigation of Río Magdalena (investment of US$1.2 million) , which intends to encourage a shift from land to river cargo transportation for imports and exports. Through the Ministry of Agriculture, Colombia has been implementing regional technical discussion tables that provide scientific information (climate forecasts and agro-climate forecasts). This has been done with the support of CCAFS (research program on climate change, agriculture and food security) and local stakeholders. Based on this created knowledge, they recommend measures to reduce the negative impact on agriculture.
	Existence of MRV	The MRV system exists conceptually, since it has gone through the phase of design and structure of its components. The MRV in Colombia is based on three main approaches: emissions, reduction of emissions and international financing and support. The construction of the component of information digitalization for the reduction approach has already started, and by 2017 will have a platform for the consolidation and analysis of the information.
	Main working sectors	Agriculture, energy (including transportation), urban transportation / development, industry, waste, housing, forestry, mining, and water.
ADAPTATION EFFORTS	National Plans and Strategies	National Climate Change Adaptation Plan. ABC Adaptation Conceptual Bases. Roadmap for the elaboration of adaptation plans within the national climate change adaptation plan. National Disaster Risk Management Plan (PNGRD).
	Sector Plans and Strategies	Work has been done in Integral Climate Change Plans, which take into account both mitigation and adaptation. These plans are aimed towards the departments and are worked on jointly with the Ministry of the Environment and the corresponding Regional Climate Change Nodes. The Ministry of Agriculture and Rural Development (MADR) has developed the Adaptation Strategy to Climate Phenomena for the Agricultural Sector. Plan for the Adaptation of the Primary Road Network in Colombia. Integral Climate Change Plan for the Sea-Port Sector. The Mining-Energy Planning Unit from the Ministry of Mines and energy is developing an adaptation plan for the energy sector, focused on the hydro-electrical and thermal sectors. A vulnerability analysis has already been done.
	Main working sectors	Maritime, transportation, agriculture.
FUNDING SOURCES	International	IDB, World Bank, United Kingdom Embassy, MAPS, EU, UNDP LECB, USAIDED-LEDS, GEF, Government of Germany, Government of the Netherlands, Environment Canada, World Resources Institute, GIZ, and USAID – Public Policy Program.
	Domestic	There has been a lot of international support in the part of formulation, but as the work begins, more financial support is expected in the implementation with public funds through the different sectors.
(I)NDC	Status of the (I)NDC	The INDC from Colombia was presented to the UNFCCC on September 07, 2015.
	Mitigation goal	Reduction of 20% of GHG emissions with respect to its BAU in 2030 using 2010 as the baseline (unilateral and unconditional goal). Reduction of 30% of GHG emissions regarding the BAU by 2030 (goal conditioned to the international support).
	Relationship of LEDS with the (I)NDC	The mitigation calculation between the PAS of ECDBC and the INDC is aligned. A high percentage (about 80%) of the measures used to make the modulation for the INDCs is already contemplated in the PAS. However, there is still work to do to ensure the compliance with the mitigation goal proposed in the INDC. The INDCs contemplate elements of mitigation, adaptation and forms of implementation.
	Inter-sectorial nature of the construction process and the focus of(I)NDC	There were workshops and bilateral meetings between the Ministry of Environment and Sustainable Development, Sector Ministries and the National Planning Department with the participation of ministers and vice-ministers. In setting the national mitigation goal, the information compiled in previous exercises within the framework of elaboration of the ECDBC was used. These exercises included conversations with public experts, private entities, the academy and the civil society.

N/D: Information not available
N/A: Not applicable

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Interviewee: Josefina Sánchez Cuervo, Contractor, Climate Change Direction.
File reviewed by: Josefina Sánchez Cuervo, Contractor, Climate Change Direction.

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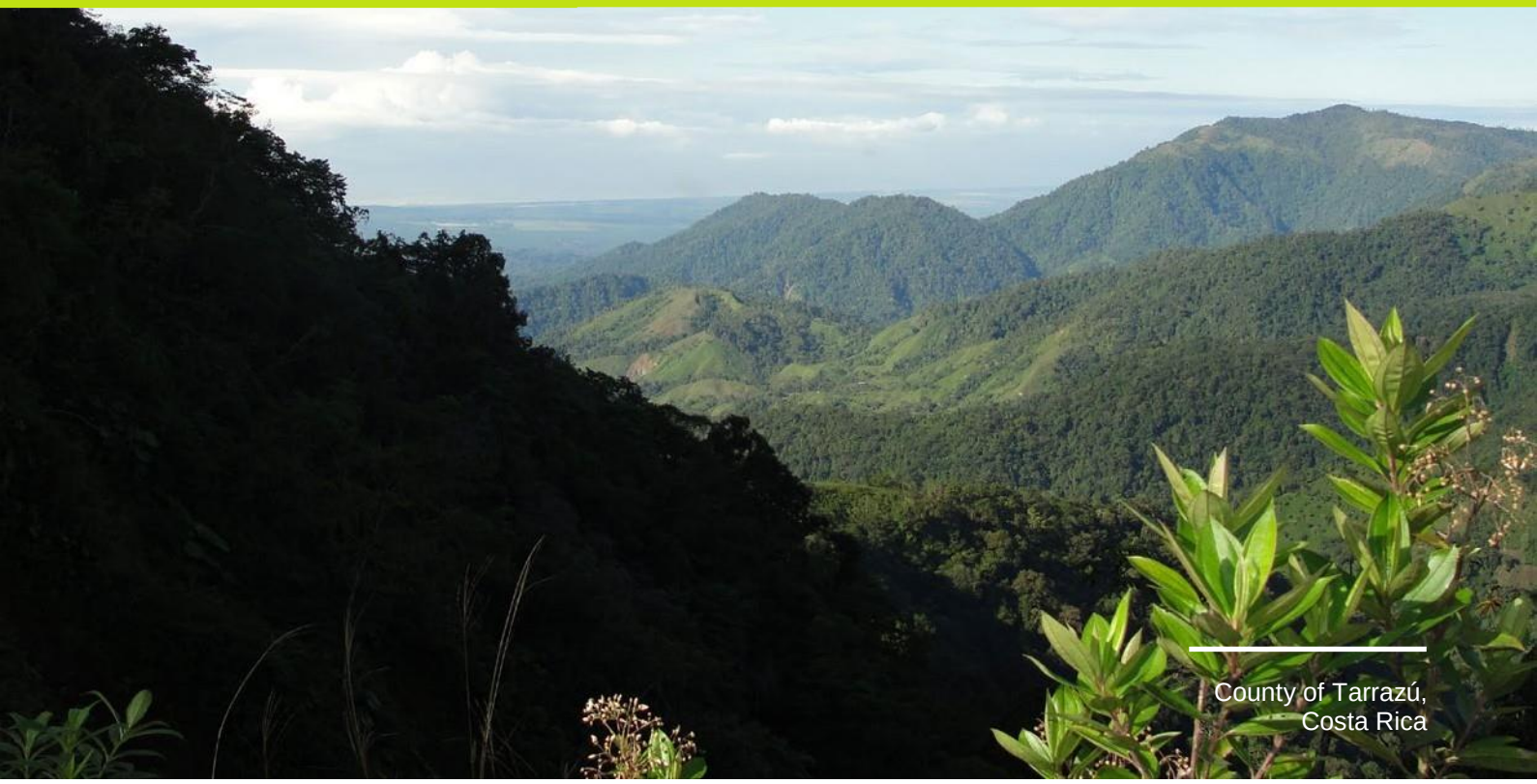
5.6 COSTA RICA



County of Tarrazú, Costa Rica

COSTA RICA					
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**		
POPULATION	Total (No. of inhabitants)	4,807,850	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	11,250,200 (Nat. inv., 2012)
	Urban (%)	76.8		CO_2 per capita emissions (tCO_2)	1.6 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		51,100		Growth rate	42.8% since 1990
GDP	Value (US$)	54,136,834,090 (WB, 2015)		Last update of GHG inventory	2012
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 69 of 188 (2014)		Previous inventories	1990, 1995, 2000, 2005, 2010
	GINI Index	49.18 (2013)		Main emitting sectors	Energy (64%, where the transportation sub-sector generates 69% of the emissions) and waste (17%)
	Governance Index	Position 20 of 179 (2011)	VULNERABILITY	Climate risk index	Position 93 of 138 (2014)
	Global Competitiveness Index	Position 54 of 138 (2016)			
LAND USE (%)	Forest area	53.9 (2015)		Priority sectors	Water supply, agriculture, coastal zones and fisheries
	Agricultural land	35.6 (2013)			
	Urban areas	7.9			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	National Climate Change Strategy 2009. Action Plan for the National Climate Change Strategy.
	Other relevant instruments	National Energy Plan 2015-2030. National Risk Management Plan 2016-2020. National Public Investment Plan National Forest Development Plan 2011-2020. National Health Plan 2010-2021. National Development Plan 2015-2018. Institutional Environmental Management Programs (PGAI). Strategy and Action Plan for the Adaptation of the Bio-diversity Sector from Costa Rica to Climate Change 2015-2025 (ENASB-CC)
	Policies and regulations that promote private investment in mitigation and adaptation	Through the C-Neutral Country Program, the organizations can get the C-Neutral brand after going through an inventory of emissions and through the evaluation of their reduction actions. Those emissions that cannot be reduced are offset through a monetary investment in the program of payment for environmental services from the National Forest Financing Fund (FONAFIFO). There is a series of assays with the National Insurance Institute that intends to reduce policies and premium for farmers that incorporate emission reduction measures in their farms. The Efficient Vehicle Acquisition Program (PAVE) provides financial facilities for the purchase of new eco-efficient vehicles. This is the result of joint work between the National Ministry of the Environment and Energy, the Bank of Costa Rica, the National Insurance Institute and the Vehicle and Machinery Import Association.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Ministry of Environment and Energy (steering entity). Climate Change Direction (supporting the work of the steering entity through coordination and management). The creation of a Climate Change Office is planned inside the climate governance improvement initiative in the country.
	Inter-institutional coordination	Environmental Council at the Presidency of the Republic. Technical Inter-Ministry Climate Change Committee (CTICC) integrated by representatives from the Ministry of Environment and Energy (through the Climate Change Direction), the Ministry of Public Works and Transportation, the Ministry of Agriculture and Livestock, the Ministry of Science and Technology, the Ministry of Finance and the Ministry of National Planning and Economic Policies. Sectoral Council in Environment, Energy, Oceans, Land Organization – this is a political entity known as Council of Ministries. Work is been done to create a Secretariat for the Council. There are coordination structures that, by decree, belong to the Climate Change Direction.
	Other coordination entities	Municipalities (although an additional effort to strengthen them is needed).
	National stakeholders	Ministry of Culture, National Institute for Women, Costa Rican Electricity Supply Institute, National Meteorological Institute, among others.
	Private sector stakeholders	They participate through the enterprises that wok on the C-Neutral standard, among other initiatives, like the Entrepreneurial Development Association (AED) and the Costa Rican Chamber of Industries.
	Civil Society stakeholders	They are working (there is a draft decree) in the creation of two public consultation spaces for climate change issues: a Citizen Consultative Council on Climate Change (with the participation of the civil sector, the private sector and the NGOs) and a Scientific Climate Change Committee (space to share with representatives from the academy). This is part of a series of climate governance efforts aimed towards strengthening the institutional structure.
	Other stakeholders	Certification entities, NGOs, international organizations.
MITIGATION EFFORTS	National LEDS	The current Government of Costa Rica is proposing a new concept to approach public policies on climate change, trying to use the synergies between adaptation and mitigation of climate change. The model is called “Adaptation with Transformational Vision” and it is proposed at the territorial (national) level under three pillars: » Public Sector, through the application of the Institutional Environmental Management Programs (PGAI). The PGAIs are mandatory tools for the public institutions of the country (including the municipalities) and consider control measures in water consumption, energy, waste management and promotion of sustainable public purchase, among others. » Private Sector, through the C-Neutral certification in the enterprises and the national carbon market. » Civil society, through the Bandera Azul (Blue Flag) Program, which has several categories focused on climate change, including; i) climate change, ii) agricultural-climate change, iii) natural protected spaces, iv) climate neutral community and v) sustainable households, among others.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
MITIGATION EFFORTS	Sector LEDS	Low-Carbon Livestock Development Strategy. Low-Carbon Development Strategy for Costa Rica (with emphasis in the GMA). The document already exists and is finalized; however, it is not known whether it is made official by the Climate Change Direction. National Energy Plan 2015-2030. Additionally, at the sectoral level, the Action Plan from the ENCC prioritizes the following sectors: » Transportation sector. Integrated Public Transportation System, Demand Control Measures (vehicle restriction), Technological Renewal Program and Modernization of the Vehicle Fleet, and Sustainable Mobility Plans (strategic planning documents at the local level). » Energy sector. Improvement and expansion of the electrical supply with renewable sources and distributed generation, substitution of fossil fuels and efficient use of energy in strategic sectors. . » Agricultural sector: Increase of technology use to reduce GHF emissions and to maintain or improve productivity in priority products.„
	NAMA (NAMA Registry)	NAMA on Low-Carbon Coffee,.NAMA on Livestock.
	Other NAMA	NAMA Urban, NAMA on Waste, NAMA on Agriculture.
	Other mitigation initiatives	The Municipality of San Rafael de Heredia elaborated a participatory climate change strategy. The Municipality of Santa María de Dota made a household survey to assess GHG emissions. The “Bandera Azul: Hogar Sustentable” (Sustainable Household) certification is available for the whole country, but it has been specially developed in the province of Guanacaste. Additionally, the Bandera Azul program has other 13 categories. There are different awareness initiatives by local governments and NGOs. Since about 2 years ago, the NGO “Costa Rica Limpia” is developing a citizen observatory in clean development topics, climate change and development with the idea of monitoring the country development promises. Several citizen consultations have been performed on this objective. The Intelligence Center for Sustainable Markets is making field research on the relevance of studying the alternative value chains for coffee (micro-processing plants) to integrate resilience in the context of the NAMA on Low-Carbon Coffee. The idea is to develop a production system with partial substitution of fossil fuels with alternative fuels from biomass for the production of cement (CEMEX).
	Existence of MRV	The scheme for the MRV is being constructed under the National Climate Change Metrics System (SINAMECC), which operates as a sub-module of the National Environmental Information System.. SINAMECC will generate reports on mitigation, adaptation, co-benefits and climate finance.
	Main working sectors	Energy (including the transportation sub-sector), agriculture, industry, solid waste, tourism, water, land use change (prioritizing the transportation and agricultural sectors)
ADAPTATION EFFORTS	National Plans and Strategies	The formulation of a National Adaptation Plan is beginning; it is expected to be ready by 2018.
	Sector Plans and Strategies	The Strategy and Action Plan for the Adaptation of the Biodiversity Sector of Costa Rica to Climate Change 2015-2025 (ENASB-CC) provides strategic guidelines and adaptation measures at the national level, an action plan and a monitoring, evaluation, follow up and learning system for the strategy. It will be revisited and updated every five years. The Strategy will be subject to revision to guarantee its alignment to the proposal of the National Adaptation Plan. The National Health Policy (2015) has a holistic management arm for risk and climate change adaptation, with a specific area of intervation for adaptation in the health sector. Costa Rica’s NDC states that by 2018 there will be an Adaptation Plan that combines sectoral and territorial approaches through at least 10 sectoral and territorial plans identified as priorities. This document specifies the National Risk Management Policy as the vehicle for adaptation. Additionally, the ENCC defines key sectors to determine adaptation measures: water, energy, agriculture, fishing and coastal zones, health, infrastructure and bio-diversity. The National Adaptation Plan will include a National Adaptation Policy identifying the risk management issues and methodologies to work on territorial and sectoral issues. There will be a pilot project at the Huetar Norte region in 2017, which is expected to bring along methodological guidelines to work at the municipal level.
	Main working sectors	Priority is been given to the work in the agricultural productive sector and fisheries, along with the infrastructure, tourism, water resources and biodiversity sectors.

FUNDING SOURCES	International	Support in several national impact projects. Some of the topics or sectors that are receiving funding are transportation, energy, agriculture, coastal zones, fisheries, water resources and waste. The main cooperating agents are the Government of the United States, Spain, the Secretariat of the UNFCCC, the World Bank and the Government of Germany. Other cooperating agents include the European Union, Australia, FUNBAM, GEF, IDB and the World Investment Fund.
(I)NDC	Status of (I)NDC	Costa Rica's INDC was submitted to the UNFCCC on September 30, 2015, and the Paris Agreement was ratified on October 13, 2016.
	Mitigation goal	Reduce GHG emissions by 44% based on the BAU scenario by 2030. In terms of adaptation, the NDC proposes the following commitments for the period 2016-2030: » Create a National Adaptation Plan. » Formulate a National Disaster Risk Management Policy 2016-2030 with the National Emergency Commission. » Promote Inclusive Green Development (DVI) to favor the application of sustainable productive systems in rural territories with lower human development indexes and vulnerable to climate change between 2016 and 2026. » Adaptation based on ecosystems: increase forest coverage up to 60% of the national territory. » By 2020, the coastal cities and counties will have land organization plans including climate change vulnerability and adaptation and mitigation actions. » By 2020, there will be methods and systems to correct and monitor physical vulnerabilities of public infrastructure systems and human settlements. » By 2030, there will be increased coverage, maintenance and sustainability of rain and sanitary drain systems. In addition, by 2018, there will be a monitoring system for the pathologies associated to climate change. » Start the consolidation of information systems, build capacity in the National Meteorological Institute, and undertake other capacity building measures, technology transfer and financing.
	Relationship of LEDS with the (I)NDC	Costa Rica's NDC contemplates elements of mitigation, adaptation and implementation means. According to an interview with authorities from the sector in the country, the idea is to use the territorial and sector strategies to reach the goals of the NDC. Currently, work is been done in modeling the actions of the public policies regarding climate change in order to determine if they are ambitious enough as to reach the goals set in the NDC.
	Inter-sector nature in the construction process and the focus of the (I)NDC	Citizen engagement has been considered as the basis for contributions. There was a consultation process taking into account over 450 participants from all sectors in the different modalities.

N/D: Information not available
N/A: Not applicable

File created by: Ana Ruth Gutiérrez Murillo
Interviewee: Andrea Meza, Climate Change Director. Climate Change Direction, Ministry of Environment and energy.

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5.7 EL SALVADOR

Llopango Lake, El Salvador

EL SALVADOR					
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**		
POPULATION	Total (No. of inhabitants)	6,126,583	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	14,453,400 (Nat. inv., 2005)
	Urban (%)	66.7		CO_2 per capita emissions (tCO_2)	1 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		21,040		Growth rate	88.1% since 1990
GDP	Value (US$)	25,850,200,000 (WB, 2015)		Last update of GHG inventory	2005
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 116 of 188 (2014)		Previous inventories	1994, 2000
	GINI Index	43.51 (2013)		Main emitting sectors	Energy (41%) LULUCF (23%), Agriculture (22%). From the energy sector, 43% corresponds to Transportation.
	Governance Index	Position 61 of 179 (2011)	VULNERABILITY	Climate risk index	Position 61 of 138 (2014)
	Global Competitiveness Index	Position 105 of 138 (2016)			
LAND USE (%)	Forest area	12.7 (2015)		Priority sectors	Infrastructure, water resources, health, agriculture, energy.
	Agricultural land	76.3 (2013)			
	Urban areas	17.3			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	National Climate Change Strategy 2013. National Climate Change Plan 2015. National Environmental Policy 2012.
	Other relevant instruments	Reforms to the Law for the Environment 2012. National Environmental Policy 2012. National Environmental Strategy 2013. Five-year Development Plan 2014-2019. National Adaptation Plan (draft). Framework Climate Change Law (in process, will be in force before 2019).
	Policies and regulations that promote private investment in mitigation and adaptation	El Salvador has a Law for Tax Incentives for the Promotion of Renewable Energy in the Generation of Electricity (Decree 462). National Energy Policy 2010-2024. Law for Energy Incentives (in process of approval). There will be a Master Renewable Energy Development Plan, which will make improvements to the regulatory and legal framework to promote the exploitation of this type of energy. The National Climate Change Plan includes a renewable energy, efficiency and energy security promotion program, and another one on climate resilient and low carbon urban and coastal development. These programs include actions that support aspects like the promotion of investment in renewable energy and the acceleration of processes for tourist and hotel development with low environmental impact, resilient and articulated to the local development.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Ministry of Environment and Natural Resources (MARN).
	Inter-institutional coordination	The implementation of the National Climate Change Plan is the responsibility of the Cabinet for Environmental Sustainability and Vulnerability, integrated by the Ministry of the Environment and Natural Resources, the Secretariat for Vulnerability Affairs, the Ministry of Government and Land Development, the Ministry of National Defense, the Ministry of Agriculture and Livestock, the Ministry of Tourism and the Ministry of Public Works, Housing and Transportation. The Ministry of Environment and Natural Resources has a Technical Cabinet with officers that coordinate the actions with the different national directions and institutions for the adoption and management of the environmental agenda and the climate change approach in the different policies, strategies, plans and programs.
	Other coordination entities	The National Council on Environmental Sustainability and Vulnerability (CONASAV) has the objective of facilitating dialogue and agreement to reach the national short, mid and long term commitments in order to promote sustainability, revert environmental degradation and reduce climate change vulnerability. It is integrated by representatives from different sectors: academy, municipalities, entrepreneurs, transportation, churches, indigenous community, political parties, civil society organizations, cooperation agents and international organizations, social media, experts and/or specialists in the subject matter.
	National stakeholders	Superintendence General of Electricity and Communications; National Energy Council, Ministry of Economy; Ministry of Agriculture and Livestock; Ministry of Tourism; Ministry of Public Works, Transportation, Housing and Urban Development; Ministry of Government and Land Development; Ministry of Health; Ministry of Finance; Ministry of Education; Vice-Ministry of Cooperation for Development; Vice-Ministry of Transportation; Salvadoran Institute of Agricultural Transformation; Social Investment and Local Development Fund; National Water and Sewage Administration; Governance Secretariat; Technical and Presidential Planning Secretariat and Secretariat for Vulnerability Affairs.
	Sub-national stakeholders	Department Governments, Municipal Environmental Units and Regional Planning Offices.
	Private sector stakeholders	They participate through CONASAV, the National Commission of Micro-Small and Medium Enterprises, the Salvadoran Construction Chamber, the Entrepreneurial Foundation for Social Action (FUNDEMAS), and the Salvadoran Entrepreneurial Council for Sustainable Development (CEDES).
	Civil society stakeholders	Representatives participate through CONASAV.
	Other stakeholders	Universidad de El Salvador, Universidad Centroamericana José Simeón Cañas UCA; Climate Change Adaptation and Strategic Risk Management Direction from the Ministry of Public Works, Transportation, Housing and Urban Development.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
MITIGATION EFFORTS	National LEDS	The National Climate Change Plan proposes eight strategic components in mitigation and adaptation: » Component 1: Program for the incorporation of climate change and disaster risk reduction in development plans, public policies and in the modernization of public institutionality. » Component 2: Program for the protection of public finance and the reduction of losses and damage associated to adverse climate change effects. » Component 3: Program for the management of biodiversity and ecosystems for climate change adaptation and mitigation. » Component 4: Program for transformation and diversification of practices and activities in agriculture, forestry and agro-forestry. » Component 5: Program for integral adaptation of water resources to climate change. » Component 6: Program for the promotion of renewable energies and energy efficiency and security. » Component 7: Program for climate resilient and low carbon urban and coastal development. » Component 8: Program for the creation of national conditions and capabilities to face climate change. Each of these strategic components has a group of actions with terms, entities responsible for the implementation and compliance indicators. Additionally, the Five-Year Development Plan 2014-2019 proposes, in Objective 7 “to transition towards an environmentally sustainable and climate change resilient economy and society”.
	Sector LEDS	National Energy Policy 2010-2024, which pursues the diversification of the energy grid with renewable energies, promoted by the National Energy Council. It gathers the ministries related to energy: Ministry of Agriculture and Livestock, Ministry of Public Works, Transportation and Housing and Ministry of Environment and Natural Resources. Master Plan for Renewable Energies. Indicative Plan of the Expansion in Energy Generation 2014-2024. Environmental Strategy on Climate Change Adaptation and Mitigation for the Agricultural, Forestry and Aquaculture Sector.
	NAMA (NAMA Registry)	There are no NAMAs registered yet.
	Other NAMA	NAMA on “Turbococina” (in process). NAMA on Energy Efficiency in Public Buildings (a pilot plan is finished and there is a document for the registration of the NAMA in the NAMA Registry). NAMA on Waste in Land Fills (just starting).
	Other mitigation initiatives	Implementation of an Articulated Transportation System in the Metropolitan Area of San Salvador (AMSS).
	Existence of MRV	In process. There is a Proposal of MRV for the NAMA on Energy Efficiency in Public Buildings.
	Main working sectors	Work is done mainly in the energy sector (with greater efforts in the sub-sector of electricity), and in the sectors of waste and sanitation and the hydro-electrical sector.
ADAPTATION EFFORTS	Sector Plans and Strategies	The Ministry of Education developed the Education Plan for Climate Change and Integral Risk Management 2012-2022. Risk Management and Climate Change Adaptation Strategy from the Social Investment Fund for Local Development. The Ministry of Health, with the support of the MARN is developing a climate monitoring system that will strengthen the health response to climate variability. In the framework of the Inter-Sector Health Commission CISALUD, made up of over 32 government organizations, civil society and universities, and under the coordination of the Ministry of Health, they have developed the Inter-Sector Operational Climate Change and Health Plan to support the implementation of the National Climate Change Plan.
	Main working sectors	Agriculture, public works, health, environment, education.
FUNDING SOURCES	International	UNDP provided support in the elaboration of the INDCs. With the support of UNDP and UNEP, there has been capacity building on climate change in the Ministry of Finance. IDB supports the implementation of the National Climate Change Strategy. The French Fund supports the implementation of actions in the program for Restoration of Ecosystems and Landscapes. There is support from CDKN in the elaboration of national instruments (supplementary support in the National Climate Change Strategy, National Climate Change Plan). GIZ supports the processes for the reduction of emissions due to deforestation and degradation REDD+ under an adaptation strategy based on mitigation and ecosystems.
	Domestic	The Fund for Civil Protection, Disaster Prevention and Mitigation (FOPROMID) and the Fund from the Initiative for the Americas (FIAES) are two of the main domestic sources of funds.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
(I)NDC	Status of the (I)NDC	El Salvador presented its INDC to the UNFCCC on November 17, 2015. They are implementing preparation and goal quantification actions to be presented before COP 22 and COP 23.
	Mitigation goal	El Salvador presents a contribution based on actions related to: » The strengthening of the institutional and legal framework through the creation and entrance into force of a Framework Climate Change Law before 2019. » Effective implementation before 2018 of a Law for Land Organization and Development. » Infrastructure, updating the Law for Urbanism and Construction, the Law for Land Organization and Development in the Metropolitan Area of San Salvador and norms and regulations for construction before 2019. » Water resources, promoting the implementation of a regulatory framework for its management before 2017. » Agriculture, livestock and silviculture: the pertinent policies and laws in force will be reviewed before 2019 » By 2030, El Salvador will establish and manage one million hectares through “Sustainable and Climate Change Resilient Landscapes”. » Energy, through the update of the National Energy Policy and the legal framework related. » Before COP 22, the energy generation sector will define a GHG emission reduction goal against growth without concrete mitigation actions or the business as usual (BAU) for the year 2025. » Before COP 22, the electrical energy generation sector will define a goal to increase renewable energy by 2025 in no less than 12% compared to the total electrical energy generated in the country in 2014. » Health, environmental health, work and society and transportation: reviewing and updating the corresponding legislation to adapt it to climate change. » El Salvador will prepare, before COP 22 an emission reduction plan for all its landfills to implement it between 2018 and 2025. The plan will present the estimation of emissions to reduce with respect to a to a period without mitigation actions (BAU).
	Relationship of LEDS with the (I)NDC	The INDC is supported by the guidelines of the Five-Year Development Plan and the National Climate Change Plan.
	Inter-sector nature of the construction and focus of the (I)NDC	INDCs were elaborated in an inter-sectoral consultation process, with active participation of the private sector, the civil society, academy and central government. The content of the consultation reflects the commitments of the sectors of infrastructure, agriculture, transportation, water resources, energy, health and environmental health.

N/D: Information not available
N/A: Not applicable

File created by: Ana Ruth Gutiérrez Murillo
Interviewee: Francisco Ernesto Durán, Climate Change Specialist. Technical Cabinet, Ministry of Environment and Natural Resources
Reviewed by: Francisco Ernesto Durán, Climate Change Specialist. Technical Cabinet, Ministry of Environment and Natural Resources

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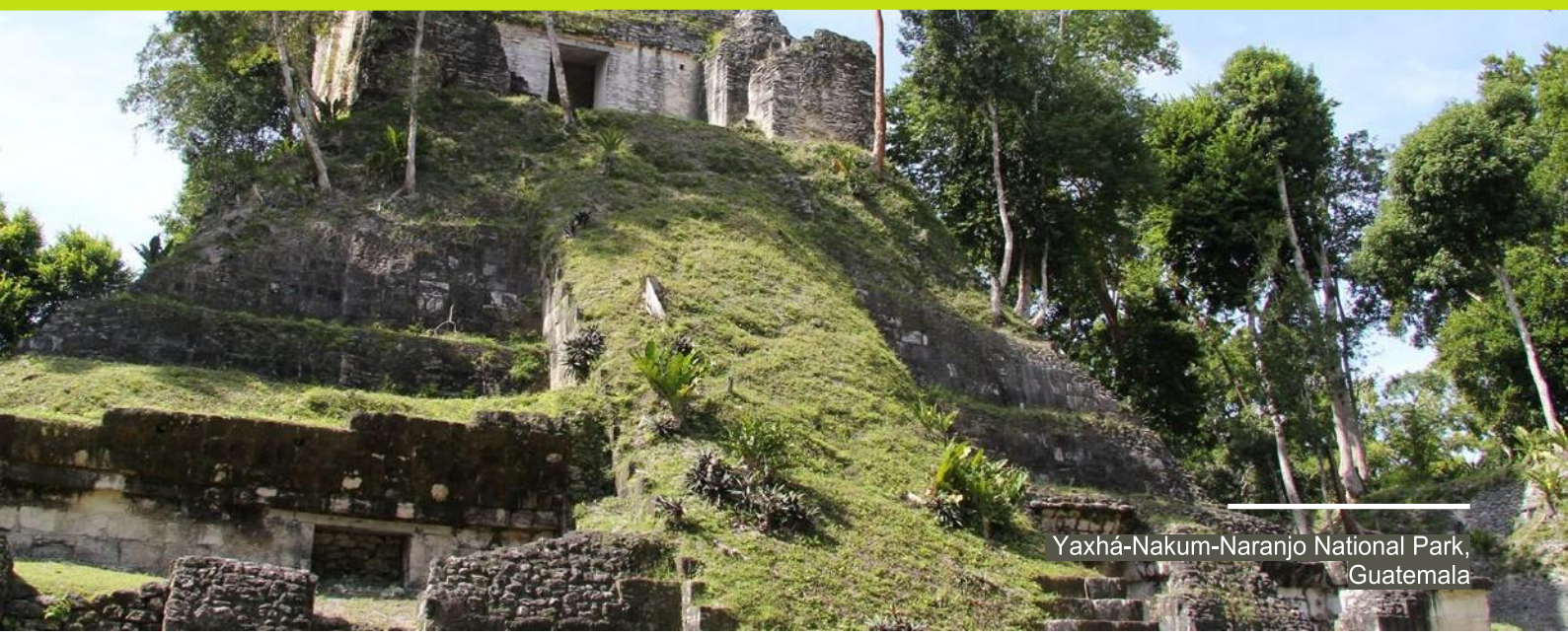
5.08 GUATEMALA



Yaxhá-Nakum-Naranjo National Park, Guatemala

GUATEMALA					
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**		
POPULATION	Total (No. of inhabitants)	16,342,897	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	31,445,936 (Nat. inv., 2005)
	Urban (%)	52		CO_2 per capita emissions (tCO_2)	0.9 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		108,890		Growth rate	111% since 1990
GDP	Value(US$)	63,794,152,886 (WB, 2015)		Last GHG Inventory update	2005
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 128 of 188 (2014)		Previous inventories	1990, 1994, 2000
	GINI Index	48.66 (2014)		Main emitting sectors	Energy (38%, where the transportation sub-sector represents 49.4% of the sector's emissions), LULUFC (27%).
	Governance Index	Position 101 of 179 (2011)	VULNERABILITY	Climate risk index	Position 40 of 138 (2014)
	Global Competitiveness Index	Position 78 of 138 (2016)			
LAND USE (%)	Forest area	33 (2015)		Priority sectors	Human health, ocean-coastal zones, infrastructure, agriculture, livestock and food security, forest resources, strategic ecosystems, water resources, productive infrastructure quality and soil protection.
	Agricultural land	34.7 (2013)			
	Urban areas	3.9			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	Decree Number 7-2013: Framework Law to regulate the reduction of vulnerability, mandatory adaptation to the effects of climate change and the mitigation of greenhouse gases (Framework Climate Change Law). Immediate Action Plan: Framework Law to regulate the vulnerability, the mandatory adaptation to the effects of climate change and the mitigation of greenhouse gases. National Climate Change Policy (2009). National Action Plan for Climate Change Mitigation and Adaptation (last revision stage). National Low-Emission Development Strategy "Guatemala Huella CERO2" (in process of elaboration).
	Other relevant instruments	National Development Plan K'atun: Nuestra Guatemala 2032. Environmental Preservation, Protection and Improvement Policy. Energy Policy 2013-2027. National Biological Diversity Policy. Policy for the Management of Ocean-Coastal Zones in Guatemala. National Integral Rural Development Policy. Risk Promotion Policy. Cleaner Production Policy. National Competitiveness Agenda. National Policy to Fight Against Land Degradation, Desertification and Drought. National Risk Management Policy. Law for the Protection and Improvement of the Environment (Decree 68-86). Law for Incentives for the Development of Renewable Energy Projects (Decree 52-2013). Forest Law (Decree 101-96). Law for Protected Areas (Decree 4-89) and its reforms. Law for the Program of Forest Incentives for Owners of Small Forest or Agro-Forest Land (Decree 51-2010). Law for the Promotion of the Establishment, Recovery, Restoration, Management, Production and Protection of Forests in Guatemala (Decree 02-2015). Strategic Inter-Institutional agenda promoted for the strengthening of the collaboration model in the creation of resilient communities in Guatemala. Water Law (in process)
	Policies and regulations that promote private investment in mitigation and adaptation	The Climate Change Law has a chapter devoted to public investment, which covers the issue of incentives.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Climate Change Direction, from the Vice-ministry of Natural Resources and Climate Change, from the Ministry of Environment and Natural Resources.
	Inter-institutional coordination	National Climate Change Council (CNCC), chaired by the President of the Republic and made up by representatives from the public sector, the private sector, indigenous groups, NGOs, municipalities, academy and farmer organizations. Its functions include the regulation and supervision of the implementation of actions and conflict resolution, in follow up to the implementation of actions derived from the Framework Law for Climate Change, including the National Climate Change Policy, the strategies and the action programs for mitigation and adaptation to the impacts of climate change. The Ministry of Environment and Natural Resources has the Secretariat of the Council, with the support from the Secretariat of Planning and programming from the Presidency of the Republic. The CNCC is made up by a) the Ministry of Environment and Natural Resources; b) the Ministry of Agriculture, Livestock and Food; c) the Ministry of Energy and Mines; d) the Ministry of Communications, Infrastructure and Housing; e) the Executive Secretary of the National Coordination for Disaster Reduction; f) a representative from indigenous organizations; g) a representative from farmer organizations; h) a representative from the Committee of Commercial, Industrial and Financial Associations; i) a representative from the Chamber of Industry; j) a representative from the Chamber of Agriculture; k) a representative from the National Association of Municipalities ANAM; l) a representative from the Association of Mayors and Indigenous Authorities; m) a representative from the National Association of Non-Governmental Organizations in Natural Resources and Environment ASOREMA, supported by the National Climate Change Table; n) a representative from the Universidad de San Carlos in Guatemala; and o) a representative from the private universities of the country. There is also an Inter-institutional Cooperation Group created through a Technical Cooperation Agreement for the preservation and sustainable management of natural resources between the Ministry of Environment and Natural Resources, the Ministry of Agriculture, Livestock and Food (MAGA), the National Forests Institute and the National Council for Protected Areas.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	Other coordination entities	Extraordinary Commission for the Study and Analysis of Climate Change from the Congress of the Republic of Guatemala (legislative level). Additionally, there are technical climate change units in different institutions, like the National Council for Protected Areas and the National Forest Institute. Technical Cooperation Agreement for the creation of the Inter-institutional Group for Forest Monitoring and Land Use (GIMBUT), between the Ministry of Environment and Natural Resources (MARN), the Ministry of Agriculture, Livestock and Food (MAGA), the National Forest Institute (INAB), and the National Council for Protected Areas (CONAP).
	National stakeholders	Ministry of Agriculture, Livestock and Food (MAGA); Ministry of Energy and Mines (MEM); Ministry of Communications, Infrastructure and Housing; Secretariat of Planning and Programming from the Presidency (SEGEPLAN); Ministry of Public Finance (MIFIN); National Disaster Reduction Coordination (CONRED); National Institute of Seismology, Volcanology, Meteorology and Hydrology (INSIVUMEH); National Science and Technology Council (CONCYT); National Council for Protected Areas and National Forest Institute, among others.
	Sub-national stakeholders	Municipalities and the structure of the Urban and Rural Development Councils. Guatemala promotes the Latin American Network of Municipalities, Cities and Territories for Climate Change, with the participation of several municipalities gathered as a Commonwealth.
	Private sector stakeholders	Private Climate Change Research Institute from the sugar association, Commercial, Industrial and Financial Associations, Chamber of Industry and Chamber of Agriculture.
	Civil society stakeholders	National Climate Change Table, indigenous authorities (Indigenous Climate Change Table).
	Other stakeholders	The academy, including the Guatemalan Climate Change Science System, which is a permanent advisory entity to the National Climate Change Council, the Universidad de San Carlos de Guatemala, and private universities.
MITIGATION EFFORTS	National LEDS	Work is progressing in a Low-Emission Development Strategy with USAID's support. This is in the initial stage after going through a diagnostic stage in 2015.
	Sector LEDS	Guatemala is preparing its national strategy for the reduction of emissions caused by deforestation and degradation, and the increase of the carbon stock (REDD+ Strategy). National Energy Plan, focused on renewable energy and emission reduction. Strategy for the Sustainable and Efficient Use of Timber. Transmetro, public transportation system promoted by the Municipality of Ciudad de Guatemala.
	NAMA (NAMA Registry)	There are no MAMAs registered yet.
	Other NAMA	The NAMA facility includes the "Efficient use of fuel and alternative fuels in indigenous and rural communities". There is also a NAMA proposal in the sector of waste, which proposes the integral management of solid waste in three basins of the country.
	Other mitigation strategies	The country is elaborating some other instruments to promote the reduction of emissions: » Program for the Compensation of GHG Emissions from fossil fuels. » Registry of GHG removal or reduction projects and its regulations. » Standards to establish a Tax Incentive Program and Subsidies Focused in the Use of Clean Energy for public and private transportation. They continue developing the National Climate Change Information System. The country has a National Forest Landscape Restoration Strategy. The Guatemalan Climate Change Science System was created as a non-governmental entity that gathers 8 institutions from the academy, NGOs and private sector to address research topics in the subject matter. There is a first preparation phase for the elaboration of Marginal Abatement Curves, within the framework of the implementation of the Program to Support the Climate Change Agenda (PACC), with funding from the Inter-American Development Bank (IDB). A preliminary curve has been done for the energy sector (efficiency and renewable energy).
	Existence of MRV	Under construction. The idea is for the National Environmental and Climate Change Information System (SNICC) to coordinate it through the Environmental and Climate Change Information Unit (UIACC) of the MARN.
	Main working sectors	Energy (including the transportation sub-sector) and LULUFC. There are actions proposed for industrial processes and waste.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
ADAPTATION EFFORTS	National Plans and Strategies	An Adaptation Fund is in the implementation process. The National Adaptation and Mitigation Action Plan is being elaborated.
	Sector Plans and Strategies	There are action plans for land organization at the local level, local and national risk management plans, and the means for the promotion of rational land use are being implemented. There is research in the health sector and the effects of climate change on it. It covers topics related to diseases caused and costs derived from such effects, among other topics.
	Main working sectors	Human health, water basins and water resources, forest resources and infrastructure.
FUNDING SOURCES	International	They are developing a study to define the percentage of funding coming from domestic and from international sources. Some of the international stakeholders that have contributed are USAID, IDB, World Bank, Climate Investment Fund and Forest Carbon Partnership. There is a fund of debt-for-nature exchange with the United States. They are about to implement a debt-for-climate change adaptation exchange in vulnerable zones with the Government from the Federal Republic of Germany.
	Domestic	The Framework Climate Change Law created the National Climate Change Fund in order to finance plans, programs and projects on risk management, vulnerability reduction, mandatory adaptation and mandatory mitigation, among others. The fund prioritizes the investment in vulnerability reduction and adaptation (80% of the total resources) over mitigation (20% of the total resources). Currently, the fund does not have the resources, but the Framework Climate Change Law provided for the funding sources. The country has National Forest Incentive Programs and Renewable Energy Incentive Programs, in addition to the volunteer markets and the regulated carbon markets. An additional source of funding will be the budget allocation derived from the Public Investment Planning and Programming Process. National Conservation Fund (FONACON). National Disaster Reduction Fund. Financial Mechanism through a National Program for the Reduction of Emissions for REDD+. The National Financial Strategy To Fight Against Desertification and Drought will be adjusted and updated. Forest Incentive Program (PINFOR). Forest Incentive Program for Owners of Small Forest Land Extensions (PINPEP).
(I)NDC	Status of the (I)NDC	Presented to the UNFCCC on September 30, 2015.
	Mitigation goal	To reduce 11.2% of total GHG emissions by 2030 compared to the base year 2005 (unconditional proposal). To reduce 22.6% of the total GHG emissions by 2030 compared to the base year 2005 (proposal conditioned to international technical and financial support).
	Relationship of LEDS with the (I)NDC	The strategies to reduce emissions that are under development in the country are linked to the INDC. However, the main link is based on the framework of the National Climate Change Policy and the Framework Climate Change Law, which provide a mandate and the mechanisms for supervision and implementation. The commitments of the INDC should be included in the National Climate Change Adaptation and Mitigation Action Plan.
	Inter-sector nature of the construction process and focus of the (I)NDC	Several government entities participated in the construction process of the INDC. There was also a consultation process with the private sector.

N/D: Information not available
N/A: Not applicable

File created by: Ana Ruth Gutiérrez Murillo
Interviewee: José Manuel Moro Blanco. Advisor to the Climate Change Direction, Ministry of the Environment.

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5.9 HAITI

Kenscoff, Haiti

HAITI					
GENERAL INFORMATION			CLIMATE CHANGE PROFILE		
POPULATION	Total (No. of inhabitants)	10,711,067	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	7,832,320 (WB, 2012)
	Urban (%)	58.6		CO_2 per capita emissions (tCO_2)	0.2 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		27,750		Growth rate	65% since 1990
GDP	Value (US$)	8,765,329,890 (WB, 2015)		Last update of the GHG Inventory	2000
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 163 of 188 (2014)		Previous inventories	1994, 2000
	GINI Index	60.79 (2012)		Main emitting sectors	Agriculture (61%) and energy (20%) (information taken from the Second National Communication).
	Governance Index	Position 153 of 179 (2011)	VULNERABILITY	Climate risk index	Position 42 of 138 (2014)
	Global Competitiveness Index	N/D			
LAND USE (%)	Forest area	3.5 (2015)		Priority sectors	Water resources and water basins, coastal zones, infrastructure, food security, education and awareness (INDC).
	Agricultural land	66.7 (2013)			
	Urban areas	3			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	National Adaptation Action Plan PANA 2006 (updated in 2010). There is a National Climate Change Policy in the process of elaboration and soon to be finished.
	Other relevant instruments	Pilot Program for Climate Resilience PPCR. Under implementation. Haiti Strategic Development Plan - PSDH Route map for a sustainable energy system in Haiti Policy from the Ministry of Agriculture, Natural Resources and Rural Development (MANRNDR) for the management of water basins. Strategy for the Creation of the National Agency for Air Protection (ANAP) Plan to re-launch the coffee sector Haiti climate profile Scaling-up Renewable Energy Program (SREP)
	Policies and regulations that promote private investment in mitigation and adaptation	A document with measures to work with the private sector, particularly in the area of renewable energy is included in the framework for the implementation of the INDC.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Climate Change Direction, Ministry of Environment
	Inter-institutional coordination	The idea is to re-activate the National Committee on Climate Change, an initiative that engages the private sector, the civil society, universities, sectoral ministries and municipalities.
	Other coordination entities	Interministerial Committee for Territorial Management (CIAT)
	Other stakeholders	L'Université Notre Dame
MITIGATION EFFORTS	Sector LEDS	The following are considered pioneer programs for identifying good practices and future dissemination: an adaptation program for coastal zones elaborated with the support of the UNDP and another adaptation program for the agricultural sector with the support of FAO. By 2017, they will integrate Climate Change into the municipal development plans, the sectoral plans and strategies and the national development plan. The INDC from Haiti will be a critical tool for this process through the thematic table that inserts climate change into different stakeholders of the civil society and the NGOs, in order to guarantee the coherence between the programs, the national policies defined and the INDC.
	NAMA (NAMA Registry)	There are no NAMAs registered.
	Other NAMA	They are planning to create a NAMA for the transportation sector and one for the energy sector to help in the implementation of the INDC.
	Existence of MRV	They are creating a national MRV system for the INDC. The projects in force have their own measurement, report and verification systems. The national system is working towards standardizing the measurement tools form the different projects in order to make them uniform.
	Main working sectors	LULUCF, in this case, the forestry sector, energy, waste, and agriculture.
ADAPTATION EFFORTS	National Plans and Strategies	Pilot Program for Climate Resilience PPCR. The National Adaptation Plan PANA (2006) has identified 10 projects to be implemented in the future. There are funds to begin with National Adaptation Plan.
	Main working sectors	PANA identifies agriculture, coastal zones and water resources and the priority sectors.
FUNDING SOURCES	Domestic	The national budget allocates less than 1% to environmental topics.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
(I)NDC	Status of the (I)NDC	Haiti presented its INDC to the UNFCCC on September 30, 2015. They are planning to update the INDC.
	Mitigation goal	To reduce 31% of GHG emissions by 2030 compared to the BAU scenario. From that 31%, 5% is an unconditional goal while the remaining 26% is a conditional goal.
	Relationship of LEDS with the (I)NDC	For the construction of the INDC in Haiti, they reviewed all the strategic documents of the country (see "Other relevant instruments"). All these planning documents were analyzed and taken into consideration during the elaboration of the INDC.
	Inter-sector nature of the construction process and focus of the (I)NDC	It was an inclusive process engaging all the sectors, covering urban and rural areas. The Ministry of Environment took the lead and it was approved by the Fist Minister. There was participation from sector ministries (Agriculture, Planning, Public Works, Energy and Transportation, Tourism, Public Health), the Inter-Ministry Committee for Territorial Management (CIAT), municipalities, professional organizations, fishing organizations and civil society, among others. Additionally, the contribution was presented to technical and financial partners that were gathered in a sector table for climate change.

N/D: Information not available
N/A: Not applicable

Note: Haiti is in the process of activating its coordination entity, the National Climate Change Committee, which will be official in the coming months. The Climate Change Direction will act as the technical secretariat of the entity.

File created by: Ana Ruth Gutiérrez Murillo and Diana Ubico
Interviewee: Odré Valbrun. Climate Change Direction, Ministry of Environment.

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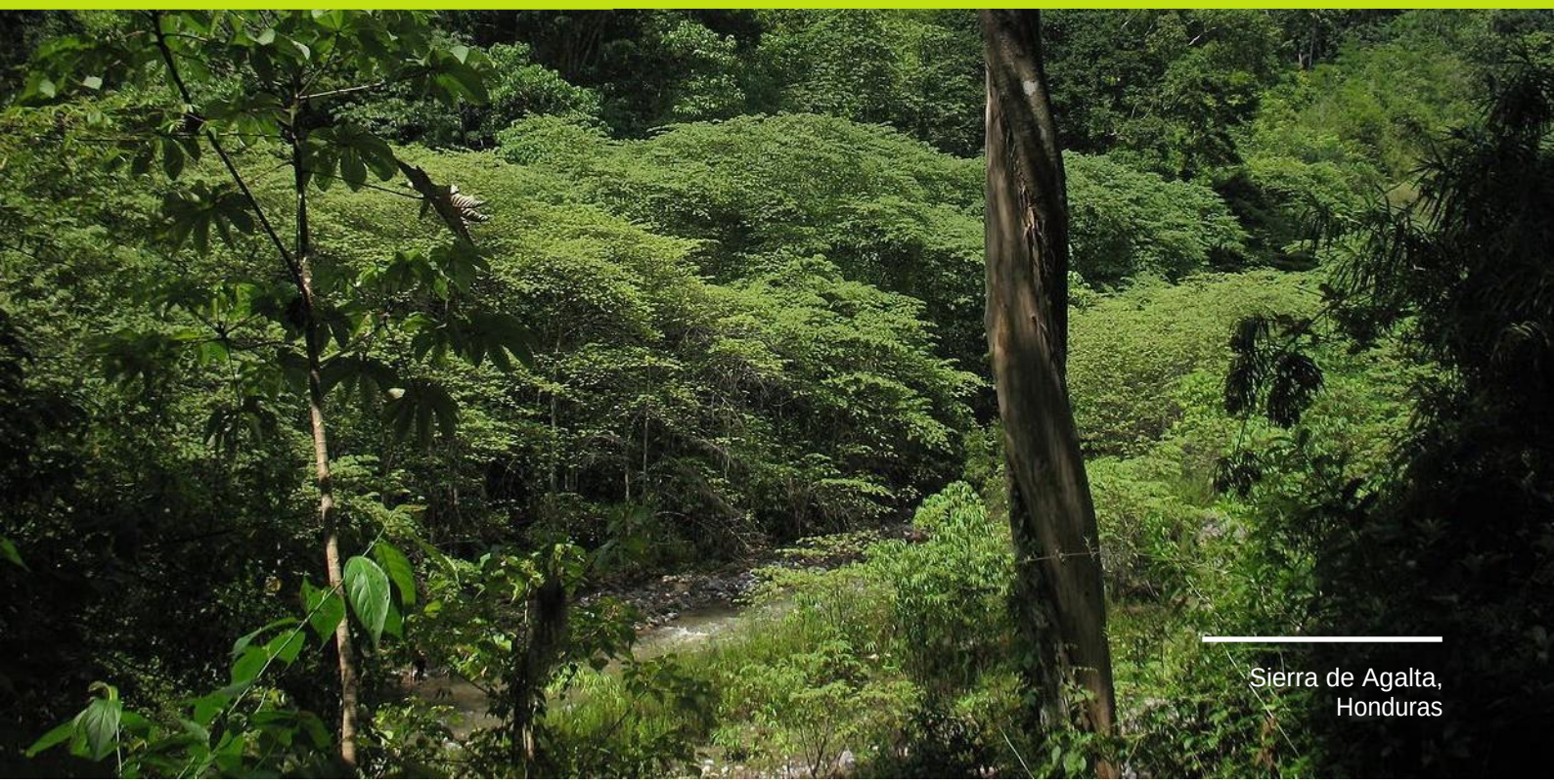
5.10 HONDURAS



Sierra de Agalta, Honduras

HONDURAS					
GENERAL INFORMATION			CLIMATE CHANGE PROFILE		
POPULATION	Total (No. of inhabitants)	8,075,060	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	20,467,162 (WB, 2012)
	Urban (%)	54.7		CO_2 per capita emissions (tCO_2)	1.2 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		112,492		Growth rate	49.2% since 1990
GDP	Value (US$)	20,420,967,148 (WB, 2015)		Last update of the GHG Inventory	2000
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 131 of 188 (2014)		Previous inventories	1995, 2000
	GINI Index	50.6 (2014)		Main emitting sectors	Energy, LULUCF
	Governance Index	Position 100 of 179 (2011)	VULNERABILITY	Climate risk index	Position 24 of 138 (2014)
	Global Competitiveness Index	Position 88 of 138 (2016)			
LANDUSE (%)	Forest area	41 (2015)		Priority sectors	Agriculture, ocean-coastal zones.
	Agricultural land	28.9 (2013)			
	Urban areas	3.3			

INFORMATION RELATED TO LEDS AND CLIMATRE CHANGE		
FRAMEWORKOF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	General Environment Law (Decree No. 104/93, and Decree 181/07 modifies the Law). Climate Change Law (2014). National Climate Change Strategy (2010). National Forestry Policy. National Policy for Forests, Protected Areas and Wildlife 2013-2022. Strategic Government Plan (2014-2018) "Plan de todos para una vida mejor". Climate Change Regulations (in process of elaboration). National Climate Change Adaptation Plan (in elaboration). National Climate Finance Process (in elaboration). Update of the Action Plan for the National Climate Change Strategy (in elaboration). Agro-forestry Law for Rural Development (in elaboration). Municipal strategic plans (in elaboration) for approximately 6-7 municipalities.
	Other relevant instruments	Honduras Cleaner Production Policy (P+L). Law for the Promotion of Electrical Energy Generation with Renewable Resources (2007) Special Regulatory Law for Public Projects on Renewable Energy (2011). Bio-fuels Law (2007) and Regulations (2008). Law for the Substitution of Incandescent Light Bulbs to Fluorescent Lighting (2007).
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Secretariat of Energy, Natural Resources, Environment and Mines (SERNA) / MiAmbiente.
	Inter-institutional coordination	Inter-institutional Climate Change Committee (political level) led by SERNA and the Technical Climate Change Committee (technical level) led by the National Climate Change Direction.
	Other coordination entities	Sub-committees of the Technical Climate Change Committee.
	National stakeholders	SERNA/MiAmbiente, Forest Conservation Institute (ICF), Secretariat of Agriculture and Livestock (SAG), and the National Electrical Energy Enterprise.
	Private sector stakeholders	Honduran Council of Private Enterprises (COHEP) and the Honduran Association of Small Producers (AHPER).
	Civil society stakeholders	Climate Change Initiatives Foundation (MDL Foundation); Fundación Vida.
	Other stakeholders	Honduran Partnership against Climate Change.
MITIGATION EFFORTS	National LEDS	National Climate Change Strategy. Risk Management (accompanied by a law and a policy and led by the Permanent Contingency Commission – COPECO). Technological Mitigation and Adaptation Acton Plan. National Productive Landscapes Program.
	Sector LEDS	REDD Strategy. National Program for Forests, Protected Areas and Wildlife. They are elaborating a Mitigation and Adaptation Strategy for the Forestry sector.
	NAMA (NAMA Registry)	There are no NAMAs currently registered with the UNFCCC.
	Other NAMA	The following are under development: » NAMA on urban public transportation » NAMA on efficiency of vehicles in operation » NAMA on sustainable coffee » NAMA on sustainable livestock » NAMA on efficient stoves
	Existence of MRV	This is under development for the NAMAs.
	Main working sectors	Agriculture, livestock, transportation, energy, industrial processes and solid waste.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
ADAPTATION EFFORTS	National Plans and Strategies	National Climate Change Strategy. Law on Climate Change. National Action Plan against Desertification 2014-2022. National Adaptation Plan is currently under construction, and the Adaptation Fund is elaborating municipal plans for climate change adaptation.
	Sector Plans and Strategies	National Climate Change Adaptation Strategy for the Sector of Agriculture, Food, Health and Coffee 2014-2022. National Strategy for Food Security and Nutrition. They are elaborating a Mitigation and Adaptation Strategy for the Forestry sector. The NDC provides an adaptation commitment, especially in the sector of agriculture and food and the ocean-coastal resources.
	Main working sectors	PANA identifies agriculture, coastal zones and water resources as priority sectors.
FUNDING SOURCES	International	All funding is external.
(I)NDC	Status of the (I)NDC	Honduras submitted its INDC to the UNFCCC in October 2015, its goals are currently being reviewed and updated. It is expected to become NDC by 2020.
	Mitigation goal	Reduction of 15% of emissions by 2030 (compared to the BAU scenario); forestation/re-forestation of 1 million ha of forest before 2030.
	Relationship of LEDS with the (I)NDC	These are country commitments to reduce greenhouse gas emissions according to the UNFCCC. Since it is a highly vulnerable country, they also present adaptation goals in the INDC.
	Inter-sector nature of the construction process and focus of the (I)NDC	A national team was created for the elaboration of the (I)NDC. There were stakeholders from the sectors of energy, agriculture, industrial processes and solid waste, and there were actors from the civil society, the academy and the state. Additionally, there were people invited to the socialization workshops. Then, there were workshops with key stakeholders from each institution and national technical consultants from the DNCC (National Climate Change Direction) and the TCN (Third National Communication) to implement the process.

N/D: Information not available
N/A: Not applicable

File created by: Andrea Pacheco
Interviewee: Marvin Josué López Maldonado. Climate finance assistant SERNA.
File reviewed by: Technical Team of the National Climate Change Direction.

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- Interview with: Marvin Josué López Maldonado (MiAmbiente)

5.11 JAMAICA

Negril, Jamaica

JAMAICA					
GENERAL INFORMA			**CLIMATE CHANGE PROFILE**		
POPULATION	Total (No. of inhabitants)	2,725,941	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	20,205,000 (including LULUCF) (Nat. inv., 2012)
	Urban (%)	55		CO_2 per capita emissions (tCO_2)	2.8 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		10,830		Growth rate	66% since 1990
GDP	Value (US$)	14,262,190,323 (WB, 2015)		Last update of the GHG Inventory	2012
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 99 of 188 (2014)		Previous inventories	2005 (complete) Period 2006-2011
	GINI Index	N/D		Main emitting sectors	Energy; public electrification and heat generation; transportation.
	Governance Index	Position 53 of 179 (2011)	VULNERABILITY	Climate risk index	Position 91 of 138 (2014)
	Global Competitiveness Index	Position 75 of 138 (2016)			
LAND USE (%)	Forest area	31 (2015)		Priority sectors	Water resources, Agriculture, Human Health, Coastal Resources (human settlements), Tourism
	Agricultural land	41 (2013)			
	Urban areas	27.71			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	Climate Change Policy Framework and Action Plan (2015). National Energy Policy (NEP) 2009-2030.
	Other relevant instruments	National Water Sector Policy and Implementation Plan (draft). Carbon Emissions Trading Policy (draft). National Renewable Energy Policy 2010-2030 (draft). National Energy-From-Waste Policy - 2010 – 2030 (currently under review and update). Energy Conservation and Efficiency Policy (draft). Biofuels Policy (draft). Comprehensive Disaster Risk Management Policy (draft). National Strategy and Action Plan on Biological Diversity in Jamaica. National Policy on Ocean and Coastal Zone Management (draft). They are currently working in the development of the Special Initiative for Low Carbon Development in conjunction with the Ministry of Science, Energy and Technology and the support of USAID. This
	Policies and regulations that promote private investment in mitigation and adaptation	National Energy Policy 2009-2030. Vision 2030 Jamaica. The private sector works hard in initiatives that help reduce emissions. For example, the Private Sector Organization of Jamaica is working in an energy efficiency program for its partners and for the agro-forestry sector.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	The Climate Change Division (CCD) of the Ministry of Economic Growth and Job Creation is responsible for the coordination and facilitation of all the activities related to climate in Jamaica.
	Inter-institutional coordination	Climate Change Focal Point Network: the focal points for climate change designated in all ministries and relevant departments and agencies (MDAs) will be responsible for the coordination of the development and implementation of their sector strategies and action plans, as well as for the actions related to climate change in the policies, plans and programs. Additionally, they have to prepare periodical monitoring reports on these strategies and action plan to present to the Climate Change Division. Climate Change Advisory Board (CCAB): this includes representatives from the public and private sectors, academy and NGOs designated by the Minister. This entity is a platform for the exchange of scientific and technical information on climate change and related topics of importance for Jamaica. The support of a Secretariat would be provided by the CCD. The membership will include *exoficio* authorities appointed by the Permanent Secretariat of the Ministry or designated by the Director of the CCD. They created ad hoc committees from the CCAB to discuss particular topics.
	Other coordination entities	Sub-networks at the community level.
	National stakeholders	Development Bank of Jamaica (DBJ) Fisheries Division Forestry Department Jamaica Information Service Meteorological Service of Jamaica Mines and Geology Division (MGD) National Environment and Planning Agency (NEPA) National Irrigation Commission (NIC) National Solid Waste Management Authority (NSWMA) Ministry of Science, Energy and Technology Ministry of Agriculture, Industry and Commerce Ministry of Transport and Mining National Water Commission (NWC) Petroleum Corporation of Jamaica National Works Agency (NWA) Office of Disaster Preparedness and Emergency Management (ODPEM) National Land Agency (NLA) Ministry of Finance and Public Service Planning Institute of Jamaica (PIOJ) Water Resources Authority (WRA)
	Private sector stakeholders	Petroleum Corporation of Jamaica (PCJ): statutory corporation under the Ministry of Science, Energy and Technology Private Sector Organization of Jamaica (PSOJ)
	Civil society stakeholders	University of West Indies

	Other stakeholders	Rural Agricultural Development Authority (RADA) Scientific Research Council (SRC) Social Development Commission Urban Development Corporation
MITIGATION EFFORTS	National LEDS	Vision 2030 Jamaica – Our Road to Sustainable Prosperity. National Carbon Emissions Trading Policy (draft).
	Sector LEDS	National Energy Policy 2009-2030: has an approach that favors some measures that would lead the country towards a low emission development. This policy prioritizes key areas like: » Energy supply security through diversification of fuels and the development of renewable energy. » Development of renewable energy sources like solar, wind, biomass, energy from waste and hydrological. » Energy conservation and efficiency » Eco-efficiency in industries.
	NAMA (NAMA Registry)	There are no NAMAs in this registry yet.
	Other NAMA	NAMA on Renewable Energy. There will be other sector NAMAs in the framework of the project supported by USAID, Climate Economic Analysis for Development, Investment and Resilience (CEADIR).
	Existence of MRV	Mainly in energy (renewable, wind, transportation), but also forests and housing.
	Main working sectors	Agriculture, livestock, transport, energy, industrial processes and waste.
ADAPTATION EFFORTS	National Plans and Strategies	Vision 2030 Jamaica: its national goal is "Jamaica has a Healthy Natural Environment" and it expects to reach the goal through three national results, including the reduction of hazard risk and the adaptation to climate change. Climate Change Policy Framework for Jamaica: developed under the Climate Change Adaptation and Disaster Risk Reduction Project from the Government of Jamaica/European Union/United Nations Environment Program, financed by the European Union under the Global Climate Change Alliance (GCCA). Plans and policies on climate change that contemplate the element of adaptation: » National Water Sector Adaptation Strategy (draft). » Disaster Preparedness and Emergency Management Act (1993). » Evacuation Plan. » National Building Code.
	Sector Plans and Strategies	Plans and policies on climate change that contemplate the element of adaptation: » 2015 Policy Guideline on Rainwater Harvesting. » 2001 Forest Management and Conservation Plan and the Strategic Forest Management Plan 2010-2014. » Forest Policy Green Paper, presented to the Parliament on March 2015.
	Main working sectors	Energy (renewables) and agriculture.
FUNDING SOURCES	International	The Environmental Foundation of Jamaica (EFJ), in collaboration with the Ministry of Economic Growth and Job Creation (MEGJC), through a fund of US$1.2 million provided by the Inter-American Development Bank. Japan Caribbean Climate Change Project; Green Climate Fund.
	Domestic	The Government of Jamaica, in collaboration with the stakeholders will develop the National Climate Change Financing Strategy.

(I)NDC	Status of the (I)NDC	The country presented its INDC to the UNFCCC on November 27, 2015.
	Mitigation goal	Mitigation of the equivalent to 1.1 million metric tons of carbon dioxide per year by 2030 versus the BAU scenario. This target is predicated on the current level of implementation of the National Energy Policy and the existing pipeline of renewable energy projects.
	Relationship of LEDS with the (I)NDC	The country will implement its INDC through the Climate Change Policy Framework and the National Energy Policy 2009-2030. Additionally, they have developed a NAMA to escalate renewable energy, which is essential for the implementation of the INDC.
	Inter-sector nature of the construction process and focus of the (I)NDC	The Ministry of Economic Growth and Job Creation, through the Climate Change Division, promotes consultative processes to improve public participation in mitigation and adaptation.

N/D: Information not available
N/A: Not applicable

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5.12 MEXICO

MEXICO					
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**		
POPULATION	Total (No. of inhabitants)	127,017,224	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	665,304,920 (Nat. inv., 2013)
	Urban (%)	79		CO_2 per capita emissions (tCO_2)	3.9 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		1,964,380		Growth rate	34.2% since 1990
GDP	Value (US$)	1,143,793,184,190 (WB, 2015)		Last update of GHG Inventory	2013
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 74 of 188 (2014)		Previous inventories	National GHG Inventory 1990-2010
	GINI Index	48.07 (2012)		Main emitting sectors	Mobile sources (26.2%, where self-transportation accounts for 23%), industry (17.3%), electricity generation (19%), oil and gas (12.1%), agriculture (12%)
	Governance Index	Position 66 of 179 (2011)	VULNERABILITY	Climate risk index	Position 26 of 138 (2014)
	Global Competitiveness Index	Position 51 of 138 (2016)			
LAND USE (%)	Forest area	34 (2015)		Priority sectors	The agricultural sector presents more risk to climate events (ENCC). The NDC Mexico includes an adaptation component that prioritizes actions in the social sector, strategic infrastructure and ecosystems.
	Agricultural land	55 (2013)			
	Urban areas	5.3			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	General Law for Climate Change (LGCC). National Climate Change Strategy "Visión 10-20-40" ENCC (2013). Special Climate Change Program 2014-2018 (PECC) (it is federal and specific for each administration – 6 years). State Climate Change Programs (11 published before the publication of the General Law for Climate Change and 6 months later). Municipal Climate Change Programs. 15 State Laws on Climate Change (as of October 2016).
	Other relevant instruments	National Climate Change Policy (established within LGCC in Title IV). National Development Plan 2013-2018 PND. Regulations to the General Law on Climate Change in terms of National Registry of Emissions. Regulations of the National Climate Change System. Climate Change Fund. Law for the Electrical Industry. Law for Energy Transition. Law for the Sustainable Use of Energy. Law for the Use of Renewable Energy and Funding for Energy Transition. Law for the Promotion and Development of Bio-energetics. General Law for Ecological Balance and Environmental Protection. National Program for Sustainable use of Energy 2014-2018. Special Program for the Use of Renewable Energy 2014-2018.
	Policies and regulations that promote public investment in mitigation and adaptation	The Energy Reform approved in 2013 promotes the investment in electrical energy generation through clean and efficient technologies and guarantees the generators open and equitable access to the National Electricity System (SEN) to sell energy in the wholesale electrical market, operated by the National Energy Control Center (Cenace). With an independent operator, the idea is to eliminate the barriers to investment and promote higher scale projects that can be developed in less time. The National Atlas for Feasible Zones for the Development of Renewable Energies (part of the Energy Reform) maps the zones available in the country for the construction of electrical grids and provides information on renewable energies for the development of projects in this area. The Program on Federal Support to Mass Transportation is an instrument created by the National Infrastructure Fund aimed to supporting the funding of mass transportation investment projects and institutional strengthening in planning, regulation and administration of urban transportation systems.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Secretariat of Environment and Natural Resources (SEMARNAT), which is in charge of the technical secretariat of SINACC.
	Inter-institutional coordination	Under the responsibility of the National Climate Change System (SINACC), which is integrated by: » The Inter-Secretarial Climate Change Commission (CICC), chaired by the President of the Republic and integrated by 14 State Secretariats. » The National Ecology and Climate Change Institute (INECC). » The Climate Change Council (C3) is a permanent consultation entity of the CICC, integrated by members from the social, private and academic sectors.. » Federative entities » Associations of municipal authorities. » The Congress of the Union.
	National stakeholders	The 14 secretariats that integrate the CICC: Secretariat of Government (SEGOB); Secretariat of Foreign Affairs (SER); Secretariat of Oceans (SEMAR); Secretariat of Finance and Public Credit (SHCP); Secretariat of Social Development (SEDESOL); Secretariat of Environment and Natural Resources (SEMARNAT); Secretariat of Energy (SENER); Secretariat of Economy (SE); Secretariat of Agriculture, Livestock, Rural Development, Fishing and Food (SAGARPA); Secretariat of Communications and Transportation (SCT); Secretariat of Public Education (SEP); Secretariat of Health (SSA); Secretariat of Tourism (SECTUR); and Secretariat of Agricultural, Territorial and Urban Development (SEDATU).
	Sub-national stakeholders	The state Secretariats of Environment with their Climate Change Offices.
	Private sector stakeholders	The corresponding participating representatives of the Climate Change Council (C3)
	Civil society stakeholders	The corresponding participating representatives of the Climate Change Council (C3).
	Other stakeholders	The civil society, especially in the sectors of land use and forests.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
MITIGATION EFFORTS	National LEDS	According to the National Climate Change Strategy, there are five strategic lines in terms of mitigation: » To accelerate energy transition to clean energy sources. » To reduce energy intensity through efficiency schemes and responsible consumption. » To move to sustainable city models with mobility systems, comprehensive waste management and low carbon print buildings. » To promote best agricultural and forestry practices in order to increase and preserve natural carbon sinks. » To reduce short-life climate contaminating emissions (CCVC) and promote health and wellbeing co-benefits. Each of these is supported by a set of actions, also defined in the ENCC that will enable their implementation and are, in turn, supported by six pillars that were established for the construction of the policy.
	Sector LEDS	National Energy Strategy (ENE) 2014-2028. National Strategy for Energy Transition and Sustainable Energy Use (ENTEASE), derived from the ENE, is the mechanism to promote policies, programs, actions and projects aimed towards a better use of the renewable energy sources and the clean technologies; towards promoting energy efficiency and sustainability; and towards reducing the dependence of Mexico from hydro-carbons as a primary source of energy. They are working in the elaboration of LEDS for the chemical industry and the mining industry. They are working in a National Air Quality Strategy.
	NAMA (NAMA Registry)	NAMA Oil and Gas Sector in Mexico – PEMEX (in pilot stage). NAMA Urban – SEDATU (under design). Concrete eco-stoves – Mexico NAMA Facility (under design). Solar heaters – Mexico NAMA Facility (under design). Co-generation in Mexico – Mexico NAMA Facility (in the idea stage). Renewal of the vehicle fleet in Mexico – Mexico NAMA Facility (under design). Solid waste management and biomass – Mexico NAMA Facility (under design). Substitution of fuels for the generation of electrical energy – Mexico NAMA Facility (in the idea stage). Substitution of fuels for the generation of thermal energy in the private industry – Mexico NAMA Facility (in the idea stage). Renewable energies – Mexico NAMA Facility (in the idea stage). Program for the reduction of emissions (NAMA) in natural gas processing, transportation and distribution systems through the reduction of fugitive emissions – PEMEX (under design). NAMA on New Housing – SEDATU (under implementation). NAMA on Existing Housing – SEDATU (in the pilot stage). Low-Emission Schools – SEMARNAT (in the pilot stage). NAMA on Federal Cargo Transportation for particular trucks and small transportation entrepreneurs – SCT/SEMARNAT (under design).

	Other NAMA	Integrated Urban Mobility Systems –BANOBRAS (under design). Appropriate National Mitigation Actions for the Industries of Cellulose and Paper – National Chamber of the Industry of Cellulose and Paper (under design). Green Route Program through the substitution of urban transportation units that use diesel as fuel for low-emission units that use compressed natural gas (CNG) – SEMARNAT (in the pilot stage). Reduction of fluorinated gas emissions in the industry of refrigeration, air conditioning and polyurethane foams – SEMARNAT (in the stage of idea). Photovoltaic generation for the manufacturing exporting industry – SEMARNAT (under design). Natural vehicle gas – Mexico NAMA Facility (in the stage of idea). NAMA on domestic refrigerators – SEMARNAT (under design). Energy Saving and Entrepreneurial Energy Efficiency Program (PAEEEM) – Entrepreneurial Eco-credit FIDEN (under implementation). Actions to reduce emissions and increase the removal of GHG in agricultural and forestry plots – Territorial Development and Environmental Services S.C. (under design). Carbon credits with local protocols, based on forest restoration and holistic agricultural management (in the pilot stage). NAMA on Co-generation in the Oil Sector in Mexico – PEMEX (under design). Energy efficiency in federal cargo transportation – SEMARNAT (in the pilot stage). Use of waste in the cement industry – Chamber of the Cement Industry (in the pilot stage). NAMA on sugar processing plants – SENER.

MITIGATION EFFORTS	Other Mitigation Strategies	The National Program for Energy Efficiency in Municipal Public Lighting started with the framework agreement for collaboration with Sener (Secretariat of Energy), Conuee (National Commission for Efficient Energy Use), CFE (Federal Electricity Commission) and Banobras (National Bank for Public Works and Services, S.N.C) in 2010. It focuses on promoting energy efficiency through the substitution of inefficient municipal public lighting systems. Special Program for Renewable Energy Use 2014-2018. National Program for Sustainable Energy Use 2014-2018. There are 29 official Mexican standards valid in terms of energy efficiency (residential, agricultural and municipal sectors, estate and housing, industry and trade). Additionally, there are 5 official Mexican standards on emission targeted to the transportation sector. The National Forestry Program 2014-2018 set a goal of avoided emissions based on the implementation of early actions in the territory. A carbon tax approved in 2013. The Energy Reform approved in 2013 pursues, among other objectives, the reduction of barriers to the development of electrical generation projects that allow for the use of renewable resources and provide certainty to the energy transition based on low GHG emissions. Mexico's GHG Program, proposed by the private sector and led by the Study Commission from the Private Sector for Sustainable Development (CESPEDES) has the objective of preparing the Mexican industrial sector in a global context with more reduction in carbon emissions. The Climate Change Fund, created in 2012, which resources will be invested in mitigation and adaptation projects. The Fund for Energy Transition and Sustainable Use of Energy, aimed towards projects and programs from different sectors and NGOs related to the promotion, dissemination and development of renewable energy and energy efficiency that meet the objectives of the ENTEASE. National Emission Inventory (INEGEI). National Risk Atlas. State and Municipal Risk Atlas.
	Existence of MRV	Not yet; however, Mexico is aware of the need to expand, strengthen and integrate the MRV mechanisms until reaching a national system that evidences the mitigation accomplished year after year. One of the pillars of the National Climate Change Policy of the ENCC is to "Implement Measurement, Reporting, Verification and Monitoring and Evaluation Mechanisms", and it has 12 lines of action to reach that objective. Some progress in terms of MRV construction includes the creation of the National Emission Registry, the National Registry of Nationally Appropriate Mitigation Actions, the Information System of the Cross-Cutting Agenda – PECC (SIAT-PECC), the National REDD+ Strategy, the INEGEI 2013 and the Evaluation of the Climate Change Policy.
	Main working sectors	There are initiatives in different sectors, with different levels of progress. The most advanced initiatives are related to the energy sector (including the transportation sub-sector), land use change, and forests.
ADAPTATION EFFORTS	National Plans and Strategies	The National Climate Change Strategy defines 3 strategic areas in terms of adaptation: » To reduce the vulnerability and increase the resilience of the social sector to the effects of climate change. » To reduce the vulnerability and increase the resilience of strategic infrastructure and productive systems to the effects of climate change. » To preserve and sustainably use the ecosystems and maintain the environmental services they provide. These are the same adaptation axes contained in the INDC, which include the corresponding actions to be implemented in the period 2020-2030. 25 out of the 32 Federative Entities have established State Climate Change Commissions (CECC) and promulgated 14 Climate Change Laws (LGCC). These documents are coherent with the ENCC and the PECC 2014-2018 and their corresponding regulations.
	Sector Plans and Strategies	The Special Climate Change Program 2014-2018 (PECC) provides, in its Objectives 1 and 2, a series of strategies and lines of action related to adaptation.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FUNDING SOURCES	International	Some of the actions that appear in the NDC are conditioned to international funding. To this date, most of this support has been directed through technical assistance (studies, capacity building and meetings with experts, among others), although there have also been international loans. Some of the international cooperation organizations that have supported the country include GIZ, USAID, Government of the United Kingdom, World Bank, IDB, Government of Denmark, Spanish Cooperation Agency for International Development and the French Development Agency. A study implemented to find about the funding coming from international organizations and organizations for bi-lateral and multi-lateral cooperation to promote or strengthen actions in climate change evidenced that, for the case of actions contributing to mitigation, close to 90% of the funds were loans, close to 10% were donations and a very small fraction was used in technical cooperation (National Institute of Ecology and Climate Change – INECC – and Secretariat of Environment and Natural Resources – SEMARNAT – 2015. First Biennial Update Report to the United Nations Framework Convention on climate Change. INECC/SEMARNAT, Mexico, Pg. 190).
	Domestic	Approximately 80% of the actions included in the PECC have public funding. A great part of the NAMA on Sustainable Housing has been developed through public funds (green mortgages). In general, the design of many NAMAs has been financed with international sources, while the public sources have financed implementation stages.
(I)NDC	Status of the (I)NDC	Mexico presented its INDC to the UNFCCC on March 30, 2015, and ratified the Paris Agreement on September 21, 2016.
	Mitigation goal	To reduce 22% of its GHG emissions and 51% of black carbon compared to its BAU by 2030 (unconditional goal). To reduce 36% of its GHG emissions and 70% of black carbon compared to its BAU by 2030 (conditional goal).
	Relationship of LEDS with the (I)NDC	The NDCs used as inputs, mainly the National Climate Change Strategy and the PECC and were discussed with the sectors involved. Since PECC is a program of the administration in office, it has a term of only six years. The discussion of the NDCs implied an additional effort, because it was necessary to analyze the possibilities for a long term period, starting in 2020.
	Inter-sector nature of the construction process and focus of the(I)NDC	The elaboration of the NDC included a public participation process through meetings with organizations from the private and the civil sectors; work meetings with chambers of industry and society organizations; and a public survey through a questionnaire on line. The Inter-Sectoral Climate Change Commission was in charge of its approval.

N/D: Information not available

N/A: Not applicable

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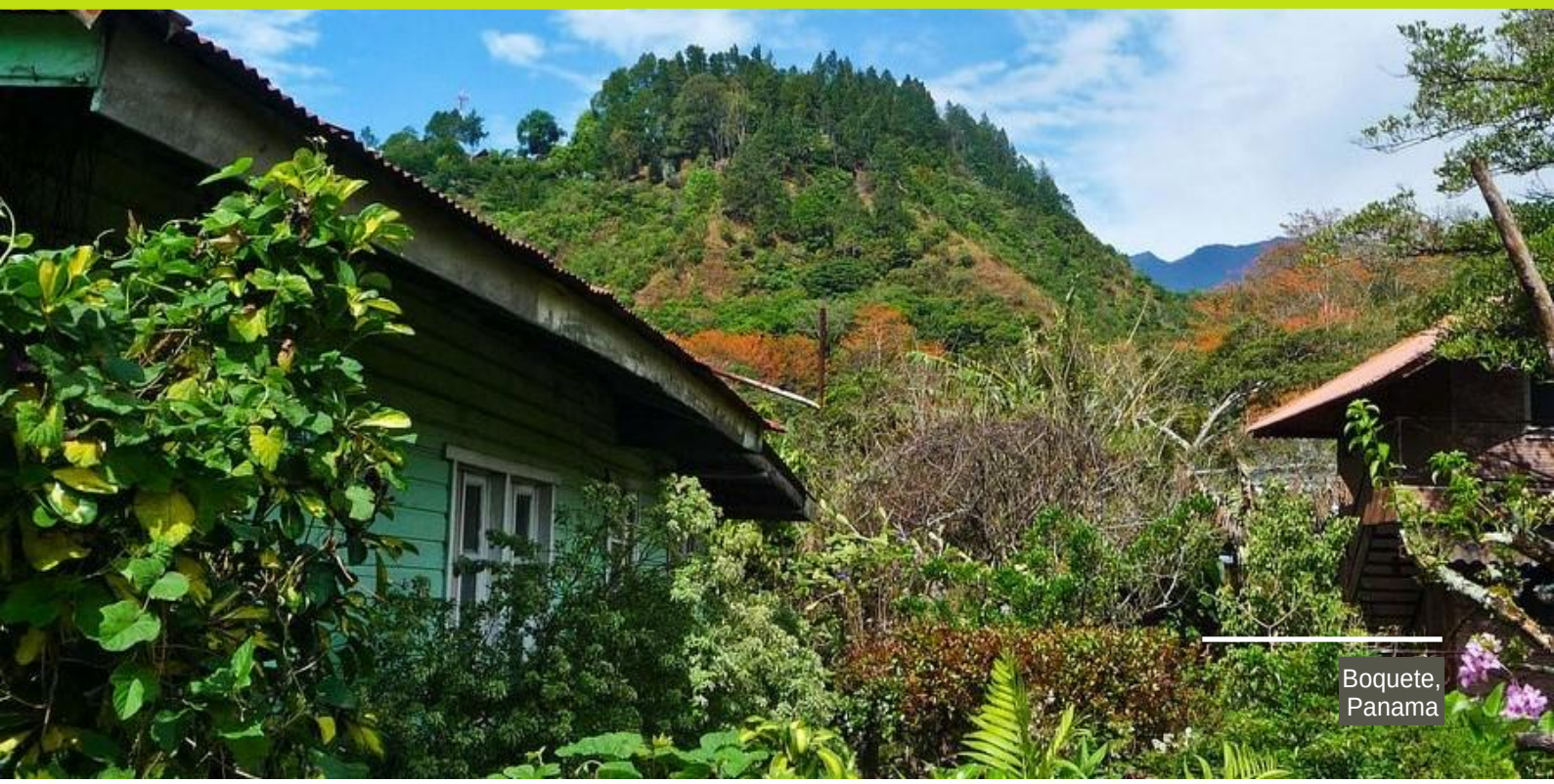
5.13 PANAMA



PANAMA				
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**	
POPULATION	Total (No. of inhabitants)	3,929,141	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	16,248,770 (WB, 2012)
	Urban (%)	66.5		CO_2 per capita emissions (tCO_2)	2.7 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		75,420		Growth rate	138% since 1990
GDP	Value (US$)	52,132,289,700 (WB, 2015)		Last update of the GHG Inventory	2000
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 60 of 188 (2014)		Previous inventories	1994
	GINI Index	51.67 (2013)		Main emitting sectors	Energy (50%, where transportation is 59%) and agriculture (33%).
	Governance Index	Position 42 of 179 (2011)	VULNERABILITY	Climate risk index	Position 69 of 138 (2014)
	Global Competitiveness Index	Position 42 of 138 (2016)			
LAND USE (%)	Forest area	62 (2015)		Priority sectors	Agriculture, water and energy, ocean-coastal zones
	Agricultural land	30.3 (2013)			
	Urban areas	3.9			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	National Climate Change Policy (in process of update, it is expected to be ready in 2017). National Climate Change Strategy (under approval). Nationally Determined Contribution to approach Climate Change of the Republic of Panama.
	Other relevant instruments	Law 8 from March 25, 2015 (Title XI). Government Strategic Plan 2014-2019. Law 40 from September 12, 2016 that ratifies the Paris Agreement.
	Policies and regulations that promote private investment in mitigation and adaptation	Law 45 from August 4, 2004; it establishes a regime for the promotion of hydroelectrical generation systems and other new, renewable and clean sources, among other provisions. Law 37 from June 10, 2013; it establishes the incentive regime to promote the construction, operation and maintenance of grids and /or solar installations. Law 42 from April 20, 2011; it establishes guidelines for the national policy on biofuels and electrical energy from biomass in the national territory. Law 69 from October 12, 2012; it establishes the general guidelines of the national policy for the rational and efficient use of energy in the national territory, known as “Ley UREE”. Law 44 from April 25, 2011; it establishes the incentive regime for the promotion of the construction and exploitation of wind grids for the provision of public electricity services.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Climate Change Unit from the Ministry of Environment (MIAMBIENTE)
	Inter-institutional coordination	Panama National Climate Change Committee (CONACCP), integrated by representatives of 27 government institutions and chaired by the Ministry of Environment.
	National stakeholders	The 27 Institutions of CONACCP are: National Environment Authority (ANAM); Ministry of Economy and Finance (MEF); Ministry of Agricultural Development (MIDA); Ministry of Health (MINSA); Ministry of Education (MEDUC); Ministry of Trade and Industry (MICI); Ministry of Public Works (MOP); Ministry of Social Development (MIDES); Water Resource Authority of Panama (ARAP); Institute of Agricultural Research of Panama (IDIAP); National Secretariat of Science, Technology and Innovation (SENACYT); National Civil Protection System (SINAPROC); Universidad de Panama; Universidad Tecnológica de Panama (UTP); Authority of the Panama Canal (ACP); National Energy Secretariat; Empresa de Transmisión Eléctrica, S.A. (ETESA); Ministry of Foreign Affairs (MINREX); Ministry of Housing and Land Organization (MIVIOT); Commission for Population, Environment and Development from the National Assembly; Civil Aeronautic Authority (AAC); Ocean Authority of Panama (AMP); Tourism Authority of Panama (ATP); Authority of Traffic and Ground Transportation (ATTT); Authority
	Sub-national stakeholders	Association of Municipalities of Panama.
	Private sector stakeholders	National Sustainable Development Council (CONADES); Association of Pig Breeders; CEMEX, Panama Green Innovations (PFC Recycling Enterprise); MELO (poultry and by-products enterprise). The banks Banistmo and Citibank manage solid Entrepreneurial Social Responsibility Programs.
	Civil society stakeholders	National Association for the Conservation of Nature (ANCON), Panamanian Association of Entrepreneurs (APE), Panamanian Construction Chamber CAPAC. Communities of native towns for the implementation of REDD+. Towns of Madugandí, Wargandí, Guna Yala, Ngäbe, Buglé, Emberá, Emberá Wounaan, Embera de Alta Bayano, Naso Tjër Di, Bri bri, Takargunyala, and collective land.
	Other stakeholders	Metro de Panamá, S.A. (enterprise owned 100% by the State of Panama),
MITIGATION EFFORTS	National LEDS	The Strategic Government Plan 2014-2019, as part of the sixth line of action, indicates that addressing climate change is a national priority. Both the national policy and the national climate change strategy are under elaboration and soon to be approved. Such instruments provide the strategic lines for low carbon and climate resilient development. Unless there is official information, the initiatives included in this study are considered as initiatives not framed as LEDS yet.
	Sector LEDS	National Forest Development Plan (2008). The National Strategy for the Reduction of Emissions from Deforestation and Forest Degradation is under public discussion. A key part of such strategy is the increase of carbon storage through the Partnership for the Million Reforested Hectares, which projects the reforestation of 13% of the national territory in the next 20 years. The National Climate Change Strategy (unpublished) will provide Sectoral Low Emission Development Programs and lines of action for energy, urban mobility, REDD+, national emissions market and Green Government.
	NAMA (NAMA Registry)	There are no NAMAs registered.

	Other NAMA	NAMA on Waste Water Treatment in Pig Breeding Farms through Biodigestors. NAMA on Sustainable Urban Mobility (high priority). NAMA on Energy Efficiency. NAMA on Replacement of 100% of latrines with sanitary toilets. NAMA on Replacement of conventional fuels for waste on ovens for the production of Clinker. NAMA on the Installation of a Perfluorocarbon Recycling Plant. NAMA on Government Carbon Print Management. NAMA on Sanitation of the Panama Bay. NAMA on the Use of Chicken Manure for energy generation. NAMA on Final Waste Management in the Province of Colon.
	Other mitigation initiatives	National Energy Plan 2015-2050. The Ministry of Environment is defining a scheme to create a national carbon market in order to make it regional, where the REDD+ reductions can be traded. Three greenhouse gas inventories will be developed through the Third National Communication and the First Biennial Update Report (BUR).
	Existence of MRV	Under development, parallel to the Third National Communication; it is expected to be ready by the third quarter of 2017.
	Main working sectors	Energy, transportation and LULUCF.
ADAPTATION EFFORTS	National Plans and Strategies	The National Climate Change Strategy (unpublished) includes an Adaptation component that covers Programs for Ocean-Coastal Zones, Agriculture, Energy and Resilient Cities. Through Law No. 8, a National Adaptation Fund was created, and it is in process of capitalization to enter into operations in 2017, It is expected that through these funds, there will be investment in adaptation in the 10 most vulnerable districts. Preparation of 10 local adaptation strategies in the most vulnerable districts.
	Sector Plans and Strategies	The National Water Security Plan 2015-2050 – Water for All and the National Energy Plan include the topic of adaptation. They are working in the elaboration of a National Adaptation Plan for the Agricultural Sector (MIAMBIENTE together with the Ministry of Agricultural Development).
	Main working sector	Water resources, agriculture, energy.
FUNDING SOURCES	International	There has been support through the World Bank, the Community Carbon Fund, the Konrad Adenauer Foundation, the German Federal Ministry of Environment and Energy, UNEP, GEF, Ministry of Environment of Italy and NORAD.
	Domestic	There is investment through national funds.
(I)NDC	Status of the (I)NDC	They were presented to the UNFCCC (April 19, 2016, according to the UNFCCC Website). The Paris Agreement was ratified on September 12, 2016.
	Mitigation goal	It presents contributions for two sectors: energy and LULUCF. For the energy sector, the goal is to increase the percentage of electrical generation through other sources of renewable energy (solar, wind, biomass) by 30% by 2050 compared to 2014. For the LULUCF sector, the goal is to increase the capacity of absorption by 10% through reforestation and restoration activities in protected areas, compared to the base scenario by 2050. (Through a supported contribution, the percentage increases to 80% of absorption capacity).
	Relationship of LEDS with the (I)NDC	The NDC is consistent with the National Climate Change Policy.
	Inter-sector nature of the construction process and focus of the (I)NDC	The NDC construction process was led by MIAMBIENTE, with the support of CONACCP. The public hearing mechanism was used for the engagement of different sectors, with representation from the ten provinces and nine structures of the native groups of Panama.

N/D: Information not available

N/A: Not applicable

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5.14 PARAGUAY

Chaco Boreal, Paraguay

PARAGUAY					
GENERAL INFORMATION			CLIMATE CHANGE PROFILE		
POPULATION	Total (No. of inhabitants)	6,639,123	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	152,687,270 (Nat. inv., 2013)
	Urban (%)	60		CO_2 per capita emissions (tCO_2)	0.8 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		397,300		Growth rate	-20.3% since 1990
GDP	Value (US$)	27,093,938,619 (WB, 2015)		Last update of GHG Inventory	2011
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 112 of 188 (2014)		Previous inventories	2005-2012 2010 2000 1994
	GINI Index	51.7 (2014)		Main emitting sectors	LULUCF; agriculture, energy, waste, industries.
	Governance Index	Position 70 of 179 (2011)	VULNERABILITY	Climate risk index	Position 44 of 138 (2014)
	Global Competitiveness Index	Position 117 of 138 (2016)			
LAND USE (%)	Forest area	38.6 (2015)		Priority sectors	Water resources; forests; agriculture and livestock; land organization; energy; infrastructure; health and sanitation; risk management and natural disasters.
	Agricultural land	55.1 (2014)			
	Urban areas	N/D			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	The Constitution of the Republic of Paraguay, sanctioned in 1992, acknowledges the right to a healthy environment and guarantees environmental protection according to the terms provided in articles 7 and 8. Laws 251/93, 1447/99 and Decree Nº 14.943 (articles 2 and 3) implement the National Climate Change Program (PNCC), which depends on the Secretariat of Environment. Under the PNCC, the following institutions were created: the National Climate Change Commission, a deliberation, consultation and resolution entity of the National Climate Change Policy, and the National Climate Change Office, an executive entity of the National Climate Change Policy. Law Nº 1447/99 approves the Protocol of Kyoto from the United Nations Framework Convention on Climate Change. National Climate Change Adaptation Plan integrated by Phase 1, Mitigation Strategy and Phase 2, National Climate Change Adaptation Strategy. National Climate Change Adaptation Strategy, approved in October 2016. Law N° 1561/00, which created the National Environment System (SISNAM), the National Environment Council (CONAM) and the Secretariat of Environment (SEAM). National Climate Change Policy; Forest Law 422/73 and Law 294/93 for Environmental Impact Assessment.
	Other relevant instruments	» National Health Policy (2015-2030), where the update to the Institutional Strategic Plan of the Ministry of Health (2014-2018) contains objectives related to the impacts of climate on the population. » National Environmental Policy (PAN). » National Risk Management and Reduction Policy (2013) (Executive Decree Nº 1.402/1). » Paraguay National Development Plan 2030. » Communication and Education Plan on the implementation of article 6 of the United Nations Framework Convention on Climate Change (consultancy in process for the update of the Plan). » Strategic Agricultural Framework 2014/2018: it promotes actions related to adaptation & risk management. » Proposal of a Climate Change Adaptation Policy from the Social Action Secretariat (SAS).
	Policies and regulations that promote private investment in mitigation and adaptation	Paraguay National Development Plan 2030: it mentions, in general terms, the attraction of foreign investment for infrastructure, provision of goods and services, and projects from the public-private sector (nothing specific for adaptation or mitigation). The National Environment Policy has the strategy of “Formulating and implementing financial and non-financial instruments to encourage the sustainability of development and the improvement in the quality of life”, including incentives for investments in environmental infrastructure. Law Nº 5102 for the Promotion of Investment in public infrastructure and enhancement of the goods and services provided by the State promotes private investment and environmental sustainability. The National Reforestation Plan, Decree 10174/12, provides the reforestation of 450 thousand ha. in 15 years as its goal. Decree Nº 4056, promoted by the Ministry of Public Works, the Ministry of Environment and the Forestry Institute to promote investment for reforestation for the production of energy from biomass with certified wood.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	The National Environment Council (CONAM) discusses the National Environment Policy, and the National Climate Change Commission (CNCC) resolves the National Climate Change Policy with the participation of member institutions.
	Inter-institutional coordination	CONAM is the inter-institutional associated entity that serves as deliberation, consultation and resolution entity of the National Environment Policy that was approved in virtue of Resolution CONAM N° 4/05 from May 31, 2005. CONAM will be integrated by a) the Executive Secretary of the Secretariat of Environment, in the role of chair; b) the representatives from the environmental units of the ministries, secretariats and public entities of the sector; by the Environmental Secretariats and Departments of the department and municipal governments; and c) the representatives of associated entities and private productive sectors, as well as from the non-governmental and non-profit environmental organizations. Its members should be ideal and of recognized moral and intellectual solvency.
	Other coordination entities	The National Climate Change Commission (CNCC), is an inter-institutional associated entity that acts as deliberation, consultation and resolution space for the National Climate Change Policy. It is constituted by 24 institutions as full members, including all the ministries and decentralized public entities. There are also representatives from the private sector and a network of environmental organizations. (The decree that makes it official opens the possibility for other members that meet the requirements to enter). The National Climate Change Office (ONCC), which is the executive entity of the National Climate Change Policy.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	National stakeholders	**National Climate Change Commission. Full Members:** » Ministry of Foreign Affairs (MRE) » Ministry of Industry and Trade (MIC) » Ministry of Public Works (MOPC) » Ministry of Finance » Ministry of Agriculture and Livestock (MAG) » Technical Planning Secretariat (STP) » Office of Meteorology – National Civil Aviation Direction (DINAC) » National Electricity Administration (ANDE) » Network of Environmental Organizations (ROAM) » School of Chemical Sciences (Universidad Nacional de Asunción) » School of Engineering (Universidad Nacional de Asunción) » School of Agricultural Sciences (UNA) » School of Exact and Natural Sciences (FACEN) (Universidad Nacional de Asunción) » School of Science and Technology (Universidad Católica) » Paraguayan Industrial Union (UIP) » Rural Association of Paraguay (ARP) » National Forest Institute (INFONA) » Secretariat for National Emergencies (SEN) » Secretariat of Social Action (SAS) » Ministry of Health - Mspybs (DIGESA) » ITAIPÚ Binational » National Commission for the Defense of Natural Resources (CONADERNA) » Ministry of Women » National Housing and Habitat Secretariat (SENAVITAT) **Advisory members:** » Development Institute » WWF » Guyra Paraguay » Institute of Law and Environmental Economy (IDEA)
	Sub-national stakeholders	Network of Municipalities in the Metropolitan Area of Asunción for Climate Change.
	Private sector stakeholders	Paraguayan Industrial Union Rural Association of Paraguay (ARP) Federation of Production Cooperatives (FECOPROD) Paraguayan Federation of Wood Producers (FEPAMA) Paraguayan Chamber of Exporters of Cereals and Oilseeds (CAPECO) Union of Production Associations (UGP)
	Civil society stakeholders	Network of Environmental Organizations Federation for the Self-determination of Indigenous Communities (FAPI) National Coordination of Rural and Indigenous Working Women (CONAMURI)
	Other stakeholders	Universidad Nacional de Asunción Universidad Católica Nuestra Señora de la Asunción (UCA) Secretariat of Women Secretariat of Social Action ITAIPÚ Binational
	National LEDS	Climate Change Mitigation Strategy. National Mitigation Plan and its action plans (under development).

MITIGATION EFFORTS	Sector LEDS	Paraguay Energy Policy, approved by Decree No. 6.092/16. National Energy Efficiency Plan, approved by the National Energy Efficiency Committee. There is a project for a Framework Energy Efficiency Law. Decree 10174/12, which provides the goal of reforestation of 450 thousand trees in 15 years. Decree 4056/2015, Regime for the Certification, Control and Promotion of the Use of Bioenergy to Guarantee the Sustainability of these Renewable Energy Resources.
	NAMA (NAMA Registry)	There are no NAMAs in this registry yet.
	Other NAMA	NAMA Livestock (under development).
	Other mitigation initiatives	» Law for zero deforestation in the Eastern region, law 2524/04. » Law Nº 3001/06 on Environmental Services. » Decree 4056/2015, Regime for the Certification, Control and Promotion of the Use of Bioenergy to Guarantee the Sustainability of these Renewable Energy Resources. » Forest (Law Nº 4890/13 Actual Right for Forest Areas – Forest Overflight). Regarding transportation, the BUR framework mentions the following laws and decrees: » Law Nº 2748/05 on "Biofuel Promotion", which sets a series of tax incentives both for biofuel producers and for importers of technology to manufacture them. » Presidential Decree N° 2130/14 from the MOPC provides the regime for the renewal of the public passenger transportation in the Metropolitan Area of Asunción, in order to withdraw and store the public transportation units considered obsolete and replace them with new units. » Law N° 5.183/14 "About incentives to imports of electrical and hybrid vehicles" and their promotion. It provides the tax exemption of Customs Tax and the Value Added Tax for Imports of electrical and hybrid vehicles into the national market.
	Existence of MRV	There is a proposal for MRV elaborated within the framework of the Third National Communication to insert mitigation strategies in an MRV. In the framework of the BUR, it is provided that the MRV System, at the national level, should include the following components or areas: » MRV on Greenhouse Gas Emissions. » MRV on Mitigation Measures. » MRV on Adaptation Activities. » MRV on the Support received and the funding needs. » MRV on REDD+. National Environmental Information System (Secretariat of Environment – SEAM) and Forests (National Forest Institute –INFONA) which pursues its implementation through REDD.
	Main working sectors	Energy and forestry
ADAPTATION EFFORTS	National Plans and Strategies	Adaptation is a priority established in the National Development Plan 2014-2030. The National Climate Change Adaptation Plan was approved in October 2016. National Climate Change Adaptation Strategy (2015).
	Sector Plans and Strategies	National Plan for Risk Management and Climate Change Adaptation in the Agricultural Sector of Paraguay. Analysis of vulnerability and action plans for the sectors of agriculture, livestock, health and water resources (under development).
	Main working sectors	Water resources, agriculture and public health.
FUNDING SOURCES	International	Climate funding through different existing funds (Green Climate Fund, Adaptation Fund, Market and No Market Mechanisms, World Environmental Forum, etc.).
		At the national level, there is no strategy to raise financial resources. Paraguay needs to promote the application of the necessary financial resources to implement plans, programs and projects on climate change adaptation and mitigation in the following priority sectors: food security and sovereignty, water (supply and sanitation), energy, biological diversity and forests, health, clean industries, infrastructure and transportation.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
(I)NDC	Status of the (I)NDC	The country presented its INDC to the UNFCCC on October 1, 2015. Paraguay ratified the Paris Agreement on October 6, 2016, under Law Nº 5.681. In the UNFCCC website, the ratification date is October 14, 2016.
	Mitigation goal	20% reduction based on the behavior of emissions projected by 2030. » Unilateral goal: 10% reduction of emissions projected by 2030. » Conditional goal: 10% reduction of emissions projected by 2030.
	Relationship of LEDS with the (I)NDC	The development of the NDC was based on the National Development Plan, which identifies mitigation and adaptation actions to improve the global habitat.
	Inter-sector nature in the construction process and focus of the (I)NDC	There was a high level participatory process with the civil society engaging all the sectors and institutions established by the National Climate Change Commission that was created by the National Climate Change Program 2001 to structure two fundamental pillars for the implementation of the National Climate Change Policy through: » The National Climate Change Office as implementer. » The National Climate Change Commission that is integrated by 24 institutions as full members, including all the ministries and decentralized public entities (Secretariat for National Emergencies, Social Action, Women). There are also representatives from the private sector, like the Industrial Union of Paraguay and the Rural Association of Paraguay, and NGOs, as well as a network of environmental organizations (the decree opens the possibility for other members that meet certain requirements to enter). » There was also participation from other organizations different from those that integrate the National Climate Change Commission.

N/D: Information not available

N/A: Not applicable

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5.15 PERU

Uros Floating Islands, Peru

PERU					
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**		
POPULATION	Total (No. of inhabitants)	31,376,670	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	171,309,570 (Nat. inv. 2012)
	Urban (%)	78		CO_2 per capita emissions (tCO_2)	1.9 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		1,285,220		Growth rate	25.6% since 1990
GDP	Value (US$)	189,111,139,010 (WB, 2015)		Last update of the GHG Inventory	2012
SOCIAL AND ECONOMIC INDICATORS	Human Development Index	Position 84 of 188 (2014)		Previous inventories	1994, 2000, 2005, 2010
	GINI Index	44.73 (2013)		Main emitting sectors	LULUCF (51%), energy (26%, where transportation represents 40%); agriculture (15%) and waste (5%).
	Governance Index	Position 75 of 179 (2011)	VULNERABILITY	Climate risk index	Position 71 of 138 (2014)
	Global Competitiveness Index	Position 67 of 138 (2016)			
LAND USE (%)	Forest area	57.7 (2015)		Priority sectors	Water resources, agriculture, fishing, forests and health.
	Agricultural land	19 (2013)			
	Urban areas	1.3			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	Framework Law on Climate Change (under formulation). General Environment Law 2005. Organic Law for Regional Government and its Modification. National Agreement on Strategic National Development Plan 2021 (Bi-centennial Plan). Multi-annual Macro-economic Framework (MMM). National Environment Policy.
	Other relevant instruments	Action Plan for Climate Change Adaptation and Mitigation. National Environmental Action Plan PLANAA 2010-2021. National Climate Change Strategy. Regional Climate Change Strategies (20 approved).
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Direction General on Climate Change, Desertification and Water Resources (DGCCDRH) from the Vice-ministry of Strategic Development of Natural Resources, from the Ministry of Environment (MINAM).
	Inter-institutional coordination	National Climate Change Commission, integrated by representatives from the public sector, the private sector and the civil society, and chaired by the MINAM. Multi-sector Commission, at the level of ministers and/or vice-ministers, in charge of elaborating the technical report that contains the INDC proposal from Peru. It is integrated by 12 ministries and the Presidency of the Council of Ministers. It is chaired by the Ministry of Environment, which takes the role of Technical Secretariat of the Commission – INDC Peru 2015.
	Other coordination entities	INFOCARBONO
	National stakeholders	Ministry of Energy and Mines; Ministry of Transportation and Communications; Ministry of Agriculture and Irrigation; Ministry of Production; Ministry of Housing, Construction and Sanitation; Ministry of Education; Ministry of Health; Ministry of Culture; and National Institute for Statistics and Information.
	Sub-national stakeholders	Regional Governments, through the Regional Climate Change Strategies that include the mitigation and adaptation components.
MITIGATION EFFORTS	National LEDS	In 2014, they worked on the roadmap towards low carbon development with the participation of competent and cross-cutting ministries and other key stakeholders. This roadmap established, as the first benchmark, the construction of INDCs, with its approval will set the beginning of the actions needed for its accomplishment.
	NAMA (NAMA Registry)	TRANSPerú - NAMA on Sustainable Urban Transportation.
	Other NAMA	They are currently working on 10 NAMAs, some more advanced than others. Each NAMA is led by the Ministry of the competent sector. » NAMA on Transportation (Project TRANSfer II). » NAMA on Municipal Solid Waste. » NAMA on the Industry for Construction Materials (cement, bricks, and steel). » NAMA on Generation and final use of energy. » NAMA on Bio-energy. » NAMA on Sustainable Buildings. » NAMA on Cacao. » NAMA on Coffee. » NAMA on Oil Palm.
	Other NAMA	NAMA on Livestock (under development).

MITIGATION EFFORTS	Other mitigation initiatives	The National Climate Change Strategy of Peru presents two general objectives: » The population, the economic agents and the State increase their awareness and their adaptive capacity to the adverse effects and the opportunities of climate change. » The population, the economic agents and the State conserve carbon reserves and contribute to the reduction of GHG emissions. Infocarbono involves different entities that, depending on their sectoral competence, will be in charge of compiling, systematizing and estimating the emissions / removal of GHG (Ministry of Energy and Mines, Ministry of Transportation and Communications, Ministry of Production, Ministry of Agriculture and Irrigation, Ministry of Housing, Construction and Sanitation, Ministry of Health), and others will be in charge of informing, educating and sensitizing the population (Ministry of Education, Ministry of Culture, National Institute of Statistics and Information, Ministry of Environment – SINIA) about the results of the inventories and about the importance of their engagement in climate change management. The Ministry of Environment (MINAM), through the DGCCDRH, is in charge of the implementation, administration and leadership of Infocarbono. Likewise, MINAM consolidates the Annual GHG Reports from the sectors to generate the National GHG Inventory. MINAM is developing sectoral manuals for the implementation of Infocarbono, as well as a Web platform to serve as repository for all the information related to the elaboration of the inventories. It will host the reports of the inventories, the spreadsheets and the sectoral manuals for the preparation of inventories. Eight methodological communications and statistics guidelines have been approved (six sectoral and two intersectoral). The first Biennial Update Report from Peru summarizes over 90 mitigation strategies, out of which the majority is under implementation process, most of them promoted by the public sector. From these initiatives, 44% corresponds to initiatives in the energy sector and 40% to initiatives in land use and changes in land use and silviculture. Peru continues developing projects under the REDD+ umbrella, aiming towards the reduction of carbon emissions caused by deforestation and degradation of forests, including conservation, sustainable forest management and improvement of forest carbon stocks. There are 20 projects identified in this field, and the majority of them have been developed in the Amazon regions of Madre de Dios and Ucayali (Ministry of Environment of Peru, 2014a). There is an agreement with the governments of Norway and Germany for the payment for the results in the reduction of emissions through reforestation. The international cooperation project “Climate Change Planning” (CIFF-COSUDE-CDKN), which finished in 2014, had the main objective of constructing the scientific bases and the capacity to develop the economic low carbon feasibility in Peru. The Project for the Support of Climate Change Management (formerly PRONAGE) is an official long term initiative with the cooperation from the Government of Switzerland to approach topics related to supporting climate change management in Peru. So far, they are working in the sectors of forest, energy and water in the regions of Arequipa and Ucayali. There are experiments regarding the type of support to be generated (standards, governance, foreign and inter-sector relations, institutional arrangements, etc.) to promote mitigation and adaptation projects.
	Existence of MRV	They are establishing the first methodological approaches at the sector level to assess performance and analyzing a national aggregate.
	Main working sectors	Energy (including transportation), waste, industrial processes, agriculture and forests.
ADAPTATION EFFORTS	National Plans and Strategies	There is a National Adaptation Plan under elaboration.
	Sector Plans and Strategies	The National Adaptation Plan will have a sectoral or thematic approach that will be consistent with the National Climate Change Strategy. These topics are the same of the Peruvian NDC. The idea is to work, especially in the sector of forests because it combines the NDCs in mitigation and adaptation.
	Main working sectors	Water, agriculture, fishing, forests, health.

FUNDING SOURCES	International	Most funding is international. The NAMA on transportation receives support from the GIZ and the German Federal Ministry of Environment, Nature Protection and Nuclear Security (BMUB). The NAMA on solid waste is financed by NOAK-NEFCO. The NAMA on the Industry of Construction Materials is financed by the European Union and the Australian Development Agency. The NAMA on Energy if financed by the GEF. The NAMA on Bioenergy is financed by the German Federal Ministry of Environment, Nature Protection and Nuclear Security (BMUB). The NAMAs on agriculture will be financed by GIZ, Rainforest Alliance, ICRAF, CiRAD, and others The First BUR presented to the Convention shows more details regarding mitigation funding.
	Domestic	There has been increasing interest by ministries and sectors to develop their own NAMAs; however, there are still no efforts financed from the ministries themselves.

(I)NDC	Status of the (I)NDC	It was presented to the UNFCCC (September 28, 2015). Ratified (July 25, 2016). They are going back to the exercise and have created a Technical Multi-sectoral Task Force to review the INDCs and turn them into NDCs. This is temporary and will be in charge of reviewing, fine tuning the analysis, evaluating costs, prioritizing co-benefits and quantifying them in order to present them to potential promotors.
	Mitigation goal	Reduction of 30% of GHG emissions compared to the BAU scenario by 2030. Out of that 30%, 20% reduction is an unconditional goal, while the remaining 10% is conditioned to external international funding and favorable conditions.
	Relationship of LEDS with the (I)NDC	The INDC from Peru contemplates mitigation and adaptation elements, and it is considered a means to meet the provisions of the climate policy, mainly regarding the National Climate Change Strategy. According to interviews with the country authorities, the NAMAs under implementation are part of the measures to achieve the mitigation objectives of the INDC. The Multi-sectoral Commission was created for the elaboration of the INDCs. The Ministry of Environment facilitates the process and the sector ministries implement it.
	Inter-sector nature of the construction process and focus of the (I)NDC	MINAM was in charge of leading the process. Three levels of dialogue were included: » "Technical-scientific", with experts for the design and calculation of emissions. » "Technical-political", with representatives from the ministries related to sources of emissions and emission management options. » "High level political", for which they created a Multi-sector Commission (CM) at the level of ministries and/or vice-ministries, in charge of elaborating the technical report including the INDC proposal. Additionally, to formulate and consult progress and results, they went through a decentralized public consultation process with the national and sub-national government stakeholders and representatives from the civil society, including indigenous organizations. They also created a multi-sector commission to review the progress of the technical working groups, which had four sessions and was financed by the German cooperation.

N/D: Information not available

N/A: Not applicable

File created by: Ana Ruth Gutiérrez Murillo
Interviewee: Eduardo Durand López. Director General for Climate Change, Desertification and Water Resources. Vice-ministry of Strategic Development of Natural Resources, Ministry of Environment.

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5.16 DOMINICAN REPUBLIC

Key of Birds, Dominican Republic

DOMINICAN REPUBLIC					
GENERAL INFORMATION			**CLIMATE CHANGE PROFILE**		
POPULATION	Total (No. of inhabitants)	10,528,391	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	221,291,090 (Nat. inv., 2010)
	Urban (%)	79		CO_2 per capita emissions (tCO_2)	2.1 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		48,670		Growth rate	96.4% since 1990
GDP	Value (US$)	68,102,618,092 (WB, 2015)		Last update of the GHG Inventory	2015 (base year 2010)
SOCIAL AND ECONOMIC INDICATORS	Human Development Index	Position 101 of 188 (2014)		Previous inventories	1990, 1994, 1998, 2000
	GINI Index	47.07 (2013)		Main emitting sectors	Electricity (~30%) Transportation (22%) Agriculture (~20%) Cement (9%)
	Governance Index	Position 73 of 179 (2011)	VULNERABILITY	Climate risk index	Position 104 of 138 (2014)
	Global Competitiveness Index	Position 92 of 138 (2016)			
LAND USE (%)	Forest area	41 (2015)		Priority sectors	Water for human consumption, energy (electrical generation component), National System for Protected Areas, human settlements, tourism.
	Agricultural land	48.7 (2013)			
	Urban areas	10.5			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWORK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	National Climate Change Policy (Decree 269-15). Dominican Republic Plan for Economic Development Compatible with Climate Change (Plan DECCC) (2011). National Climate Change Adaptation Plan (2008) (currently being updated within the framework for the elaboration of the Third National Communication). National Development Strategy Articulated to Climate Change (under development).
	Other relevant instruments	Dominican Republic Political Constitution (2010). Law 253-12 on Capacity Building in State Collection for Fiscal Sustainability and Sustainable Development (2012). Law 1-12 National Development Strategy 2030 (2012). National Multi-Annual Plan for the Public Sector 2013-2016 (2012). National Climate Change Adaptation in the Agricultural Sector of Dominican Republic 2014-2020. Law 57-07 on the Incentive for Renewable Energy and Special Regimes (2007). Guidelines for a National Climate Change Strategy (2008). Decree 253-12, which provides taxes for carbon.
	Policies and regulations that promote private investment in mitigation and adaptation	The portfolios of projects for the Green Climate Fund and the Green Fund are in harmony with the private sector. Thirteen of the fourteen MDL projects are from the private sector.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Ministry of Environment and Natural Resources, together with the National Climate Change Council and Clean Development Mechanism (CNCCMDL).
	Inter-institutional coordination	CNCCMDL.
	Other coordination entities	There are inter-institutional agreements with the National Meteorology Office, the Dominican Civil Aviation Institute and the Ministry of Education.
	National stakeholders	The ministries and stakeholders of the CNCCMDL are: President of the Republic (chair); Ministry of Environment and Natural Resources; Ministry of Economy, Planning and Development; Ministry of Agriculture; Ministry of Foreign Affairs; Ministry of Finance; Ministry of Industry and Trade; Ministry of Public Health and Social Assistance; Central Bank; National Energy Commission; Corporation of State Electrical enterprises; Superintendence of Electricity; Office for Transportation Re-organization; Ministry of Energy and Mines (this latter has been recently created and is a key participant).
	Private sector stakeholders	Cement industry, private generators, National Council of Private Enterprises (CONEP), Association of Industries, Association of Banks and Association of Hotels.
	Other stakeholders	Universidad Agroforestal Fernando Arturo de Meriño (UAFAM).
MITIGATION EFFORTS	Sector LEDS	The Plan DECCC provides four strategic components at the sectoral level: 1. The energy sector (mainly electricity) represents one third of the whole potential for emission mitigation. The type of levees proposed to reach the mitigation goals in this sector are energy efficiency in the industry and buildings; maximization of renewable energy in the generation mix; replacement of electrical plants that operate with fossil fuels or substitution of plants to work with natural gas; and reduction to the minimum of the need for self-generation, replacing it with new plants that operate with natural gas.. 2. The transportation sector could reduce it emissions to half. The types of levees proposed in this sector are to increase efficiency in all the categories of vehicles; substitute gasoline and diesel vehicles by some that use compressed natural gas; and provide a modern public transportation system to Santo Domingo. 3. The levee options proposed for the forestry sector include to reduce deforestation; prevent and control forest fires; and increase forestation and re-forestation efforts. 4. The fourth component is the quick wins. These are specific actions in some sectors with a high potential for mitigation at a very low cost. The main actions in this component focus in the cement sector, the waste sector and the tourism sector, and some of them are already been promoted through NAMAs. The National Strategy to Strengthen Human Resources and Skills towards a Green Development with Low Emissions and –Climate Resilience (education strategy).
	NAMA (NAMA Registry)	Tourism and Waste. Cement and Co-processing of residual products. Energy Efficiency in the public sector. Reduction of Emissions in Pig Farms. Blue carbon: Conservation and restoration of mangroves.

	Other NAMA	NAMA on refrigeration and air conditioning (fluorocarbons). NAMA Coffee (triangular cooperation between Spain, Costa Rica and Dominican Republic). NAMA Rice NAMA on energy efficiency and renewable energy in the hotel industry.
MITIGATION EFFORTS	Other mitigation initiatives	Jarabacoa: First Carbon Neutral Municipality in the Dominican Republic, promoted by UAFAM. Construction of a wind power park in three phases. The first photovoltaic park in Monteplata. A biomass generation plant. "Roadmap to a Sustainable Energy System", launched by the Worldwatch Institute in 2015. Metro Santo Domingo. It has two of the six operation lines designed.
	Existence of MRV	They are developing one, first at the sectoral level, for the NAMA on Cement and Co-processing of residual products, to then implement it at the national level (together with DDT from Copenhagen and UNEP).
	Main working sectors	Energy, agriculture and transportation. Additionally, the sectors of forestry, waste, cement industry, mangroves, pig industry, tourism, refrigeration and air conditioning.
ADAPTATION EFFORTS	National Plans and Strategies	National Climate Change Adaptation Action Plan 2008 (it will be updated in the 3rd National Communication that will come out in October).
	Sector Plans and Strategies	National Climate Change Adaptation Strategy in the Agricultural Sector of the Dominican Republic 2014-2020. Law for Territorial Organization and Land Use.
	Main working sectors	Water (supply, irrigation, consumption).
FUNDING SOURCES	International	The Government of Germany supported the NAMA on cement. They are currently looking for the support of IDB. According to the INDC, "in terms of mitigation, the implementation of the Plan DECCC has implications of approximate costs for USD 17,000 million (dollars from 2010) in the sectors of energy, transportation, forestry, tourism, solid waste and cement for the period 2010-2030, to reach emission reductions of 25MtCO$_2$e".
	Domestic	Together with UNDP, they are evaluating the application of a methodology to analyze the public expenditure associated to climate change.
(I)NDC	Status of the (I)NDC	The country presented its INDCs to the UNFCCC on August 18, 2015.
	Mitigation goal	Reduce 25% of GHG emissions by 2030 compared to 2010.
	Relationship of LEDS with the (I)NDC	It is expected that the measures proposed in the Plan DECCC contribute to reach such objective through national exercises that integrate all the sectors.
	Inter-sector nature of the construction process and the focus of the (I)NDC	There were previous multi-sector consultations to identify mitigation and adaptation actions. UAFAM was part of the process in representation of the academic sector. A temporary board of directors was created with the participation of CNDDMDL, Ministry of the Environment and Natural Resources, with "shade" Cabinet in the private sector with several representatives (Dominican Association of Cement Producers, for example). The transportation and agriculture sectors were also part of this committee.

File created by: Ana Ruth Gutiérrez Murillo

Interviewee: Omar Ramírez Tejeda. Executive Vice-president, National Climate Change Council and Clean Development Mechanism (CNCCMDL)

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5.17 URUGUAY

Japanese Gardens, Montevideo Uruguay

URUGUAY					
GENERAL INFORMATION			CLIMATE CHANGE PROFILE		
POPULATION	Total (No. of inhabitants)	3,431,555	GHG EMISSIONS AND INVENTORY	Total emissions (tCO_{2eq})	36,765,000 (INGEI 2012)
	Urban (%)	95.3		CO_2 per capita emissions (tCO_2)	2.2 (WB, 2013)
GEOGRAPHICAL AREA (KM^2)		176,220		Growth rate	27.8% since 1990
GDP	Value (US$)	53,442,697,568 (WB, 2015)		Last update of GHG inventory	2012
ECONOMIC AND SOCIAL INDICATORS	Human Development Index	Position 52 of 188 (2014)		Previous inventories	1990, 1994, 1998, 2000, 2002 2004, 2006, 2008 y 2010
	GINI Index	41.6 (2014)		Main emitting sectors	Agriculture (74%); energy (22%)
	Governance Index	Position 24 of 179 (2011)	VULNERABILITY	Climate risk index	Position 50 of 138 (2014)
	Global Competitiveness Index	Position 73 of 138 (2016)			
LAND USE (%)	Forest area	10.5 (2015)		Priority sectors	Agriculture, livestock, and energy, coasts and cities.
	Agricultural land	82.1 (2013)			
	Urban areas	3			

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
FRAMEWROK OF PUBLIC POLICIES RELATED TO CLIMATE CHANGE	Framework policies	A National Climate Change Policy is under preparation. National Climate Change Response Plan (2010). A report was published in 2014 on the 5 years of the National Climate Change Response System (SNRCC) and on the implementation of this plan, which analyzes the responses provided in the period 2009-2014. General Environmental Protection Law (No. 17.283). Decree 238 – 2009 on the Creation of the National Climate Change Response System. Decree 172 – 2016 on the Creation of the National Environmental System and regulations of the National Secretariat for Environment, Water and Climate Change. Energy Policy 2030. Uruguay Agro-Smart Policy 2010.
	Other relevant instruments	They are elaborating a National Climate Change policy with a horizon to 2050, strategic pillars on governance, knowledge, environment, social and production in the areas of mitigation and adaptation and with action lines at the short and medium term; it is currently under public consultation.
	Policies and regulations that promote private investment in mitigation and adaptation	Law for the Promotion of Investments (16906) (1998). Decree 455/007: encouraging productive investment in the country and promoting different sectors of the economy. Law for the promotion and regulation of agro-fuels (Law 18.195): regulating the production, commercialization and use of agro-fuels in the country. Additionally, it promotes investment in agro-fuels. Energy policy 2030, focusing in the diversification of the energy matrix and on energy efficiency. The Adaptation Fund financed the promotion of a series of adaptation initiatives concentrated in small cattle producers in areas of the country with the most vulnerability to drought. Additionally, the forestry sector has been promoted, especially forest plantations, through a series of incentive mechanisms.
INSTITUTIONAL STRUCTURE AND STAKEHOLDERS	General coordination	Ministry of Housing, Land Organization and Environment (MVOTMA).
	Inter-institutional coordination	The National Climate Change Response System (SNRCC), created through decree 238 in 2009, is in charge of the coordination and planning of the necessary public and private actions for the prevention of risk, and climate change mitigation and adaptation. According to Decree 238, the SWNRCC is integrated by the following entities: MVOTMA; Ministry of Livestock, Agriculture and Fishing; Presidency – Planning and Budget Office; National Secretariat of Environment, Water and Climate Change; Ministry of Foreign Affairs; Ministry of National Defense; Ministry of Industry, Energy and Mining; Ministry of Public Health; Ministry of Tourism; Ministry of Economy and Finance; National Emergency System; Congress of Intendents; Ministry of Social Development; Ministry of Transportation and Public Works; and Uruguayan Meteorology Institute. The SNRCC works with a Coordination Group, and Advisory Commission and Thematic Sub-groups. The Advisory Commission is integrated by technical representatives of academic, technical and research entities. It is led by the Ministry of Housing, Land Organization and Environment. According to Decree 172 from 2016, the National Environmental System and the National Environmental Cabinet are created, and the National Secretariat for Environment, Water and Climate Change is regulated. The National Environmental System has the objective of strengthening, articulating and coordination national public policies in environment, water and climate change, in order to promote sustainable environmental development to preserve the goods and services provided by natural ecosystems, to promote protection and rational water use and to increase climate change resilience. The National Emergency System (SINAE) has a risk management and prevention logic; not only response. It is a subsidiary integrated system for the reduction of disasters. It has different coordination entities to face drought and floods, taking into account the most vulnerable urban population.
	Other coordination entities	The incorporation of a high percentage of renewables in the energy matrix involved many institutions: National Energy Direction from the Ministry of Industry, Mining and Energy, public enterprises, private institutions and contributions from universities, research and development agencies and international cooperation agencies. The parliament has also promoted participatory processes for coordination at multiple levels of the agricultural sector, particularly by promoting irrigation installations to, in association, approach the vulnerability to drought.
	National stakeholders	MVOTMA, Ministry of Livestock, Agriculture and Fishing, Chair – Planning and Budget Office, Ministry of Foreign Affairs, Ministry of National Defense, Ministry of Industry, Energy and Mining, Ministry of Public Health, Ministry of Tourism, Ministry of Economy and Finance, National Emergency System, Congress of Intendents, Ministry of Social Development, Ministry of Transportation and Public Works, Uruguayan Institute of Meteorology, National Secretariat of Environment, Water and Climate Change, and Ministry of Education and Culture.
	Sub-national stakeholders	Congress of Intendents.
	Private sector stakeholders	Chambers and Associations of Rural, Industrial and Service Producers and Exporters.
	Civil society stakeholders	Network of Environmentalist NGOs. Workers (PIT-CNT).
	Other stakeholders	Universities, National Agricultural Research Institute, Technological Laboratory of Uruguay.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
MITIGATION EFFORTS	Sector LEDS	Change in the energy matrix towards renewable energy: » The Energy Policy 2030 proposes four strategic areas: institutional, supply, demand and social. » The area of supply intends to potentiate the use of renewable energy and has introduced sources like photovoltaic and biomass for the generation of electricity and wind power. Regarding the latter, in only a few years it went from 0% to over 30% of the total energy supply. From the area of demand, they have worked hard in energy efficiency and access to the population regarding quality energy. The goal is to improve the use of energy by consumers in all sectors through the promotion of technologies and practices, labeling, standards and trust funds, among others. Regarding access, electricity coverage in the country is over 99% nowadays, but the expectation is to reach 100% with quality electricity. Lower emission Livestock: Since most emissions in the country come from livestock production, the proposal is to increase cattle productivity and contribute to reduce relative emissions per product unit. In addition, they have promoted policies for natural field management, reduction of degraded pastures, better land management plans for agriculture and irrigation policies. Promotion of no deforestation or degradation of native forest for carbon removal. Land organization instruments for the protection of the coastal zone and the cities.
	NAMA (NAMA Registry)	Sustainable Housing Program. Wind Power High Integration Program. Sustainable production with low emission technologies in agriculture and in the production chains of agro-industry. First introduction of Photovoltaic Solar Energy in the national energy matrix. Re-gasifying Terminal. Promotion of renewable energy participation in the primary energy matrix of Uruguay. Expansion of electricity generation from biomass by-products from sustainable forests.
	Other mitigation actions	Initiative in the Tourist Sector, where they are working with a tourist sustainability stamp that includes aspects of climate change mitigation and adaptation. A sustainable urban mobility project is getting started in the metropolitan area.
	Existence of MRV	National System for Greenhouse Gas Inventory (SNINGEI).
	Main working sectors	Energy, transportation, LULUCF (forestry) and agriculture.
ADAPTATION EFFORTS	National Plans and Strategies	National Climate Change Response Plan. They are preparing National Adaptation plans for the agricultural sector and for coastal and urban territories.
	Sector Plans and Strategies	Project for Development and Climate Change Adaptation in the Agricultural Sector. Project for Cattle Raisers at Family Enterprise Level and Climate Change Incorporation of adaptation in some plans of the National Protected Areas System. Energy Policy 2030.
	Main working sectors	Agricultural sector, coastal zones and cities.
FUNDING SOURCES	International	World Environment Fund, Adaptation Fund, bilateral cooperation, regional and south-south. Direct Foreign Investment.
	Domestic	National budget and private investment.

INFORMATION RELATED TO LEDS AND CLIMATE CHANGE		
(I)NDC	Status of the (I)NDC	The INDC was presented to the UNFCCC (September 29, 2015). Uruguay will present its first NDC in 2017, once its National Climate Change Policy is defined.
	Mitigation goal	The goals of the NDC are specific for gas and by sectors, with an emphasis in reducing the intensity of emissions. Regarding CH_4, the production of beef represents 78% of the emissions of this gas as of 2010, and the goal is to reduce 33% in the intensity of emissions with respect to the kg of beef with own funds or 46% with additional implementation means (compared to 1990). The production of livestock is the sector responsible for most of the emissions in Uruguay. Regarding CO_2, energy represents 94% of the emissions of this gas in 2010, and the goal is to reduce 25% of the intensity of emissions with respect to the GDP with own funds or 40% with additional implementation means (compared to 1990). That goal includes the transportation sector, responsible of about half of the emissions.
	Relationship of LEDS with the (I)NDC	To define the INDCs, they reviewed the policies that were under implementation in terms of mitigation and analyzed the potential mitigation of the current strategic proposals.
	Inter-sector nature of the construction process and focus of the (I)NDC	The INDC were constructed inter-institutionally within the framework of the National Climate Change Response System.

File elaborated by: Andrea Pacheco
Interviewees:
Ignacio Lorenzo. Ministry of Housing, Land Organization and Environment.
Beatriz Olivet. Ministry of Industry, Energy and Mining.

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06

COOPERATION INITIATIVES AND REGIONAL OR GLOBAL FUNDS THAT SUPPORT RESILIENT AND LOW EMISSION DEVELOPMENT IN LAC

The initiatives and funds described below are part of a non-exhaustive list of cooperation programs that provide support to the countries of the region in the design, formulation and implementation of resilient and low-emission development strategies, among other climate change actions. They include only programs or funds that support more than two countries, therefore, bilateral cooperation initiatives are not taken into consideration

The initiatives are grouped according to the implementing institution , by alphabetical order in the presentation of the institutions, as possible as can be. The order of the initiatives does not indicate the importance or the magnitude of their financial resources.

United States Agency for International Development (USAID)

Enhancing Capacity for Low Emission Development Strategies - EC LEDS

EC-LEDS was launched in 2010 by the U.S. Global Climate Change Initiative, and it is a program aimed towards supporting countries in the development and implementation of LEDS, through technical assistance and the construction of a knowledge base in LEDS GP (EC-LEDS, 2013). The countries of Latin America and the Caribbean where this program has worked are Colombia, Costa Rica, Guatemala, Mexico and Peru. In Colombia, the program has supported the country in the planning and implementation of the "Colombian Low-Carbon Development Strategy" (ECDBC), in the creation of the National Climate Change Committee and on the design of 8 sectoral plans for mitigation. Additionally, through the SilvaCarbon Program, EC-LEDS has collaborated to the creation of a management system for GHG inventories, among other initiatives (ECS-LEDS 2015a).

In 2014, the Low-Carbon Resilient Development Program (LCRD) was created, taking into account the needs of the Colombian government and the priorities of USAID in its climate change agenda, which would expand the scope of EC-LEDS to cover not only mitigation but local-based adaptation topics as well. The program supports four intermediate cities/regions of the country (Pasto, Valledupar, Riohacha and the Department of Huila); in addition, it promotes the vertical integration by allowing linkages with the advances of EC-LEDS to take it to the territories while providing feedback to the National Government.

In Costa Rica, EC-LEDS has helped in building capacity in the agriculture and livestock sector. There has been support for the development of GHG inventories in this sector and for the definition of indicators to monitor GHG emissions, which is critical for the MRV system that will be used for the implementation of the NAMA on livestock (EC-LEDS, 2015b).

In Guatemala, EC-LEDS is supporting institutional capacity building to respond to climate change. An important effort is being made to include the participation of the private sector and civil society in the implementation of practices and technologies that allow emissions reduction while improving competitiveness. The program has also supported the launch of the "Iniciativa Guatemala Huella Cer02", among other activities (EC-LEDS, 2015c).

In Mexico, the program has provided technical assistance to (a) promote sustainable forest management, (b) elaborate a roadmap for the integration of the energy matrix and the updated solar resource maps, and (c) measure the reduction of GHG emissions in agriculture (EC-LEDS, 2015d). The program has also supported the update of the GHG inventories and is contributing to the development of a macro-economic model to better understand the impacts of several low-carbon development policies (EC-LEDS, 2013).

Finally, in Peru, the program is supporting the Ministry of Environment in the elaboration of a roadmap for the creation of low-emission development strategies. They have also promoted dialogue between national and regional stakeholders in the field of forests to facilitate the development and joint implementation of sustainable forest management processes, among other activities (EC-LEDS, 2015e).

Regional Climate Change Program (PRCC)

The PRCC is a five-year cooperation initiative (2013-2018), implemented by a consortium of institutions led by the Center for Agronomic Tropical Investigation and Education (CATIE), with the participation of the International Union for the Conservation of Nature (IUCN), the Cooperative for Assistance and Relief Everywhere (CARE), Terra Global Capital and Development Alternatives, Inc. (DAI), with the technical support of the United States Environmental Protection Agency (EPA).

The program supports the countries of the Central American Integration System (SICA: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Dominican Republic) in the creation of tools and capacities to address climate change challenges. The program's partners contribute in a supplementary and strategic way to the region's needs and opportunities to face climate change, by providing technical assistance to the governments and their organizations, to promote sustainable territories, climate information systems and to strengthen environmental management.

Starting in 2013, the program has worked with the Sustainable Landscapes and Climate Change Adaptation components. Through the former, support is given to the region's governments in the preparation and implementation of their strategies for the Reduction

of Deforestation and Degradation from the forests (REDD+). The latter component (Adaptation) focuses on supporting the countries to gain access, use and understanding of the regional climate information to make decisions at different scales (national and local governments, private sector and communities) to adapt their activities to the changes in the climate. As of 2016, the program incorporated a new component to support environmental management in the region, to modernize and strengthen the environmental legislation and standards, and to promote efforts to reduce contamination.

Inter-American Development Bank (IDB)

Canada Climate Fund (C2F)

In 2012, the Canadian Climate Fund for the Private Sector of the Americas (C2F) was established; it can be accessed by the Inter-American Investment Cooperation (IAIC) of the IDB Group C2F has directed US$250 million to promote investment in the private sector aimed towards climate change adaptation and to the mitigation of its effects in LAC. The priority sectors are renewable energy, energy efficiency, bio-fuels, agriculture, silviculture and land use, and adaptation.

Sustainable Energy and Climate Change Fund (SECCI)

The SECCI is a fund from IDB established in 2007 with the purpose of supporting the countries of Latin America and the Caribbean in finding viable energy options from the environmental and economic perspectives, and to adapt to the impacts of climate change. It obtains internal contributions from IDB and from international donors like Germany, Austria, Spain, Finland, Italy, Japan, Korea, Switzerland and the United Kingdom.

The objectives of the initiative focus on the provision of exhaustive sustainability options in areas related to the sectors of energy, transportation, water and environment, and on constructing climate resilience in key areas that are vulnerable to climate change. This initiative is based on four strategic pillars: Renewable Energy and Energy Efficiency; Development of Sustainable Bio-Fuel; Access to Carbon Markets; and Climate Change Adaptation.

Initiative of Emerging and Sustainable Cities (ICES)

Technical assistance program that helps intermediate cities in Latin America and the Caribbean to identify, prioritize and structure projects to improve environmental, urban and fiscal sustainability. It uses a multi-disciplinary approach to tackle the challenges that such cities face, by integrating environmental sustainability and climate change, integral urban development, and fiscal sustainability and governance.

ICES provides the emerging cities with a set of tools to define the investment decisions in the sectors that can generate more positive impacts; find adequate specific solutions based on the cost-benefit ratio, which could level the field towards sustainability through priority interventions; and follow up to the progress reached once the interventions are implemented.

To December 2016, the initiative had included 71 cities of the LAC region, 21 of which were incorporated that same year.

NDC Invest

Platform created in 2016 with the objective of supporting the countries of the LAC region in transforming their national commitments into investment plans. The Platform has 4 components:

- NDC Program, through which the countries create the adequate conditions to implement investment plans based on the current climate needs;
- NDC Accelerates, which objective is to ensure the technical and financial viability of projects through supporting pre-feasibility assessments;
- NDC Promotes, which provides financial instruments to generate business models, adequate financial instruments and additional market services, and
- NDC Finance, created to mitigate the risks of climate investments through the mobilization of internal and external funding sources, according to the national priorities and the NDC.

It is expected that private companies and NGOs are invited to participate in the development of the initiative, with the objective of creating a regional public-private platform that contributes to the creation of low carbon resilient investments in climate so much needed by the region.

World Bank (WB)

CF Assist

CF-Assist has the objective of facilitating the transfer of knowledge and capacity building in the countries that wish to implement projects with the objective of reducing GHG emissions, to promote the progress of low-emission and climate resilient development strategies and the climate actions consistent with the national and local development priorities (CF Assist, 2015).

Through its activities, CF-Assist supports developing countries and economies in transition to create and manage carbon assets and to reduce the market share costs, by helping them reach their sustainable development goals while contributing to the environmental benefits worldwide.

The program has three thematic areas: a) preparation for climate funding, b) policy instruments and carbon pricing, and c) low-emission development strategies. Currently, CF Assist is a collaborating partner of LEDS Global Partnership and of the LEDS LAC Platform.

Partnership for Market Readiness (PMR)

The PMR is a global facility that provides funding for capacity building. It is a platform that is intended to explore the use of market instruments to support the reduction of GHG emissions. The PMR is integrated first of all by the participating countries, both implementers and contributors. Together, they make up the Assembly of the PMR, the decision-making entity. The Secretariat is operated by the World Bank.

The Contributing Participants are those that provide financial resources to the PMR Trust Fund. This group is made up by Australia, Denmark, the European Commission, Finland, Germany, Japan, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom and the United States. The implementing countries receive support in two phases: a first phase on readiness, where they elaborate a Market Readiness Proposal, and a second phase on implementation, where they implement the components of capacity building and technical assistance outlined in the first phase. There are seven LAC countries that participate as implementers: Argentina, Brazil, Colombia, Costa Rica, Chile, Mexico and Peru.

There are also "Technical Partners", those countries or sub-national jurisdictions in an advanced stage of implementation of a carbon pricing instrument, such as Kazakhstan, the State of California, Quebec and Alberta. The partnership also has some stakeholders that attend as observers, like France, Italy, New Zealand, Singapore and the Republic of Korea.

BioCarbon Fund (BioCF)

Created in 2004, the BioCF is an investment fund managed by the World Bank that finances, among other things, the purchase of carbon emissions in projects of the areas of forestry, agriculture and land management. It is the first world fund focused on land use.

The projects where BioCF invests are designed to facilitate the storage of carbon in vegetation and soil; additionally, they help stop land degradation, preserve the biodiversity of the forests, the agricultural ecosystems and improve the living conditions of the local communities and the poorest groups.

The initiative acknowledges the role of the private sector in encouraging innovation, in leveraging its experience and knowledge, and in mobilizing the necessary capital to disseminate the best practices in and use and accelerate the "green" transformation of supply chains.

Some projects derived from the BioCF have been approved for the region in countries like Brazil, Chile, Colombia, Costa Rica and Nicaragua.

Forest Carbon Partnership Facility (FCPF)

The World Bank functions as Trust Fund Manager and Secretariat of the Forest Carbon Partnership Facility (FCPF), created with the objective of supporting developing countries in their efforts to reduce emissions caused by deforestation and forest degradation, to promote conservation, sustainable forest management and the rise of forest reserves. The initiative is financed by the European Commission, the Government of Australia, Canada, France, Germany, Norway, Switzerland, United Kingdom, USA, Denmark, Finland, Japan, Italy, Netherlands and Spain. Additionally, it has the support of The Nature Conservancy and BP Technology Ventures, Inc. The resources from these donors are distributed among the two funds that make up the FCPF: the Carbon Fund and the Readiness Fund.

According to the website of the FCPF, this is integrated by 47 REDD Participating Countries. They include 16 countries from LAC: Argentina, Bolivia, Belize, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru and Uruguay.

Korea Green Growth Trust Fund (KGGTF)

The KGGTF seeks to support countries in their efforts for the design, planning and implementation of strategies and investments towards "green development". The initiative emerged in 2011 through a partnership between the Government of the Republic of Korea and the World Bank Group.

The LAC region has received resources from the fund through 6 projects developed. One of these is a regional portfolio called Regional Resource Recovery and Recycling, which has included over 40 interventions. This modality seeks to provide options to deal with the barriers that hinder "green" solutions, in line with the discussions on the regional solid waste management strategy. A second phase of the project will have a particular focus on the technical solutions identified in the first phase.

Peru, Ecuador, Colombia, Argentina and Brazil have received support from this initiative in different projects and modalities.

Global Fund for Disaster Reduction and Recovery (GFDRR)

The Global Fund for Disaster Reduction and Recovery, created in 2006 is a global partnership that seeks to help developing countries understand and reduce their vulnerability to natural hazards and to adapt to climate change. The fund is supported by 34 countries and 9 organizations, and it is managed by the World Bank Group.

Its operations are based on 5 pillars of action: risk identification, risk reduction, readiness, financial protection and resilient recovery. In the LAC region, 22 countries receive the support from the initiative, including Panama, Barbados, Peru, Bolivia, Trinidad & Tobago, Brazil, Haiti, Colombia, Costa Rica, Guatemala and Mexico.

Climate Investment Funds

The Climate Investment Funds (CIF), which custodian is the World Bank, was created in 2008 to promote transformations in the sectors of energy, resilience, transportation and forestry, providing concessional funding to try new business models and increase the trust of investors to mobilize additional funding from other sources, especially the private sector and multilateral development banks, including the IDB, the Asian Development Bank, the African Development Bank and the European Reconstruction and Development Bank.

The CIF has 4 programs:

- Clean Technology Fund: seeks to promote transformation in developing economies through the facilitation of resources to increase low carbon technologies with high potential to save GHG emissions at the long term. The initiative promotes the investment conditions and attracts significant co-funding to reduce the costs of technology, supporting first-time investors, closing funding gaps, creating markets and innovating in private sector finance. Chile, Colombia and Mexico have received support from this program.

- Pilot Program for Climate Resilience (PPCR): assists national governments in the integration of climate resilience in development planning between sectors and groups of stakeholders. It also provides additional funding to implement such planning and lead innovative public and private solutions to reduce climate risks. In LAC, the program has supported Bolivia, Honduras, Haiti, Jamaica, Dominica, Granada, Saint Lucia, and Saint Vincent and the Grenadines.

- Scaling Up Renewable Energy Program (SREP): provides support for the deployment of renewable energy solutions to increase access to energy and access to economic opportunities. In the region, the SREP has supported Haiti, Honduras and Nicaragua, allocating 12% of its resources between these three countries.

- Forest Investment Program (FIP): provides funding for the benefit of forests, development and climate. The countries in the region that have been benefited from this initiative are Ecuador, Guatemala, Peru, Brazil and Mexico.

European Commission - EUROCLIMA

Climate change is a key topic in the strategic relations between both regions. Therefore, the Heads of State and Government, gathered in Lima in 2008, in the framework of the 5th Latin American and Caribbean – European Union Summit, agreed to establish a joint environmental program, EUROCLIMA, with the objectives of exchanging knowledge, promoting structure dialogue and supporting the countries of the region to undertake studies in the field of climate change.

- Since 2010, with the beginning of the first phase of the program, EUROCLIMA facilitates the integration of climate change mitigation and adaptation strategies in the public development policies and plans in Latin America, providing technical and financial assistance, promoting research and promoting dialogue in the regional policy.

- With its actions, this Program works to contribute to the reduction of poverty in the population of Latin America by reducing their environmental and social vulnerability to climate change, and by reinforcing the capacity of recovery of the region from such change and promoting opportunities for green growth.

- The program, financed by the European Commission, has national Focal Points designated by the governments of the 18 Latin American countries members of EUROCLIMA (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela). These Focal Points facilitate and guide the implementation of the program and promote the use of the resources generated in the framework of EUROCLIMA to make political decisions at the national and regional level.

- Currently, the program is in its Second Phase (2014-2017), with a contribution from the European Union of 11.45 million Euros. This phase is implemented by four partners: The Economic Commission for Latin America and the Caribbean (ECLAC), the Inter-American Institute for Cooperation in Agriculture (IICA), the Joint Research Center of the European Commission (JRC), the United Nations Environment Program (UNEP) and the Direction General for International Cooperation and Development from the European Commission, with the support of the Technical Assistance provided by the general coordination and supervision of the program.

- Looking for the continuity and sustainability of the program, they agreed on a new regional climate change program, EUROCLIMA +, which will begin in 2017. It is structured based on the results from several joint coordination workshops of the European Commission with the Latin American countries. EUROCLIMA+ takes the results from the current Program to promote regional dialogue

on public policies and provide technical and financial support to plan and apply climate change adaptation and mitigation policies in Latin America.

UNEP DTU Partnership

Program "Low Carbon Development" (LCD)

The LCD program is developed by UNEP DTU Partnership (UDP – former UNEP Risø Centre), with two main objectives. The first one is focused on low emission strategies and actions, and the second one focuses on climate funding and carbon markets. Each objective addresses research, applied research, consultancy in the public sector, capacity building and formal education in the subject matter (DTU, 2015).

In the framework of the LCD program, there are several initiatives in LAC countries; some of them are:

Facilitating Implementation and Readiness for Mitigation (FIRM)

The project FIRM started operations in 2011 in order to build national capacity to formulate low carbon development strategies and to identify mitigation opportunities in the context of national sustainable development priorities and the concept of Nationally Appropriate Mitigation Actions (NAMA). In order to do this, it provides technical and methodological assistance and creates institutional capacity for the national organizations and other relevant stakeholders in the participating countries.

FIRM is financed by the Danish International Development Agency, DANIDA, the Ministry of Foreign Affairs (UM) and the Ministry of Climate, Energy and Buildings from Denmark, and it is about to start its second phase of operations.

The countries of the region prioritized in this project were Mexico and Costa Rica. In the case of Mexico, the agricultural sector and the water sector were priorities. In the case of Costa Rica, the FIRM was also planned at the sector level, and the country elaborated two LEDS and one NAMA (one LEDS in the livestock sector, one LEDS in urban affairs for the Great Metropolitan Area and one urban NAMA).

Adaptation and Mitigation Readiness (ADMIRE)

ADMIRE supports the implementation and formalization of the idea proposed in an activity supported by the public sector with a funding plan approved. This funding plan represents most of the work to be done with the resources of ADMIRE and it is based on the provision of technical assistance by experts to ensure the development of sustainable funding mechanisms for the private sector to be in charge of funding the climate action.

Once concluded, ADMIRE would have supported 14 projects on adaptation and mitigation, 7 of them in the LAC region.

Financed by DANIDA and the Danish Ministry of Climate, Energy and Buildings from the Government of Denmark, ADMIRE is currently supporting Chile, Colombia, Jamaica, Mexico and Peru in different projects. Its operations started in 2013, and they are expected to conclude in 2017.

UNEP DTU Partnership is the main service provider, while UNOPS (United Nations Office for Purchasing Services) is the financial director of the program.

UNEP GEF iNDC Support

Through the project iNDC Support, UNEP DTU provides technical support to 31 LAC region countries, including Antigua and Barbuda and Dominica. Financed by the Global Environment Facility, the project is divided into two phases: UNEP GEF INDC Support project & GSP for INDC preparation (April 2015 to December 2015) and NDC implementation Support (January 2016 to June 2017).

In the first phase, UDP facilitated and supported the countries in the definition and development of their INDC, including the objective of the economy, sector goals, projects and policies. In the second phase, UDP is supporting capacity building actions for the implementation of its NDC through three elements: (I) INDC review and finalization; (II) support to the countries in understanding the necessary measures to elaborate a readiness plan for the implementation of NDC; and (III) identification of the lessons learned in the development of the INDC, to use them as the basis to develop options of institutional arrangements to coordinate the development and implementation of the NDCs.

Initiative for Climate Action Transparency (ICAT)

ICAT is financed by the German Federal Ministry of Environment, Nature Protection, Construction and Nuclear Security (BMUB), the Children Investment Fund Foundation (CIFF), the Climate Works Foundation and the Ministry of Environment from the Government of Italy (IMELS). It was launched in 2015 and will finalize in 2019.

ICAT has the objective of helping the governments build capacities to measure the effects of their policies and inform the public about their progress, in addition to improving the availability and quality of data, which will enable the countries to promote efficient and profitable policies. The initiative will also provide a platform for the countries to exchange the lessons learned and to establish mutual trust in their climate actions.

According to the information provided by UDP, 8 countries have been benefited in LAC: Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Mexico, Peru, and Trinidad and Tobago.

Program "Climate Resilient Development" (CRD)

The CRD program, just as the LCD, is based on three objectives: one focuses on strengthening the dissemination and adoption of technologies for adaptation; another one on the support to planning, implementation and evaluation of climate compatible development; and the third one on the engagement of the private sector with climate resilience. Each of these objectives approaches analysis and research, capacity building, technical coaching and support to policies.

In the framework of CRD, in 2009 emerged a project that has been broadly implemented by the countries in the Latin American region: the Technology Needs Assessment, which consists on evaluations towards identifying and determining, through a set of activities promoted by the countries, the technological mitigation and adaptation technologies. This project is about to begin its third phase of operation. In the LAC region, support has been given to Argentina, Belize, Bolivia, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Granada, Guatemala, Guyana, Honduras, Panama, Peru and Uruguay. The program is financed by the Global Environment Facility (GEF).

Other initiatives

Green Climate Fund (GCF)

The Green Climate Fund is the operational entity of the financial mechanism of the UNFCCC. It was created in 2010 with the objective of mobilizing public and private resources from developed countries to developing countries, thus contributing significantly to the accomplishment of the goals set by the international community.

Since its entrance into operations in 2015, the GCF has benefited countries around the world by bringing direct and indirect financial assistance to develop their mitigation and adaptation projects and programs. Seven of the 35 projects in the GCF portfolio are in the LAC region, distributed in Peru, Mexico, El Salvador, Chile, Ecuador, Argentina and the Eastern Caribbean (Dominica, Granada, Saint Lucia, Saint Vincent and the Grenadines, and Saint Kitts and Nevis).

The investment strategy of the GCF includes the equitable allocation of resources between mitigation and adaptation, engagement with the private sector through the Private Sector Facility, provision of a geographical balance in the allocation of resources and the creation of an allocation basis for adaptation for particularly vulnerable countries.

The World Bank has the role of custodian of the Fund since 2015, and will keep it until another entity is selected three years after that date.

International Climate Initiative (IKI)

The IKI started activities in 2008 and responds to an initiative of the Federal Ministry for the Environment, the Conservation of Nature, Construction and Nuclear Security (BMUB) from the Republic of Germany. The program is devoted to funding climate and biodiversity projects in developing countries and countries of recent industrialization, as well as in countries with a transitional economy, in four areas of support: Mitigation of Greenhouse Gases, Conservation of Biological Diversity, Adaptation of Impacts Caused by Climate Change and Conservation of Natural Carbon Sinks with Emphasis in REDD+.

Through the funding category "Greenhouse Gas Mitigation", IKI provides assistance to the countries to move towards a sustainable low carbon economy. The projects focus mainly on the development of LEDS and NAMA, as well as on the systems for monitoring, reporting and verification (MRV) of GHG and of mitigation actions. Additionally, it works to mobilize private capital and direct it towards climate protection measures (IKI, n.d.a.).

This initiative has supported multiple projects in LAC and, as of November 2016, there were 108 projects in the region, each one in different stages of implementation. To mention a couple of examples, through the program "Capacity Development in the Fields of Renewable Energy and Grid Integration" support is provided to countries like Ecuador, Mexico and Peru (IKI, n.d.b). On the other hand, through the program "Accounting Rules For the Achievement of the Mitigation Goals of Non-Annex I Countries" support is been provided to Costa Rica, Colombia and Mexico (IKI, n.d.c).

Some projects launched in 2016 include: Advancing From Mitigation Ambition to Action (supporting Argentina), Development of a Regional System to Monitor Biodiversity and Climate Change (supporting Belize, Guatemala and Mexico) and Global Ocean Biodiversity Initiative (supporting Costa Rica and Honduras).

Low Emission Capacity Building Program (LECB) - UNDP

The program LECB is implemented by the United Nations Development Program (UNDP) with funding from the European Commission and the Federal Ministry for Environment, Nature Conservation, Construction and Nuclear Security (BMU) from the Government of Germany, the Australian Department for Climate Change and Energy Efficiency and the Australian Cooperation Agency AusAID. The program started in December 2010 and will finish in December 2017. Only the BMU has provided 10 million Euros (IKI, n.d.c).

LECB seeks to strengthen the technical and institutional capacity at the national level while facilitating the inclusion and coordination of the public and private sector in the national initiatives on climate

change (LECB, n.d.).

The objectives of the program are: to develop management systems for GHG inventories; to identify opportunities for NAMA; to design LEDS in the context of national priorities, to design systems for measuring, reporting and verifying the actions proposed and the means to reduce GHG emissions, to facilitate the design and adoption of mitigation actions for selected industries in some countries.

Some countries of the region that have participated in this program are: Argentina, Chile, Colombia, Costa Rica, Ecuador, Mexico, Peru and Trinidad and Tobago.

International Partnership on Mitigation and MRV

In May 2010, in Bonn, Germany, in the framework of the Petersberg Climate Dialogue, the governments of South Africa, South Korea and Germany launched the International Partnership on Mitigation and MRV. Currently, the program is made up by approximately 90 countries, most of them developing countries. It is not formal in nature and is open to including new countries with ambitious climate agendas.

Financed by the Federal Ministry of Environment, Nature Protection, Construction and Nuclear Security from the Republic of Germany (BMUB), and executed by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, the general objective of the Partnership is to support a practical exchange on climate activities and MRV between developed and developing countries in order to help close the global ambition gap.

By gathering climate experts from a variety of countries, the Partnership seeks to promote mutual learning, identify best practices, establish a shared knowledge basis, disseminate lessons learned and facilitate political dialogue, with the intention of promoting concrete mitigation measures in different countries, as well as to promote international climate negotiations.

With this purpose, the activities of the Partnership approach the following topics: (Intended) Nationally Determined Contributions (I)NDCs, Low-Emission Development Strategies (LEDS), Nationally Appropriate Mitigation Actions (NAMA) and Measurement, Reporting and Verification Systems (MRV).

The Partnership promotes its activities in four regional Groups: Regional Latin American and Caribbean Group; African Regional Group, Asian and Pacific Regional Group and the Francophone Cluster. The Regional Latin American and Caribbean Group facilitates the exchange of experiences and cooperation among the countries of the region in topics of the Partnership, such as the definition of national mitigation objectives and the monitoring of the progress towards reaching them.

NAMA Facility

The NAMA Facility is a joint initiative between the Federal Ministry of Environment, Nature Conservation, Construction and Nuclear Safety (BMUB) from Germany, the Department of Energy and Climate Change (DECC) from the United Kingdom, the Danish Ministry of Energy Utilities and Climate, the Danish Ministry of Foreign Affairs (MFA) and the European Commission.

The project started operations with a joint initial contribution of 70 million Euros to finance developing countries and emerging economies that wanted to implement NAMA. From that moment on, the project has received additional contributions thanks to the success it has had (NAMA Facility, n.d.).

The entities in charge of implementing the NAMA Facility are the KfW Development Bank and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Gmbh. To date, many of the initiatives to support the NAMA have been focused on the readiness and the creation of favorable environments for the implementation of NAMA, but very few initiatives have received international support and funding for the implementation. The NAMA Facility is trying to close this gap (NAMA Facility, 2015).

The program provides personalized support for the implementation of NAMA in developing countries by making calls and selecting the most ambitious, transformational and most potential proposals. Since its beginning in 2013, out of three calls, 14 projects have been selected from Africa, Latin America and Asia.

Until 2016, in the LAC region, the NAMA Facility has supported the NAMA on Renewable Energy for Self-Consumption in Chile, the Transit Oriented Development and Substitution of Domestic Refrigerators in Colombia, Low-Carbon Coffee in Costa Rica, Efficient Use of Fuel and Alternative Fuels in Indigenous and Rural Communities in Guatemala, New Residential Buildings in Mexico and Sustainable Urban Transportation in Peru.

The fourth call for proposals was launched in July 2016 and closed in October of that same year, resulting in 75 proposals received for consideration.

NDC Partnership

The NDC Partnership is a coalition between developed countries, developing countries and international institutions working together in order to ensure that the countries receive the necessary technical and financial support to meet their climate and sustainable development goals.

The initiative was launched in November 2016, during the twenty-second Conference of the Parties of the UNFCCC and receives the support from the Ministry of Foreign Affairs (BZ) from the Government of the Netherlands, the Ministry of Foreign Affairs (UM) from the Government of Denmark and the Federal Ministry for Economic Cooperation and Development (BMZ) from the Government of Germany.

The objective of the Partnership is to increase cooperation for the countries to have more efficient access to the necessary technical knowledge and financial support to meet their NDCs and the commitments related to the Sustainable Development Goals (SDG). Additionally, it seeks to align global and national efforts to improve the understanding of the already existing resources and initiatives that focus on the national support to climate actions and sustainable and inclusive development.

Together with its members, the initiative will create and disseminate knowledge products that fill the information and knowledge gaps. The partner countries to the NDC Partnership from Latin America and the Caribbean include Brazil, Chile, Costa Rica, Colombia and Mexico.

Adaptation Fund (AF)

Since 2010, the Adaptation Fund finances projects and programs that support vulnerable communities in developing countries to adapt to climate change. This is done through the financial support of private and governmental donors and a portion of what is collected through the purchase of Certified Emission Reductions (CERs).

The Adaptation Fund currently provides support to a total of 55 projects, 14 of them in countries of Latin America and the Caribbean (Argentina, Belize, Chile, Colombia, Costa Rica, Cuba, Ecuador, Guatemala, Honduras, Jamaica, Nicaragua, Peru and Uruguay).

07

CURRENT SITUATION AND TRENDS

Public Policy Instruments

All the countries included in this report have different public policy instruments on climate change, including laws, policies, strategies and plans, which include guidelines for both mitigation and adaptation. The national circumstances have an important effect in the orientation of the policies. For example, there are several countries that, due to their condition of vulnerability, have defined adaptation as a priority in their climate change policy, as reflected in the documents reviewed and the declarations of the interviewees. Belize, El Salvador, Haiti, Panama, Paraguay, Peru and Dominican Republic are examples of such situation.

The information compiled in 2016, both from secondary sources and from the interviews with the climate change authorities, indicates an important degree of progress in the formulation of policy instruments compared to 2015, either because they did not exist before, as it happens in several cases regarding adaptation policies and strategies, or because the existing ones have been updated.

For example, Argentina is elaborating a new National Climate Change Strategy while Chile has advanced in the creation of tis National Climate Change Action Plan 2017-2022. At the moment of the research, Colombia was in the phase of approving a proposal for a National Climate Change Policy and had a proposal for a National Climate Change Law. Costa Rica is beginning the elaboration of a National Adaptation Plan; in El Salvador, there are new policy documents under elaboration; for example, the National Adaptation Plan and the Framework Climate Change Law; Peru is formulating a National Climate Change Law and a National Adaptation Plan; and the Dominican Republic is updating its National Climate Change Adaptation Action Plan and developing a National Strategy for Development Articulated to Climate Change.

Advancements were also found in some countries in the development of sectoral policy instruments. For example, Colombia has developed a Strategy for the Adaptation of the Agricultural Sector to Climate Phenomena, a Plan for the Adaptation of the Primary Road Network of Colombia and a Comprehensive Climate Change Plan for the Ocean – Port Sector. Costa Rica now has a new Strategy and Plan for Adaptation Actions in Biodiversity, and El Salvador developed a Master Plan for Renewable Energy and an Environmental Strategy for Climate Change Adaptation and Mitigation in the Sectors of Agriculture, Forests and Aquaculture.

Some regional strategies were also identified; that is, strategies that cover several countries; for example, the Regional Climate Change Strategy (2010), developed by the Central American Economic Integration System (SICA) and the Central American Commission for Environment and Development (CCAD) for Central America, and the Regional Framework for Achieving Development Resilient to Climate Change 2009-2015, developed by the Caribbean Community Climate Change Centre. Additionally, there have been projects for the Caribbean under the support of the Global Environment Facility (GEF): Caribbean Planning for Adaptation to Global Climate Change, Caribbean Renewable Energy Development, and Caribbean Mainstreaming Adaptation to Climate Change, among others.

Progress is also perceived in tax instruments, which require an important degree of coordination between environmental and economic authorities, such as the carbon taxes. Mexico has been pioneer in this field for the region, but it is important to also mention that the Dominican Republic has published a new decree for a carbon tax. Similarly, Chile has been working on “green taxes” for emissions resulting from local contaminants from vehicles and fixed sources. They are also designing a specific tax for carbon dioxide (CO2) emissions resulting from thermal sources that will enter into force in 2017.

In general, the mitigation efforts tend to focus on energy and forestry sectors, while the adaptation efforts include strategies for the sectors of agriculture, water resources, ocean-coastal zones, health and bio-diversity. Although the challenge of integrating the different agendas (mitigation, adaptation and development) still persists, it should be acknowledged that there are efforts developed in this field and that, in several cases, the interviewees recognize that the initiatives in mitigation generate benefits in adaptation, and vice-versa.

As examples of progress in the integration of the mitigation and adaptation agendas, the Colombian Low-Carbon Development Strategy defines strategic sectoral lines. Additionally, its National Development Plan 2014-2018 contemplates green growth as one of the cross-cutting areas. Furthermore, the country is working at the level of departments in Comprehensive Climate Change Plans, taking mitigation and adaptation into account as supplementary elements.

Another interesting example is the National Development Policy from Guatemala K’atun 2032, which includes a complete section devoted to natural resources, emphasizing climate change mitigation and adaptation. The policy provides goals, guidelines, accountable entities, coordination entities and terms (short, medium and long).

Low-emission development strategies

In analyzing the documentation and interviews of the 17 countries in the study, out of which 13 participated[4] in the research for LEDSinLAC 2015, a greater effort is perceived in moving from climate actions and projects to the formulation of new strategies

4 The LEDSinLAC 2015 Report included the analysis of 14 countries, including Brazil. In the case of the LEDSinLAC 2016 Report, 17 countries were analyzed, not including Brazil, but adding Antigua and Barbuda, Haiti, Honduras and Paraguay.

(or their updates in some cases) towards low emission and climate resilient development. This is a positive progress and could be attributed to the fact that the process for the formulation and presentation of national contributions to the Secretariat of the UNFCCC and the need to plan their implementation has forced the governments to carefully analyze their way of reaching the goals set.

The progress is shown in different ways. For example, there are national development plans where the climate component is becoming a cross-cutting topic, as in Guatemala or the Dominican Republic. In other cases, the progress occurs in the same national / sectoral climate change strategies or plans, which show a better understanding and connection with development topics, as the energy strategies / plans that take advantage of the emission reduction opportunities while ensuring economic development and energy security objectives in the countries.

Although it is very positive to see that in general, the countries show progress in the design of LEDS, it should be acknowledged that in some cases, the interviews to stakeholders from other relevant sectors reveal some criticism towards the implementation of these policies, strategies and plans. As mentioned before, this research does not contemplate the measurement of LEDS implementation; however, the opinion of other relevant stakeholders on this matter should not be ignored. In any case, implementation is one of the main challenges faced by the countries.

Supplementing that idea, it is important to mention that this research has identified that several of the stakeholders interviewed associate the LEDS with any mitigation effort, either short, medium or long term, and, in some cases, not related to the development policies. It seems there is no consensus yet among the interviewees regarding the concept of LEDS, in spite of the fact that they all work, in one or another way, in climate change.

Two interesting cases to mention for their best practices and structure are Chile and Mexico, which had already been identified in the first edition of the Report. In the case of Chile, with its National Climate Change Action Plan 2017-2022, we should underline the evaluation process applied to the previous plan (period 2008-2022) and the formulation of proposals for the new plan based on the experience and the lessons learned. In addition, the new plan was defined taking into consideration different mitigation scenarios. In Mexico, the National Climate Change Strategy of Mexico has a vision at 10, 20 and 40 years. This country is a good example on how its climate change policy is contemplating low emission development strategies at the long term.

Supplementary Instruments

The design and implementation of nationally appropriate mitigation actions (NAMA) is still a widely used instrument to reach the emission reduction goals. The NAMA are used to reach mitigation goals pre-2020 in some countries, and they are proposed to reach mitigation goals post-2020 in the majority of the countries of the region. The level of effort in this field is varied. There are countries with a broad NAMA portfolio, like Colombia, Mexico and Peru, to mention three examples; while other countries are just taking the first steps with this type of instrument.

The NAMA are usually proposed in the greatest emitting sectors of each country, with important considerations of opportunities and readiness in the corresponding sector. Some of the outstanding NAMAs are in the energy sector (several of them in the sub-sectors of transportation, renewable energy and/or energy efficiency). Other sectors mentioned include forestry, agriculture, waste management and industrial waste.

Research this year has identified that, in many cases, there is still a lacking link between NAMAs and LEDS. In other words, the proposals of NAMA are not necessarily conceptualized within a general climate change strategy or a long term development strategy for a specific sector. This undoubtedly generates an alert since what is desirable is that the sectors move towards a long term transformation, under the same vision rather than just apply specific actions that lack a broader perspective. One example of good practices in this sense is the livestock sector in Costa Rica, where a Livestock NAMA is framed into a Low-Carbon Livestock Development Strategy, thus presenting a broader perspective of the sector.

Additionally, the great majority of countries reveal other mitigation initiatives that are not necessarily LEDS or NAMA. This evidences other efforts that are under implementation but, similar to other NAMA cases, many of them do not necessarily respond to a strategic long term proposal.

Monitoring, Reporting and Verification (MRV)

In general, the MRV schemes are still incipient in the countries of the region. When consulting the representatives of the institutions in charge of leading the climate policy in each country, it becomes evident that the issue of MRV is mainly associated to NAMAs or GHG Inventories.

Two interesting cases that show some more progress are Colombia and Costa Rica. Colombia already has a conceptualized MRV system, based on three main aspects: (i) emissions, (ii) emission reduction, and (iii) international funding and support. In the case of Costa Rica, they are building the National Metrics

System for Climate Change (SINAMECC), which operates as a sub-module of the National Environmental Information System. SINAMECC's objective is to generate reports in mitigation, adaptation, co-benefits and climate finance.

The MRV systems represent a challenge and an opportunity for the LAC countries, since a structured design and an adequate implementation offer the potential of facilitating progress to reach the mitigation goals set in their LEDS. At the same time, an appropriate MRV system allows taking corrective actions on time in case of showing that the objectives are not been reached within the terms initially set.

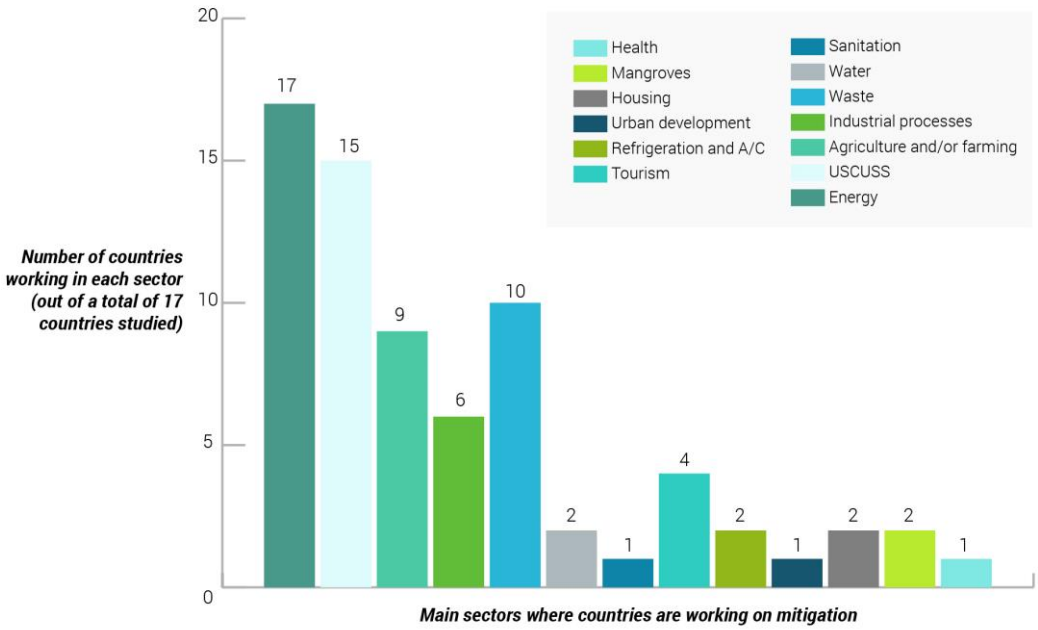
Sectors

In general, the main emitting sectors of the countries in the study are energy, land use, changes in land use and forestry (LULUCF), and agriculture. This trend had already been identified in LEDSinLAC 2015 and it remains in 2016, even with the inclusion of new countries in the study. In the energy sector, the sub-sector of transportation usually represents an important percentage of emissions.

In spite of the fact that this report does not contemplate in its scope the "quantification" of mitigation efforts for each sector in the country, the information obtained from the research allows for the identification of the fact that practically all the countries are devoting most of their efforts to the main emitting sectors (Fig. 3), either due to their emission reduction commitments or to other national interests. An example of the latter is the energy sector, where in many cases, the main incentive to approach it is to reach energy security in the country, and the reduction of emissions is a co-benefit of these efforts.

Furthermore, there are efforts in the sector of waste/residual products and in industrial processes, like the production of cement. Some of these initiatives are reflected through NAMAs. For example, some countries that have or are developing NAMAs in waste/residual products are Argentina, Belize, Colombia, Costa Rica, El Salvador, Guatemala, Mexico, Panama, Peru and Dominican Republic. Some countries with NAMA in industrial processes are Mexico, Peru and the Dominican Republic.

Figure 3. Main sectors where the countries are working in mitigation



Source: Own elaboration with information provided by the interviewees [5]

Note: this chart includes the sectors indicated in the interviews as the main sectors where the country is working on mitigation. The study cannot ensure that these data correspond to a quantitative result on emission reduction.

5 *The information on which are the main working sectors came from the interviews performed.*

The energy sector has the trend on development strategies focused on transportation, energy efficiency and the transition towards the use of renewable energy. The countries recognize that any effort in this field is a step forward in terms of energy security, while the sector offers important emission mitigation potential. The investments for a clean energy transition result from the economic, social and environmental interest for the countries; thus, the 17 countries under study are making efforts in this field.

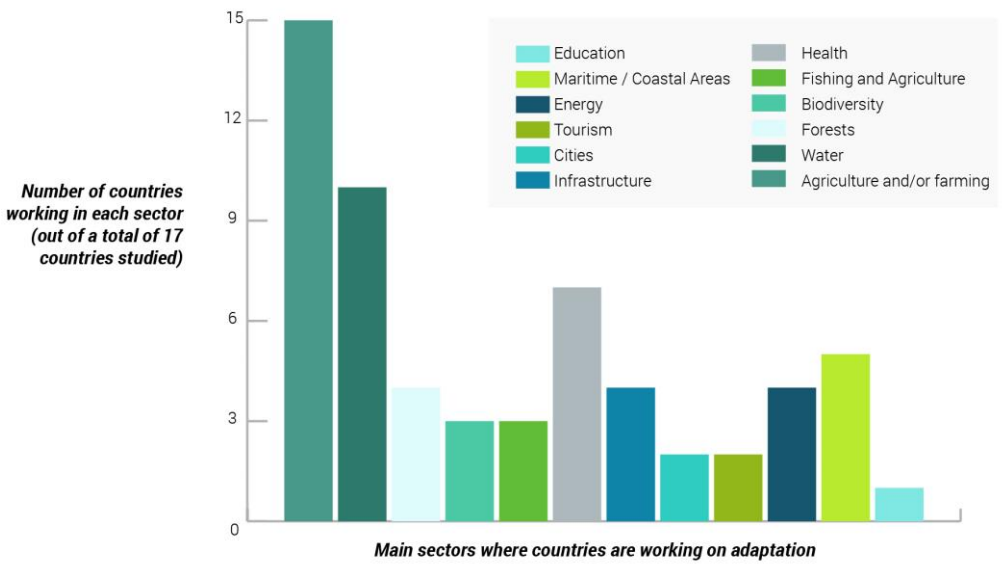
There is also a continued trend for the development of strategies in the forestry sector, mainly through REDD+ strategies, which contemplate the reduction of emissions caused by deforestation, the reduction of emissions caused by degradation, the conservation and sustainable management of forests and the increase of forest carbon reserves. These approaches focus on both mitigation and adaptation.

As an example, some of the countries that already have a REDD+ strategy are Colombia, Honduras and Panama. Other countries, like Costa Rica and Paraguay, have specific policies or decrees for the forestry sector.

Some countries also show progress in strategies for the agricultural sector. For example, Chile is designing its National Climate Change and Vegetal Resource Strategy (ENCCRV), Colombia has a Sector Action Plan for Agriculture (PAS), and El Salvador has developed an Environmental Strategy for Climate Change Adaptation and Mitigation in the Sectors of Agriculture, Forestry and Aquaculture.

Regarding adaptation, the efforts in the sectors of agriculture, water, human health and infrastructure (Fig. 4.) are outstanding. This is coherent with the reality in many of the countries of the region that recognize adaptation as a national priority in light of the future effects of climate change.

Figure 4. Main sectors where the countries are working in adaptation



Source: Own elaboration with information provided through the interviews.

Note: This chart includes the sectors indicated in the interviews as the main sectors where the country is working in adaptation.

Most of the countries already have a strategy or plans for climate change adaptation, or they are in process of elaboration, as the case of Argentina, Chile, Colombia, Costa Rica, Guatemala, Haiti, Honduras, Paraguay, Peru and Dominican Republic. Some countries, like Mexico, do not have this instrument as such, but they contemplate the strategic guidelines of adaptation within their national climate change strategies.

Several countries where identified with adaptation strategies for specific sectors, such as agriculture and/or livestock (Belize, Chile, Colombia and Dominican Republic), biodiversity (Chile and Costa Rica) and health (Chile, Costa Rica and Honduras), to mention just some examples. It is also important to mention the disaster risk management strategies that contemplate climate change in their strategic guidelines.

LEDS and (I)NDC

At the close of this research, 100% of the studied countries had presented their INDC to the United Nations Framework Convention on Climate Change (UNFCCC), and 47% (8 countries) had ratified the Paris Agreement, which entered into force on November 4, 2016. These countries are Antigua and Barbuda, Argentina, Belize, Costa Rica, Mexico, Panama, Paraguay and Peru.

In this topic, it is important to mention that, as expressed during the interviews, there are several countries reviewing their (I)NDC or have just finished it, like Argentina, El Salvador, Haiti, Honduras and Peru. The reasons for the reviews vary, but in some cases, the idea is to fine tune the goals previously established according to their national realities, and align them to the climate strategies and plans already established or under development.

The (I)NDCs in the region contemplate both adaptation and mitigation. In this latter, as mentioned in LEDSinLAC 2015, most of the countries present their emission reduction targets as a percentage of the total reduction of emissions of the country. Several of them propose an unconditional target of reducing "X" percent of emissions, normally in comparison with the business as usual (BAU) scenario for year "Y", and a more ambitious emission reduction target conditioned to international support. Usually, the targets are set at the national level, but there are countries like Belize, Panama and Uruguay that present emission reduction targets at the sector level. There are also cases like Belize and El Salvador that present a proposal as a set of actions to be implemented.

LEDSinLAC 2015 also identified that, although all the countries have clear emission reduction quantitative targets, the documents do not necessarily explain how to reach those targets; that is, the strategies that will support the countries in meeting that objective. This new edition of the report goes back to the issue, taking into account the progress in the field during the last year and considering the new countries included in the study.

According to the interviews, some countries indicate that the climate policy instruments that existed before the elaboration of the (I)NDC served as input to define such contributions. In turn, they mention that the (I)NDC will serve as input for the future low emission and climate resilient development strategies. Other countries only indicate that the existing climate policies and strategies are the basis for them to reach the emission reduction goals set in the (I)NDC.

Whatever the case, there seems to be a persistent challenge in implementation if we take into account that the (I)NDCs will begin to be applied as of 2020, and that the strategic guidelines and the mitigation strategies currently proposed in the countries under study not always consider long term time horizons, and if they do,. It is still difficult to have a clear idea of how they are going to evolve along the way.

This is a challenge faced by all the countries, and several of them are finding ways to approach it. For example, as mentioned before, some countries are reviewing their (I)NDC, although they have already been presented to the UNFCCC, and they are working in the development and/or update of climate public policy instruments.

This seems to be a signal of recognition by the countries that the goals set in the (I)NDCs should correspond to an analysis of what is possible to reach with the current climate strategies and the strategies that should be developed, if necessary, to reach those goals. In other words, the emission reduction goals should be firmly supported by the development strategies that incorporate the climate component.

Additionally, this research tried to analyze the inter-sectoral nature of the construction processes and the focus of the (I)NDC. In general, all the countries studied state that the (I)NDC elaboration process was participatory and consulted with different stakeholders from the country, such as government, private sector, civil society and the academy. Some of the countries mentioned that they also included different government levels, like provincial or municipal governments. Examples of this include Argentina, Haiti, Panama and Peru.

Special approach: Inter-Institutional Coordination Mechanisms

Considering the vision and the scope of action of the LEDS LAC Platform, a climate policy is deemed effective when it promotes the transformation of the development patterns of a country based on its specific climate change mitigation and/or adaptation objectives. In order to accomplish this, it is necessary to have a real integration of the goals and actions of the climate policies into the economic and social development agendas which, in turn, require new forms of governance. In the public policies, this implies abandoning the traditional sectoral approach and creating new coordination entities between government organizations and between these and other relevant stakeholders from the society.

The LEDSinLAC 2015 report found that the 14 countries included in the study had different types of inter-institutional coordination mechanisms, mainly integrated by government institutions that represent different sectors. However, in spite of the progress in the creation of new coordination mechanisms, one of the main conclusions of the report is that "although there is interest by the countries in the formulation of low emission and climate change resilient development strategies, there is still a challenge, in practice, of adequately integrating the mitigation, adaptation and development agendas (LEDS LAC, 2015).

Taking this situation into account, the World Bank, through the CF-Assist Program, requested the LEDS LAC Secretariat to formulate a working document entitled Inter-Institutional Coordination for an Effective Climate Policy, as a contribution to the process of the second edition of the LEDSinLAC report.

There were 55 interviews to representatives of the relevant sectors (ministries, sub-national sector, private sector, organized civil society, and the academy, among others) in addition to the 18 representatives of the climate policy entities that were interviewed as primary source for the elaboration of the other sections of the LEDSinLAC 2016.

As the basis to structure the analysis and the design of the instruments for the interview, the research team defined a series of criteria (Chart 1) in order to characterize the inter-institutional coordination mechanism for the design and implementation of the climate policies.

Chart 1. Criteria for the characterization of inter-institutional coordination mechanisms

INSTITUTIONALITY	REPRESENTATION
» Clearly established mandate (official) » Technical secretariat (if it is a permanent committee) » Permanence (seniority and permanence) » Scope (national, multi-sector, sub-national) » Level (political, technical)	» Diversity of government stakeholders » Participation of the most relevant sectors for mitigation and adaptation » Participation of the private sector » Participation of the civil society » Participation of research, science or academic institutions » Sub-national governments » Diversity considerations
OPERATIONS	**FUNCTIONS**
» Terms of reference defined » Budget assigned » Frequency of meetings » Average attendance level in meetings » Documentation of discussions » Use of technical and/or scientific documentation as input	» Consultation » Coordination » Binding decisions
ARTICULATION	**MONITORING & EVALUATION**
» Between national and sectoral entities » Between government levels » With non-governmental initiatives » Between cooperation programs	» Follow up mechanisms established » Frequency of measurements/evaluations » Progress reports (if done and who receives them)

The interviews to the people in charge of the climate policies evidenced that in all the countries under study there are or have been one or more institutional coordination mechanisms for the application of climate policies at the level of the government – national, sub-national and/or sector. However, when making the research, the mechanism mentioned in the interview with Haiti was in process of reactivation, therefore, it was decided to not include the country in the analysis for the working document.

Taking this into account, an aggregated analysis was made with 16 Latin American and Caribbean countries: Antigua and Barbuda, Argentina, Belize, Chile, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Panama, Paraguay, Peru, Dominical Republic and Uruguay. During the interviews, the officials of some countries provided information about more than one coordination mechanism; therefore, a total of 24 active inter-institutional coordination mechanisms were identified for the study.

The working document "Inter-Institutional Coordination for an Effective Climate Policy",published parallel to the current report, discusses the results of the aggregated analysis for each of the criteria indicated in Chart 1, based on the opinions and information provided by the people interviewed for the study. Below are the general conclusions of that discussion.

Institutionality was the area with more progress. Out of the 24 mechanisms studied, 22 are permanent and 23 have an officially assigned coordination entity, with established functions. However, there is a need to strengthen the efforts on communication to the NGOs, the private sector and society in general on the existence and functions of these entities.

Representation is very high in terms of engagement of the authorities in charge of the sectoral policies, since all the mechanisms analyzed incorporate representatives from different sector policy entities at the level of the national government. However, they are very different in terms of openness to the participation of other stakeholders. Fifteen out of the 24 mechanisms identified report the inclusion of non-governmental stakeholders coming from the organized civil society; 15 report the participation of the private sector, while 16 incorporate universities or research institutes, and only 9 have representation of sub-national governments.

Regarding the functions, most of the mechanisms mentioned operate with functions of coordination, consultation and dissemination of information; however, a good number of high political level entities, like cabinets, councils of ministers and inter-sectoral commissions (9 mechanisms) also have a decision-making function. In some countries, there are several coordination entities. The political level has binding decision-making functions; the technical level is in charge of the consultations prior to making decisions, of the coordination for the implementation of plans and projects, and of the technical assistance to sector institutions and other similar functions.

Regarding operations, 19 out of the 24 coordination mechanisms have well-defined terms of reference, although it was detected that these terms are not necessarily known by all the relevant stakeholders. Only 4 said that they had allocated budget. In most cases, the frequency and attendance of the members to the meetings is quite high, and there are good practices to use technical and scientific documents as input for decisions, and to create and share minutes to document the results of the meetings.

One of the main areas of improvement is the inclusion of mechanisms and instruments to monitor and evaluate the work of the inter-institutional coordination entities. In 17 out of the 24 coordination entities analyzed in the study, the representatives of the authorities in charge of the climate policy informed about the existence of mechanisms to follow up and monitor the agreements made by the committees, councils and other relevant figures. However, only 8 said they use indicators for this monitoring process and/or to make periodical evaluations.

Finally, and consistent with the results of the LEDSinLAC 2015 report, the current study highlights the need to continue working in the articulation of the climate policies with the other policies and the actions of the sectoral authorities, the local governments and the non-governmental initiatives. This is very important if the idea is to move from the implementation of isolated actions in mitigation and adaptation to a transformation in the development pattern.

From the analysis of the interviews, the working document presents a series of recommendations to be taken into account on learning efforts, institutional strengthening and capacity building in the government and international cooperation organization that come with them, in order to make more efficient inter-institutional coordination mechanisms for the formulation and application of the resilient low emission development policies.

These recommendations are especially important in the following areas of action:

- Evaluate the operation of the existing mechanisms to identify specific aspects that can be improved while maintaining the strengths.
- Define and clearly communicate the stakeholders about the functions of the different coordination entities and the roles of the participants.
- Analyze the pertinence of allocating budget resources to strengthen capacities and the operation of the coordination entities and ensure the compliance with their agreements.
- Strengthen the mechanisms to follow-up the agreements reached in the inter-institutional cooperation entities and promote more transparency through the publication of periodical reports.
- Develop agile and effective systems and mechanisms to monitor and follow up the performance and the impact of the inter-institutional coordination mechanisms.
- Generate more spaces for dialogue and coordination between the national government and the sub-national governments.
- Incorporate the private sector in the entities of discussion and coordination of climate policies.
- Advance in the search for an efficient articulation between policy and action scales and sectors, instead of being limited to the coordination for specific initiatives.

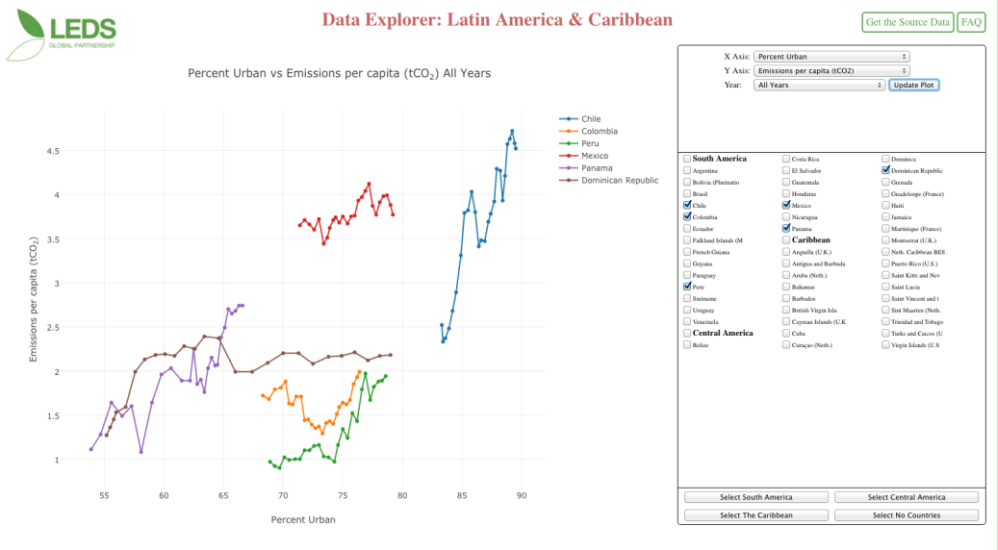
Summary of the report "Forging low emission development paths in Latin America: Multi-level dynamics in the world's most urbanized region"

Introduction

The relationship between the different levels of authority in a country is critical to shape the national and global capacity to implement climate actions. The national and sub-national governments, as well as the civil society and the private sector, have assets and unique attributes that can be coordinated and integrated in a productive way to resolve complex issues.

Nowadays, LAC is the most urbanized region of the world; this has been the result of 60 years of growth and movement in the urban population, which has gone from 40% to 80% of the total between 1950 and 2010. This represents a great challenge that has become critical because, globally, the cities represent 75-80% of the energy consumption and the emission associated to CO_2. Should the current trends in the expansion of cities continue, the urban use of energy could increase in more than three times by 2050. Therefore, urbanization and multi-level governance (MLG) are quickly becoming urgent issues for those in charge of developing climate and energy policies at all levels.

To support the debate and the necessary actions to coordinate, escalate and accelerate climate actions, the Sub-National Integration Working Group (SNIWG) of LEDS GP recently published a comprehensive report with general information about the region of Latin America and the Caribbean (LAC) (http://ledsgp.org/working-groups/subnational-integration-of-leds). This comparative analysis of national trends related to CO_2 emissions, urbanization, GDP and the commitments of climate actions shares several examples of MLG initiatives along the region for the implementation of LEDS by national, sub-national and/or combined efforts. An interactive web-based Platform accompanies the report to be able to visualize and compare the trends of data between 1990 and 2015 in all the nations of the region (http://ledslac-data.netlify.com/).



Overview of the trends

Although the report from the SNIWG presents reference frameworks of important climate actions that emerge from the MLG of different countries, it is important to mention that, in general, all LAC regions are urbanizing rapidly without achieving reductions in emissions. CO_2 emissions resulting from the use of fossil fuels and from the production of cement increase faster than the growth rate of urban population; this, in turn, increases faster than the growth rate of the national population. This trend is especially divergent in the zone of South America.

In most of the 48 countries analyzed in the LAC region, the percentage of change in the urban population since 1990 is greater than the percentage of change in the total population of the country. In some cases, the difference is more than double. This has important implications for the changes in the governance dynamics. Particularly, as recently indicated by the Intergovernmental Panel on Climate Change Experts (IPCC), the majority of the cities in the developing world lack the institutional, financial and technical capacities needed to make the transition towards low emission development pathways.

And although the impressive urbanization in LAC has undoubtedly contributed to a great part of the significant economic gains of the region, it cannot be stated that it is related to the growth in the GDP. In this line, an important precaution highlighted by the LAC data is that the spectacular increase in the GDP of the region can pervert the data of carbon intensity. The reduction in the intensity of carbon does not represent reductions in the emission of CO_2 below the critical ceilings and the thresholds of climate change. For example, although the intensity of carbon in the economies of Chile and Panama has reduced impressively between 1990 – 2015 (in -56% and -45%, respectively), their annual CO_2 emissions derived from fossil fuels and cement have increased in +143% and +295%.

Lessons learned

In spite of the positive trend in LAC of increasing the commitments with LEDS by non-state stakeholders at the sub-national level, the cities and regions of LAC have not had significant influence in the national reference frameworks with respect to climate governance. The focus and funding of the climate policy have been characterized by an imposed methodology (top down) and without coordination. In general, the Nationally Determined Contributions (NDC) in LAC do not represent an integrated vision of the country and were not generated with the corresponding consultations.

Another significant challenge for the implementation of LEDS in LAC, due to the phenomenal trends of urbanization, is fragmentation, especially through the big metropolitan cities of the region. Uncoordinated and often competitive policies and actions of the neighbor municipalities and in boundary zones limit the ability of the sub-national governments to collaborate with one another (horizontally) and to make substantial contributions to the formulation and implementation of the NDCs and LEDS at the long term.

08

CONCLUSIONS

Although the transition towards a resilient low emission development is one of the main challenges currently faced by our societies, it is encouraging to confirm, through this research, that the region of Latin America and the Caribbean is making important efforts in that direction and shows progress with respect to the previous edition of this report.

These initiatives that have been promoted must continue, more accelerated and reinforced through the support between the countries. Sharing the progress, the successful experiences and the lessons learned is very important, and the LEDS LAC Platform has undertaken the commitment to provide this support in order to facilitate learning and the required transformational changes.

The investigation presented in this study leads to the following conclusions:

- All the countries analyzed have different public policy instruments on climate change, with normal variations among them in terms of progress.
- Some countries have defined climate change adaptation as a national priority, and this is reflected in the orientation of the efforts in the climate policy.
- The great majority of the countries studied show a degree of progress with respect to the elaboration and/or update of their own public policy instruments on climate change. The progress is evidenced both in national and in sectoral policies.
- Although the challenge of integration of the development, mitigation and adaptation agendas still persists, there are some interesting efforts in this field, which could be considered as future case studies to try to disseminate the experiences and lessons learned.
- The subscription of the Paris Agreement and its entrance into force could be considered a trigger for the countries in the design and development of LEDS, turning these into the roadmap of their countries to reach the goals set in their (I)NDCs.
- In general, given the opinion of other relevant stakeholders in each country, the implementation of the climate strategies is perceived as a great challenge.
- The lack of clarity in the concept of low emission and climate resilient development strategies (LEDS) persists, and in many cases, it is associated to any mitigation effort, at the short or medium term.
- The NAMAs continue as key elements to reach emission reduction goals in the countries. The level of effort needed for their formulation also varies a lot between the countries, and the main sectors where they are been developed are energy, forestry, waste management, industrial processes and agriculture.
- In most of the countries, there are many other mitigation initiatives that can be perceived as actions out of a long-term strategic framework for low emission and climate resilient development. There is an opportunity to organize these efforts within a broader vision that allows for the maximization of their positive impacts in terms of development and emission reduction.
- The MRV schemes are incipient in the region. There is an opportunity to start working in the design and implementation of MRV schemes that contribute to the measurement of the impact of the efforts and the international climate commitments.
- The main emitting sectors of the countries are energy (including transportation), land use, changes in land use and forestry (LULUCF) and agriculture. At the same time, these are the main sectors where the countries indicate that they are working on, along with waste / residual products.
- In the case of adaptation, the countries indicate that they are devoting more efforts to agriculture and/or livestock, water resources, public health, oceans and coastal zones.
- Some countries are reviewing their (I)NDCs, which represents an opportunity to fine tune the way in which the LEDS will define the roadmap for the achievement of the emission reduction objectives.

GLOSSARY

- **Adaptation:** adjustments in the natural or human systems in response to the climate stimuli or its effects, current or expected, which moderate the damage or take advantage of the beneficial opportunities (UNFCCC, n.d.).
- **Conference of the Parties of the United Nations Framework Convention on Climate Change**: it is the supreme entity of the Convention. Currently, it meets once a year to review the progress of the Convention. The term "conference" is not used here in the sense of "meeting", but rather as "association". The "Conference" meets in sessions; for example, the "fourth session of the Conference of the Parties" (UNFCCC, n.d.).
- **United Nations Framework Convention on Climate Change**: international treaty with the objective of "achieving the conformity with the provisions related to the Convention, the stabilization of greenhouse gas concentration in the atmosphere at a level that hinders the dangerous anthropogenic interference in the climate system" (UNFCCC, 1992).
- **Greenhouse Gases (GHG):** these are the atmospheric gases responsible for global warming and climate change. The main GHGs are carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O). Less prevalent, but still very powerful greenhouse gases are chlorofluorocarbons, perfluorocarbons and sulfur hexafluoride (SF6) (UNFCCC, n.d.)
- **Climate governance:** it is integrated by particular mechanisms and measures that have the objective of directing the social systems towards the prevention, mitigation or adaptation of the risks presented by climate change (IPCC, 2014; Jagers and Stripple, 2003).
- **INDC:** intended nationally determined contributions (UNFCCC, n.d.)
- **LEDS:** The acronym comes from the English title of Low Emission Development Strategies; however, for the purpose of this document and of the work of LEDS LAC, it is interpreted as Low Emission and Resilient Development Strategies. For further details, see the conceptual framework.
- **Mitigation**: in the context of climate change, it is a human intervention to reduce the sources or increase the sinks for greenhouse gases. Some examples include the use of fossil fuels in a more efficient way for industrial processes or electrical generation, changing to solar energy or wind power, improving the insulation of buildings and expanding forests and other sinks to remove greater amounts of carbon dioxide from the atmosphere (UNFCCC, n.d.).
- **MRV:** measurement, reporting and verification. A process/concept that provides potential support for more transparency in the climate change regime (UNFCCC, n.d.).
- **NAMA:** in the COP 16 in Cancun, the governments decided to establish a registry to take note of the nationally appropriate mitigation actions seeking for international support, to facilitate the corresponding support in terms of funding, technology and capacity building with these actions and to recognize other NAMAs (UNFCCC, n.d.).
- **NDC:** according to Article 4, paragraph 2 of the Paris Agreement, each Party must prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to meet. The Parties should pursue domestic mitigation measures in order to achieve the objectives of such contributions (UNFCCC, n.d.).
- **Sustainable Development Goals:** set of global objectives to eradicate poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda. Each objective has specific targets that should be reached within the next 15 years. (United Nations, n.d.)

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Sources used for data in general information and climate change profile for each country

Variable	Source
Population	World Bank Database (http://databank.worldbank.org/data/home.aspx)
Geographical Area	World Bank Database (http://databank.worldbank.org/data/home.aspx)
GDP	World Bank Database (http://databank.worldbank.org/data/home.aspx)
Human Development Index	UNDP. Human Development Index. Report on Human Development 2015. Available at https://goo. gl/6EvxnD
GINI Index	World Bank Database (data from 2011) (http://databank.worldbank.org/data/home.aspx)
Governance Index	World Governance Index (data from 2011) (http://www.world-governance.org/article743.html?lang=es)
Global Competitiveness Index	WEF. Global Competitiveness Index 2016-2017. The Global Competitiveness Report 2016-2017. Available at https://goo.gl/yiBNsZ
Land use	World Bank Database (http://databank.worldbank.org/data/home.aspx)
Total emissions	Most recent National GHG Inventory in each country. If the inventory has more than 15 years from its publication, the data from the World Bank Database are reported. (http://databank.worldbank.org/data/home.aspx)
CO_2 per capita emissions	World Bank Database. (http://databank.worldbank.org/data/home.aspx)
Growth rate of emissions	World Bank Database (http://databank.worldbank.org/data/home.aspx)
Main emitting sectors	Interview to the representative of the Institution in charge of leading the climate policy of the country and (I)NDCs.
Climate risk index	Global Climate Risk Index 2016 (data from 2014)
Priority Adaptation Sectors	Interview to the representative of the Institution in charge of leading the climate policy of the country and (I)NDCs.

ANNEX: EXAMPLE OF THE INTERVIEW FOR REPRESENTATIVES OF THE INSTITUTION IN CHARGE OF LEADING THE CLIMATE POLICY IN THE CORRESPONDING COUNTRY

Country:	
Name of interviewee:	
Position:	
Institution:	
Date of the interview:	

Questions related to low emission and climate resilient development strategies

1. Do you think the following (include personalized list per country) public policies related to climate change in your country make up a national general framework?

   Note: First review secondary sources with the existing documentation and then supplement the information with this question. For the countries that analyzed the LEDSinLAC 2015 report, this documentation is already there, it is only necessary to verify if there is any new element.

2. Which are the policies that promote private investment in mitigation and adaptation in your country?

3. Based on the information presented in the LEDSinLAC 2015 report, is there any additional low emission and climate resilient development strategy that is being planned or under implementation in your country?

   Note: this question can be applied as it is for the countries included in the LEDSinLAC 2015 report. For new countries, the question should be: what are the low emission and climate resilient development strategies that are being planned or implemented in your country?

4. Based on the information presented in the LEDSinLAC 2015 report, is there any additional NAMA under design or being implemented?

   Note 1: again, review first the NAMA Registry.

   Nota 2: for the countries that were not included in the LEDSinLAC 2015 report, the question should be if they are in the process of elaborating any NAMA in addition to the ones that appear in the NAMA Registry. It might also be possible that there are no NAMAs registered yet.

5. Are there other mitigation strategies under implementation in your country that are not framed as LEDS or NAMAs? If so, please mention these other initiatives.

6. According to the three previous answers, which would you say are the main working sectors to reduce emissions?

   Energy ☐ LULUCF ☐ Agriculture ☐
   Industrial processes ☐ Waste ☐ Water ☐
   Other ☐

7. Is there any type of monitoring, reporting and verification (MRV) System for the mitigation efforts in your country (national climate change metrics system)? If your answer is yes, please explain.

   Yes ☐ No ☐

8. What are the national and sectoral plans and strategies for the adaptation efforts in your country and in what implementation stage are they at?
9. What are the main working sectors in terms of adaptation in your country?

   Note: This question is particularly as validation, depending on the findings from secondary sources.

10. Do you know any example of climate action that has been implemented in coordination between different levels (local, state/regional, national) or between different sectors (private sector, academy, civil society, public) of governance? If your answer is yes, please explain.
11. Yes ☐ No ☐
12. Regarding the low emission and climate resilient development strategies, what percentage of funding is domestic and what percentage of funding is international? If your answer is yes, please explain.

    Note: If they do not know the answer, ask for an estimate or the reference to find the information.

13. How are the low emission and climate resilient development strategies linked to the NDC of your country in the UNFCCC? Please explain.

    Note: for the countries included in the LEDSinLAC 2015 report, check first what is indicated in this sense in the file of the country.

14. Regarding the (I)NDCs, is this already an NDC in your country with the ratification of the Paris Agreement at the internal level, or what is the status?
15. In the process for the formulation of the (I)NDC of your country:
    a) What institutions participated in the elaboration? Which were their roles?
    b) Was there a consultation process prior to the approval?
    c) If the previous answer is yes, what sectors participated in the consultation and how?

Specific questions on inter-institutional coordination mechanisms

Institutionality

16. Is there in the country a clearly established mandate (official) for one or several inter-institutional coordination entities in terms of climate change? If the answer is yes, what document(s) provide for that? What are their names? Provide a brief description.

Note: The existing information should be checked before asking this question.

Yes ☐ No ☐

17. Is this entity working actively at this moment?

Yes ☐ No ☐

18. What are the functions of the inter-institutional coordination entity?

Consultation ☐ Coordination ☐ Binding decisions ☐ Other ☐

Describe: Answer the following questions for each of the entities mentioned in the previous question. When asking the question, substitute the generic term (entity) with the specific word that applies: committee, commission, platform, etc.

19. Is this coordination entity permanent?

Yes ☐ No ☐

20. Does it have a Technical Secretariat and/or Coordinating entity? If the answer is yes, who leads this secretariat and/or Coordinating entity?

Yes ☐ No ☐

21. What is its scope?

National ☐ Sub-national ☐ Multi-sector ☐ Other ☐

22. Is it political or technical?

Political ☐ Technical ☐ Both ☐ Other ☐

Representation

23. In the inter-institutional coordination mechanism there is participation from:

a. Sectoral authorities? (Yes/No). If yes, what authorities?

b. Sub-national authorities (provinces, cities, etc.) (Yes/No). If yes, what authorities?

c. Civil society? (Yes/No).

d. Private sector? (Yes/No).

e. Research institutions, academy and/or science? (Yes/No).

24. Are there diversity considerations in the integration of this entity? (gender, ethnicity, etc.)

Articulation

25. How are climate policies articulated between:

a. National and sectoral entities?

b. Different levels of government (national, sub-national, province)?

c. With non-governmental initiatives?

d. With the international cooperation program?

Operations

26. Are there terms of reference defined for the work of the coordination entity? If yes, what document contains them?

Yes ☐ No ☐

Note: Check if they have them or not, and what is the quality of those terms.

27. Does the coordination entity have an annual budget specifically allocated for its work? Yes or no. How much? (In US$) Are these domestic resources or do they come from international donors?

Yes ☐ No ☐

28. How frequent are the meetings?

Annual ☐ Six months ☐ Monthly ☐ Ad hoc ☐ Other ☐

29. How would you describe the average attendance in the meetings: High (everyone participates), medium (not all people participate) or low (few people participate)?

30. Are discussions documented? How is the documentation process performed?

31. Yes ☐ No ☐

32. Is there technical and/or scientific documentation used as input, like academic research, studies, etc.? Please explain.

Monitoring and evaluation

33. Are there follow up/monitoring mechanisms established to follow up on the decisions made in the inter-institutional coordination entity? If so, what are those mechanisms?

Yes ☐ No ☐

34. Are there evaluations or measurement of indicators? If so, how often are measurements and/or evaluations performed?

Yes ☐ No ☐

35. Does the committee present progress reports on its work?

Yes ☐ No ☐

36. If so, who do they report to and/or communicate this progress?

ANALYSIS QUESTIONS: Coordination quality

37. What do you think are the strengths of the coordination entity in which you participate at the technical level? What improvements would strengthen this aspect? Please explain.

38. What do you think are the strengths of the coordination entity in which you participate in terms of space for innovation and learning? What improvements would strengthen this aspect? Please explain.

39. What do you thing are the strengths of the coordination entity in which you participate in terms of impact of the decisions made? What improvements would strengthen this aspect? Please explain.

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