Food and Agriculture Organization of the United Nations

ANALYSIS AND SYSTEMATIZATION

ON INTENDED NATIONALLY DETERMINED CONTRIBUTIONS (INDC) IN LATIN AMERICA AND CARIBBEAN (LAC) COUNTRIES

BASED ON THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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1. INTRODUCTION AND BACKGROUND

The twenty-second session of the Conference of the Parties (COP 22), the twelfth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP 12), and the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA 1), were held in Bab Ighli, Marrakech, Morocco, from 7-18 November 2016.

The Conference showed how the world is making progress for the implementation of the Paris Agreement, and how the constructive spirit of multilateral cooperation on climate change continues.

Governments have set until 2018 to complete the Paris Agreement application standards, in order to ensure trust, cooperation and success in the upcoming years and decades. The agreement adopted at COP21 came into force on November 4, 2016, and, this way, countries have ratified their commitment to struggle to keep the increase in global temperature below 2 degrees centigrade and to achieve an economy free from greenhouse gas (GHG) emissions until the second half of this century.

Within this context of challenges and considering the principles, provisions and structures of the United Nations Framework Convention on Climate Change (UNFCCC), the countries have filed documents on their Intended Nationally Determined Contributions (INDC).

This analysis and systematization study examines the **INDC[1] documents from 32 Latin America and Caribbean (LAC)[2] States.**

[1] Source: UNFCCC Webpage at www4.unfccc.int/Submissions/INDC/Submission%20Pages/submissions.aspx.

[2] Out of the 33 FAO member countries in Latin America and the Caribbean, only Nicaragua does not have an INDC document.

TABLE 1. LATIN AMERICAN AND CARIBBEAN COUNTRIES WITH ANALYZED INDC DOCUMENTS

	SOUTH AMERICA	CENTRAL AMERICA	CARIBBEAN	NORTH AMERICA
COUNTRIES WITH ANALIZED INDC DOCUMENTS	1. Argentina	11. Costa Rica	17. Antigua and Barbuda	32. Mexico
	2. Bolivia	12. El Salvador	18. Bahamas	
	3. Brazil	13. Guatemala	19. Barbados	
	4. Chile	14. Honduras	20. Cuba	
	5. Colombia	15. Belize	21. Dominica	
	6. Ecuador	16. Panama	22. Grenada	
	7. Paraguay		23. Guyana	
	8. Peru		24. Haiti	
	9. Uruguay		25. Jamaica	
	10. Venezuela		26. The Dominican Republic	
			27. Saint Kitts and Nevis	
			28. Saint Vincent and the Grenadines	
			29. Saint Lucia	
			30. Suriname	
			31. Trinidad and Tobago	

Source: CMNUCC website www4.unfccc.int/Submissions/INDC/Submission%20Pages/submissions.aspx.

All Caribbean countries - with the exception of Cuba - are Small Islands Developing States (SIDS). Number 11 of Decision 1 CP/20 of the UNFCCC Conference of the Parties establishes that **"small island developing States may communicate information on strategies, plans and actions for low greenhouse gas emission development"**. Therefore, it does not establish that the document must be prepared by SIDS, however, in LAC, all these countries have presented their INDC documents.

It was not possible to analyze, comparatively, the information contained in the INDCs of all countries from the Region due to, for instance, the lack of accuracy in the magnitude of emissions during defined periods. On the other hand, sources in addition to the INDC were used to have comparative data; such as, for instance, the **FAOSTAT**[3] database (2010), **World Bank**[4] information and **ConexionCop** information for the Business as Usual (BAU)[5] emission projections.

2. EMISSIONS IN THE REGION

According to World Resources Institute data, in 2012, global carbon dioxide equivalent emissions for the sectors of energy, agriculture[6], land use change and forestry[7], waste, industrial processes and bunker fuel, were 47 540 Mt. From that amount, 3 956 Mt CO_2eq were emitted in Latin America and the Caribbean, corresponding to 8.32%. At a global level, agriculture-related emissions correspond to 10.60% of total emissions, while in Latin America and the Caribbean, emissions from the "Agriculture" sector correspond to 22.68% of regional emissions. 17.80% of global GHG emissions from Agriculture are explained by agricultural emissions in LAC; approximately ¼ of global emissions from land use, land use change and forestry (land clearance), correspond to those of the region, showing the high rates of deforestation and forest conversion into areas for other uses.

According to FAOSTAT data (2010) of the Food and Agriculture Organization of the United Nations (FAO), out of the countries with the highest participation in the total greenhouse gas (GHG) emissions in the region, Brazil takes the first place with 37.00%, followed by Mexico with 15.19%, Argentina with 9.41%, Colombia with 7.42% and finally Venezuela with 6.05%.

Paraguay, Bolivia, Peru, Chile, Cuba, Nicaragua, Ecuador, Trinidad and Tobago and Honduras are within the medium range, with emission contributions ranging from 3.8% to 1%. The remaining countries classified as SIDS, in addition to Guatemala, Panama, El Salvador, Uruguay and Costa Rica, contribute with emissions at a range lower than 0.99%.

The following countries are below 0.01%, contributing the lowest GHG levels: Antigua and Barbuda, Grenada, Saint Vincent and the Grenadines and Saint Kitts and Nevis. In this regard, it is important to note that SIDS are highly vulnerable to the impacts of climate change, not just in their natural resources, but also in their possibilities of economic development in sectors such as tourism, agriculture, fisheries, forestry and water, all of them highly sensitive to climate.

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[3] FAOSTAT, available at: www.fao.org/faostat/es/?#data/EM. The analysis is carried out with 2010 data, considering that it is the latest year with homogeneous information available in FAOSTAT.

[4] GDP (World Bank). World Bank data on national accounts, 2010 http://www.datos.bancomundial.org/indicador

[5] Climate commitments in Latin America (INDCs). Free use material prepared by ConexionCOP.

[6] Agriculture contains all emissions produced in the different sub-domains of agricultural emissions, in order to offer an overview of the contribution of agriculture to the total amount of GHG emissions. GHG emissions from agriculture consist of non-CO_2 gasses called methane (CH_4) and nitrous oxide (N_2O), generated by agricultural and livestock production as well as by man-agement activities.

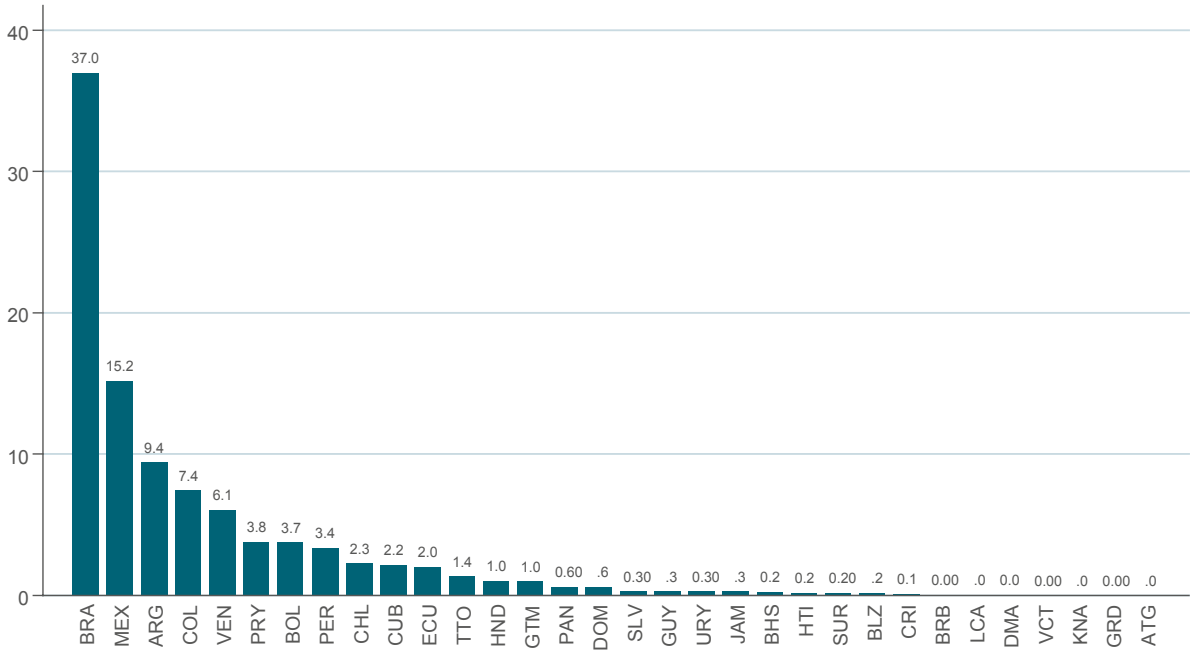
[7] Land use contains the greenhouse gas (GHG) emissions estimated based on carbon inventory changes in air and underground biomass deposits of forest lands, including forest land conversion to other land uses. CH_4 and N_2O emissions, as well as additional CO_2 emissions, are estimated regarding biomass combustion in fires, including peatland fires, and organic soil drainage.

TABLE 2. EMISSION LEVELS PER SECTOR AT A GLOBAL LEVEL AND IN LAC (MT CO_2EQ), 2013

SECTOR	EMISISONS				
	GLOBAL	%	LAC	%	% OF GLOBAL
GENERAL TOTAL	47 540.44	100.00	3 956.04	100.00	8.33
ENERGY	33 952.92	71.42	1 827.49	46.19	5.38
AGRICULTURE	5 038.75	10.60	897.10	22.68	17.80
LAND USE CHANGE AND FORESTRY	2 977.73	6.26	752.34	19.02	25.26
WASTE	1 504.80	3.17	244.13	6.17	16.22
INDUSTRIAL PROCESSES	3 042.40	6.42	156.32	3.95	5.14
BUNKER FUEL	1 023.84	2.15	78.65	1.99	7.68

Source: *Climate Data Explorer. World Resources Institute: http://cait.wri.org/*

FIGURE 1. GHG EMISSIONS PER LAC COUNTRY (PERCENTAGE OF THE TOTAL EMISSIONS IN THE REGION), 2010



Source: *FAOSTAT (2010) www.fao.org/faostat/es/?*

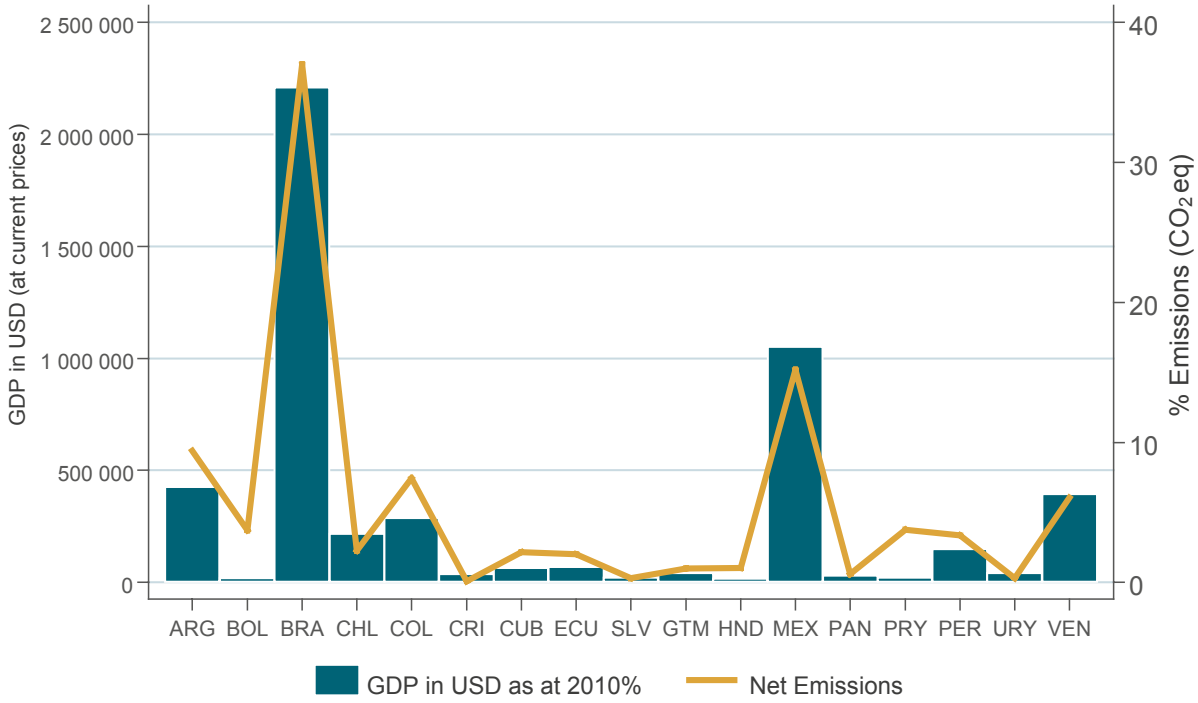
3. GDP AND GHG EMISSIONS IN LAC COUNTRIES

Comparing the 2010 GDP and the GHG of that same year[8], we can see there is a direct relation between the size of the economy and the percentage of GHG contribution among countries in the region. The countries with the highest GDP in the region, contribute more to the total emissions: Brazil (USD 2.2 trillion[9] - 37% emissions); to a lesser extent, Mexico (USD 1.05 trillion - 15.19% emissions), Argentina (USD 420 billion[10] - 9.41% emissions), Venezuela (USD 390 billion - 6.05% emissions), Colombia (USD 290 billion - 7.42% emissions).

Likewise, smaller economies in developing countries (non-SIDS) present lower emission levels, within a range from 0 to 3.7% of the total emissions of the region. Such is the case of Belize, Bolivia, Cuba, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Panama, Paraguay, Trinidad and Tobago and Uruguay. All these countries have a GDP below USD 70 billion.

The following chart shows the relationship between the GDP and GHG emissions in non-SIDS countries.

FIGURE 2. GDP (USD MILLION) AND GHG EMISSIONS (PERCENTAGE OF TOTAL EMISSIONS IN THE REGION) IN LAC NON-SIDS COUNTRIES (2010)



Source: *GDP (World Bank). World Bank data on national accounts, 2010. http://www.datos.bancomundial.org/indicador*

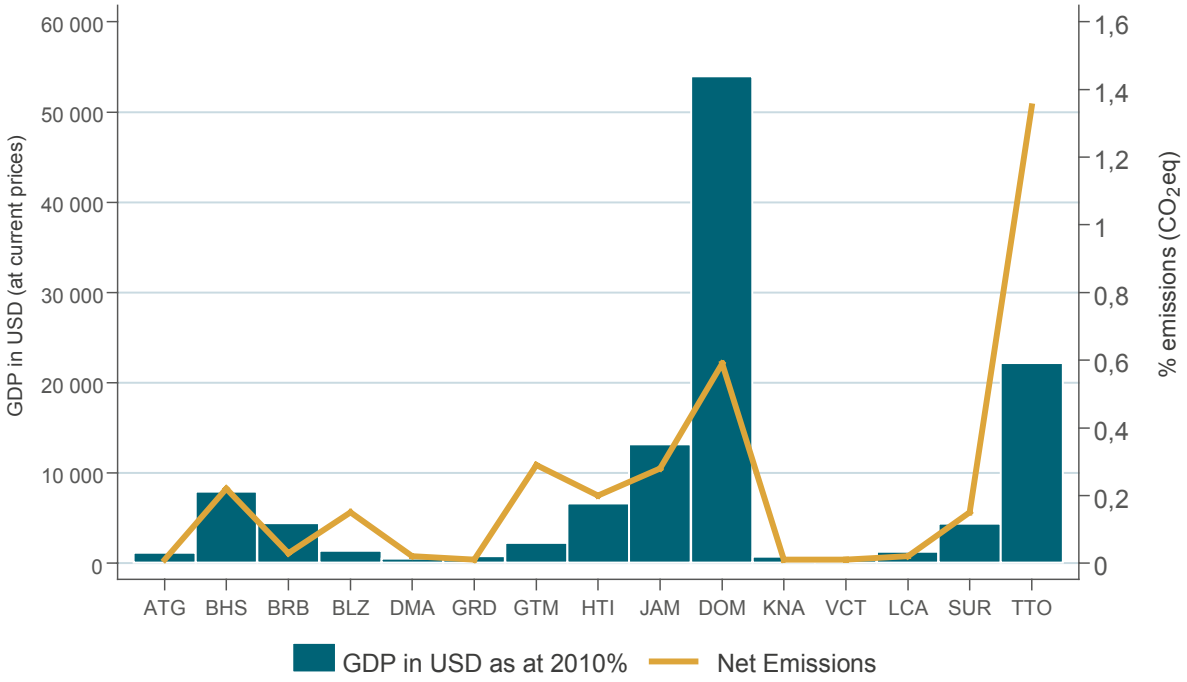
Regarding SIDS countries, with significantly smaller economies (maximum USD 550 billion, as the case of the Dominican Republic), the emission percentage is also lower (Trinidad and Tobago has the highest emission rate at approximately 1.4%). For these island countries, the effects of climate change have been extremely devastating to their economies, as shown in their INDCs.

[8] As indicated, the analysis is carried out with 2010 data, because that is the latest year with homogeneous information available on GHG emissions in FAOSTAT.

[9] Trillion: 1×10^{12}

[10] Billion: 1×10^{9}

FIGURE 3. GDP (USD MILLION) AND GHG EMISSIONS (PERCENTAGE OF TOTAL EMISSIONS IN THE REGION) IN LAC SIDS COUNTRIES (2010)



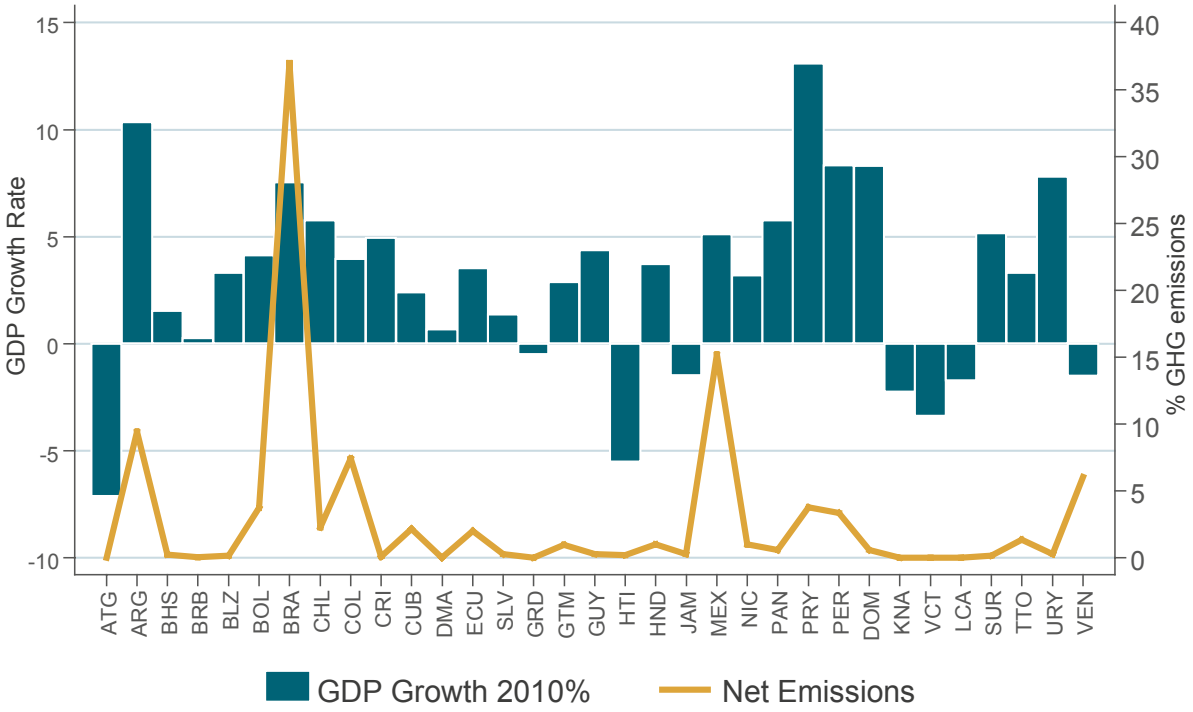
Source: *GDP (World Bank). World Bank data on national accounts, 2010. http://www.datos.bancomundial.org/indicador*

Contrary to non-SIDS countries, the connection between emissions and the size of the economy in SIDS countries, is not evident in all cases. The Dominican Republic, for instance, presents a relatively lower emission level than other SIDS, in regards to the size of its economy; Trinidad and Tobago, on the other hand, with an inferior economy, presents a higher emission level than that of the Dominican Republic. Although a more detailed analysis is required to explain this situation, in 2010, the expansion of the economy in the Dominican Republic was seen to be mainly supported on activities such as trade, insurance and financial intermediation, construction and communications, which, in principle, could be considered low-emission activities. In the case of Trinidad and Tobago, the economic growth of which that year was "relatively flat", there was a moderate increase of the economic activity in the energy sector, and a substantial reduction of non-energy activities.

This way, it can be seen that, beyond size, the GDP behaviour also conditions the GHG emission level. That shows an apparent connection between both variables. On one hand, countries with medium GDP growth (0 - 3%) have had - in most cases - emissions lower than 5%. At the same time, countries with high GDP growth (above 4%), have had net emissions higher than 10%.

In general terms, our region presents a direct link between economic development, growth or size of the economy and GHG emissions. The dissociation of GHG emissions from economic growth, is one of the big challenges for sustainable development in LAC.

FIGURE 4. GDP GROWTH (PERCENTAGE REGARDING THE PREVIOUS YEAR) AND GHG EMISSIONS (TOTAL PERCENTAGE OF REGIONAL EMISSIONS) IN LAC COUNTRY (2010)



Source: *GDP (World Bank) Data on World Bank national accounts, 2010. http://www.datos.bancomundial.org/indicador*

4. INSTITUTIONS AND LAWS REPORTED IN THE INDC

In regards to institutions and laws, INDCs present an array of previously developed mechanisms as well as some that appear as proposals for development. In general, all these countries have a legal and institutional structure according to their own levels of governmental development.

It is important to stress that all countries have Ministries, within the environmental sector, to manage climate change. The two exceptions are Saint Lucia and Guyana, for which the environmental subject is managed by Ministries of other sectors.

It is also important to mention that the countries have different governmental instantiations at different levels, where the implementation of environmental and climate change policies is managed and promoted, such as: specialized departments, secretariats, directions, specialized offices, under-secretariats, institutes, etc.

According to the information provided in the INDCs, Antigua and Barbuda, Argentina, Barbados, Chile, Costa Rica, Cuba, Dominica, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti and Panama, have Consulting Committees/Councils/Groups at a national level, with different strata from the civil society and governmental instantiations to manage the mentioned matters.

In the region, 9 countries have a specific enacted law regarding climate change, which is a very significant progress for the achievement of the agreements of the United Nations Framework Convention on Climate Change (UNFCCC). These countries are: Brazil, Bolivia, Costa Rica, Dominica, El Salvador, Guatemala, Honduras, Mexico and Panama.

On the other hand, all countries have specific climate change policies, strategies and plans developed, presented and approved in their own laws, as shown in the following chart.

FIGURE 5.
INSTITUTIONS REPORTED FOR THE IMPLEMENTATION OF THE INDC

Source: Own preparation, based on INDC documents

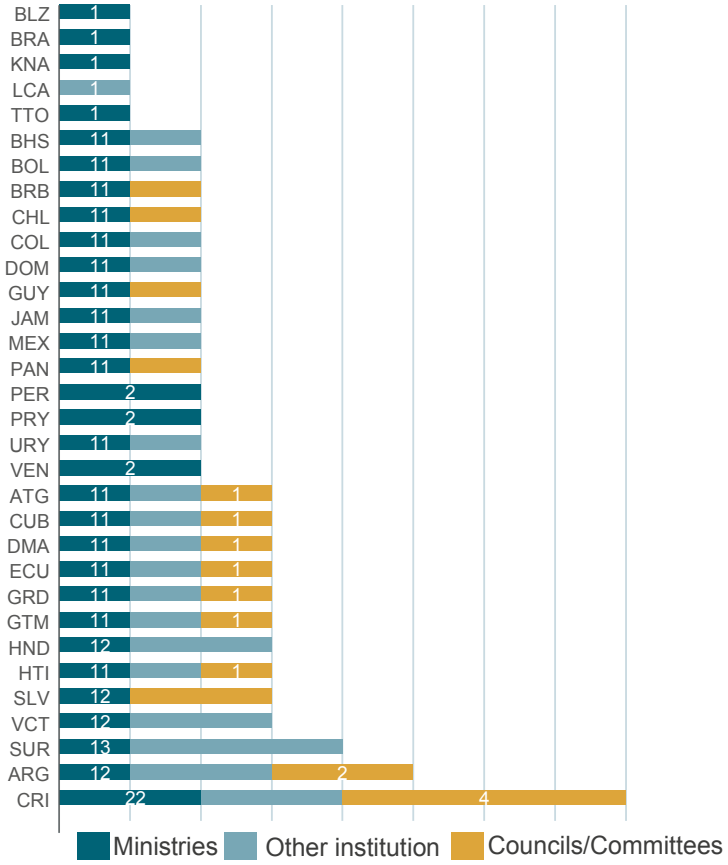
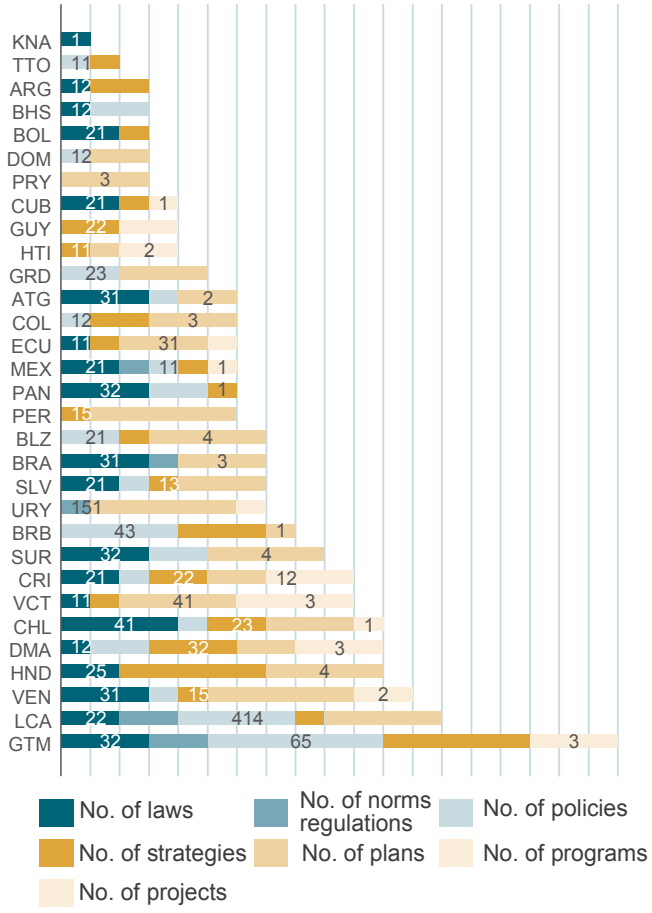


FIGURE 6.
REGULATIONS REPORTED FOR THE IMPLEMENTATION OF THE INDCS

Source: Own preparation with data from INDC documents



All these countries declare to have a structure to approach the topic, as seen in laws on Climate Change, forestry and forest protection laws, climate change adaptation policies, policies on risk management, emissions and energy, adaptation action plans, coastal zone management plans (when applicable), National Strategies for Reducing Emissions from Deforestation and Forest Degradation (REDD+) and sectoral programs and projects, both on climate change adaptation and mitigation.

For instance, Guatemala states in its INDC, the existing mechanisms and standards, regarding the environmental subject, which include: 3 draft laws, 2 regulations, 6 policies, 5 strategies and 3 programs, all of which are part of its structures for the implementation of its INDCs.

Only two countries (Chile and Mexico) declare, in their INDCs, to have implemented taxes for the funding of actions to face climate change, not diminishing the other countries which, in some cases, have even indicated commercial actions such as, for instance, increasing import duties for vehicles and equipment that contribute to CO_2 emissions, mainly regarding the industry and transportation.

Finally, most countries participate one way or another in processes for reducing carbon emissions from deforestation and degradation (REDD+), which become important climate change mitigation mechanisms, and which seek to acknowledge and provide incentives to the countries to expand the forest base, protect their forest resources, improve their management and use them in a sustainable manner under the principle of avoided emissions.

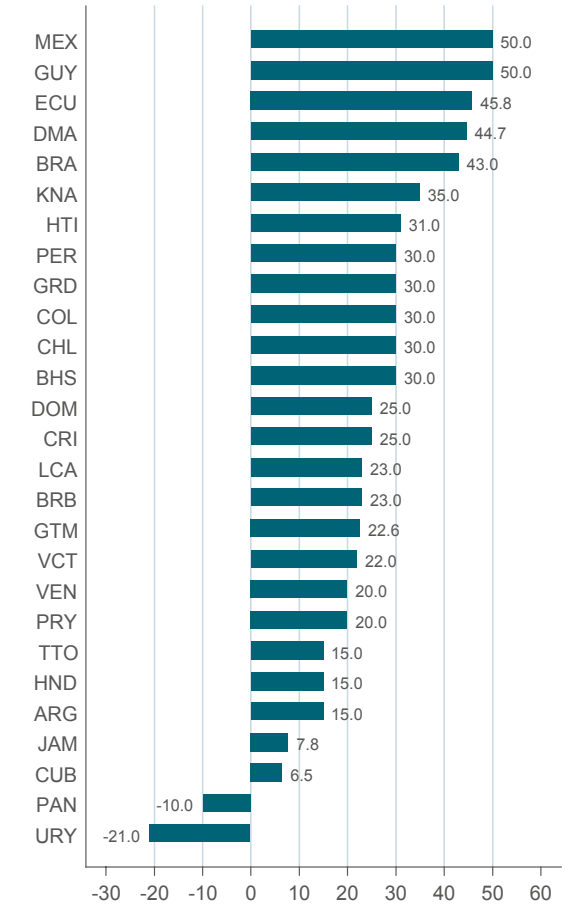
5. EMISSION REDUCTION TARGETS

The **CO_2 emission reduction percentage** is used for the comparison of targets, as common denominator present in most documents. Additionally, countries report on the time established to achieve their targets, which ranges between year 2025 and 2033, 21 countries having established 2030 as the year for achieving such targets.

In regards to emission reduction targets, Mexico and Guyana present the highest, corresponding to 50% as compared to their "Business as usual" (BAU) scenario. Followed, within a range of 30% to 46% reductions, by Bahamas, Chile, Colombia, Grenada, Peru, Haiti, Saint Kitts and Nevis, Brazil, Dominica and Ecuador. Argentina, Honduras, Trinidad and Tobago, Paraguay, Venezuela, Saint Vincent and the Grenadines, Guatemala, Barbados, Saint Lucia, Costa Rica and the Dominican Republic are within the following range of reductions, between 15% and 25%.

Targets lower than 10% have been set by: Cuba and Jamaica; while 5 countries do not state in their INDCs an emission reduction percentage; these countries are: Belize, Bolivia, El Salvador, Suriname and Antigua and Barbuda.

FIGURE 7. 2030 TARGETS OF EMISSION REDUCTIONS AND REMOVAL INCREASES (PERCENTAGE REGARDING BAU SCENARIO)



Source: Own preparation based on INDC data

6. ADAPTATION AND MITIGATION ACTIONS

It is important to point out that, for the analysis of the adaptation and mitigation measures, the criteria assumed only allow determining literal expressions regarding what will be the "adaptation" or "mitigation".

As indicated by several countries in their documents, there is a synergy between mitigation and adaptation. Most countries state the co-benefits generated within the set of measures. This happens particularly in less developed countries, as these countries focus their actions on adaptation rather than on mitigation, because they believe they are or will be those receiving the greatest impacts of climate change and need to better adapt to them.

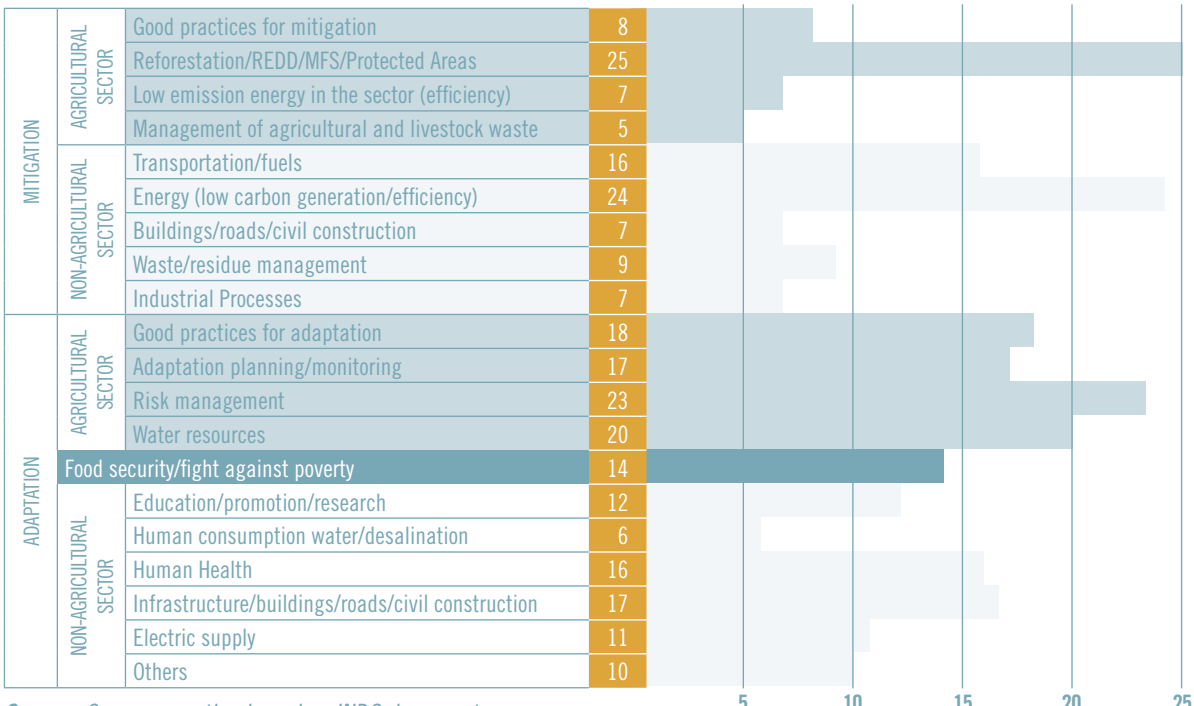
The countries commit to unilateral or unconditional contributions, mainly in regards to "land use" and reforestation. In the case of SIDS countries, naturally, they put more stress on adaptation measures regarding water resources, which is the most sensitive in their economy and development (water resources associated to aquaculture, agriculture and human consumption); and also, in regards to mitigation and adaptation, the energy sector, due to their low generation capacity, and fuels, due to their dependence on "fossil" fuels. On the other hand, the most important mitigation and adaptation measures in countries with greater territories, are related to transportation (beyond fuels) and energy.

INDC documents express the mitigation and/or adaptation actions in an array of ways. There are documents describing intervention sectors in a generic way; while others detail the specific actions within sectors, in some cases even scheduling the actions and quantifying the necessary resources for their implementation.

The following analysis presents the "main activities" resulting from the review of the INDCs, which gather a set of mitigation and adaptation measures mentioned by the countries. Such main activities are grouped in those related to the agricultural sector, and those that are not (see full list per country in annex 1). Activities that are not related to the agricultural sector make reference to mitigation or adaptation measures that are not directly within the action framework of FAO, such as, for instance, housing, transportation, human settlements, roads.

Additionally, the analysis intended to identify in the INDCs the measures proposed by the countries that make explicit reference to "food security" or "fight against (rural) poverty", which are part of FAO's mandate. This is how 14 out of the 32 countries in the region presenting their INDCs, mention the need to promote food security and nutrition (FSN) or the reduction of poverty levels, as a national adaptation action.

TABLE 3. MITIGATION AND ADAPTATION ACTIONS MENTIONED BY THE COUNTRIES IN THE INDC



Source: *Own preparation based on INDC documents*

The analysis also shows that the two most frequent actions in the INDCs and linked to the agricultural sector, are those related to the forestry sector (reforestation, reducing emissions from deforestation and forest degradation - REDD -, sustainable forest management, protected area conservation, etc.), in regards to mitigation, and risk management (improvement of agroclimate information systems, early warning systems, agriculture and livestock insurance, etc.), in regards to adaptation. With a frequency quite close to risk management, as adaptation measure, the countries have also mentioned the integral management of water resources (including the water supply for agriculture and irrigation), the development of good practices as productive field activity level, and planning actions for adaptation, strategy development and budget allocation, as well as the monitoring of the productive activity.

Considering the frequency with which some measures were mentioned by the countries in the region, it can be said that the two most important actions for mitigation are those related to forestry, within the agriculture sector, and energy (change of energy matrix, low carbon generation and promotion of the efficient use of energy), considered out of the direct scope of agricultural management.

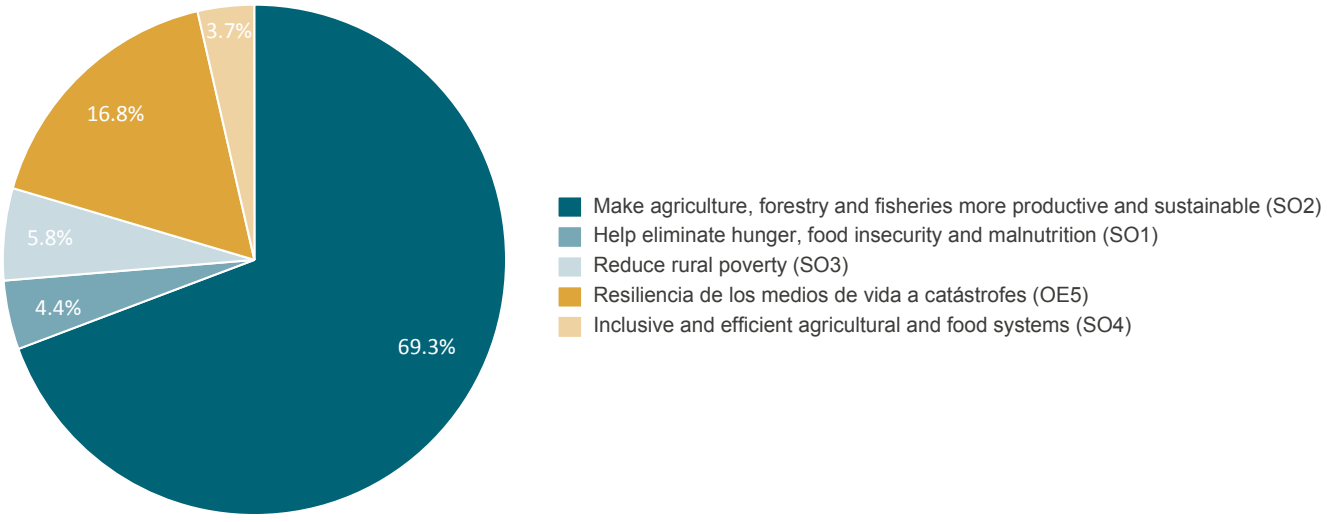
In general terms, although the forestry sector attracts the attention of the countries in regards to mitigation, INDCs more frequently mention mitigation measures as a whole, which fall outside of the scope of the agriculture sector. On the contrary, in regards to adaptation, countries more frequently mention the measures that can be implemented in the agricultural sector, as compared to the non-agricultural sector.

6.1. IN REGARDS TO FAO STRATEGIC OBJECTIVES

In regards to the 5 FAO Strategic Objectives (SO)11, the distribution of actions described in the INDCs is not uniform, with strategic objective 2, regarding the actions in the agriculture, forestry and fisheries sector, to promote a sustainable activity (69%), being the one most frequently indicated by the countries, followed by strategic objective 5, regarding risk management and the promotion of resilience in rural populations and their livelihoods upon disasters, in this case, due to the effects of climate change (17%). Strategic objectives 3 on the reduction of rural poverty, 4 on efficient agricultural and food systems, and 1 on eliminating hunger, food insecurity and malnutrition, with 6%, 4% and 4%, respectively, are those with the lowest frequency in the INDCs of the countries in the region. It is important to note that it is very difficult to link the actions indicated in the INDCs with a single FAO SO, as many of the mentioned actions contribute to more than one SO at the same time.

[11] FAO Strategic Objectives: 1. Help eliminate hunger, food insecurity and malnutrition; 2. Make farming, forestry and fisheries more productive and sustainable; 3. Reduce rural poverty; 4. Enable inclusive and efficient agricultural and food systems; 5. Increase the resilience of livelihoods to threats and crises.

FIGURE 8. ACTIONS EXPOSED IN THE INDCS PER FAO STRATEGIC OBJECTIVE



Source: *Elaboración propia en base a datos de documentos CPND*

Some examples of the actions considered in the INDCs according to FAO Strategic Objectives are:

Help eliminate hunger, food insecurity and malnutrition (SO1)

- Plans and programs for food security.
- Guarantee the right to access to water.
- Support framework for vulnerable communities and segments of society to be able to approach the threats to food security, human health, the mitigation of poverty, sustainable livelihoods and economic growth.
- Strengthen of food security policies and strategies.

Make agriculture, forestry and fisheries more productive and sustainable (SO2)

- Incentives to food production and export.
- Urban and peri-urban agriculture programs.
- Generation of legal instruments for the preservation of forest wealth and sustainable use of forests.
- Development of varieties that allow to reduce the use of pesticides and resistance to water stress.
- Development of agricultural calendars adapted to water shortage.
- Organic and agroecological production foment program.
- Incentive and growth plans for agriculture, fisheries, water and health.
- Development of more sustainable agro-ecosystems.
- Strengthen of research and capabilities: selection and development of varieties and species of crops and grasses resistant to droughts and floods, sustainable use of biodiversity.
- Implementation of program for integrated pest management.
- Research and development of natural biocides.
- Implementation of climate change criteria in the management plans of protected areas, and studies on the dynamics of land and marine-coastal ecosystems, their populations and the relations to meet human needs.
- Reduction of deforestation and preservation of important ecosystems, such as the Amazon, given their enormous potential to contribute to the stabilization of GHG in the atmosphere.
- Effective techniques for the use of water resources, development of aquaculture.
- Changes in livestock practices: modifications in grazing times; seeding of improved grasses; implementation and promotion of intensive livestock stalls; and, limitation to field burning for the control of mites in livestock.

Land tenancy improvement; production diversification, particularly in subsistence farming.

- Protection, conservation and expansion of existing mangrove forests.

- Integrated water management infrastructure, including the construction, rehabilitation and maintenance of reserves and channels and maritime defences, sanitation and water supply, as well as the introduction of new agricultural techniques such as hydroponics and fertirrigation for FSN.

- Territorial order of native forests at province level.

Reduce rural poverty (SO3)

- Increase the number of programs and instruments in the fight against poverty to reduce poverty and exclusion indexes.

- Special attention to the poorest populations, to improve their housing and life conditions, reinforcing their capacity to withstand the effects of serious climate events.

Enable inclusive and efficient agricultural and food systems (SO4)

- Improvement in systems for the storage, processing and preservation of agriculture and livestock production; and, development of model farms for the promotion of best plantation practices.

- Development of technology for the production, transformation, conservation of agricultural and livestock products.

- Foment the use of biodigesters to reduce waste.

Increase the Resilience of Livelihoods from Disasters (SO5)

- Promotion of agriculture and livestock insurance.

- Permanent monitoring of extreme climate events such as droughts and excessive rainfall affecting productivity.

- Reinforcement of meteorological surveillance systems and agricultural yield forecasts.

- Development of a support framework for vulnerable communities and segments of society (women, youth, seniors, people with disabilities) to manage their own climate change risks and thus approach the climate change impacts in vulnerable sectors (particularly, agriculture).

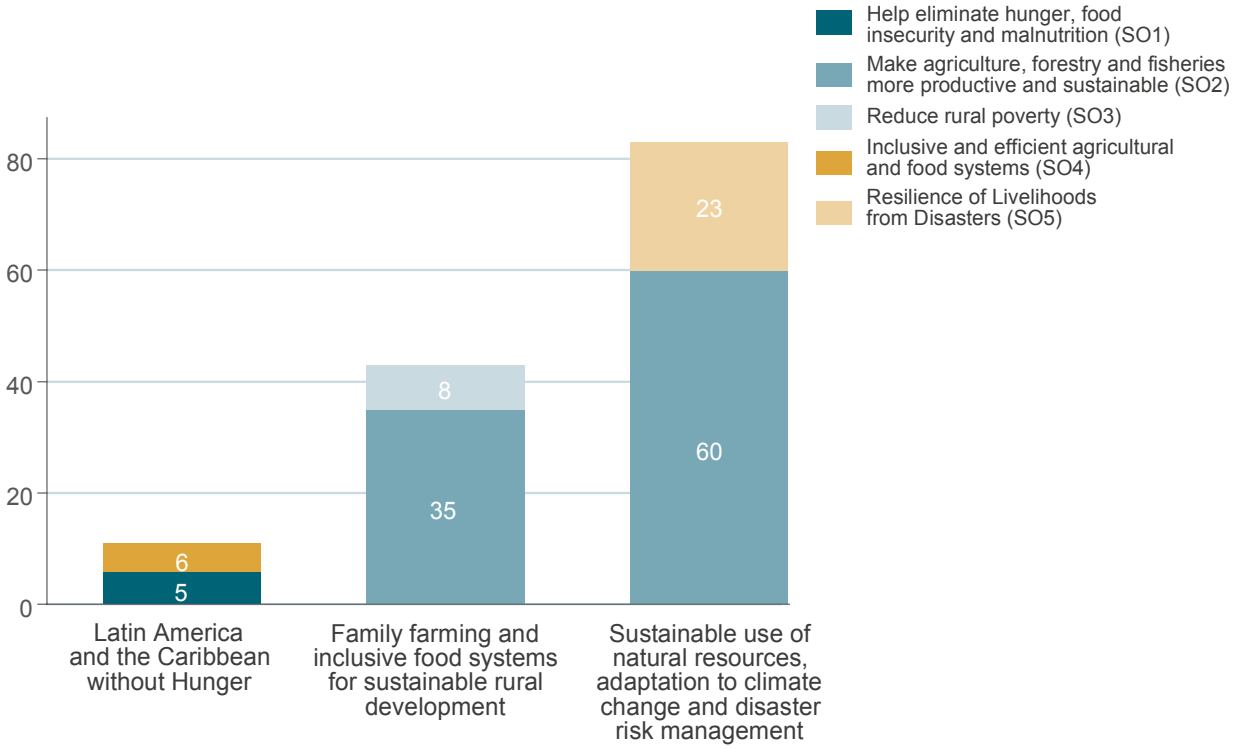
6.2. IN REGARDS TO FAO PRIORITY TOPICS IN THE REGION

The three FAO regional priorities for cooperation in Latin America and the Caribbean[12] are: i) Food security and nutrition (Regional Initiative **"Hunger-Free Latin America and Caribbean"**); ii) Fight against rural poverty and integral regional development (**"Family farming and inclusive systems for sustainable rural development"**); and, iii) Disaster resilience (**"Sustainable use of natural resources, adaptation to climate change and disaster risk management"**). According to the previous analysis, the most frequent mitigation and adaptation measures in the INDCs, linked to the agriculture sector, are mainly related to the third regional priority subject mentioned.

[12] Topics approved by FAO Regional Conference to focus the attention of cooperation on priority areas of interest of member countries in Latin America and the Caribbean. Each priority topic gave origin to a regional initiative, which is the delivery mechanism of FAO products and services at a national, sub-regional and regional level.

The above is understandable because, as previously indicated, the most frequent measures in the INDCs of the countries are related to forests (sustainable forestry management and reforestation, from an emission reduction perspective), the development of good practices and the low-carbon energy topic for the agricultural sector, in regards to mitigation; and disaster risk management and water resources management, from an adaptation point of view. That is, the measures proposed by the countries make reference mainly to the promotio Secondly most frequent is the priority topic regarding rural poverty and regional development and, thirdly, food security and nutrition. This shows that, although some of the INDCs have made reference to the link of poverty and food security to adaptation and mitigation, it is still necessary to identify and reinforce the analysis of the relation in a two-way manner between development, poverty reduction, food security, and climate change adaptation and mitigation.

FIGURE 9. ACTIONS PRESENTED IN THE INDCS, CLASSIFIED BY FAO REGIONAL PRIORITIES



Source: *Own preparation based on INDC statements.*

7. INFORMATION GAPS IN INDC DOCUMENTS

To further the analysis, as well as to facilitate the follow-up, monitoring and accountability of the commitments, it is important to homogenize the information contained in the INDCs; for this, parameters, variables, units and time considerations that are not currently standard in the documents, need to be established. For instance, there is no explicit homogeneity regarding the review periods for the achieved contributions; some countries state that the review will be every 5 years, while others indicate year 2025. Anyhow, for the indicated periods, partial targets are not defined, as to be able to verify compliance with the self-assumed commitments of the countries.

Another very important detail the documents do not consider, is the quantitative effect that the negative impacts of climate change have on populations (persons, human collectives), as well as the expected positive effect of the planned mitigation and adaptation actions, on such populations. It is also relevant to mention the little reference made to south-south cooperation possibilities in the region, for climate matters. Countries that explicitly mention the possibility of cooperating with their peers are only Brazil, Panama and Uruguay. Although it is understandable that countries do not state specific possibilities in this aspect (eventually, due to the little availability of financial and technological resources); it is also true that there are several countries in the region

that face vulnerable situations, others that have experience in disaster situations, and that have been able to develop adaptation capabilities and knowledge, experience, as well as an institutional baggage that could be extended to and used in the region.

It is also relevant to stress that two cross-sectoral topics are important to properly assess the effects of climate change: the impact on vulnerable groups and the breakdown of the effect by gender. These cross-sectoral topics are not considered in detail by most INDCs. Very few documents make open reference to these matters, which should be properly monitored in the process of implementing the commitments of countries, upon the effects of climate change. Cross-sectoral topics such as childhood, youth, indigenous peoples and dignified employment, have not been mentioned or extensively mentioned, in most cases.

Another one of the difficulties to perform a proper analysis of the INDCs makes reference to the lack of information on funding for the implementation of commitments. Several documents indicate specific figures for some concrete big-sized actions, but the vast majority does not determine definite funding mechanisms, or the necessary amounts.

8. CONCLUSIONS AND RECOMMENDATIONS

• In the set of INDCs, there is a concentration of proposals naturally linked to the "classic activities" of climate change adaptation and mitigation, that are already being carried out, such as, for instance, reforestation or disaster risk management. The agenda observed in the INDCs "enhances" or reaffirms the relevance of these actions already in process of implementation by the countries, and calls the attention to the need for greater collaboration of the international community.

• Notwithstanding the above, the INDCs should also focus on the setting of a more complex agenda, that links more directly the "rural poverty" and "food security and nutrition" topics to climate change adaptation and mitigation actions. This, considering that the actions on the fight against poverty and FSN, are effective for climate change adaptation, and that mitigation could be achieved, partly, by programs and projects that link the reduction of poverty, mainly rural poverty, and the promotion of food security, to the reduction of the emission or capture of greenhouse gases.

• The 32 documents analyzed have a great amount of information. However, not all documents have the same levels of information, due to lack of updated data, as seen in some of them. The intention of many countries, particularly the ALBA and some SIDS countries, is clear in generating information and making evident the different responsibilities and those shared by the countries with greater participation in GHG emissions and their effects on the smaller countries, in development, as more vulnerable countries, affected by climate change.

• It is necessary to further the analysis and the action possibilities, to homogenize information, both for follow-up and monitoring, as for the accountability of these countries. For that, variables, units and time considerations that are not currently standard in the INDCs, are needed.

• According to the information contained in the documents, the countries in the Region can be classified into: a) big-sized continental, in terms of economy, population and geography (with, comparatively, "high emissions"), b) developing countries with medium-sized economy and low emissions; c) Small Islands Developing States (SIDS); and d) countries considered - due to their information - as positive-balance countries, in which CO_2eq captures exceed emissions. Naturally, these 4 groups, particularly SIDS, have different problems and, therefore, very different metrics in terms of magnitude and effects.

• Documents do not analyze the quantitative effect that climate change and the proposed mitigation and adaptation (consequences) actions will have on populations (people, human collectives). The information related to macro-economic variables (undoubtedly necessary) is insufficient and/or incomplete if it does not take into account the everyday life of human beings (lifestyles, needs and capabilities).

• Emissions are proportional to the size of the economy; however, it is important to mention that there are countries in the region that show they have more removals than emissions, regardless of their economic size (Panama, Uruguay and Suriname).

• The analysis shows that the SIDS have small economies and that their emissions are marginal as compared to regional emissions, and even more so in regards to global emissions. The effects of climate change are generally of great magnitude in these countries, where low resilience and vulnerability are also observed.

• In regards to reduction targets, 26 out of the 32 countries have stated figures of emission reduction, to be achieved by year 2030. Among them, 12 countries declare reductions exceeding 30% as compared to the "business as usual" (BAU) scenario, and only 6 of them do not declare the reduced emission figures in their INDCs.

TABLE 4. CLASSIFICATION OF COUNTRIES BASED ON THEIR CONDITIONS (ECONOMY, GEOGRAPHY, POPULATION) AND THEIR CO_2EQ EMISSIONS

BIG-SIZED CONTINENTAL AND HIGH EMISSIONS	DEVELOPING COUNTRIES WITH MEDIUM-SIZED ECONOMY AND LOW EMISSIONS	SMALL ISLANDS DEVELOPING STATES (SIDS)	POSITIVE-BALANCE COUNTRIES, IN WHICH CO_2EQ CAPTURES EXCEED EMISSIONS
1. Argentina	6. Bolivia	16. Antigua and Barbuda	30. Panama
2. Brazil	7. Chile	17. Bahamas	31. Uruguay
3. Colombia	8. Costa Rica	18. Barbados	
4. Mexico	9. Cuba	19. Belize	
5. Venezuela	10. Ecuador	20. Dominica	
	11. El Salvador	21. Grenada	
	12. Guatemala	22. Guyana	
	13. Honduras	23. Haiti	
	14. Paraguay	24. Jamaica	
	15. Peru	25. The Dominican Republic	
		26. Saint Kitts and Nevis	
		27. Saint Vicent and the Grenadines	
		28. Saint Lucia	
		29. Trinidad and Tobago	
		32. Suriname	

• Mitigation and adaptation actions have only been declared in a heterogeneous manner by the 32 countries. The most frequent actions related to the agriculture sector are those related to reforestation, reduction of emissions from deforestation and forest degradation - REDD -, sustainable forest management and conservation of protected areas, etc., in regards to mitigation, and the risk management that implies the improvement of agroclimate information systems, early warning systems, agriculture and livestock insurance, in relation to adaptation.

• In reference to FAO strategic objectives, adaptation and mitigation measures focus on strategic objective 2 "Make agriculture, forestry and fisheries more productive and sustainable" (69%), and in second place, strategic objective 5 "Increase the resilience of livelihoods to threats and crises" (17%). Actions linked to the former have been mentioned by the countries in the region four times more frequently than the second objective indicated. Anyhow, the priority regional subject of FAO, which focuses the attention of adaptation and mitigation measures mentioned by the countries, is the one regarding the "sustainable management of natural resources, climate change adaptation and disaster risk management".

• Few countries present specific costs and funding for the measures and actions considered in their INDCs, but all of them mention goals conditioned to cooperation funds in the sector, and most of them leave open the possibility of carbon transactions at an international level. The information regarding funding sources and costs is still a topic that requires further work, with much clearer metrics, as the information available is very rich in too few cases and very poor and/or almost non-existent in most documents.

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• **World Bank - CO_2 Emissions (metric tonnes per capita)**
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• **Climate Data Explorer. World Resources Institute**
Available at *http://cait.wri.org/*

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ANNEX 1.
ADAPTATION AND MITIGATION ACTIONS PER COUNTRY

ANNEX 1. ADAPTATION AND MITIGATION ACTIONS PER COUNTRY

		MITIGATION									ADAPTATION											
		AGRICULTURAL SECTOR				NON-AGRICULTURAL SECTOR					AGRICULTURAL SECTOR					NON-AGRICULTURAL SECTOR					
		Good practices for mitigation	Reforestation/REDD/MFS/Protected Areas	Low emission energy in the sector (efficiency)	Management of agricultural and livestock waste	Transportation/fuels	Energy (low carbon generation/efficiency)	Buildings/roads/civil construction	Management of agricultural and livestock waste	Industrial Processes	Good practices for adaptation	Adaptation planning/monitoring	Risk management	Water resources	Food security/fight against poverty	Education/promotion/research	Human consumption water/desalination	Human Health	Infrastructure/buildings/roads/civil construction	Electric supply	Others
1	Antigua and Barbuda		x				x						x		x		x		x	x	
2	Argentina		x								x	x	x	x				x			
3	Bahamas					x		x				x	x	x	x			x	x		x
4	Barbados					x	x						x					x			
5	Belize	x	x		x	x					x							x			x
6	Bolivia		x				x				x	x	x	x	x					x	x
7	Brazil	x	x	x	x	x	x	x				x			x						
8	Chile		x									x		x							
9	Colombia	x	x			x		x			x	x	x	x				x	x	x	x
10	Costa Rica	x	x	x		x	x		x		x	x	x	x	x			x	x		
11	Cuba							x				x	x			x		x	x		
12	Dominica				x	x	x	x	x			x			x			x			
13	Ecuador		x				x				x	x	x	x	x		x		x	x	
14	El Salvador		x			x	x		x		x	x	x	x	x			x	x	x	
15	Grenada		x			x	x		x				x	x	x	x				x	x
16	Guatemala		x			x	x		x	x	x		x	x	x			x			
17	Guyana		x		x		x				x		x	x		x			x		
18	Haiti	x	x	x			x		x		x	x	x	x	x	x	x	x	x	x	x
19	Honduras		x	x							x			x	x	x					
20	Jamaica						x					x	x			x		x	x		
21	Mexico	x	x				x			x	x		x				x		x		
22	Panama		x	x			x				x			x		x					
23	Paraguay		x				x				x	x	x	x				x		x	
24	Peru		x										x			x				x	
25	The Dominican Republic	x					x		x	x			x		x		x		x	x	x
26	Saint Kitts and Nevis					x	x	x			x			x		x	x	x	x		x
27	Saint Vincent and the Grenadines		x			x	x				x	x	x	x				x			
28	Saint Lucia		x			x	x	x	x	x	x	x	x	x		x				x	
29	Suriname		x	x			x				x			x		x		x	x		x
30	Trinidad and Tobago		x			x	x			x											
31	Uruguay	x	x	x	x	x	x		x	x			x	x		x			x		x
32	Venezuela		x			x	x			x			x			x			x	x	
	Number of countries	8	25	7	5	16	24	7	9	7	18	17	23	20	14	12	6	16	17	11	10

Source: *Own preparation based on INDC statements.*

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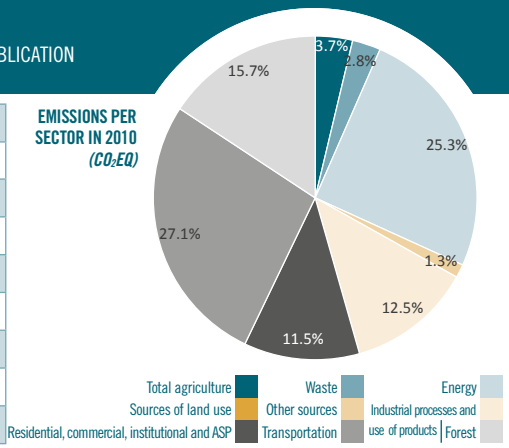
ANNEX 2.
FILES PER COUNTRY WITH INDC SUMMARIES

ANTIGUA AND BARBUDA | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	4.1
Prevalence of underfeeding (%)	SD
Agricultural area (% of total land surface)	20.45
Forest area (% of total land surface)	22.27
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	SD
CO_2 Emissions (metric **tonnes** per capita) according to INDC	5.8
Total population by 2015 (thousands)	91.8
Urban Population by 2015 (%)	23.77
Rural Population by 2015 (%)	76.23

EMISSIONS PER SECTOR IN 2010 ***(CO_2EQ)***



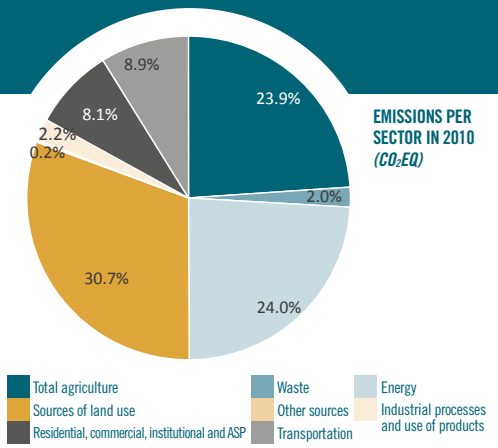
Source: FAO and World Bank

TARGETS	
Target	Undefined
Baseline	Emissions and removal of greenhouse gases (Gg) for 2006.
Scope - Sector	Reduction of GHG emissions in the energy sector. Sectors approached in the adaptation and mitigation objectives include: energy, health, tourism, agriculture, residues, water, transportation, forestry and land use change. The national GHG inventory comprises carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and hydrofluorocarbons (HFC).
Application period	Pre 2020 and 2020 – 2030
Review	2020

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Ministry of Health and the Environment; Department of the Environment; Technical Advisory Committee (TAC); Renewable Energy Act (2015); Environmental Protection and Management Act (EPMA), 2015; Physical Planning Act (2003); National energy policy; Sustainable Energy Action Plan (SEAP), 2013; Sustainable Island Resource Management Zoning Plan (SIRMZP).

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
The implementation cost of adaptation objectives has been estimated at approximately **USD** 20 million per year during the next ten years, and the implementation cost of mitigation objectives, at approximately **USD** 220 million. However, these figures require a more detailed analysis.	Improve the established legal, political and institutional framework for low carbon emission development, for the reduction of poverty and sustainable development. By 2020, update the Construction Code to face the projected impacts of climate change.

MITIGATION ACTIONS	ADAPTATION ACTIONS
In 2020, efficiency standards will be established for the import of all vehicles and electronics. By year 2020, the technical studies will be completed to build and start-up a residue-base power production plant in 2015. By year 2030, the expectation is to have an energy matrix with 50 MW from renewable sources, both within and out of the public grid. By 2030, all remaining wetlands and watershed areas with carbon sequestration potential are protected as carbon sinks.	By 2025, increase the sea water desalination capacity by 50% above 2015 levels. By 2030, all buildings will be improved and prepared for extreme climate events, including droughts, floods and hurricanes. By 2030, 100% of the electricity demand for the water supply, as well as for other essential services (including health, food storage and emergency services) will be served by renewable sources. By year 2030, all waterways will be protected to reduce flood risks and impacts on health. By 2030, an accessible insurance plan will be available for farmers, fishermen, and household and business owners to face the losses resulting from climate variability.



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

Note: Mitigation in forests corresponds to 8.2% of total emissions.

GDP annual growth rate by 2015 (%)	2.4
Prevalence of underfeeding (%)	< 5%
Agricultural area (% of total land surface)	54.34
Forest area (% of total land surface)	10.02
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	1.4
CO_2 Emissions (metric tonnes per capita) according to INDC	4.5
Total population by 2015 (thousands)	43 417
Urban Population by 2015 (%)	91.75
Rural Population by 2015 (%)	8.25

Source: FAO and World Bank

TARGETS	
Target	670 Mt CO_2eq, corresponding to 15% by year 2030. The contribution considers six greenhouse gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC) and sulfur hexafluoride (SF_6).
Baseline	The "Business as usual" (BAU) scenario is built according to an economic growth projection in the absence of climate change mitigation policies.
Scope- Sector	he coverage considered is all national territory, including the following sectors: energy, agriculture, residues, industrial processes, land use change and forestry.
Application period	Since year 2005 with projection by year 2030.
Review	2030

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Ministries of the Environment and Sustainable Development; Climate Change Unit - Secretariat of the Environment and Sustainable Development; Governmental Committee on Climate Change; National Fund for the Enrichment and Conservation of Native Forests; National Platform for Disaster Risk Reduction; Risk Management Work Commission; Law 26 331 of Native Forest Environmental Protection; National Strategy on Climate Change; National Strategy on Biodiversity.

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
It could reach a reduction of its GHG emissions of approximately 30% by year 2030, in regards to the emissions projected in its "business as usual" (BAU) scenario by that same year. The target considers both the increase of the scopes of the measures in place, as well as the implementation of new measures.	Argentina proposes a reduction target of its GHG emissions of approximately 15% by year 2030 as compared to the emissions projected in its BAU by such same year. The target includes, among others, actions linked to promoting the sustainable management of forests, energy efficiency, the use of biofuels, nuclear energy and renewable energies, and the change in transportation means. Criteria to select actions included the potential to reduce/capture GHG emissions and the associated co-benefits, such as the possibility of applying nationally developed technologies.

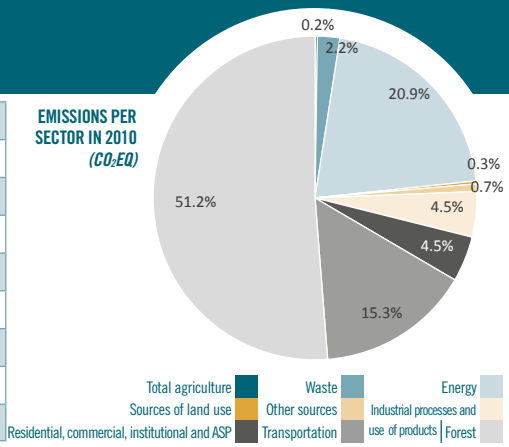
MITIGATION ACTIONS	ADAPTATION ACTIONS
The enrichment, conservation, restoration, improvement and sustainable management of native forests.	The extension of early warning systems regarding heavy rainfall, floods and heat waves, and of climate-origin disaster response and recovery systems. The extension of agricultural surface under irrigation and improvements in the efficiency of water resource management. The improvement of the decision-making process in "crop management". The reduction of vulnerability and the strengthening of health management processes related to the direct and indirect impacts of climate change. The promotion of biodiversity conservation and ecosystem-based adaptation. The implementation of structural and non-structural measures to face extreme events.

BAHAMAS | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	-1.7
Prevalence of underfeeding (%)	SD
Agricultural area (% of total land surface)	1.4
Forest area (% of total land surface)	51.45
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	SD
CO_2 Emissions (metric tonnes per capita) according to INDC	8.2
Total population by 2015 (thousands)	388
Urban Population by 2015 (%)	82.87
Rural Population by 2015 (%)	17.13

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 (CO_2EQ)



TARGETS	
Target	Bahamas estimates it will reduce its emissions by at least 30% below 2002 levels. The following GHGs are considered for the target definition: Carbon Dioxide, Methane and Nitrous Oxide.
Baseline	2002
Scope- Sector	Mainly in the energy and forestry sectors.
Application period	From 2010 to 2030
Review	Undefined

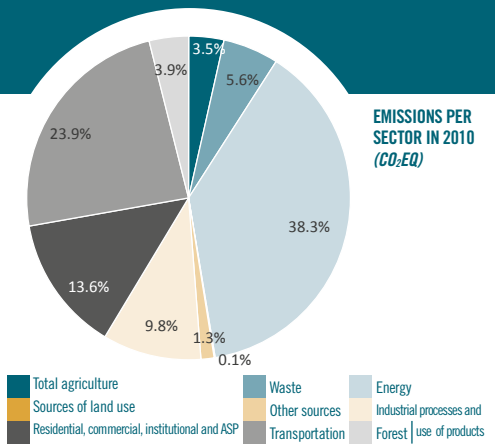
INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Forestry Act (2014); National Climate Adaptation Policy (2006) National Energy Policy (2013); Ministry of Environment and Housing; Regional framework for climate change resistant development (2009-2015).

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Bahamas will require international support through financing, investment, technology development and transfer, and capacity foment in its efforts to capitalize on a greater use of renewable energy sources and to adapt to negative impacts. It has been estimated that the INDC implementation, by 2030, will cost more than 900 million dollars, just to implement mitigation measures. The implementation cost is projected to be covered through the multi-lateral and bi-lateral support from different sources, instruments, and access conditions. Bahamas has limited experience using market mechanisms under the Kyoto protocol. However, it is open to consider market mechanisms. Bahamas will carry out an analysis to determine the implementation cost of adaptation actions.	Bahamas has the intention of achieving, by 2030, a GHG emissions reduction of approximately 30% as compared to its "Business as Usual" (BAU) scenario, through actions in different sectors of its economy.

MITIGATION ACTIONS	ADAPTATION ACTIONS
The strategy of the transportation sector will reduce imports of inefficient vehicles, through the reduction of import duties for hybrid and electric vehicles. The transportation policy will foment development and the application of energy-related measures, such as: efficient traffic management, use of clean fuels to minimize contamination, flexible work hours, a massive public transportation system, foment to non-motorized transportation and promotion of road and vehicle maintenance programs. Laws and support infrastructure for the use of biofuels will be established. The construction industry will follow energy efficiency standards outlined in a new construction code. The possibility will also be considered to generate incentives for the construction of carbon-neutral buildings that would not use energy from the public grid, but that will focus on sustainable and renewable energy sources. The Ministry of Finances will develop and implement an incentive program and fiscal measures to allow and support investments in modern infrastructure and facilities in the energy sector. The national financial sector will actively seek to participate in investments for the development of the energy sector. The Bahamas National Energy Policy and the Forestry Act were amended to allow the establishment of permanent forestry farms. Pursuant to the amended Act, 20% of the land cover is assigned to forestry reserves, protected forests and conservation forests. This will be subject to a management plan for territorial order and conservation of the environment.	Acknowledging that mitigation by itself will not protect the country from the negative effects associated to climate change, Bahamas understands the need of adaptation as urgent. **Agriculture, livestock and fisheries:** draft and apply strategies and measures that contribute to improving food security and sustainable food production. **Tourism:** work with stakeholders in the tourism sector to develop a strategic plan that includes climate change considerations and appropriate measures such as water conservation programs. **Health:** follow-up on data regarding environmental conditions, risks of diseases and the conditions associated to climate change. Increase of the scientific base to better understand the connection between climate change and sanitary results. Identification of specific population groups with higher risk of sanitary threats, as well as those potentially affected by heat waves. Extension of the capacity to model and forecast the effects on health that might be climate-related. **Insurance and financial sectors:** an available option is to reduce the cost of property insurance for lots at altitudes and impose a higher property insurance for properties at lower altitudes. **Coastal, marine and fishery resources:** adopt short, medium and long term measures to protect coasts and increase the resilience of coastal ecosystems, compliance with setbacks and restoration of coastal wetlands. **Human settlements:** relocation of coastal communities. This has already proved effective. New coastal defences have been built and the existing ones have been strengthened. Construction codes have been made further solid to mitigate the wind load increase. **Water resources:** investments and research will continue for the use of reverse osmosis technology in all islands to provide access to drinking water as adaptation to the loss of freshwater resulting from sea water intrusion. At the same time, actions will be implemented for the rehabilitation of the water and sewage infrastructure.



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

GDP annual growth rate by 2015 (%)	0.9
Prevalence of underfeeding (%)	<5%
Agricultural area (% of total land surface)	32.56
Forest area (% of total land surface)	14.65
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	ND
CO_2 Emissions (metric tonnes per capita) according to INDC	5.1
Total population by 2015 (thousands)	284
Urban Population by 2015 (%)	31.48
Rural Population by 2015 (%)	68.53

Source: FAO and World Bank

TARGETS	
Target	Reduction of GHG emissions by approximately 44%, as compared to its "Business as Usual" (BAU) scenario by year 2030. In absolute terms, this results in a 23% reduction of emissions as compared to 2008. An intermediate reduction target of approximately 37% is established, as compared to the BAU scenario by 2025, which is equivalent to an absolute 21% reduction in regards to 2008. It has been assumed that the power supply will grow 1% per year, that the per capita generation of municipal solid residues will remain similar to that of year 2014 (the last year with available information), that transportation and industrial combustion will increase according to the GDP growth forecasts by 2020 (there is no GDP forecast data available by 2030) and that all other sources (calculated to jointly contribute less than 10% of GHG emissions), will remain at 2010 emission levels.
Baseline	2008 (1 820 CO_2eq Gg), considering carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), HFC, sulfur hexafluoride (SF_6).
Scope- Sector	Energy (including national transportation), industrial processes and use of products, residues, agriculture, land use, land use change and forestry.
Application period	2030 (with a provisional target by 2025).
Review	2025/2030

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Ministry of Environment and Drainage; National Climate Change Committee (NCCC); National Climate Change Policy Framework (NCCPF); Barbados Sustainable Development Policy (2004); Medium term growth and development strategy (2013-2025); Medium term growth and development strategy 2013-2020; National Adaptation Strategy to Address Climate Change in the Tourism Sector in Barbados; Physical development plan; White Paper on the Development of Tourism in Barbados.

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Barbados requires financial support, as well as in technology transfer and for the creation of skills to prove the projected contribution and the related infrastructure. International donation and loan financing mechanisms, such as the current "Energy Smart Fund", are considered fundamental to provide technical and financial support to energy efficiency and renewable energy projects. Barbados says that international support will be critical for the implementation of the actions and targets established in its National Climate Change Policy Framework and other sectoral plans and policies.	

MITIGATION ACTIONS	ADAPTATION ACTIONS
Contributions for emission reduction will be achieved through mitigation actions in the energy and waste sectors, representing most of GHG emissions. **Renewable energy:** the increase of the installation of solar photo-voltaic systems and power plants fuelled by biomass, wind power and biogas from landfills, is projected. **Electric energy efficiency:** 22% reduction in electricity consumption as compared to a BAU scenario by 2029. Among the measures considered in this sector are the Public Sector Energy Conservation and Efficiency Program, energy efficiency measures in housing and different LED light initiatives. The government is investing in vehicles and alternative fuels, such as compressed natural gas, PLG, ethanol, natural gas, hybrid and electric vehicles. It encourages the adoption of these fuels through fiscal incentives. In the energy sector, residue emissions represent the main contributor to national GHG emissions (16% in 2009).	Barbados has a series of programs in place on adaptation as a central theme within its key economic sectors: Regional Monitoring and Assessment System for Disaster Risk Management (DRM) and Climate Change Adaptation (CCA) in the Tourism Sector in the Caribbean; Flood Resilience and Water Resources management; Risk Assessment Program; Human Health Protection Project; among others.

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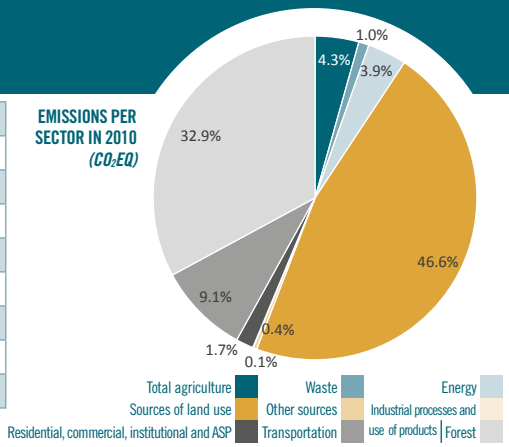
GDP annual growth rate by 2015 (%)	1
Prevalence of underfeeding (%)	6.2
Agricultural area (% of total land surface)	7.01
Forest area (% of total land surface)	60.12
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	11.3
CO_2 Emissions (metric tonnes per capita) according to INDC	1.7
Total population by 2015 (thousands)	359
Urban Population by 2015 (%)	43.97
Rural Population by 2015 (%)	56.03

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 (CO_2EQ)



TARGETS	
Target	Reduce GHG emissions in Belize by 24 million metric tonnes of CO_2eq during the 2014-2033 period. Belize expects to increase the participation of renewable energies in its energy matrix by 85% for 2027, with a reduction of carbon dioxide emissions of approximately 62% as compared to a BAU scenario. Currently, Belize, as part of the Small Islands Developing States, contributes with less than 0.01% to global emissions and represents a small portion of past and current greenhouse gas emissions. However, Belize continues to be committed to the strategic transition towards a low carbon emission and a climate change resistant country.
Baseline	Undefined
Scope- Sector	Contribution will be national. The sectors considered are: energy, land use, land use change and forestry.
Application period	2014-2033
Review	Undefined

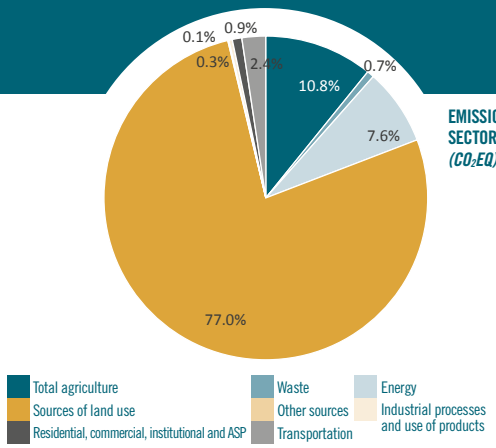
INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of Energy, Science and Technology and Public Utilities (MESTPU); Belize National Climate Change Policy; Growth and Sustainable Development Strategy 2014-2017; Climate Change Policy, Strategy and Action Plan (2015-2020); National Energy Policy Framework (2012-2017); Sustainable Energy Action Plan 2014-2033; National Climate Resilience Investment Plan; Belize Integrated Coastal Zone Management Plan.

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
The Intended Nationally Determined Contributions of Belize focus on its contribution to mitigation and fall within the framework of an action-based approach depending on profitable technology, capacity building and an appropriate financial support. Each activity is directed towards approaching the sectors with significant greenhouse gas contributions in Belize. These are activities for which Belize shall have to have access to international support regarding finances, technology and capacity and, furthermore, they have potential to provide shared benefits for sustainable development.	Adjustment and development of policies, laws and existing projects, availability of human resources and integration of development and climate change activities as a national effort for mitigation and adaptation actions.

MITIGATION ACTIONS	ADAPTATION ACTIONS
REDD+ National Strategy: Belize's contribution will approach matters of deforestation control and foment to forestation, maintenance of healthy forest ecosystems through sustainable forestry management and, at the same time, the increase of resilience among human communities, particularly those whose livelihood depends on the use of forest resources. **Protected Areas (PAs) and biodiversity:** the contribution will also approach the management and protection of protected areas and biodiversity, through the promotion of sustainable forestry order plans and practices, the rehabilitation of high conservation value critical areas by local communities and sustainable use based on the goods and services of ecosystems. **Transportation sector:** contribution will be made to the achievement of a reduction of at least 20% in the use of conventional fuels for transportation by 2033, and energy efficiency will be promoted in the sector through appropriate policies and investments, for which the performance of studies is considered for better transit management in urban zones (improvement to public transportation; fleet maintenance; route programming; use of biofuels). **Residue management:** improvement to the management of solid residues and reduction of GHG emission generation. The Solid Waste Integral Management Program is to be developed at a national	Key sectors have been identified, for which adaptation and mitigation strategies will be developed. Such sectors are: Agriculture, Forestry, Fisheries and Aquaculture, Maritime and Coastal Resources, Water Resources, Land Use and Human Settlements, Human Health, Energy, Tourism, Transportation, Solid Residues, Infrastructure. Belize has a National Adaptation Strategy in the Agricultural Sector. **Forests:** the country is intent on integrating climate change to the actions of the revised forestry national plan, for which it estimates an investment of approximately **USD** 5 158 000.- **Fisheries:** the fisheries sector is important for Belize because it is a source of food, provides revenues and livelihoods to a significant part of the population, and is an important source of foreign currencies. Belize has the purpose of adapting the fisheries sector to climate change, for which it estimates that investments ranging between USD 500 000 and USD 750 000 per year would be necessary. Belize also has the goal of achieving the order, conservation and preservation of marine resources and habitats to promote the resilience of ecosystems in coral reefs. For this purpose, the adoption and application of the Belize Integrated Coastal Zone Management Plan is intended. The cost of these actions is estimated in approximately USD 500 000 per year. **Tourism:** the objective is to assess the vulnerability of the Belize tourist system to climate change and to ensure integration of adaptation measures in the sector. **Human Settlements:** The strategy consists on promoting the adoption of an integrated land tenancy and classification policy, as well as developing and implementing programs that discourage human settlements in areas that are prone to natural hazards. **Transportation:** the proposal is to carry out a vulnerability assessment with further emphasis on transportation infrastructure, particularly in urban and other critical areas to support productive sectors of the country. **Human Health:** it is important for the Ministry of Health to carry out a vulnerability assessment of the system upon the possible impacts of climate change and the attention and response capacity of the sector. **Climate Resilience:** the Government is expected to integrate the National Climate Resilience Investments Plan in its Sustainable Development and Growth Strategy, and to align it with the 2010 - 2030 Horizon. The implementation cost of this action is approximately USD 231.4 million.



Note: Mitigation in forests corresponds to 26.8% of total emissions.

GDP annual growth rate by 2015 (%)	4.8
Prevalence of underfeeding (%)	15.9
Agricultural area (% of total land surface)	34.81
Forest area (% of total land surface)	50.82
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	7
CO_2 Emissions (metric tonnes per capita) according to INDC	1.9
Total population by 2015 (thousands)	10 725
Urban Population by 2015 (%)	68.51
Rural Population by 2015 (%)	31.49

Source: FAO and World Bank

TARGETS	
Target	Undefined
Baseline	2004
Scope- Sector	Water, energy, forests and livestock.
Application period	Two periods are established. The first one corresponds to the 2015-2020 period, in which all countries must make ambitious efforts to achieve significant impacts in the reduction of the increase rate of the global average temperature. The second one corresponds to the 2021-2030 period, with subsequent actions.
Review	Undefined

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of Environment and Water; Plurinational Authority of Mother Earth; Law 071 on the rights of Mother Earth; Law 300 framework of Mother Earth and integral development for good living; Bicentennial 2025 patriotic agenda.

CONTRIBUTIONS

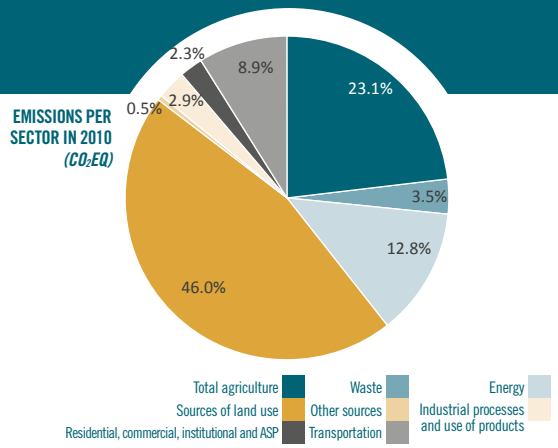
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Water: The water storage capacity will be increased (from 596 million m3 in 2010 to 3 779 million m3 by 2030), as well as the agricultural surface under irrigation (from 296 thousand hectares in 2010 to 1.5 million hectares by 2030), agricultural production under irrigation (from 1.69 million MT in 2010 to 9.49 million MT by 2030), and local water management by social organizations will be increased 90% by year 2030. **Energy:** The participation of renewable energies in the energy matrix will be increased (from 39% in 2010 to 81% by 2030); the participation of alternative and other energies (combined cycle steam) will be consolidated at 9% of the total electric system with an installed capacity of 1 378 MW by 2030, and the export potential for electricity generated mainly from renewable sources will be increased to a capacity of 10 489 MW by 2030. **Forests:** A zero illegal deforestation will be achieved by 2020; the surface of forested and reforested areas will be increased to 4.5 million hectares by 2030; forest areas with community-focused sustainable and integral management will be increased to 16.9 million hectares by 2030, regarding 3.1 million hectares in 2010. **Environmental Services:** environmental functions (the capture and storage of carbon, organic matter and the improvement of land fertility, conservation of biodiversity and water availability) will be strengthened by approximately 29 million hectares by 2030.	For the 2015-2030 period, the Plurinational State of Bolivia estimates it will achieve the objectives and results mentioned as follows, regarding mitigation and adaptation, within the integral development framework. **Water:** integrally increase the adaptation capacity and systematically reduce the water vulnerability of the country. **Energy:** increase the electric generation capacity through renewable energies for local and regional development. **Forests and agriculture:** increase the joint mitigation and adaptation capacity through the integral and sustainable management of forests.

MITIGATION ACTIONS	ADAPTATION ACTIONS
Adoption of a new civilizing model in the world without consumerism, "warism" and mercantilism, and a world without capitalism; building and consolidating a world order of Good Living, defending and promoting the integral rights of our peoples, undertaking the road of harmony with nature and the respect of life. Construction of a climate system based on responsibility towards Mother Earth, the culture of life and the full realization of humanity in its integral development, humanizing and communitarizing the economy, overcoming the simplistic approach to decarbonize the economy. Protection of the rights of Mother Earth in an organized manner, in complement to the rights of the peoples to their integral development. More specifically, the export potential for electricity generated mainly from renewable sources will be developed, getting to export by year 2030 an estimated 8 930 MW, increasing the energy income of the State. Zero illegal deforestation will be achieved by 2020, and the surface of forested and reforested areas will increase to 4.5 million hectares by 2030. Environmental functions (the capture and storage of carbon, organic matter and the improvement of land fertility, conservation of biodiversity and water availability) will be strengthened by approximately 29 million hectares as of 2030. As previously mentioned, the participation of renewable energies, alternative and other energies in the energy matrix, will be increased.	Elimination of patents on technologies and acknowledgement of the human right to life science and technology. Effective implementation by governments of the human right to water. For this purpose, water storage capacity will be increased from 596 million m3 in 2010 to 3.779 billion m3 by 2030; 100% of potable water coverage by 2025 with resilient service rendering systems; by 2030, the water component in the Unmet Basic Needs (NBI) will be reduced to 0.02%; and, as indicated, the irrigated surface and the production of food under irrigation will be increased. Progress will be made in social participation for local water management, increasing to 80% the social water management organizations with resilient systems as compared to 35% in year 2010. Water vulnerability will be reduced from 0.51 units (measurement by the *National Water Vulnerability Index* of the country, considering aspects related to exposure/threats, water sensitivity/water shortage and adaptation capacity) in 2010, to 0.30 units by year 2030. Adaptation capacity will be increased from 0.23 units (measurement by the *National Water Adaptation Capacity Index*) in year 2010 to 0.69 units by year 2030. The Unmet Basic Needs (NBI) for electricity coverage will be reduced from 14.6% in year 2010 to 3% by year 2025. Forest areas with community-focused integral and sustainable management will increase to 16.9 million hectares by 2030, from the 3.1 million hectares recorded in year 2010. The joint mitigation and adaptation capacity of the areas included in forests and farming and forest systems, will increase from 0.35 units (measurement of the *National Sustainable Forest Life Index)* in 2010 to 0.78 units by year 2030. Within the framework of adaptation, extreme poverty in the population depending from forests will be reduced to zero by 2025, from approximately 350 thousand persons in 2010. The Gross Domestic Product (GDP) increase is estimated at a rate of 5.4% by year 2030, favoured by agroforestry, agricultural and livestock production, jointly with conservation.

BRAZIL | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	-3.8
Prevalence of underfeeding (%)	< 5%
Agricultural area (% of total land surface)	33.81
Forest area (% of total land surface)	59.17
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	4.5
CO_2 Emissions (metric tonnes per capita) according to INDC	2.5
Total population by 2015 (thousands)	207 848
Urban Population by 2015 (%)	85.69
Rural Population by 2015 (%)	14.31

Source: FAO and World Bank



Note: Mitigation in forests corresponds to 17.1% of total emissions.

TARGETS

Target	Reduce, by 2030, greenhouse gas emissions by 43% below 2005 levels. Reduce, by 2025, greenhouse gas emissions by 37% below 2005 levels.
Baseline	2005
Scope- Sector	100% of the territory, throughout the whole economy, including CO_2, CH_4, N_2O, perfluorocarbides, hydrofluorocarbons and sulfur hexafluoride.
Application period	Targets established by 2025 and by 2030.
Review	Undefined

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of the Environment; National Climate Change Policy (Law 12 187 of 2009); Native Forest Protection Law (Law 12 651 of 2012); National Conservation Unit System (Law 9 985 of 2000); National Adaptation Plan (PAN); National Water Safety Plan; National Protected Areas Strategic Plan; Forestry code.

CONTRIBUTIONS

CONDITIONAL

The policies and measures to achieve this contribution shall be applied regardless of the use of the Convention financial mechanism or any other international support and cooperation modality, with a view towards increasing the efficacy and/or advance the application.

Additional measures would demand a big scale increase of international support and investment flows, as well as the development, deployment, diffusion and transfer of technology.

Specifically, in regards to the forestry sector, the execution of REDD+ activities and the permanence of achieved results require the continuous provision of appropriate and foreseeable payments based on the outcomes, according to the pertinent COP decisions.

UNILATERAL OR UNCONDITIONAL

The implementation of the Brazilian INDCs do not depend on international support, although they favourably welcome the support of developed countries with a view towards generating global benefits.

Acknowledging the complementary role of South-South cooperation, based on solidarity and common sustainable development priorities, Brazil will make its best efforts to improve cooperation initiatives with other developing countries, particularly regarding the following aspects: forestry surveillance systems; foment of the capacity and transfer of biofuel technology; low carbon emissions and resilient agriculture; restoration and reforestation activities; management of protected areas; greater resilience through protection and social inclusion programs; capacity building for national communications and other commitments regarding the Convention, particularly for Portuguese-speaking countries.

MITIGATION ACTIONS

During the 2004-2012 period, Brazil's GDP grew by 32%, while emissions fell 52% (GWP-100, IPCC AR5), thus severing economic growth from emission levels. During this same period, Brazil has managed to save more than 23 million people from extreme poverty.

Per capita emissions fell from 14.4 tCO_2e (GWP-100, IPCC AR5) in 2004 to an estimate of 6.5 tCO_2e (GWP-100, IPCC AR5) in 2012.

In 2012, per capita emissions in Brazil were already equivalent to what some developed countries have deemed to be an equitable and ambitious average per capita by year 2030. Per capita emissions in Brazil will be further reduced to an estimated 6.2 tCO_2e (GWP-100; IPCC AR5) by 2025 and 5.4 tCO_2e (GWP-100).

Mitigation actions are based on the sustainable use of bioenergy, measures of great significance regarding climate in the use of land and forests, increasing zero and low carbon energy supply three- or even four-fold, at a global level, by year 2050.

Bioenergy: Brazil already has one of the biggest and most successful biofuel programs so far, including the co-generation of electricity with biomass. The energy matrix of Brazil today comprises 40% of renewable energies (electric supply), which is equivalent to three times the global average of renewable energies, and over four times the OECD average. This already qualifies Brazil as a low carbon economy. The participation of sustainable biofuels in the Brazilian energy matrix is expected to increase to approximately 18% by 2030.

Forests and land use change: The goal is to strengthen compliance with the Forestry Code, at a federal, state and municipal level; strengthen policies and measures towards achieving zero illegal deforestation in the Brazilian Amazon by 2030; compensate greenhouse gases in the legal reduction of vegetation by 2030; restore and reforest 12 million hectares of forests by year 2030, with multiple purposes; improve the sustainable systems of forestry order for native forests, through geo-reference and tracking systems applicable to the order of native forests, with a view towards stopping illegal and unsustainable practices.

Energy: by 2030, work will be done to bring the participation level of renewable energies to 45% of the national energy matrix, for which the use of renewable energy sources, other than hydro-electric power, in the total energy mix will be expanded between 28% and 33% by 2030; and, the use of non-fossil fuel energy sources will be expanded in the country, increasing the participation of renewable energies (except for hydro-electric power) by at least 23% by 2030, even increasing the participation of wind, biomass and solar power. In general terms, a 10% of efficiency earnings will be achieved in the electric sector for 2030.

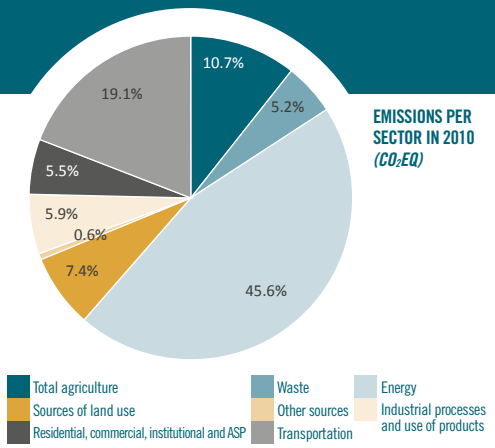
Agriculture: the strengthening of the Program of Low Carbon Emissions Agriculture (ABC) as the main strategy for the development of sustainable agriculture, including restoring another 15 million hectares of degraded grasslands by 2030 and the improvement of 5 million hectares of agricultural and livestock plantations before 2030.

Industry: new clean technology standards will be promoted and energy efficiency and low carbon emission infrastructure measures will be further improved.

Transportation: transportation infrastructure efficiency and improvement measures will be further promoted, particularly for public transportation in urban zones.

ADAPTATION ACTIONS

Brazil is working on the design of new public policies, through its National Adaptation Plan (PNA), which is at its final preparation stage. The PNA has the purpose of implementing knowledge management systems, promoting technological research and development for adaptation, developing processes and tools to support adaptation actions and strategies at different government levels. The perspective of the PNA is to integrate, when applicable, vulnerabilities and climate risk management into public policies and strategies, as well as to improve congruence of national and local development strategies with adaptation measures. The fast urbanization process, the risk areas, housing, and basic infrastructure are key areas/scopes/topics for adaptation policies, particularly in the areas of health, sanitation and transportation.



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

Note: Mitigation in forests corresponds to 13.9% of total emissions.

GDP annual growth rate by 2015 (%)	2.3
Prevalence of underfeeding (%)	< 5%
Agricultural area (% of total land surface)	21.20
Forest area (% of total land surface)	23.45
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	0.8
CO_2 Emissions (metric tonnes per capita) according to INDC	4.7
Total population by 2015 (thousands)	17 948
Urban Population by 2015 (%)	89.53
Rural Population by 2015 (%)	10.47

Source: FAO and World Bank

TARGETS	
Target	30% reduction in emissions not considering the "Land use, land use change and forestry" (LULUCF) sector.
Baseline	2007
Scope- Sector	Sectors: energy, industrial processes, use of solvents and other products, agriculture and residues.
Application period	Mitigation 2015-2030, and adaptation 2016 – 2021.
Review	2027 and 2032

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of the Environment; Council of Ministers for Sustainability; Law 20 698 on the extension of the energy matrix, through non-conventional renewable sources; Law on the recovery of native forests and forestry foment; Law 701 on the legal regime of forestry lands; Law on native forest recovery and forestry foment (Law 20 283); National strategy on climate change and vegetational resources - ENCCRV; Atmospheric Decontamination Strategy 2014-2018; National Climate Change Action Plan 2016-2021; National Climate Change Adaptation Plan; Sectoral Adaptation Plans (forestry, farming and livestock, and biodiversity); Nationally Appropriate Mitigation Actions (NAMAs); Tax on CO_2 emissions from fixed sources.

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Carbon intensity per GDP unit (target year 2030): 0.71 tCO_2eq/ million CLP 2011 (subject to economic growth). Carbon intensity per GDP unit (target year 2030): 0.56 - 0.66 tCO_2e/million CLP 2011 (conditional to international monetary contributions and economic growth). A growth rate of the economy similar to the growth path of the country over the latest decade is assumed for the definition of the commitments, excepting the most critical years of the international financial crisis (2008-2009). Additionally, for the second commitment, the international monetary contribution (loans) is considered, to allow implementing actions that have direct effects on GHG emissions within appropriate time.	

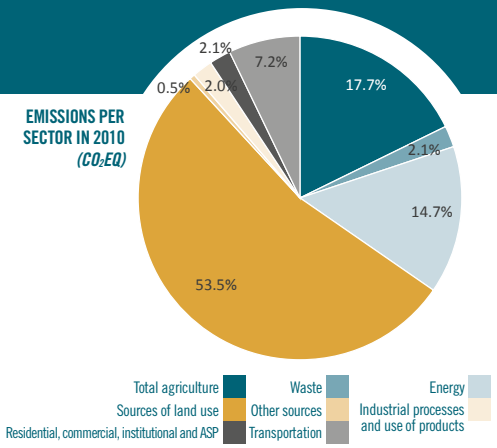
MITIGATION ACTIONS	ADAPTATION ACTIONS
All sectors quantified in the National Greenhouse Gases Inventory (1990-2010) are prioritized for the performance of mitigation actions in Chile. Chile obliges itself to reduce its CO_2 emissions per GDP unit by 30% by 2030 in reference to the level achieved in 2007, considering a future economic growth that will allow it to implement the appropriate measures to achieve this commitment. Additionally, and subject to receiving international monetary contributions (loans), the country commits to increase its CO_2 emission reduction per GDP unit by 2030 until achieving a 35% to 45% reduction regarding the level achieved in 2007, while considering a future economic growth that will allow it to implement the appropriate measures to achieve this commitment. **LULUCF Sector:** Chile obliges itself to the sustainable management and recovery of 100 000 hectares of mainly native forest, that will represent the capture and reduction of greenhouse gases approximately 600 000 **tonne**s of CO_2eq per year, starting 2030. This commitment is conditional to the approval of amend-ments to the Law on the recovery of native forests and forestry foment. Chile commits to reforest 100 000 hectares, mostly with native species, that will represent the capture of 900 000 to 1 200 000 ton**ne**s of CO_2eq per year, starting 2030. This commitment is conditional to the extension of Law Decree 701 and the approval of a new Forestry Foment Law.	Chile commits to implement concrete actions to increase resilience in the country, within the framework of the National Climate Change Adaptation Plan and the sectoral plans, with a decentralized approach and seeing for the integration of efforts among the different decision-making levels (national, regional, municipal). It also commits to identify funding sources to implement such plans, the creation of synergies with initiatives considered in matters of mitigation and maximize the benefits resulting from the pillars of capability construction and development, as well as the creation and transfer of technologies included in the contributions document; to strengthen the institutional framework of adaptation in Chile; to prepare metrics and measurement mechanisms for sectoral plans. In addition to the mentioned actions, starting 2021, Chile has the purpose of beginning a second cycle of sectoral climate change adaptation plans, based on the previously gained experience; to have an updated National Adaptation Plan; and to develop a national assessment exercise by 2026, through vulnerability indexes and methodologies to determine the increase of adaptive capability of persons, the communities and the systems that will be impacted by Climate Change.

COLOMBIA | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	4.8
Prevalence of underfeeding (%)	8.8
Agricultural area (% of total land surface)	40.48
Forest area (% of total land surface)	52.75
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	5
Emisiones de CO_2 (toneladas métricas per cápita)	1.9
Total population by 2015 (thousands)	48 229
Urban Population by 2015 (%)	76.44
Rural Population by 2015 (%)	23.56

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 *(CO_2EQ)*



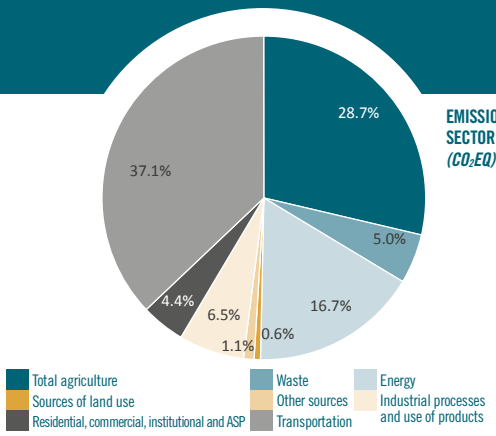
Note: Mitigation in forests corresponds to 4.3% of total emissions.

TARGETS	
Target	30% reduction as compared to BAU scenario. Year 2020: 278 Mton of CO_2eq Year 2030: 335 Mton of CO_2eq
Baseline	Year 2010: 224 Mton of CO_2eq
Scope- Sector	Target for the whole of the national economy and applicable to all national territory. It considers 100% of emissions according to information from the National Greenhouse Gases Inventory for year 2010 (INGEI 2010). Includes the 6 gases acknowledged by the Kyoto Protocol: CO_2, CH_4, N_2O, HFCs, PFCs, SF_6. It considers all emitting sectors identified by the Intergovernmental Panel for Climate Change (IPCC).
Application period	2015-2030
Review	Subject to the outcome of the Paris Agreement negotiations, in the timeline section, Colombia will study the possibility of communicating an indicative target in 2025.

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Colombia Ministry of Environment; Climate Change Direction; National Climate Change Policy; Colombian Low Carbon Development Strategy (ECDBC); National Strategy for Reducing Emissions from Deforestation and Forest Degradation (ENREDD+); National Climate Change Adaptation Plan (PNACC) 2011; Agriculture and Livestock Sectoral Plans; Document 37009 of the National Council of Social and Economic Policy 37009.

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Subject to the provision of international support, Colombia could increase its intent to go from a 20% reduction to a 30% reduction regarding the emissions projected by year 2030.	20% reduction of emissions as compared to the “Business as Usual” (BAU) scenario.

MITIGATION ACTIONS	ADAPTATION ACTIONS
To meet the target, prioritized measures have been identified through 8 sectoral mitigation action plans, the goals of which are maximizing the “carbon-efficiency” of the economic activity in the country at a sectoral and territorial level and, at the same time, contributing to social and economic development. These plans were prepared within the framework of the Colombian Low Carbon Development Strategy (ECDBC) and are approved by the corresponding sectoral ministries (Agriculture and Rural Development; Commerce, Industry and Tourism; Transportation; Housing, City and Territory; Mines and Energy). Likewise, mitigation measures have been identified in the land use change sector, with the processes associated to the REDD+ Strategy and the Amazon Vision Program, among others.	100% of the national territory is covered with already drafted climate change plans under implementation. Additionally, a national adaptation indicator system has been prepared, that allows monitoring and assessing the implementation of adaptation measures. The plan is to equip the priority watersheds of the country with water resource management instruments in relation to variability and climate change. Six priority sectors of the economy (transportation, energy, agriculture, housing, health, tourism and industry) will include climate change considerations in their planning instruments, and will be implementing innovative adaptation actions. The definition and protection of the 36 paramo compounds Colombia has (approximately 3 million hectares) will be promoted; as well as the increase by more than 2.5 million hectares in surface of new protected areas in the National Protected Areas System - SINAP -, in coordination with local and regional actors; the improvement of capabilities of 10 associations from the agricultural sector such as those in the rice, coffee, livestock and silvopasture trades; the participation of actors from 15 departments in the agroclimate technical tables, aligned with the national table; and the generation and distribution of agroclimate information to 1 million producers, to facilitate decision making in agriculture and livestock activities.



Note: Mitigation in forests corresponds to 67% of total emissions.

GDP annual growth rate by 2015 (%)	3.7
Prevalence of underfeeding (%)	<5%
Agricultural area (% of total land surface)	35.47
Forest area (% of total land surface)	53.38
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	1.4
Emisiones de CO_2 (toneladas métricas per cápita)	1.6
Total population by 2015 (thousands)	4 807
Urban Population by 2015 (%)	76.82
Rural Population by 2015 (%)	23.18

Source: FAO and World Bank

TARGETS	
Target	The country commits to an absolute maximum of 9 374 000 net TCO_2eq emissions by 2030, with a path proposed of per capita emissions of 1.73 net per capita tonnes by 2030; 1.19 net per capita tonnes by 2050; and -0.27 net per capita tonnes by 2100. It is a challenging long term target, as it intends to achieve zero net emissions by 2085.
Baseline	Year 2012 with an emission level at 12 441 260 MT CO_2eq
Scope- Sector	All sectors for which emissions are accounted in the National Greenhouse Gases Inventory, with special attention to transportation, energy, agriculture, solid residues. Includes: Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur Hexafluoride (SF_6).
Application period	**From 1 January 2021 to 31 December 2030**
Review	2020

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of Environment and Energy; National Environmental Information System (SINIA); National System of Conservation Areas (SINAC); Climate Change Direction at the MINAE; National Environmental Council;

Sectoral Council of Environment, Energy, Seas and Territorial Development; Inter-Ministerial Council for Climate Change; Mixed Commission of the Ministry of Environment and Energy and the Ministry of Agriculture and Livestock; Citizen Consulting Council on Climate Change; Ministry of Planning; Forestry Law 7575 of **16** February 1996; Organic Law of the Environment; National Disaster Risk Management Policy; Environment sectoral strategy; REDD+ national strategy; Sectoral low carbon strategies (LED); 7th National Energy Plan 2015-2030; National Action Plan to Combat Land Degradation; Payment for Environmental Services Program (PSA); National Forest Financing Fund (FONAFIFO); Emission Reduction Program (ERPA); Executive Decree 37926 - MINAE for the creation of the carbon board; NAMAs.

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
The modernization of the transportation sector is necessary, through multi-mode systems. This will require the development of an ambitious investment portfolio in sustainable transportation matters.	The national commitment implies a 44% GHG emission reduction as compared to a "Business as Usual" (BAU) scenario, and represents a 25% GHG emission reduction as compared to 2012 emissions. To reach the target, Costa Rica will have to reduce 170 500 tonnes of GHG every year until 2030.

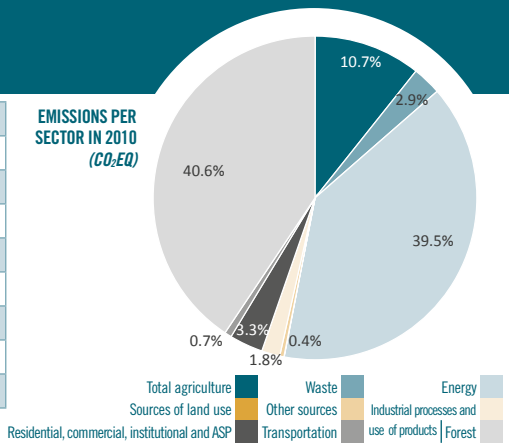
MITIGATION ACTIONS	ADAPTATION ACTIONS
The target is to achieve and maintain a sustained electric generation in 100% of the renewable sources by 2030. For this purpose, the creation of an integrated public transportation system has been considered, in which bus routes are improved through sector division, the train is extended, and non-motor transportation is integrated. Likewise, the availability of loans and microloans is to be increased, in addition to incentives for the use of clean energies and water savings, as well as for the development of low-emission technologies for the agriculture and livestock sector. Costa Rica is promoting its NAMA in the coffee sector, and is developing NAMA proposals in Livestock and Biomass, and an important sector of Costa Rican economy as small and medium-sized enterprises (SMEs). Sectoral dialogues and consultations regarding the REDD+ Strategy showed consensus on the need to build governance for the forestry resource of the country, to allow guaranteeing the long term capacity of the country to produce wealth, and at the same time generate environmental services and goods. Achieving this requires clearly defining the rights on the forest resource, carbon and the other environmental services provided by the forestry ecosystems and agroecosystems of Costa Rica. This target requires managing forest health and establishing natural restoration and regeneration as a mitigation activity. Solid waste is the third biggest source of emissions, and it continues to increase. The official recognition of the urban development plan for the great metropolitan area and of the national territorial order policy, both with cross-referenced propositions on climate change, as well as the beginning of the construction process of a low-emission development strategy in the urban sector with possible associated NAMAs in transportation, solid residues and sustainable housing, constitute important steps to reduce emissions. Reduction measures mention foment to integral waste management, with sorting at source, and the extension of recycling programs with composting of the organic fraction, among others.	The country will continue its commitment based on the promotion of green and inclusive development under local action, strengthening conservation programs and extending the payment program for environmental services to include adaptation based on ecosystems. Likewise, it will continue to promote renewable energy generation, the integrated management of the landscape through agroforestry systems, watershed management and municipal territorial order as a tool to reduce long term vulnerability. Costa Rica makes the commitment of having, by year 2018, an Adaptation Plan to combine territorial and sectoral approaches (biodiversity, agriculture and livestock, water, coastal zone, fisheries, health, infrastructure, energy, tourism and cities). It commits to the drafting and implementation of a National Disaster Risk Management Policy 2016-2030 with the National Emergency Commission (CNE), the cross-sectoral centers of which are risk reduction, disaster preparedness and response, and recovery. Costa Rica commits itself to promote Inclusive and Green Development (Desarrollo Verde e Inclusivo - DVI), favouring the application of sustainable productive systems, in rural territories with lower human development indexes, and vulnerable to climate change, through a DVI program in productive territories, for the 2016 and 2026 period. The country will base the adaptation of its territories under the ecosystem adaptation approach, taking on the commitment of increasing the forest cover until achieving 60% of the national territory. By 2020, all cities and all coastal cantons are expected to have territorial order plans considering vulnerability to climate change and the corresponding adaptation and mitigation measures. Also by the same year, the creation of methods is expected to identify and correct the physical vulnerabilities of human settlements and infrastructure systems, as well as having a national monitoring plan for the vulnerabilities of infrastructure systems to floods, draughts, landslides and sea level rise that could worsen with climate change. The country takes on the commitment of increasing the coverage, maintenance and sustainability of rainwater and sanitation sewage systems up to 90% by 2030, at the same time, establishing a health surveillance program by year 2018, that follows-up on the pathologies associated to the effects of climate change.

CUBA | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	4
Prevalence of underfeeding (%)	< 5%
Agricultural area (% of total land surface)	60.38
Forest area (% of total land surface)	30.25
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	SD
Emisiones de CO_2 (toneladas métricas per cápita)	3.5
Total population by 2015 (thousands)	11 389
Urban Population by 2015 (%)	77.07
Rural Population by 2015 (%)	22.93

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 *(CO_2EQ)*



TARGETS	
Target	Reduction of 6 million MT CO_2eq of emissions.
Baseline	2010
Scope- Sector	Priority sectors for the reduction of emissions according to the national contributions document are the energy and agriculture sectors. Among the GHGs identified by the Kyoto protocol, the projected emission reduction actions make reference to mainly three: CO_2, CH_4, N_2O.
Application period	2010-2030
Review	2030

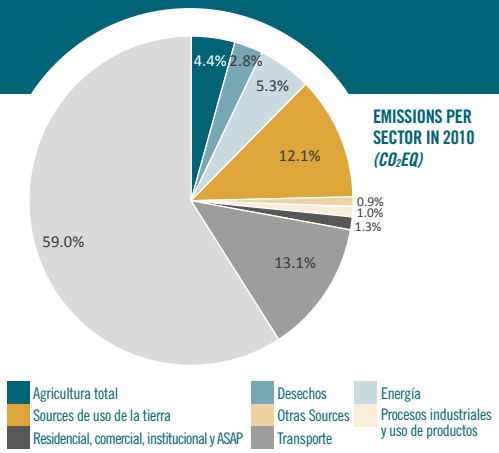
INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of Science, Technology and Environment (CITMA); National Commission for Protection of the Environment and the Rational Use of Natural Resources (COMARNA); National Office for the Control of the Rational Use of Energy; Law 33 on the Protection of the Environment and the Rational Use of Natural Resources; Law 81 of the Environment; National Environmental Strategy; Territorial and Sectoral Environmental Strategies; Macroproject on "Coastal Threats and Vulnerability", for years 2050-2100.

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
The implementation of actions identified for adaptation and mitigation, demand support from international cooperation and financing mechanisms for climate change. The country's access to the Technology Mechanism of the Convention (Technology Executive Committee and the Climate Technology Centre and Network) needs to be increased, to facilitate technology development and transfer both for mitigation and for adaptation. With international assistance support, Cuba now has the Centre for the Creation of Capabilities for Disaster Risk Reduction and Climate Change Adaptation, which has carried out multiple activities and hosts even greater potential to continue promoting South-South cooperation.	Having for its base the potential of renewable sources available in the country, it projects the installation of 2 144 MW of capacity connected to the national power grid, which includes the construction of: · 19 bioelectric plants attached to the sugarcane plants with 755 MW from cane and forestry biomass. ·13 wind parks with 633 MW. · 700 MW of photovoltaic generation. · 74 small hydro-electric power plants The implementation of these programs is estimated to allow the generation of more than 7 thousand GWh per year with renewable sources, ceasing to emit to the atmosphere more than 6 million tonnes of CO_2.

MITIGATION ACTIONS	ADAPTATION ACTIONS
In 1997, the Electricity Savings Program (PAEC) was created in Cuba and, since 2006, the energy revolution programs have been implemented in Cuba, which include: · The replacement of 9.4 million incandescent bulbs for energy-saving bulbs; 2.6 million refrigerators; one million fans; 260 thousand motor pumps; 247 thousand television sets; 230 thousand air conditioning units; and the installation of highly efficient motors (fuel and diesel) for the generation of 2 400 MW of energy. · The rehabilitation of electric distribution grids. · The strengthening of energy savings and efficient use in the state sector, mainly in the high consumption ones. · Information campaigns for the promotion of savings policies among the population and with school children regarding the efficient use of energy.	The following have been established as adaptation actions: Reduce coastal vulnerability for settlements threatened by rising sea level and surges from hurricanes and waves. · Recover the most affected mangrove areas of the Cuban archipelago and stop, as far as possible, the deterioration of coral reef crowns. · Incorporate an adaptation aspect to the programs, plans and projects related to food production, integral water management, territorial order, forestry, fisheries, tourism and health. · Create an environmental monitoring network that allows the systematic assessment of climate and environmental trends for decision-making. · Reduce the vulnerability of the health sector, starting from a better knowledge and understanding of the relations between climate variability, climate change and human health, in two essential areas: infectious diseases and the early warning and surveillance system of the sector. · Develop integral investigations to protect, conserve and rehabilitate the environment and adjust the environmental policy to the new projections of the social and economic environment. Prioritize studies focused on facing climate change and, in general, the country's development sustainability.



Note: Mitigation in forests corresponds to 25.8% of total emissions.

GDP annual growth rate by 2015 (%)	-1.8
Prevalence of underfeeding (%)	SD
Agricultural area (% of total land surface)	33.33
Forest area (% of total land surface)	58.13
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	SD
Emisiones de CO_2 (toneladas métricas per cápita)	1.8
Total population by 2015 (thousands)	72
Urban Population by 2015 (%)	69.54
Rural Population by 2015 (%)	30.46

Source: FAO and World Bank

TARGETS	
Target	Dominica commits to progressively reduce total greenhouse gas (GHG) emissions to below 2014 levels (164.5 Gg), with the following reduction rates: i) 17.9% by 2020; ii) 39.2% by 2025; and iii) 44.7% by 2030. Using good management practices, Dominica's forest will continue to sequester 100 Gg national GHG emissions per year, during the period between 2020 and 2030.
Baseline	Year 2014
Scope- Sector	By year 2030, total emission reductions per sector will be: · Energy industries: 98.6% (mainly from the usage of geothermal resources). · Transportation: 16.9%. · Manufacture and construction: 8.8%. · Commercial / institutional, residential, agricultural, forestry, fisheries: 8.1%. · Solid Residues: 78.6%. The reduction targets consider the following GHG: Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), Hydrofluorocarbon (HFC).
Application period	From 2016 to 2030.
Review	Undefined

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of Health and the Environment; Council for the Environment; Department of Climate Change, Environment and Development; Draft Law on Climate Change, the Environment and Development (2015); National Climate Change Adaptation Policy (2002); Dominica National Energy Policy (2014); Growth and Social Protection Strategy (GSPS); Low Carbon Climate Resilient Development Strategy; Dominica Climate Change Adaptation Policy and Action Plan (2002); Dominica Sustainable Energy Plan (draft) (2014); Special Program on Adaptation to Climate Change (SPACC); Pilot Program for Climate Resilience; Dominica Strategic Program on Climate Resilience (2012).

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
The contribution is conditional to the timely access to international funding for climate change, technology development and transfer, and support to strengthen of capabilities for priority adaptation and mitigation measures. Dominica's document will continue to be provisory until the timely access to the above has been confirmed, and support is achieved for the creation of capabilities for the implementation of the described adaptation and mitigation measures.	The Government of Dominica obliges itself to provide the necessary resources to ensure the timely and successful implementation of the Low Carbon Climate Resilient Development Strategy and the Strategic Program on Climate Resilience. The costs of priority adaptation measures to be implemented in the upcoming 5 years are approximately USD 25 million. The execution of priority programs regarding climate change is a joint responsibility led by the Ministry of Health and the Environment.

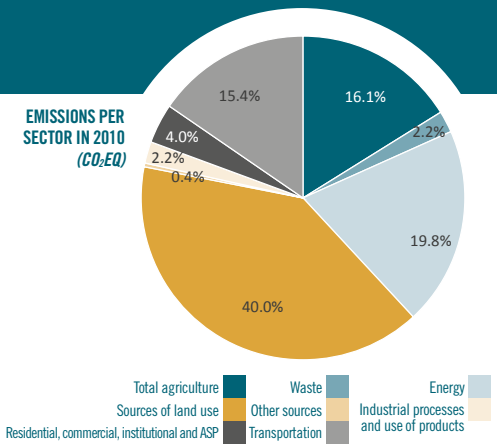
MITIGATION ACTIONS	ADAPTATION ACTIONS
Dominica is implementing an integral response to build climate resilience in vulnerable communities, while at the same time it promotes green growth through the transition to sustainable energy technologies. Starting on 2025, the commercial development and continuous use of the geothermal resources of Dominica will allow the country to export significant amounts of renewable energy (estimated at 200 Gg every year) to the nearby French territories of Martinique and Guadalupe, thus contributing to the global efforts to reduce GHG emissions. **Energy:** The implementation of the following programs is projected: a capacity building and extension program (USD 75 000 000), an Energy Efficiency Program (USD 2 300 000), a Solar Photovoltaic Conversion Program (USD 2 700 000), generation with micro-hydro power plants, wind (USD 3 300 000), generation with hybrid power (USD 9 000 000), replacement of Portsmouth lamps with LED lights (USD 1 200 000). **Transportation:** Government vehicles will be replaced with hybrid vehicles. Additionally, market-based mechanisms will be introduced to motivate the private sector to purchase hybrid vehicles, replacing current vehicles. **Residues:** Methane emissions from landfills will be reduced, for which a public awareness and extension program will be promoted throughout the island, as well as the collection of sorted organic residues, the recovery of material and the installation of composting systems in selected regions of the island (USD 4 508 921).	The Caribbean Climate Change Adaptation Plan will be implemented, and the national development policies, programs and initiatives in place will be analysed, particularly the Growth and Social Protection Strategy of the Government of Dominica, which establishes a medium-term strategy for growth and the reduction of poverty in the upcoming five years. Community surveys have been carried out to identify vulnerabilities, capabilities and the priority needs to face climate change, based on the mapping of community vulnerability and the assessment of the adaptation capacity. This is part of the Sustainable Territorial Order Program of Dominica and the Special Climate Change Adaptation Program.

ECUADOR | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	0.2
Prevalence of underfeeding (%)	10.9
Agricultural area (% of total land surface)	22.55
Forest area (% of total land surface)	50.84
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	4
Emisiones de CO_2 (toneladas métricas per cápita)	2.8
Total population by 2015 (thousands)	16 144
Urban Population by 2015 (%)	63.74
Rural Population by 2015 (%)	36.26

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 (CO_2EQ)



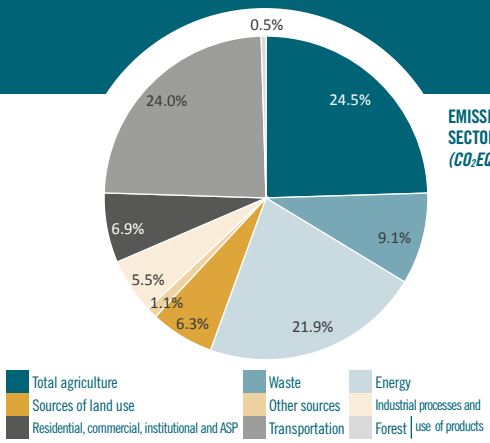
Note: Mitigation in forests corresponds to 0.6% of total emissions.

TARGETS	
Target	Emission reduction as compared to the BAU scenario: i) 37.5% to 45.8% (conditional); and ii) 20.4% to 25% (unconditional).
Baseline	According to the national GHG inventory for the IPCC sectors, Ecuador, in year 2010, emitted 71.8 million t CO_2eq
Scope- Sector	The reduction would have national coverage and would comprise CO_2, CH_4, N_2O, CO, particulate matter, nitrogen oxides and SO2. It would cover the residential and transportation sectors, as well as electric generation in the oil sector, and electric generation for the national interconnected system. The prioritized sectors for the National Climate Change Plan 2015-2018 are: agriculture and other land uses, water, eco-systems, energy. Ecuador has begun a decarbonization process of its energy and productive matrix within the framework of which both mitigation and adaptation actions are developed. Ecuador intends to achieve a 90% of clean energy from hydro-electric power plants in its total electricity production until 2017 and to further increase the renewable energy ratio in the energy matrix by 2025.
Application period	The BAU scenario considers the 2011-2025 period.
Review	2025

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Ministry of the Environment; Undersecretariat of Climate Change (Ministry of the Environment); Article 414 of the National Constitution (on climate change mitigation); Inter-institutional Committee on Climate Change (CICC); National Plan for Good Living 2013 - 2017; National Climate Change Strategy 2012 - 2025; National Climate Change Plan 2015 - 2018; National Climate Change Plan (for institutional transversalization); National Forest Restoration Program.

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Ecuador has potential to increase emission reductions in the energy sector between 37.5% to 45.8% as compared to the business as usual (BAU) scenario, under appropriate circumstances in terms of the availability of resources and support offered by the international community.	Ecuador intends to reduce its emissions in the energy sector by 20.4% to 25% as compared to the BAU scenario.

MITIGATION ACTIONS	ADAPTATION ACTIONS
Through the National Forest Restoration Program, it projects to recover 500 000 additional hectares by 2017, and increase such figure by 100 000 hectares per year until 2025, counterbalancing deforestation in the country. Implementation of the "Socio Bosque" incentives program to maintain the national goal of having 2 million additional hectares sustainably managed and preserved by 2017.	In regards to the indicated mitigation measures, within the scope of adaptation, the protection of watersheds will also be promoted to prevent landslides and strong erosion processes linked to torrential rains, and to thus protect agriculture and livestock production, availability of water for human consumption, as well as to protect ecological water flows. The projected adaptation measures are: more effective water management in communities where the availability or quality of this resource has been affected by climate change; installation of weather stations on high mountain places; conservation of protected areas, carbon reservoir management, water collection systems; strengthening of resilience of vulnerable communities focusing on food security; identification of areas vulnerable to drought and land degradation to promote sustainable land management practices and water catchment systems; and infrastructure vulnerability analysis and water availability for hydro-electric power plants upon the effects of climate change.



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

GDP annual growth rate by 2015 (%)	2.5
Prevalence of underfeeding (%)	12.4
Agricultural area (% of total land surface)	76.35
Forest area (% of total land surface)	13.21
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	2.8
Emisiones de CO_2 (toneladas métricas per cápita)	1
Total population by 2015 (thousands)	6 126
Urban Population by 2015 (%)	66.73
Rural Population by 2015 (%)	33.27

Source: FAO and World Bank

TARGETS

Target	Historically and to this date, El Salvador has generated very low greenhouse gas (GHG) emissions, so its contribution to global emissions is not significant. Before COP 22, the energy generation sector will define and achieve a GHG emission reduction target for year 2025 (of no less than 12% regarding the total electric power generated in the country in year 2014), through the implementation of energy efficiency processes and measures; or else, it will define percentages of energy efficiency improvement at a sectoral level, in regards to a baseline established for year 2010, associated to a scenario without specific efficiency increase actions by year 2025.
Baseline	2015
Scope- Sector	Infrastructure, water resources, agriculture, health and energy.
Application period	To be defined by consensus, whether in year 2025 or 2030.
Review	Undefined

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Office of Environmental Sustainability and Vulnerability; National Council of Environmental Sustainability and Vulnerability (CONASAV); Metropolitan Development Council (CODEMET); Climate Change Framework Law draft before 2019; Territorial development and order law; National Energy Policy 2010-2024; Climate Change Adaptation and Mitigation Strategy of the agriculture and livestock, forestry, fisheries and aquaculture sectors 2015; Five-year development plan 2014-2019 (Goal 7); National Climate Change Plan; Family Farming Plan.

CONTRIBUTIONS

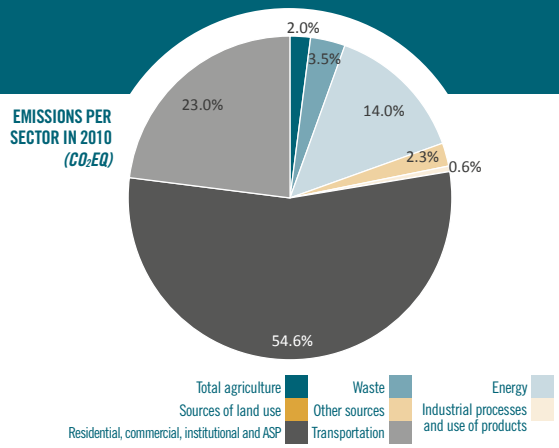
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Given the limited availability of national resources due to the need to cover social benefits and the already present effects of climate change, El Salvador considers that external support is a fundamental element to promote the measures related to climate change, and which condition several of its proposed targets. El Salvador says that the contributions can be updated pursuant to the Paris Agreement, particularly in regards to financial support and technological transfer. Financial resources shall have to be new and additional to the official development aid; ensuring not just the strengthening of national capabilities but also appropriate access to technologies, among other types of cooperation. The Convention is required to establish appropriate mechanisms for access to more efficient and cost-effective technologies that contribute to achieving the proposed GHG emission reductions.	The country maintains a macroeconomic stability and a positive economic growth and poverty reduction trend, but it considers that public financial resources cannot be applied to a global problem affecting it, reducing the financial capacity of matters prioritized by the country for its development such as education, health and safety.

MITIGATION ACTIONS	ADAPTATION ACTIONS
The Five-Years' Development Plan 2015-2019 (PQD) has established, among its goals and lines of actions, to promote energy efficiency, promote renewable energies, control emissions from the transportation sector and those associated to waste and spills. In actions for the restoration of landscapes and ecosystems, the implementation of the REDD+ Program, as well as the adaptation of agriculture to climate change, quantifiable mitigation co-benefits are developed simultaneously in many cases. **Territorial order:** the application of the Territorial Development and Order Law is planned before 2018, as an instrument to enable the fulfilment of the national actions and contributions in adaptation and mitigation, and for the control of the land use change. **Energy:** the update of the associated legal framework and of the National Energy Policy is planned. Before COP 22, the energy generation sector will define a GHG emission reduction target in regards to a growth without concrete mitigation actions or "business as usual" (BAU) for year 2025. **Transportation:** Regulations will be presented at COP 22 to improve the quality of the diesel fuel used in the country, to be implemented starting from 2018. During the 2018-2025 period, clean mobility will be promoted in the San Salvador Metropolitan Area, gradually incorporating less contaminating motors. **Health:** the sectors of health, environmental sanitation, labor and social security will review and update their corresponding laws in order to adjust them to the circumstances and threats presented by climate change. El Salvador will present, before COP 22, an emission reduction plan of all its landfills to be implemented between 2018 and 2025.	El Salvador has resorted to sectoral adaptation strategies with emphasis on agriculture, water resources, infrastructure and health. **Agriculture, livestock and forestry:** Policies and laws in force regarding the regulation of the activity of these sectors will be reviewed and updated before 2019. Before COP 22, quantifiable transformation targets of traditional agriculture for the 2021 - 2025 period will be presented. Additionally, before COP 23, a diversification plan of agriculture and the economic activity for the eastern zone of the country will be presented, to be implemented in the 2018 - 2025 period. By 2030, a million hectares will be established and managed through "sustainable landscapes, resilient to climate change". Within this framework, the current tree cover - 27% of the territory - will be preserved, maintaining the natural areas, including mangroves, agro-forestry systems and the existing forest plantations. **Water resources:** El Salvador will promote the effective implementation of a regulatory framework for the integral management of water resources before 2017. Before 2019, a steering plan will be prepared for a sustainable management of rainwater in the El Salvador Metropolitan Area, focusing on the basin and emphasis on the reuse of water. In the 2018-2025 period, investments will be made in lamination lagoons for flood control in the San Salvador Metropolitan Area. During the 2021 - 2025 period, unbilled water losses recorded at urban level in year 2015 will be reduced by 20%, and the protection and restoration of 70% of the main aquifer recharge zones will be implemented. Three hydraulic infrastructure works of national importance will be built for water conservation and flow regulation, according to the identified needs. During the 2018 - 2025 period, the decontamination process of the Acelhuate, Sucio, Suquiapa and Grande de San Miguel rivers will be implemented. **Infrastructure:** the update to the Law of Urbanism and Construction, as well as the Law of Territorial Order and Development of the San Salvador Metropolitan Area and the construction standards and regulations, will be promoted before 2019. The Metropolitan Development Council (CODEMET) will develop and present, before 2018, an initial adaptation plan for the Metropolitan Area as part of the national contribution to the first implementation period of the agreement by 2015. During the 2018 - 2025 period, the second stage or phase of the Integral Transportation System of the San Salvador Metropolitan Area (SITRAMSS) will have been implemented. **Health:** in coordination with the municipalities, an integral adaptation plan will be presented before 2018 on matters of health, work and food and nutrition security to be implemented in the 2018 - 2025 period.

GRENADA | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	6.2
Prevalence of underfeeding (%)	SD
Agricultural area (% of total land surface)	23.53
Forest area (% of total land surface)	49.97
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	SD
Emisiones de CO_2 (toneladas métricas per cápita)	2.9
Total population by 2015 (thousands)	107
Urban Population by 2015 (%)	35.59
Rural Population by 2015 (%)	64.41

Source: FAO and World Bank



Note: Mitigation in forests corresponds to 25% of total emissions.

TARGETS	
Target	Reduce GHG emissions by 30% between 2010 and 2025. Additionally, an indicative 40% reduction is projected for the 2010 - 2030 period. Grenada considers that all countries must contribute to the reduction of emissions and, therefore, has adopted the goal of reducing emissions in accordance with the comparative level of effort globally required by all parties.
Baseline	2010
Scope- Sector	Sectors: electricity, transportation, residues, forestry. GHGs that will be part of the reduction target: Carbon Dioxide and Methane
Application period	Two periods are established: one, by 2025, and another one, with an indicated goal, by 2030.
Review	Undefined

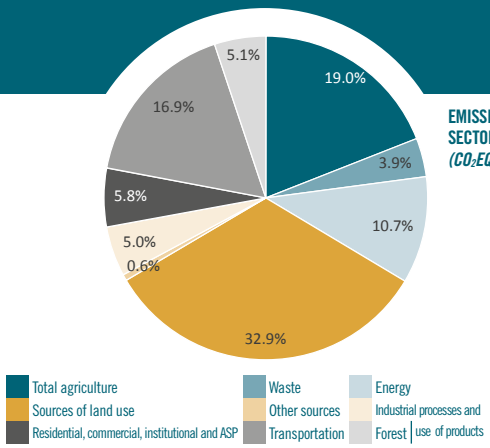
INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of Agriculture, Forestry, Lands and Fisheries; Ministry of Environment; National Climate Change Committee; Energy Division of the Ministry of Finance; National Climate Change Policy and Action Plan (2007-2011); National Energy Policy 2011; Grenada Protected Area System Plan 2012; National Adaptation Plan (PAN); Grenada Resilience Plan.

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Grenada projects access to international support, including the Green Climate Fund, multilateral agencies and bilateral arrangements for the implementation of the actions considered in its national contribution document, which will have an approximate cost of USD 161 million to be implemented by 2025.	In addition to the actions for which international cooperation is expected, Grenada reports it is implementing, with a national effort, the sustainable energy program "Energy for the Poor".

MITIGATION ACTIONS	ADAPTATION ACTIONS
The National Energy Policy of Grenada is the main guideline for the Government to achieve sustainable energy and a low-carbon development. The purpose of the Policy is to create an appropriate, enabling and dynamic regime of incentives, that is both regulatory and institutional, to achieve a more diversified and sustainable energy sector. A combination of already planned actions can result in a reduction of greenhouse gas emissions in Grenada by almost 50% of the business as usual (BAU) scenario projected by 2025. These include tax reduction incentives for the use of solar panels and solar water heaters, and "energy-saving" bulbs in some Government buildings. For this, a new Electricity Act is expected in Grenada. **Energy:** Grenada will reduce emissions by 30% through the use of renewable energies (10% of the reduction) and energy efficiency measures (20% of such reduction). To achieve this goal, Grenada will produce 10MW with solar power and 15MW with geothermal power. Energy efficiency measures to reduce emissions include the adaptation of all buildings (20% reduction), the setting of energy efficiency policies for all construction sectors (30% reduction) and the implementation of energy efficiency in hotels (20% reduction). **Transportation (land and sea):** it contributed an average of 39% of the greenhouse gas emissions of Grenada during the 2010 to 2014 period. Grenada has planned to reduce its emissions in the transportation sector by 20% as at 2025. To fulfil its commitment, Grenada plans several policies/actions, including the introduction of biofuel blends, establishing taxes and implementing efficiency standards in vehicle combustion through incentives. **Residues:** waste contributes approximately 10% of the emissions of Grenada. Currently, Grenada has plans to build a controlled landfill. Additionally, Grenada considers that activities such as waste reduction, sorting and recycling, can further reduce GHG emissions. **Forestry:** currently Grenada has 3,900 hectares of protected forests, a total of 11% of its forest surface, equivalent to 1.3 million tonnes of CO_2. Grenada has the national mandate to protect 17% of its land area as part of the Aichi target of the Convention on Biological Diversity. Additionally, as part of the Caribbean Challenge Initiative, Grenada committed itself to protect 20% of its land surface.	Grenada commits itself to assess and improve the existing institutional framework for the development and implementation of climate change adaptation plans at a local and national level. Grenada has started to improve its institutional capacity through the selection of focal points for climate change in all ministries and training for risk analysis related to climate change and general and specific knowledge regarding the subject. The equitable and sustainable use of water sources and the watersheds will be promoted, considering that the best catchment, storage, distribution and conservation of water will increase the adaptation capacity of individuals and communities. The country has carried out an assessment of the vulnerability of the sector and has prepared a National Adaptation Plan and an Action Plan for the water management sector, that include the improvement of the cartography and verification of the quality of water from informal sources. Rainwater collection activities have been carried out in some remote communities to improve the availability and storage of the resource. Grenada has adopted measures to help community organizations and NGOs, to allow them to become formal and, thus, facilitate their access to funding and increase their management capabilities, including building capabilities on climate change, data collection and cartography in Geographic Information Systems. Grenada has also launched a financing program in which community groups can access funds for small climate change adaptation projects, in an effort to help communities build resilience. Grenada is carrying out its assessment of the technological needs and has selected the water, agriculture and tourism sectors as focal ones. Water management was identified as the most important cross-sectoral action.



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

GDP annual growth rate by 2015 (%)	4.1
Prevalence of underfeeding (%)	15.6
Agricultural area (% of total land surface)	35.4
Forest area (% of total land surface)	33.37
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	13.7
CO_2 Emissions (metric tonnes per capita) according to INDC	2.48
Total population by 2015 (thousands)	16 343
Urban Population by 2015 (%)	51.57
Rural Population by 2015 (%)	48.43

Source: FAO and World Bank

TARGETS

Target	Guatemala plans to achieve a 22.6% reduction of its greenhouse gas (GHG) emissions, having for reference the emission level at the base year 2005 if it has international cooperation. Unconditionally, it sets the reduction target at 11.2% of emissions in reference to base year 2005.
Baseline	At base year 2005, the country shows to have emitted a total of 31.45 million tonnes of CO_2eq.
Scope- Sector	Scope: at national level. Greenhouse Gases: Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O) (in CO_2eq). Emitting sectors: energy, land use, land use change and forestry, agriculture, waste and industrial processes. The sectors of national economy with greatest need for support for the implementation of emission reduction policies and emissions are forestry, agriculture and transportation.
Application period	The application period is 2016 - 2030, with regular reviews according to the cycles established in the new agreement.
Review	Undefined

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of the Environment and Natural Resources (MARN); National Climate Change Council (created by Decree 7-2013); Framework Law on Climate Change; Law on Incentives for Renewable Energy Project Development (Decree 52-2003); Guatemala Law on the Foment of the Establishment, Recovery, Restoration, Management, Production and Protection of Forests - PROBOSQUE (Decree 02-2015); National Climate Change Policy (Government Agreement 329-2009); Cleaner Production Policy; Guatemala Policy for the Integral Management of Coastal Zones (Government Agreement 328-2009); National Policy for Disaster Risk Reduction; Energy Policy 2013-2027; Irrigation Policy with integral focus on water resources; Biological diversity national strategy and its action plan 2012 - 2022; Low emission development strategy; Strategy for Reducing Emissions from Deforestation and Degradation of Forests (REDD+); National Forest Landscape Restoration Strategy; National Financial Strategy to Combat Desertification and Drought; Program of Forest Incentives for Small-Scale Landholders for Forestry or Agricultural Forestry (PINPEP); Incentives program to encourage voluntary GHG emission reduction or absorption activities; National Climate Change Fund (FONCC); National Program for Reducing Emissions for REDD+; standards to establish a program of fiscal incentives and subsidies focused on the use of clean energies; standards to regulate GHG emissions in individual and collective public transportation (Art. 21).

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Guatemala proposes a global reduction by year 2030 of up to 22.6% of its total GHG emissions of base year 2005. This implies that emissions at a «business as usual» (BAU) trend scenario of 53.85 million tonnes of CO_2eq for year 2030, would result in the reduction of 41.66 tonnes of CO_2eq by that year. As a condition to achieve the target, Guatemala projects to have the necessary financial and technical support from new and additional public and private international resources.	Guatemala proposed, with a national effort, a reduction of up to 11.2% of its total GHG emissions, in reference to base year 2005. This corresponds to a reduction, by 2030, of 53.85 million tonnes of CO_2eq projected for such year, to 47.81 million tonnes of CO_2eq. This contribution will be possible under the following assumptions: a) Capital creation dynamic similar to the average observed over the last two decades, with a stable growth in the financial sector and a trend towards macroeconomic stability. b) No relevant national events harming the allocation of financial resources at national and international level, and that, therefore, there is no need to refocus public policies and activities for unforeseen ends, taking away funding from priority matters for the country such as education, health and safety. c) The governments throughout the period prioritize the implementation of strategies, policies and actions in matters of climate change defined in the corresponding framework law, and in the international treaties, conventions and agreements on the subject. d) Increase in the competitiveness of the country and, therefore, the more efficient insertion into global economy. e) Participation of the country in stable carbon market mechanisms. f) Access to more efficient and cost-effective technologies that allow achieving GHG emission reductions and maintaining the corresponding monitoring.

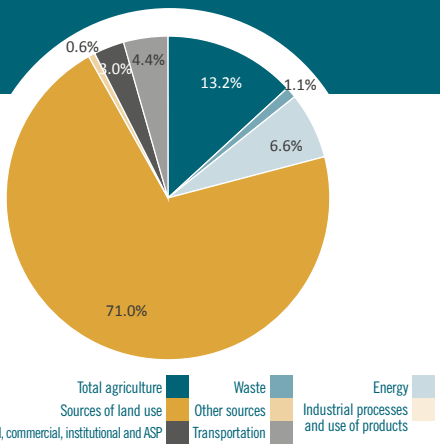
MITIGATION ACTIONS	ADAPTATION ACTIONS
Energy: Currently, the National Interconnected System (SNI) has power generation from renewable sources corresponding to 69.72%, and power generation from renewable sources is expected to be 80% by 2030. The Energy policy 2013-2027 establishes among its 5 axes, the need to promote savings and the efficient use of energy, and the efficient and sustainable use of wood. The country has a Law on incentives for Renewable Energy Project Development (Decree 52-2003; the plan to implement a National Energy Plan established in the Framework Law on Climate Change (Art. 18); and, technical standards for the connection, operation, control and commercialization of renewable generation and self-producing users with energy surplus. **Transportation:** The Transmetro system will be implemented and improved, and standards to establish a program of fiscal incentives and subsidies focused on the use of clean energies for public and private transportation will be promoted, including standards to regulate GHG emissions in individual and collective public transportation (Art. 21). **Land Use and Land Use Change and Forestry:** The implementation of the Strategy for Reducing Emissions from Deforestation and Degradation of Forests (REDD+) and the strengthening of the National Forest Fire Control and Prevention System, is projected. The National Forest Landscape Restoration Strategy will be implemented, with a target of 1.2 million hectares, and the implementation of an association strategy among forestry, industry and market, as well as a National Strategy to Combat Illegal Logging, will be promoted. **Industrial Processes:** There is an incentive program for the development of voluntary GHG emission absorption and reduction activities (Art. 19), and the involvement of the private sector will be promoted through actions within the Cleaner Production Policy. **Waste:** The country has a Solid Waste Policy, and will implement Waste Waters Regulations.	On the subject of agriculture and livestock and food security, the crop monitoring system prioritizes those actions that have a direct effect on food production, mainly for self-consumption and subsistence in priority zones. The country will strengthen the National Rural Extension System among other programs related to the Action Plan for the implementation of the National Policy of Integral Rural Development, and the implementation of the irrigation policy with integral focus on water resources. In regards to adaptation and its link to human health, the country establishes, as a priority, the fulfilment and support to the development of the institutional strategic plan of the Ministry of Public Health and Social Assistance and the Guatemalan Institute of Social Security (IGSS), mainly taking into account vectorial diseases that might increase as a result of climate variability and change. In matters of disaster risk reduction related to extreme weather events, a climate information unification process and the development of early warning systems began.

GUYANA | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	3
Prevalence of underfeeding (%)	10.6
Agricultural area (% of total land surface)	8.53
Forest area (% of total land surface)	84
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	5.3
Emisiones de CO_2 (toneladas métricas per cápita)	2.5
Total population by 2015 (thousands)	767
Urban Population by 2015 (%)	28.55
Rural Population by 2015 (%)	71.45

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 *(CO_2EQ)*



Note: Mitigation in forests corresponds to 3.3% of total emissions.

TARGETS

Target	Emissions avoided by approximately 48.7 $MtCO_2eq$ per year. Guyana is a highly vulnerable developing country. Aggregate emissions of Guyana in 2004 were 0.004617 Gt CO_2eq, which correspond to an almost insignificant amount in regards to the global emissions that year. This, jointly with the carbon sequestration of the 18.48 million hectares of natural forests and considering the historical extremely low deforestation rates (0.06% per year), make of Guyana one of the few "carbon sink" countries in the world.
Baseline	2012
Scope- Sector	The target is at a national level, mainly to be achieved through actions in the forestry and energy sector.
Application period	Until 2025
Review	Undefined

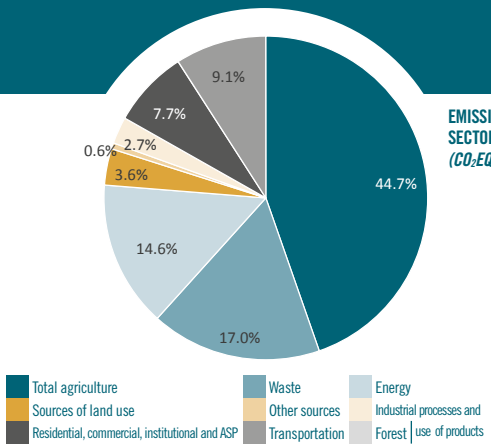
INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Department of Government, Natural Resources and the Environment; Guyana Forestry Commission;
Climate Resilience Strategy and Action Plan (CRSAP); Low Carbon Development Strategy (LCDS)
Emission Reduction Program (ERP); REDD + Programs and Projects.

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Guyana promotes an equitable assignment of the costs of global environmental protection. In 2008, the country established the Low Carbon Development Strategy (LCDS), the implementation of which has been mainly funded with resources from the REDD+ Investment Fund of Guyana, pursuant to the Guyana - Norway Agreement. With additional, timely, appropriate and accessible resources, Guyana can make use of this achievement and the lessons learned over the last five years to take a more inclusive and integral road towards a green low-emission economy. More specifically, with the provision of appropriate resources, Guyana can increase the participation of renewable energies in its energy matrix to 100% by year 2025. Additionally, if the appropriate means are provided, Guyana can prevent the emission of 48.7 MT CO_2eq per year, through the implementation of the REDD+ Strategy.	It proposes to continue and improve the current work to achieve a sustainable forestry order, that guarantees compliance with the different practice codes in the logging industry, using local resources. Forest monitoring will keep a high level of legality, committing 50% of the staff of forest management public institutions, for field monitoring, in the 54 forest monitoring stations throughout the country. These efforts will maintain a low illegal logging rate (less than 2% of the production). Guyana is also prepared to implement the Voluntary Partnership Agreement (VPA) within the EU-FLEGT framework. This agreement would be ready by the end of 2016, which will provide accreditation, regardless of the legality and the forest management practices in the whole logging industry of Guyana. With its own resources, Guyana will strengthen its support to indigenous communities as they continue to manage their lands and, among other things, the benefits resulting from the REDD+ activities by them. Policies will also be implemented to benefit the extractive sector and indigenous peoples, to guarantee the actions to face and reduce climate change.

MITIGATION ACTIONS	ADAPTATION ACTIONS
The conservation of 2 million additional hectares through the National Protected Areas System is considered, including the protection of dams and their watersheds and waters from new sources for the hydro-electric power generation. The existing mangrove forests will be included in this objective, extending the mangrove restoration program along the vulnerable coast. In the forestry activity, actions towards tree extraction will be regulated in order to reduce incidental and collateral damages during logging, by 10%, and the damages caused by landslides related to trails, by 35%. Guyana will seek to build and/or promote the building of small hydraulic systems in appropriate places such as Moco Moco, Kato and Tumatumari for power generation. Additionally, it will promote the use of renewable energy sources in the six new municipalities established, starting with Bartica. Independent energy producers and suppliers will be encouraged to build energy farms and to sell power to the national grid. Preliminary approvals have been granted for a 26MW wind park. Laws have been enacted to eliminate import duties and tax barriers for the import of renewable energy equipment, compact fluorescent bulbs and LED bulbs, to encourage and motivate an efficient energy behaviour. Guyana will continue performing energy audits and replacing the inefficient lights in public, residential and commercial buildings to reduce power consumption. Public education and awareness programs will continue to play an important role by providing consumers with information and tools to reduce power consumption and expenses. Guyana shall apply other policies to foment energy efficiency and the use of renewable energy, including construction codes and the net measurement of residential renewable energy. Guyana is committed to eliminating, almost completely, the dependency on fossil fuels, given the potential for solar, wind and hydro-electric power generation in the country. The Emission Reduction Program will include actions by the Guyana Geology and Mines Commission (GGMC) to implement policy and educational reforms, as well as incentives for the integral planning and management of the mining sector. This will imply the transformation of the mining sector by 2020, through actions to: (i) implement ore charting in the mining districts to identify economically exploitable deposits; (ii) implement awareness and incentive programs to improve the efficiency of technologies and practices in the mining industry. The replacement of inefficient mercury-based technology by more efficient technologies will be included, such as stovetops and centrifuge systems that can increase gold recovery rates from the current 30% up to 80%; and, (iii) institute the mandatory reforestation and recovery of lands, at a national level, of mining areas. The Government of Guyana will continue to work closely with the farmers from agricultural zones to foment the use of biodigesters to reduce waste, produce biogas and provide economic, healthy and efficient cooking means at household level.	Contributions focus on CO_2 emissions. With limited resources, Guyana will continue to work basically on the integral water management infrastructure, which includes the construction, rehabilitation and maintenance of reservoirs and channels and maritime defences, water supply and sanitation, as well as the introduction of new agricultural techniques such as hydroponics and fertirrigation. It also proposes to implement the Action Plan and Climate Resilience Strategy, improve infrastructure and other assets to protect itself from floods, restore mangroves, develop and implement weather forecast and climate early warning systems, including studies on microclimate and localized forecasts, and develop and introduce crop varieties that are flood resistant, drought tolerant, or disease resistant. Awareness programs on the environment and climate change will also be developed at all levels, as well as innovative measures on financial risk management and insurance.



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

Note: Mitigation in forests corresponds to 1,8% of total emissions.

GDP annual growth rate by 2015 (%)	1.2
Prevalence of underfeeding (%)	53.4
Agricultural area (% of total land surface)	66.76
Forest area (% of total land surface)	3.55
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	51.6
Emisiones de CO_2 (toneladas métricas per cápita)	0.2
Total population by 2015 (thousands)	10 711
Urban Population by 2015 (%)	58.65
Rural Population by 2015 (%)	41.36

Source: FAO and World Bank

TARGETS

Target	Haiti will reduce its GHG emissions by 31% as compared to the "business as usual" (BAU) scenario by 2030. In 2000, GHG emissions in Haiti represented only 0.03% of the total global emissions. Per capita emissions calculated for the same year were 0.91 t CO_2eq. Despite its status as less developed country and small island state with its development strongly victimized by climate-related catastrophes, the Republic of Haiti firmly considers the principle of common but differentiated responsibilities and wishes to participate in the global mitigation effort. For this, the country wants to reduce its emissions by 31% as compared to the reference scenario.
Baseline	The values used are those recommended by the intergovernmental group of experts on climate evolution, pursuant to decision 17/CP.8 of the UNFCCC, for the preparation of national GHG inventories.
Scope- Sector	Actions will be mainly carried out in the sectors of energy, agriculture, forestry and land use change, and the management of municipal solid residues. The gases considered for the fulfilment of the target are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O).
Application period	From 2016 to 2030
Review	Undefined

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Direction of Combat to Climate Change; National Climate Change Committee.

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Reduction of emissions by an additional 26% as compared to the trending development scenario by 2030, that is 35.24 MT CO_2eq. This commitment assumed represents a global funding need of USD 25.287 billion. Therefore, Haiti expects a true joint effort of the international community to continue supporting the combat to climate change under the principle of "common but differentiated responsibilities", established in the Rio Declaration on Environment and Development.	Reduction of emissions by 5% as compared to the reference scenario by 2030, that is, a total of 10 MT CO_2eq.

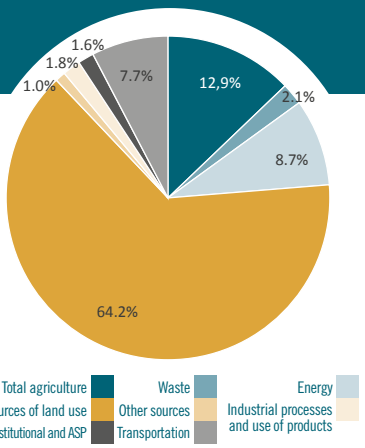
MITIGATION ACTIONS	ADAPTATION ACTIONS
A financial need of USD 8.773 billion has been estimated for the execution of mitigation actions. For that, direct access to the Green Climate Fund (GCF) and to other funds will be necessary for the conditional mitigation measures and adaptation-related activities, mainly the preparation and execution of the National Adaptation Plan; as well as access to different market mechanisms such as the Reduction of Emissions from Deforestation and Forest Degradation (REDD+) and the Mechanism for Appropriate Development (MDP); and, the transfer of technology based on assessments of technological need. **Energy:** The proposal is to increase by 47% the participation of renewable energies in the electric system of Haiti by 2030 (hydroelectric 24.5%, wind 9.4%, solar 7.5%, biomass 5.6%). It also proposes to install, by 2030, wind parks (50 MW), hydroelectric power plants (additional 60 MW); solar (30 MW) and biomass power plants (20 MW). Additionally, it will be necessary to reduce energy consumption by 32% by 2030, establish properly managed energy forests (10,000 hectares by 2030), establish the mitigation measures in the transportation sector, promote the use of eco-energy stoves (20-30% energy gain per stove), improve energy efficiency in vegetable coal production ovens (performance improvement ranging from 10-15% to 36-45%), distribute 1 million low-consumption bulbs to replace incandescent bulbs. **Forests:** By 2030, 137.500 hectares of forest will be planted, favouring local species 100,000 hectares of which will be reconditioned between 2020 and 2030. Additionally, the national parks with existing forests (10.500 hectares) will be protected and conserved until 2030; the existing mangrove forests (19 500 hectares) will be protected, conserved, and expanded until that same year; existing agro-forestry systems (at least 60.000 additional hectares between 2020 and 2030) will be restored, valorized and expanded; and the quality of grasses for livestock, particularly bovine livestock, will be improved. **Residues:** The national solid residue management policy will be implemented, promoting reduction at source, recovery, reuse, recycling, valorization and the improvement of landfills.	The country priorities for climate change adaptation are: i) the integral management of watersheds and water resources, ii) the integral management of coastal zones and infrastructure rehabilitation, ii) the preservation and reinforcement of food security, and iii) information, education, and awareness. Haiti commits by 2030 to include in the sectoral development strategies, the effects of climate change; develop the 15 strategic watersheds most vulnerable to extreme weather phenomena following the territory use structure; protect coastal zones from impacts from climate change; and, develop climate-savvy agriculture and bio-economy. Additionally, during the 2016-2020 period, Haiti will prepare the National Climate Change Policy, the National Adaptation Plan (PNA), and the Response Plan on Climate Change and Losses, the Territorial Development Plan per region, and the National Forestry Policy. **Agriculture and food security:** agricultural techniques and cultivars adapted to climate change will be developed, as well as aquaculture, the conservation and regeneration of soils, more effective techniques for the use of water resources, the implementation of drought-resistant cultivars adapted to the Haitian context. Disaster Risk Reduction will be promoted in the parts most vulnerable to drought, developing cultivars adapted to salinized water, rural engineering techniques valorizing local labour and materials, the thermal energy of seas for fresh water production, technologies for the conservation, transformation and valorization of agricultural products, and the reinforcement of meteorological surveillance systems and agricultural yield forecasts. **Coastal zones:** a national strategy will be established for the adaptation of coastal zones to the impacts of climate change, promoting planning to protect and relocate endangered infrastructure, establish resistant infrastructure, promote sustained fisheries management, improve the autonomy and safety of small fishing boats, preserve and protect marine biodiversity and coral reefs, and support community management of protected marine areas. **Water resources:** the construction of dams, family water tanks, and the collection of rainwater, will be fomented; as well as the restoration of hydro-meteorological stations of strategic watersheds; the reinforcement of the capacity of watershed management committees, the reforestation of upstream zones, the development of initiatives associated to payment for ecosystemic services. Human settlements: Haiti will implement the Sustainable Development and Urbanism Plan in cities with flood risk, including internal movement and displacement of population and disaster reduction in the most vulnerable zones. Additionally, the National Disaster and Risk Management Plan (PNGRD) will be updated, incorporating climate change risks in urban zones, the reinforcement of the National Disaster and Risk Management System; the reinforcement of the Early Warning System upon natural catastrophes; the preparation and implementation of disaster and risk management plans at a local level in the most important/vulnerable cities; and the reinforcement of construction standards. Education: the production and diffusion of knowledge regarding climate change (primary, secondary and university education), awareness at a national level of the causes and effects of climate change, and the adaptation strategy, will be promoted, as well as the reinforcement of the Climate Change Direction at the Ministry of Environment. **Public health:** Access to potable water will be improved, to prevent diseases, and a surveillance system will be established in the surroundings of urban zones. **Public finances:** Work will be done in support to the insurance sector for the management of losses resulting from climate and natural disasters, the adoption of fiscal incentives and measures to promote local production including bio-economy, the implementation of a financial disaster and risk management strategy, the strengthening of financial instruments that will allow a capacity increase to harness resources in response to natural catastrophes and reduce the budget volatility implied by these cases. The financial allocation for the performance of the actions considered in this contribution, is estimated at approximately USD 25.4 billion, USD 16.6 billion of which are necessary to promote adaptation. Conditional and unconditional mitigation measures amount to a cost of USD 8.8 billion, USD 0.8 billion of which correspond to unconditional measures.

HONDURAS | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	3.6
Prevalence of underfeeding (%)	12.2
Agricultural area (% of total land surface)	28.91
Forest area (% of total land surface)	42.11
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	16.5
Emisiones de CO_2 (toneladas métricas per cápita)	1.2
Total population by 2015 (thousands)	8 075
Urban Population by 2015 (%)	54.73
Rural Population by 2015 (%)	45.27

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 (CO_2EQ)



Note: Mitigation in forests corresponds to 0.2% of total emissions.

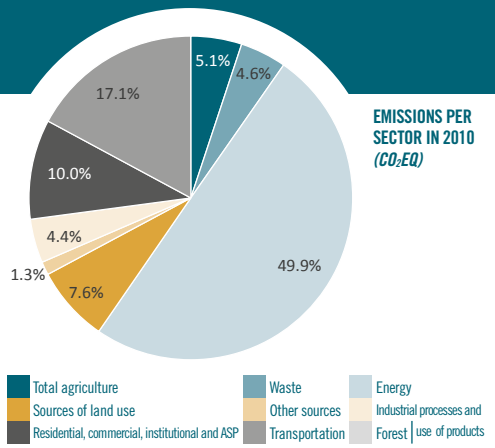
TARGETS	
Target	15% reduction of emissions as compared to the "business as usual" (BAU) scenario by 2030.
Baseline	The BAU scenario is as follows: Year 2012: 18 915 CO_2eq Gg Year 2020: 22 027 CO_2eq Gg Year 2030: 28 922 CO_2eq Gg
Scope- Sector	Commitments are established for the energy, industrial process, agriculture and residue management sectors. The gases considered in the indicated contributions are Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O).
Application period	From 2012 to 2030.
Review	A review every 5 years is considered. The first revision will be after the completion of the third national communication.

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of the Environment; Climate Change Direction of the Ministry of the Environment; General Law on Climate Change; Agricultural and Forestry Law for Rural Development; National Climate Change Strategy; National Strategy on Food Security and Nutrition; Climate Change Adaptation Strategies for the agroalimentary, health and coffee plantation sectors; REDD+ National Strategy; Strategic Government Plan (2014 - 2018); National Climate Change Adaptation Plan; National Climate Change Strategy Action Plan; National Action Plan to Combat Desertification; Climate Change Investment Plan; National Climate Finance Process.

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
A 15% reduction in emissions expected according to the BAU scenario by 2030, for the mentioned set of sectors. This commitment will be conditioned to support being favourable, foreseeable and for climate financing mechanisms to be implemented.	Honduras commits to provide an estimate of the emissions and sinks from the "Land Use, Land Use Change and Forestry" sector, within the framework of the Third National Communication project.

MITIGATION ACTIONS	ADAPTATION ACTIONS
The Republic of Honduras commits to the forestation/ reforestation of 1 million hectares of forest by 2030, as a sectoral target. Likewise, through the inclusion of efficient ovens, a 39% reduction in family wood consumption is expected, helping efforts in the combat against deforestation.	The final document of the National Adaptation Plan planned for 2016, will gather sectoral actions that will be promoted to face the effects of climate change. **Agriculture:** the implantation of "Quesungual" agroforestry systems will be promoted, as well as the reduction of the load from fertilizers, the use of slow-absorption organic fertilizers, changes in crop calendars, incentives to the promotion of land-race seeds adapted to local conditions, introduction of insect-repellent plants in established plantations, the modification or elimination of inappropriate agricultural burn practices, erosion-prevention measures, micro-irrigation programs in slope agriculture, plague and disease biological control practices, the development of organic fertilization systems, and a boost to organic agricultural production, including tax and financial incentives. **Livestock:** modifications will be introduced in the pasture time, planting of improved grasses, implantation and promotion of intensive livestock in stabling, and the limitation to field burning for the control of mites in cattle. **Research:** crop and pasture varieties that are resistant to droughts and floods, will be selected; the national integral plague management program will be implemented; as well as the design and implementation of a national biodiversity investigation program; research and development of natural biocides; foment to the implementation of regional research centers and a national information program; and, the development of agroecology-based sustainable systems. Additionally, land tenancy, the diversification of national agricultural production and, particularly, subsistence farming, will be improved. The country's food security policies and strategies will be strengthened, as well as the storage, processing and preservation systems for agricultural and livestock production; and, model farms for the promotion of best plantation practices.



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

Note: Mitigation in forests corresponds to 0.7% of total emissions.

GDP annual growth rate by 2015 (%)	1
Prevalence of underfeeding (%)	8.1
Agricultural area (% of total land surface)	40.99
Forest area (% of total land surface)	31.01
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	0
Emisiones de CO_2 (toneladas métricas per cápita)	2.8
Total population by 2015 (thousands)	2 726
Urban Population by 2015 (%)	54.79
Rural Population by 2015 (%)	45.21

Source: FAO and World Bank

TARGETS	
Target	Jamaica's contribution, at a national level, focuses on mitigating the equivalent to 1.1 million metric tonnes of carbon dioxide by year 2030. This is a 7.8% reduction in emissions as compared to the "business as usual" (BAU) scenario. According to this target, Jamaica would have emissions equivalent to 4.7 metric tonnes of carbon dioxide per person by 2030, while the BAU scenario would be 5.1 metric tonnes of carbon dioxide per person.
Baseline	Emissions estimated in 2005, which correspond to 10.572 billion metric tonnes of carbon equivalent.
Scope- Sector	The mitigation target will be achieved with actions mainly related to the energy sector. The following GHGs are considered: Carbon Dioxide, Methane, Nitrous Oxide, Carbon Monoxide, Non-Methane Volatile Organic Compounds, Sulfur Dioxide.
Application period	Execution period 2005 - 2030.
Review	Provisionally defined for 2025.

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Ministry of Water, Land, Environment and Climate Change; Climate Change Office of the Ministry of Water, Land, Environment and Climate Change; Climate Change policies; Framework of Climate Change policies; National energy policy 2009-2030; National Development plan in national outcome No. 14 "Hazard Risk Reduction and Adaptation to Climate Change"; Pilot Program for Climate Resilience (PPCR).

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Jamaica will conditionally increase its intent to reduce GHG emissions by 10% below the BAU scenario by 2030, subject to the availability of international support.	Jamaica commits to reduce emissions by 7.8% as compared to the "business as usual" (BAU) scenario by 2030.

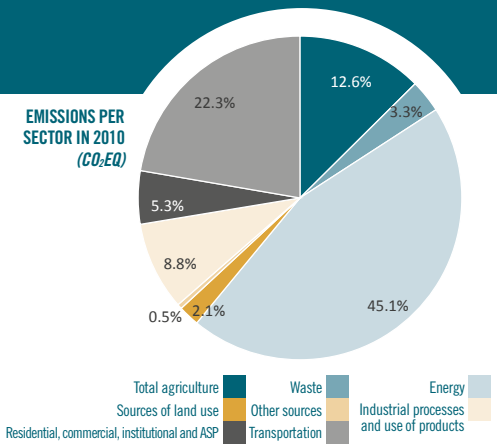
MITIGATION ACTIONS	ADAPTATION ACTIONS
Jamaica considers promoting mitigation through: i) the inclusion of the considerations on climate change in the national policies and in all types and levels of development planning, and the strengthening of the country's capacity to develop and implement climate change adaptation and mitigation activities; ii) support to institutions responsible for the research, data compilation, analysis and projections at a national level regarding climate change and its impacts, to facilitate informed decision-making and strategic actions in all levels, both for mitigation and for adaptation; iii) the facilitation and coordination of the national response to the impacts of climate change and the promotion of low carbon emission development; iv) the improvement of communications at all levels on the impacts of climate change and also adaptation and mitigation opportunities for decision-makers and the public in general to be better informed; and, v) the mobilization of climate funding for adaptation and mitigation initiatives.	The main areas for the development of strategies and action plans for climate change adaptation are tourism, agriculture, fisheries, forestry, water, energy, industries, human settlements, coastal resources, marine resources, human health, transportation, waste management and education. For this, projections are as follows: the preparation of sectoral strategies and action plans on climate change and the integration of the considerations regarding climate change into national policies and into sectoral and local development plans and programs; the implementation of an integral awareness and education program on climate change, for politicians, policy-makers, the private sector and the population in general; the implementation of high priority adaptation programs / projects with national and cross-sectional impact on the sectors of waters, agriculture, tourism, health, human settlements and coastal resources; the prioritization of data compilation in all climate change related national proposals or projects; the investment on the installation and maintenance of automatic weather stations in strategic places throughout the island, including training to keep the stations operational; the implementation of a central and safe national climate database; the strengthening of technical and human capabilities to monitor climate variations in real time; the strengthening of research capabilities (for instance, universities and the National Meteorological Service) to carry out research on the specific climate variability of Jamaica; the reduction of the scale of existing global climate models to national or sub-national levels; among others.

MEXICO | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	2.5
Prevalence of underfeeding (%)	<5%
Agricultural area (% of total land surface)	54.89
Forest area (% of total land surface)	34.02
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	1.1
CO_2 Emissions (metric tonnes per capita) according to INDC	5.9
Total population by 2015 (thousands)	127 017
Urban Population by 2015 (%)	79.25
Rural Population by 2015 (%)	20.75

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 (CO_2EQ)



Note: Mitigation in forests corresponds to 0.4% of total emissions.

TARGETS

Target	Unconditional 25% emission reduction as compared to the "Business as usual" (BAU) scenario by year 2030, and increase of this target by 40% in a conditional manner. This target is consistent with what is established in the General Law on Climate Change of Mexico, which establishes a 50% emission reduction by 2050 as compared to those of year 2000.
Baseline	The baseline corresponds to year 2013, which was the first year of enforcement of the General Law on Climate Change. The following scenario was presented: 2020: 906 Mt CO_2eq (792 Mt CO_2eq of GHG and 114 Mt CO_2eq of Black Carbon) 2025: 1 013 Mt CO_2eq (888 Mt CO_2eq of GHG and 125 Mt CO_2eq of Black Carbon) 2030: 1 110 Mt CO_2eq (973 Mt CO_2eq of GHG and 137 Mt CO_2eq of Black Carbon)
Scope- Sector	The sectors considered to set of the target are energy, industrial processes and product use, agriculture, residues, land use, land use change and forestry. The gases considered are: Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur Hexafluoride (SF_6), Black Carbon.
Application period	From 2013 to 2030
Review	Undefined

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

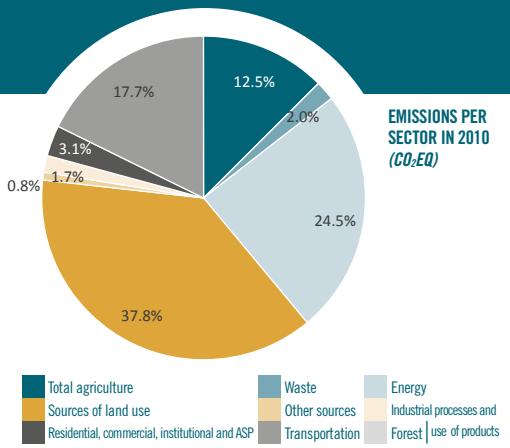
Ministry of the Environment and Natural Resources (SEMARNAT); National Institute of Ecology and Climate Change;

General Law on Climate Change (LGCC) 2012; Energy Reform including laws and regulations (2014); National Climate Change Strategy (2013); Special Climate Change Program (PECC 2014-2018); Carbon Tax (2014); National Register of Emissions and Reductions (2014); sectoral consultation meetings.

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
The unconditional reduction commitment of 25% can be increased up to 40%, subject to the adoption of a global agreement that includes important matters such as an acceptable price of carbon at an international level, adjustments to duties for carbon contents, technical cooperation, access to low-cost financial resources and to technology transfers, at a scale equivalent to the challenge of global climate change. Under the same conditions, GHG reductions could increase by up to 36% and black carbon reductions by up to 70% by 2030.	Mexico commits to reduce, in an unconditional manner, 25% of its Greenhouse Gases (GHG) and short-live climate contaminants (as compared to the BAU scenario) by year 2030. This commitment implies a 22% reduction of GHG and a 51% reduction of black carbon. A peak of emissions is estimated by 2026, separating GHG emissions from economic growth. The intensity of emissions per GDP unit will be reduced by approximately 40% during the 2013 - 2030 period.

MITIGATION ACTIONS	ADAPTATION ACTIONS
Since year 2000, Mexico has published three national strategies on climate change and, in 2009, it adopted its first special program on climate change. Additionally, Mexico has presented five national communications to the UN Framework Convention on Climate Change, with the corresponding greenhouse gas inventories. In April 2012, the Mexican Congress unanimously approved the General Law on Climate Change, which came into force in October that year, Mexico being the first developing country to have an integral law on this matter. As a result of the application of this new Law, the country has established effective institutions and instruments to reduce greenhouse gas (GHG) and particulate emissions, as well as to increase its adaptation capabilities. In regards to mitigation, the Law establishes a clear obligation to prioritize less costly mitigation actions, which at the same time translate into health and well-being benefits for Mexican population. Due to this, both the national climate change strategy adopted in June 2013 - which establishes the vision for the upcoming 10, 20 and 40 years - as well as the Special Program on Climate Change (PECC 2014-2018) include greenhouse gases and other particulates, also known as short lived climate contaminants. The country's contributions include the reduction of such gases and particulates.	Mexico has obliged itself to strengthen the adaptive capacity of at least 50% of the most vulnerable municipalities in the national territory, establishing early warning and risk management systems throughout all sectors of Government. The proposed adaptation actions encourage positive synergies with mitigation actions; for instance, Mexico has defined that, by 2030, it will have a zero deforestation rate, and has obliged to reforest high, medium and low basins with particular attention to riparian zones, also using native species from the area. Additionally, it commits to conserve and restore the ecosystems to increase ecological connectivity among all protected natural areas and other conservation areas through biological corridors and sustainable productive activities. Mexico will substantially increase priority species conservation and action programs, will strengthen the protection of the coastal line with the implementation of a conservation and recovery system for coastal and marine ecosystems such as reefs, mangroves, marine grasses and dunes. On the other hand, Mexico will guarantee integral water management in its different uses (agricultural, ecological, urban, industrial, household), will implement relocation programs for infrastructure located in high risk zones in priority tourism destinations and will implement restoration actions for unoccupied sites; will include climate change adaptation criteria in public investment projects that consider the infrastructure construction and maintenance; will guarantee the treatment of urban and industrial waste waters, ensuring the amount and good quality of water, in human settlements bigger than 500 000 inhabitants. It proposes applying the standard on adaptation and environmental protection specifications upon the adverse effects of climate change to the planning, design, construction, operation and abandonment of tourism real estate developments in coastal ecosystems, and guaranteeing the safety of dams and strategic water infrastructure works, as well as that of communications and transportation.



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

Note: Mitigation in forests corresponds to 6.3% of total emissions.

GDP annual growth rate by 2015 (%)	5.8
Prevalence of underfeeding (%)	9.5
Agricultural area (% of total land surface)	30.36
Forest area (% of total land surface)	62.33
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	3.6
CO_2 Emissions (metric tonnes per capita) according to INDC	2.7
Total population by 2015 (thousands)	3 929
Urban Population by 2015 (%)	66.59
Rural Population by 2015 (%)	33.41

Source: FAO and World Bank

TARGETS	
Target	To increase by 10% the greenhouse gas absorption capacity through reforestation and the recovery of degraded zones. By 2050, 30% of the energy matrix will be based on renewable sources.
Baseline	2014 for energy and 2015 for "Land use, land use change and forestry".
Scope- Sector	Energy and land use, land use change and forestry.
Application period	From 2015 to 2050.
Review	2020

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of the Environment; National Committee on Climate Change in Panama (CONACCP); Law 38 of 2015, that approves the Doha amendment to the Kyoto Protocol; Law 10 of 1992 with the annex for the approach of Climate Change at the different educational levels; National Climate Change Policy of Panama; Reforestation and Restoration Foment Policy; Government Strategic Plan (PEG 2015-2019 Axis 6); Forestry Draft Law (indicated in the government strategic plan 2015-2019); Public consultation on the Nationally Determined Contributions of Panama.

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
With assistance from the Green Climate Fund and if the country receives international support for implementation, the GHG absorption capacity could increase by up to 80% in regards to the reference scenario by 2050.	The document on Intended Nationally Determined Contributions establishes that, by 2050, Panama will increase by 30% the energy installed capacity from non-conventional renewable sources such as wind, solar and biomass; and that, through area restoration and reforestation activities, the GHG absorption capacity will increase by 10% in regards to the trend base scenario by 2050. Currently, the country is making an investment of USD 6 billion in projects related to water safety, as well as USD 1.5 billion in the energy sector for the extension of the power transmission system, and USD 5.25 billion in the project for the extension of the Panama channel, shortening the sailing distance of global trade by approximately 5%, which implies a reduction in carbon emissions from the international maritime sector.

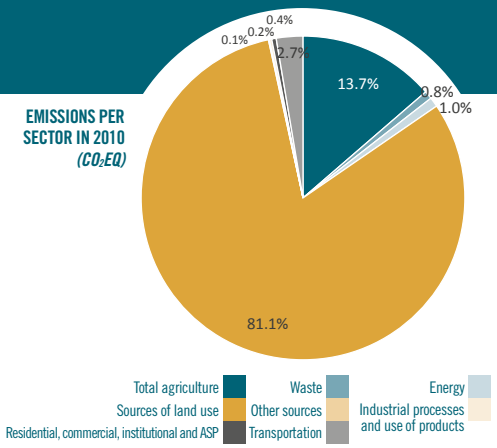
MITIGATION ACTIONS	ADAPTATION ACTIONS
Energy: the use of fuel with lower carbon contents will be promoted; an increase will be promoted regarding investment in renewable sources such as solar, wind and biomass, and the use of new technologies to achieve improvements in power efficiency, generation, storage, transmission and distribution; new regulatory frameworks will be created and modified to promote other types of renewable energy sources and energy efficiency. **REDD+ and related activities:** Panama will establish the International Center for the Implementation of Reduced Emissions from Deforestation and Forest Degradation, and it will promote and organize activities on education and the development of technical, scientific and operational capabilities for the research and implementation of REDD+ and related activities; knowledge, information and technology networks will be built with international and regional institutions; the compilation, analysis, and standardization of scientific data, information and protocols, will be encouraged; efforts will be organized and directed to promote public financing and market-focused approaches at national, regional and international levels to guarantee that the REDD+ mechanism can be financed in a sustainable manner; and, donations, trusts, subventions, tenders, contracts and loans granted through multi-lateral, bi-lateral, private and philanthropic cooperation will be moved and managed, in order to put into practice sustainable development programs, projects and activities associated to the conservation and management of rainforests. Panama commits to the reforestation of one million hectares within a period of 20 years.	Panamá promoverá una cultura de manejo forestal sostenible y el comercio internacional de las emisiones reducidas de carbono. Además, aplicará medidas y políticas en el sector "uso del suelo, cambio de uso del suelo y silvicultura", tales como: modernizar la legislación forestal, promover la simplificación de los procesos relacionados con las actividades forestales; identificar y priorizar áreas susceptibles a reforestar, con la finalidad de revertir los procesos de deforestación y proteger los bosques existentes; impulsar el fortalecimiento de la institucionalidad forestal y trabajar en conjunto para acceder a recursos económicos nacionales e internacionales para promover el sector de forma sostenible y eficiente; promover la creación de sistemas de incentivos para el manejo sostenible de los recursos forestales, la reforestación y la restauración de las tierras de vocación forestal degradadas; promover la creación de franjas de protección con reforestación y restauración alrededor de las áreas protegidas amenazadas por la deforestación; promover e incentivar a los tenedores de tierras para la protección de las Sources de agua; mantener y/o aumentar la cobertura forestal de las fincas mediante el establecimiento de sistemas agro-forestales, silvopastoriles y el establecimiento de parcelas forestales de rápido crecimiento; y el mantenimiento de la cobertura boscosa de las fincas. También se crearán corredores biológicos por medio del establecimiento de cercas vivas en todas las fincas y la protección de las Sources de agua, se incorporará a los sistemas agrícolas los conceptos de reforestación y restauración de ecosistemas; se promoverá la investigación sobre especies forestales en Panamá como base para la toma de decisiones sobre políticas estatales del sector forestal, se establecerán campañas de concienciación para la participación de la población panameña.

PARAGUAY | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	3
Prevalence of underfeeding (%)	10.4
Agricultural area (% of total land surface)	55.08
Forest area (% of total land surface)	39.39
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	4.4
CO_2 Emissions (metric tonnes per capita) according to INDC	0.8
Total population by 2015 (thousands)	6 639
Urban Population by 2015 (%)	59.67
Rural Population by 2015 (%)	40.33

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 (CO_2EQ)



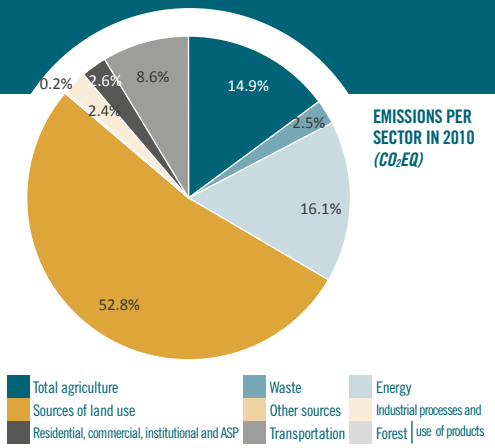
Note: Mitigation in forests corresponds to 5.7% of total emissions.

TARGETS	
Target	A 20% reduction in emissions is expected, as compared to the scenario projected as of 2030.
Baseline	The greenhouse gases inventory of the base year 2000, presented in the Second National Communication. The projection of emissions is: Year 2011: 140 million tonnes of CO_2eq (under review) Year 2020: 232 million tonnes of CO_2eq (under review) Year 2030: 416 million tonnes of CO_2eq (under review)
Scope- Sector	All sectors mentioned in the IPCC methodology guidelines are considered for the preparation of greenhouse gas inventories.
Application period	From 2014 to 2030, pursuant to what is established in the National Development Plan.
Review	Every 5 years. Additionally, Paraguay remains entitled to review, update or adjust the contribution proposal as well as the commitments established according to the updates of national communications and the new commitments that might result from the global climate agreement.

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Ministry of the Environment; Deputy Ministry of Mines and Energy; National Development Plan of Paraguay (2014-2030) with objectives established and linked to climate change; National Forestation and Reforestation Plan; National Climate Change Plan.

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
10% reduction of emissions projected by 2030.	10% reduction of emissions projected by 2030. Among the unconditional commitments, reference is made to the Program "A Todo Pulmón - Paraguay Respira", which was established as an organization in 2009, with the original purpose of planting 14 million trees, a goal not only achieved but exceeded with more than 40 million trees planted throughout the country. Its current goal is to recover 1 million hectares of forest.

MITIGATION ACTIONS	ADAPTATION ACTIONS
Paraguay intends to develop a sustainable energy matrix, include technologies for the exploitation of new sustainable energy sources (i.e. solar, wind, biomass energy), promote the sustainable management of forestry ecosystems and promote reforestation activities in order to protect and create income and a reduction of the native forest loss and degradation process.	Paraguay is preparing the Adaptation Plan, prioritizing the following sectors: management of water resources, forests, health and sanitation, early warning systems, energy, agricultural and livestock production, territorial order, and natural disaster and risk management.



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

GDP annual growth rate by 2015 (%)	3.3
Prevalence of underfeeding (%)	7.5
Agricultural area (% of total land surface)	19.01
Forest area (% of total land surface)	57.92
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	3
CO_2 Emissions (metric tonnes per capita) according to INDC	1.9
Total population by 2015 (thousands)	31 376
Urban Population by 2015 (%)	78.61
Rural Population by 2015 (%)	21.39

Source: FAO and World Bank

Note: Mitigation in forests corresponds to 7.3% of total emissions.

TARGETS	
Target	Peru considers a 30% reduction regarding greenhouse gas emissions (GHG) projected by year 2030, as part of a "business as usual" (BAU) scenario. This corresponds to emissions of 298.3 MT CO_2eq including "Land use, land use changes and forestry" (LULUCF), and 139.3 Mt CO_2eq excluding LULUCF.
Baseline	The scenario starts with base year 2010 with an emission level at 170.6 MT CO_2eq including LULUCF, and 78 MT CO_2eq excluding LULUCF.
Scope- Sector	The scope is national and the main GHG considered are: Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O). Sectors considered in the national GHG inventory (2010) are similar to those considered in the BAU scenario projection. Emissions from international freight aviation and transportation have not been considered due to the lack of an agreed accounting framework. Neither have the emissions from national maritime or railway transportation been projected, due to their marginal participation in the "Transportation" sub-category and the resulting lack of detailed information. The "Solvents and product use" category has zero emissions.
Application period	The commitment period goes from **1 January 2021 to 31 December 2030** (target year).
Review	The Peruvian State remains entitled to update the BAU scenario, based on new information existing before 2020.

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Ministry of the Environment (MINAM); Multi-sectoral Commission at Minister and/or Deputy Minister level (Supreme Resolution ° 129-2015-PCM); National Climate Change Strategy (approved by Supreme Decree 011-2015-MINAM); Adaptation and Mitigation Action Plan upon Climate Change (PAAMCC); Disaster Risk Management National Plan; Environmental Action Plan; Integral Adaptation and Mitigation Plan upon the effects of climate change on public health; National Adaptation Plan (2015).

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
The Peruvian State considers that out of the emissions reduction target established at 30% regarding the BAU scenario, 10% will be subject to the availability of international external funding and favourable conditions. That is, the country will require international support in terms of funding, research, technology and strengthened capabilities to fulfil the established targets. Likewise, the need of support is considered for the development and implementation of an effective monitoring, assessment and reporting system.	The Peruvian State considers that a 20% reduction will be implemented through investments and expenses with internal, public and private resources.

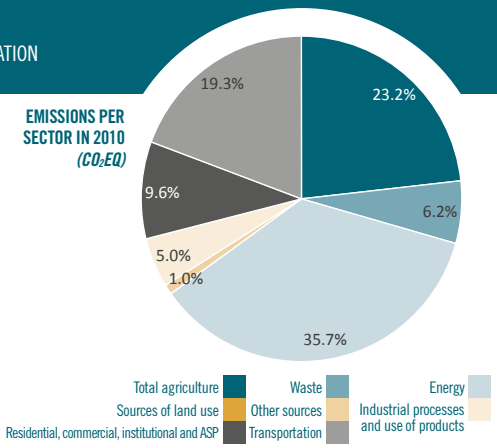
MITIGATION ACTIONS	ADAPTATION ACTIONS
Peru says that the country, even having to make an important economic and social effort in its adaptation process, commits to a significant reduction of GHG emissions, having an extensive initial work in the participative construction of targets by 2030. For the country, it is also ambitious to actively work on the strengthening of mechanisms and activities to introduce the mitigation variable in the planning processes, and for the fulfilment of its development objectives, involving all stakeholders that will allow ensuring an economic, social and environmental sustainability, translated into improvements to competitiveness and social-environmental changes. The proposal has an increased ambition including and organizing forecasts and efforts in matters of adaptations to the effects of climate change. Peru's proposal is - in summary - aligned with the final target of UNFCCC by requiring an emission reduction from the different activities developed within the national scope. The document does not specify the mitigation actions.	Five cross-sectors have been identified for adaptation: **Disaster Risk Management** for which the number of districts prioritized according to monitored hydro-meteorology and climate phenomena will increase, as well as the number of people with training and knowledge on disaster risk management and climate change adaptation. **Resilient public infrastructure** for climate shielding of the National Public Investment System (SNIP), and the inclusion of methodology guidelines for the creation of public investment projects of the National Public Investment System (SNIP), for the relevant sectors, with guiding elements that allow carrying out these actions within a context of climate change. **Focus on poverty and vulnerable populations** with adjustments to the design of programs and regulatory frameworks with adaptation criteria, and an increase to the number of programs and instruments to combat poverty that include climate change adaptation. **Cross-cultural and gender focus** for the creation and approval of the Gender and Climate Change Action Plan, and the foment to the participation of indigenous organizations in actions against Climate Change. **Promotion of private investment in adaptation** in order to assess the introduction of innovating mechanisms that foment private investment to contribute to increasing resilience in vulnerable systems.

THE DOMINICAN REPUBLIC | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	7
Prevalence of underfeeding (%)	12.3
Agricultural area (% of total land surface)	48.69
Forest area (% of total land surface)	40.36
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	2.5
CO_2 Emissions (metric tonnes per capita) according to INDC	2.1
Total population by 2015 (thousands)	10 528
Urban Population by 2015 (%)	78.98
Rural Population by 2015 (%)	21.02

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 (CO_2EQ)



Note: Mitigation in forests corresponds to 25.8% of total emissions.

TARGETS	
Target	A 25% reduction of emissions is estimated by year 2030 as compared to the base year.
Baseline	The baseline corresponds to per capita emissions estimated in 2010 at 3.6 t CO_2eq.
Scope- Sector	The sectors on which work will be performed to meet the target are: energy, industrial processes and use of products, agriculture, residues, land use, land use change and forestry. The GHG considered for the fulfilment of the target are: Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O).
Application period	The application period goes from 2010 to 2030.
Review	Reviews are considered every 5 years.

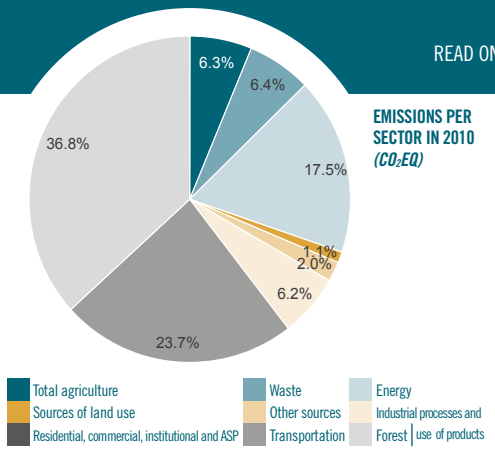
INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Ministry of the Environment and Natural Resources; Climate Change Direction; Clean Development Mechanism; National Climate Change Policy; Plan of Economic Development Compatible with Climate Change (DECCC); National Adaptation Action Plan (PANA-RD); National Strategy to strengthen human resources and skills to move towards green development, with low emissions and climate resilience.

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
To achieve a 25% reduction in emissions by 2030 regarding the base year, the country requests the favourable and foreseeable support that makes feasible climate funding mechanisms, and the correction of flaws in the existing market mechanisms. The National Strategy to strengthen the human resources and the capabilities to move towards green development, with low emissions and climate resilience, identifies that the financing needs will exceed USD 1.5 billion per year for projects in Higher, Technical - Trades and Specialization Education.	To date, the education of multipliers (120) and teachers (1 200) has already begun, with measurements of the impact of the national strategy efficacy to face climate change.

MITIGATION ACTIONS	ADAPTATION ACTIONS
Understanding the challenge that a resilient and low-emissions society represents, in terms of development, the Dominican Republic has developed a strategy to strengthen human resources, emphasizing the youngest and future generations, aligned with the National Development Strategy.	The sectors identified as the most vulnerable are water management for human consumption, energy in its electric generation component, the national protected areas system, and the sector of human settlements and tourism. The components for the strategic approach to adaptation shall be the following: i) adaptation based on ecosystems/ecosystemic resilience; ii) increase in adaptation capacity and reduction of territorial/sectoral vulnerability; iii) integrated water management; iv) health; v) food security; vi) infrastructure; vii) floods and droughts; viii) coastal-maritime; and, ix) risk management and early warning systems

READ ONLINE PUBLICATION

SAINT KITTS AND NEVIS



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

GDP annual growth rate by 2015 (%)	3.8
Prevalence of underfeeding (%)	SD
Agricultural area (% of total land surface)	23.08
Forest area (% of total land surface)	42.31
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	SD
CO_2 Emissions (metric tonnes per capita) according to INDC	5.1
Total population by 2015 (thousands)	56
Urban Population by 2015 (%)	32.05
Rural Population by 2015 (%)	67.95

Source: FAO and World Bank

TARGETS	
Target	An emission reduction of approximately 22% and 35% of greenhouse gases (GHG) is proposed in the "business as usual" (BAU) scenario by 2025 and 2030, respectively.
Baseline	Undefined
Scope- Sector	All economic sectors are considered and actions will be developed, focused on the fulfilment of the Intended Nationally Determined Contributions, but with special attention to the energy and transportation sectors, which are the ones that contribute the most to the national matrix of GHG emissions. Mainly Carbon Dioxide (CO_2) is considered in the analysis.
Application period	From 2020 to 2030
Review	2025

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Ministry of Agriculture; National Conservation and Environmental Protection Act (NCEPA).

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
The contribution indicated in the target is conditional and is based on the availability of funding and technological support.	Saint Kitts and Nevis proposes reducing its GHG emissions focusing on electric generation and the transportation sector. Pursuant to these proposed mitigation measures, policies and measures are to increase the use of renewable energy sources by 50%. For this, together with the conditional contribution, the country will ensure the implementation of pertinent policies and measures within the sectors of natural, financial, technological and human resources, to achieve the projected emission reductions.

MITIGATION ACTIONS	ADAPTATION ACTIONS
The country will develop measures to increase the participation of alternative and renewable sources for power generation by at least 35 MW from geothermal power plants, 1.85 MW from solar panels, and 7.6 MW by wind mills. It also proposes replacing inefficient equipment and automating high consumption equipment. Additionally, it will promote incentives for greater efficiency in fuel consumption by vehicles, tax increases on vehicles with high fuel consumption, the improvement of the public transportation system, the repair and construction of new highways and traffic regulations. This has been estimated to allow a 5% reduction in fossil fuel consumption.	For the country, the most vulnerable sectors and areas include forestry and land ecosystems, coastal ecosystems, water resources, human settlements, agriculture, tourism and human health. In the water sector, the expectation is to increase the offer and reduce the demand through the improvement of infrastructure and education, the implementation of desalination plants, water harvest and deep well drilling. The improvement of the coastal infrastructure is also projected, as well as the regulation and planning and a coastal protection program. In agriculture, actions will focus on improving crops and livelihoods as well as fisheries. In order to guarantee the effective application of the projected adaptation actions, local agents must be involved and, therefore, be empowered and prepared to perform the necessary tasks. The preparation process might require, among other things, technical training, training workshops, expert guidance as well as technical and feasibility studies. It is important to highlight the relevance of the institutional capacity, as well as the necessary establishment of the institutional coordination and the political support to achieve the desired national goals. Additionally, economic and technical feasibility studies would be required for all execution levels (actions, projects, programs, policies), as well as an exhaustive analysis of the political effects. It is also relevant to prepare a sectoral financing plan with specific resource sources and disbursement planning to implement the necessary policies and measures.

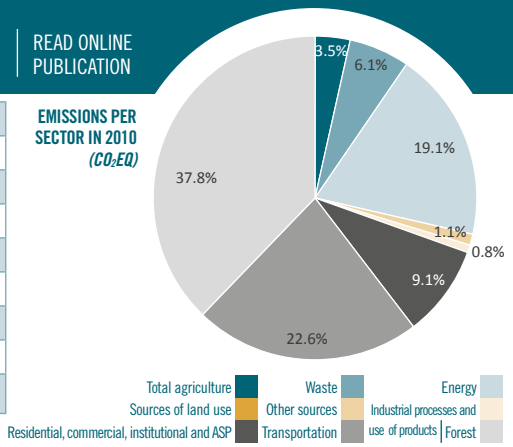
SAINT VINCENT AND THE GRENADINES

READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	1.6
Prevalence of underfeeding (%)	6.2
Agricultural area (% of total land surface)	25.64
Forest area (% of total land surface)	69.23
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	SD
CO_2 Emissions (metric tonnes per capita) according to INDC	1.9
Total population by 2015 (thousands)	109
Urban Population by 2015 (%)	50.55
Rural Population by 2015 (%)	49.45

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 *(CO_2EQ)*



TARGETS	
Target	Reduction of greenhouse gas emissions by 22% as compared to the "business as usual" (BAU) scenario by 2025.
Baseline	Base year 2010 when emissions were estimated at approximately 407 Gg CO_2eq.
Scope- Sector	Sectors: energy (including national transportation), industrial processes and use of products, agriculture, "land use, land use change and forestry", residues. Greenhouse gases considered in the target are Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), and Hydrofluorocarbon (HFC).
Application period	From 2015 to 2025.
Review	Undefined

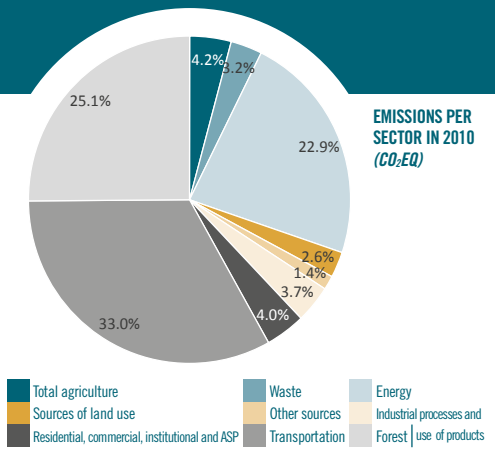
INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of Health, Wellness and the Environment; Environmental Management Act; Regional Framework for Achieving Development Resilient to Climate Change, approved by the CARICOM Heads of State; National Forest Resources Conservation Plan (1994 - 2003); National Economic and Social Development Plan of Saint Vincent and the Grenadines 2013 (Goal 4: Improving Physical Infrastructure, Preserving the Environment and Building Resilience to Climate Change); National Environmental Management Strategy; Regional Disaster Vulnerability Reduction Project (RDVRP) 2011-2018; National Energy Action Plan; Pilot Program for Climate Resilience (PPCR); Programme on Improving Management of Coastal Resources and the Conservation of Marine Biodiversity in the Caribbean Region; Coastal Protection for Climate Change Adaptation in the Small Island States in the Caribbean 2014-2018; Integrated Water Resources Management (IWRM); Regional Disaster Vulnerability Reduction Project (RDVRP) 2011-2018.

CONTRIBUTIONS

CONDITIONAL	UNILATERAL OR UNCONDITIONAL
Saint Vincent and the Grenadines welcomes the financial support and foment to the capacity of helping produce a nationally appropriate mitigation action (NAMA) for the transportation sector of the country. This is a key priority for the stabilization and reduction of national GHG emissions in the upcoming years. Likewise, similar international support is wanted to foment the finances and capabilities for the "Land use, land use change and forestry" sector, and to help establish a related mitigation actions program.	Unconditional reduction, at economy scale, of GHG emissions by approximately 22% as compared to the BAU scenario by year 2025. The proposed unconditional contribution would give place to a per capita emission reduction projected at 4.3 t CO_2eq by 2025, which would be less than the global average of 5.3 t CO_2eq per capita estimated by such year.

MITIGATION ACTIONS	ADAPTATION ACTIONS
Renewable Energy: : plans for renewable energy generation focus on the development of the geothermal plant proposed by the country (projected for 2018). The facility, when completed, will cover approximately 50% of the annual national needs of power consumption. **Energy Efficiency:** the target is to achieve a 15% reduction in the national power consumption as compared to a BAU scenario by 2025. Among the measures considered in this sector is the adjustment, at a national level, of public lights, a new construction code and an energy labelling system for household appliances. **Transportation:** new policies are being introduced to reduce import taxes on low emission vehicles. The estimate is that this will result in approximately 10% of emissions prevented in the next 10 years. **Land use, land use change and forestry:** Saint Vincent and the Grenadines intends to develop GHG sinks through forestation and reforestation, reducing deforestation and reducing forest degradation. Once the national forest inventory has been carried out, policies and actions will be developed for the sector, as the contribution cannot be quantified at this stage. Actions and policies can be implemented through instruments such as the Clean Development Mechanism (CDM) and Reducing Emissions from Deforestation and Forest Degradation (REDD).	The country has a national climate change adaptation program, within the framework of which the main activities being implemented at a national level include: i) pilot program for climate resilience, proposing the strengthening of community resilience to face the threats of climate change, increase institutional capability, strengthen information and knowledge, map threats, implement initiatives for risk management with gender sensitivity and to collaborate with communities at all levels in risk and disaster management; ii) plan the adaptation of the agricultural sector, and the implementation of actions to support small farmers in production technologies and agribusiness management, including abandoned areas in sustainable agriculture and livelihoods, implementing the National Forest Resources Conservation Plan and strengthening the adaptive capability of rural economies; iii) adaptation planning in coastal zones; iv) adaptation planning for the water resources sector; v) adaptation planning in the health sector; vi) disaster risk management and reduction.



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

GDP annual growth rate by 2015 (%)	2.4
Prevalence of underfeeding (%)	SD
Agricultural area (% of total land surface)	17.38
Forest area (% of total land surface)	33.38
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	11.8
CO_2 Emissions (metric tonnes per capita) according to INDC	2.2
Total population by 2015 (thousands)	185
Urban Population by 2015 (%)	18.5
Rural Population by 2015 (%)	81.5

Source: FAO and World Bank

TARGETS	
Target	By 2025, 16% reduction of the emissions estimated in a "business as usual" (BAU) scenario for that year, which corresponds to a reduction of emissions of approximately 121 CO_2eq. Gg. By 2030, 23% reduction of the emissions estimated in a BAU scenario for that year, which corresponds to a reduction of emissions of approximately 188 CO_2eq. Gg. St. Lucia expects its per capita emissions (excluding the figures from "Land use, land use change and forestry") to be reduced from 3.88 t CO_2eq (estimated in 2010) to 3.29 t CO_2eq by 2030. In a "business as usual" (BAU) scenario by 2030, emissions would be in the order of 4.25 t CO_2eq per capita.
Baseline	Year 2010 with emission levels at 643 CO_2eq. Gg
Scope- Sector	The sectors in which actions will be performed to achieve the indicated targets are, mainly, Energy and Transportation. The greenhouse gases considered for the estimate of targets are Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O)
Application period	From 2010 to 2030
Review	Targets and actions will be reviewed every 5 years.

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Ministry of Education, Innovation, Gender Relations and Sustainable Development; Department of Sustainable Development; Electricity Supply Act; Draft Geothermal Development Bill; Energy Policy (2010); Environment Management Strategy (2004, reviewed in 2014); National Climate Change Policy and Adaptation Plan (2015); Sustainable Energy Plan (2001); Integrated Land Use Plan; Early Warning Systems; Sustainable Energy Plan (2001); Natural Resource Management of the North East Coast of Saint Lucia; National Land Policy (2014); National Standards of Energy Efficiency Labelling; Natural Defences (mangroves, wetlands, etc.) and construction codes.

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
The country indicates that, while national efforts are in place and will continue towards emission reduction, external support is a previous requirement to achieve the established emission reduction targets. It has been estimated that the total accumulated investment costs to achieve the mitigation targets by year 2030, will be approximately USD 218 million (at 2015 prices), and the costs of the governmental program are estimated at USD 23 million.	The government of Saint Lucia has created a sturdy legal and regulatory framework to support reforms, that will be relevant to achieve the reduction targets for greenhouse gas emissions. If necessary, policies and laws will be reviewed to guarantee that possibilities of a stronger application of the necessary actions are explored.

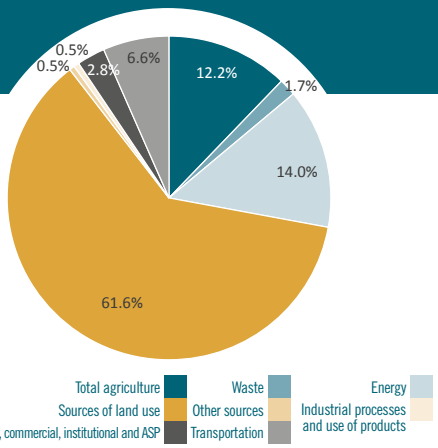
MITIGATION ACTIONS	ADAPTATION ACTIONS
Energy: A national energy policy will be adopted, through which the participation of renewable energies in the national energy matrix will be encouraged to approximately 35% by 2020. For this purpose, incentives to renewable energies will be introduced, and regulations on electricity supply will be reviewed. To promote energy efficiency measures, the Code of Civil Construction will be reviewed, and a labelling system will be established. **Transportation:** the import of used vehicles will be controlled, and the reduction of taxes and duties will be promoted for the import of fuel-efficient and alternative energy vehicles, while at the same time increasing taxes on high consumption vehicles. A transportation policy will be proposed for this. **Residues:** in 2012, the National Water and Sewerage Commission was established to regulate water and sanitation operators, and the approval and implementation of a residue management strategy will be promoted to include energy production from waste. **Land use, land use change and forestry:** a full forestry inventory was carried out in 2009, and a Natural Resources Management Plan was developed for the north-east of Saint Lucia, while a National Land Policy was also prepared (2014). **Industrial Processes:** a hydrochlorofluorocarbons (HCFC) management plan was approved, and a Draft Code of Practice for Refrigeration and Air Conditioning has been prepared.	The country accepts the need to contribute to global mitigation efforts, but it has the intention to pay more attention to adaptation efforts, given its unique circumstances as a small developing island state, therefore, highly vulnerable to climate change. The country plans to establish a Multi-Sectoral National Climate Change Committee, to approve a National Climate Change Policy and Adaptation Plan (2015), develop a strategic program for climate resilience, approve a national coastal zone management policy, approve a National Environmental Management Strategy and a National Environmental Plan (2004, revised on 2014), implement the initiative of sustainable energy for everyone, and to develop a climate change education policy. Efforts are being geared towards achieving the following targets by 2022: i) priority adaptation measures for the adverse effects of climate change, developed and implemented at all levels; ii) identification of priority vulnerable areas and appropriate adaptation measures and sectors; iii) adaptation measures in priority vulnerable areas, supported on data and traditional knowledge; and, iv) adaptation measures integrated into the national and sectoral development strategies.

SURINAME | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	-0.3
Prevalence of underfeeding (%)	8
Agricultural area (% of total land surface)	0.57
Forest area (% of total land surface)	98.31
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	10.5
CO_2 Emissions (metric tonnes per capita) according to INDC	3.9
Total population by 2015 (thousands)	543
Urban Population by 2015 (%)	66.04
Rural Population by 2015 (%)	33.96

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 *(CO_2EQ)*



Note: Mitigation in forests corresponds to 0.9% of total emissions.

TARGETS:

Target	Undefined in terms of greenhouse gas (GHG) emission reduction. However, it has been established that Suriname promotes the reduction of the yearly deforestation rate, which currently stands at 0.02%, and the adjustment of the energy matrix to achieve, by 2025, a 25% participation of renewable energies. Suriname is a "carbon negative" country, as it absorbs more carbon than that which it emits. GHG emissions are insignificant at approximately 7 million t CO_2eq per year, regarding its rainforests, which cover approximately 94% (15 million hectares) of the land surface of the country, absorbing 8.8 million t CO_2eq. per year.
Baseline	Undefined
Scope- Sector	The sectors considered are forestry and energy. The greenhouse gases mentioned in the nationally determined contributions of Suriname are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O).
Application period	Until 2025.
Review	2025.

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of Natural Resources; Department of National Coordination for Environmental Policy; National Institute for Environment and Development in Suriname (NIMOS); Forest Management Act (1992); Draft law for the protection of the mangrove forest along the North Atlantic Coast of Suriname; Draft Electricity Act; Energy policy 2013-2033; National forestry policy (2003); Development Plan 2012-2016 of the Republic of Suriname; Forest canopy monitoring national plan; Interim Strategic Action Plan for the Forest Sector (2008); Foundation for Forest Management.

CONTRIBUTIONS

CONDITIONAL

Suriname has defined four critical elements necessary for international collaboration: i) direct access to climate funding; ii) compensation for losses and damages; iii) technology transfer to generate big scale adaptation and mitigation; and iv) compensation for the climate services the country offers through its rainforests.

Forests: Considering that the rainforests of Suriname store approximately 11 gigatons of carbon and absorb, annually, more than 8.8 million tonnes of carbon, Suriname wishes to maintain its high forest cover and reduce the deforestation rate (0.02% per year) if appropriate incentives are offered in the long term. In this sense, Suriname has estimated its contribution to the mitigation of carbon sequestration and prevented deforestation by 2025, at a total of USD 630 million.

Energy: several options of renewable energy are technically feasible in Suriname. Additional studies are required to explore the potential of biofuels such as rice husks, different herb and microalgae species. The government is considering a hydroelectric project with a capacity of 168 MW (approximate cost of up to USD 1.377 billion); a biofuel project to promote the blend of ethanol and gasoline (60% vehicles can use this blend) and produce, at the same time, 25 MW; and a thermal power plant to produce 62 MW. In addition to promoting the use of renewable energies, Suriname has considered short, medium and long term measures, to improve the energy use efficiency with actions that could amount to a cost of USD 485 million. Therefore, the cost of actions regarding the energy sector could amount to USD 1.862 billion (only considering energy efficiency and hydroelectric infrastructure). This way, through the existing efforts and with international funding for implementation, Suriname is willing to continue the transition of its energy sector to ensure that the use of renewable energies remains above 25% of the energy matrix by 2025.

Adaptation: financing is a key requirement to support adaptation actions. Developing climate change resilience is an immediate priority for the country. In order to be able to make basic interventions in this scope, Suriname requires an estimate of USD 1 billion to make progress in the implementation of the climate resilience program by 2025.

UNILATERAL OR UNCONDITIONAL

Forests: the intensification of forest surveillance efforts to reduce illegal logging as well as the adoption of tools for reduced-impact forestry use has helped keep a low carbon ands environmental footprint. However, much more detailed information on forestry resources is needed and, in this regard, Suriname is currently developing a national forest inventory. Suriname has the intention of increasing sustainable forest and ecosystem order efforts, and stabilizing and minimizing deforestation and forestry degradation unconditionally. Suriname has 13% of its total surface under its national protection system, and intends to increase the surface of forests and wetlands under preservation.

Energy: Suriname has prepared a National Energy Plan (2013 - 2033) defining a long term vision and a modern and efficient strategy, for the energy sector to provide safe energy in the long term, at the same time improving competitiveness. Some initiatives are already at an advanced stage, such as the promotion of solar power for rural communities, a study on waste-based energy production and hydraulic micro-generation projects. The use of biomass and the development of wind power are also being explored.

Adaptation: at a strategic level, Suriname has prepared a National Development Plan 2012-2016, through which a series of mitigation actions have been taken, including the rehabilitation and strengthening of the infrastructure such as protection dams for coastal zones, drains in urban and non-urban zones, water management improvements, among others.

MITIGATION ACTIONS

Forests: Suriname has the intention of continuing with the sustainable forestry management in an effort to promote the multiple use of its forestry resources, while it explores the option of receiving the mentioned payments/compensations. The country is currently endeavouring in the preparation process for REDD+ at a national level and initial measures are being taken to assess the deforestation factors and to develop strategies, approaches and options among the key sectors such as agriculture, logging and mining. Estimates are also being prepared on the national carbon inventories and the development of a monitoring, reporting and verification (MRV) system.

Energy: According to statistics, 85% of Suriname's population has access to energy. The energy demand by the population of Suriname ranges between 150MW and 250MW, and is supplied by diesel (51.6MW), hydroelectricity (115MW) and small diesel generators with a capacity of 10 to 60 kW that are used in rural villages. The power demand projected by 2022 is estimated at 500MW. To serve this growing demand, the country has prepared a National Energy Plan 2013-2033, that portrays a long-term vision and strategy to establish a modern energy sector, using other types of renewable energy, such as wind power, biomass, etc. A national energy efficiency program has been started, focused on consumer awareness and the use of energy saving lamps, as well as the promotion of energy-efficient building designs. Additionally, duties on renewable energy products have been eliminated.

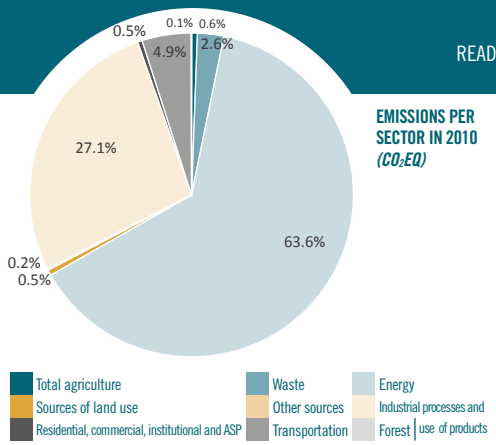
ADAPTATION ACTIONS

Suriname is very vulnerable to the effects of climate change due to its coastal lowlands and the threat of rising sea levels, together with a greater frequency of extreme climate events. Adaptation, therefore, takes a starring role in Suriname's approach to climate change. Suriname has included climate resilience measures as part of the National Development Plan (2012-2016) and has obliged itself to the development and implementation of projects and actions in direct response to climate change.

Several critical mitigation measures to be put into place by the country, include the rehabilitation and improvement of infrastructure such as dams to protect the coastal zone and the recovery and protection of mangroves; drainage of urban and non-urban zones; improvements to water resource management in aquifers and rivers; the promotion of sustainable land management; the application of innovative land use technologies; and, the integration of climate resilience to infrastructure, production, social, educational, health and tourism programs.

READ ONLINE PUBLICATION

TRINIDAD AND TOBAGO



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

GDP annual growth rate by 2015 (%)	-0.6
Prevalence of underfeeding (%)	7.4
Agricultural area (% of total land surface)	10.53
Forest area (% of total land surface)	45.39
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	SD
CO_2 Emissions (metric tonnes per capita) according to INDC	34.5
Total population by 2015 (thousands)	1 360
Urban Population by 2015 (%)	8.45
Rural Population by 2015 (%)	91.56

Source: FAO and World Bank

TARGETS	
Tipo de target	Reduction of BAU emissions projected by year 2030.
Target	Trinidad and Tobago established the target of achieving a reduction of greenhouse gas (GHG) emissions of approximately 15% as compared to the "business as usual" (BAU) scenario by 2030, which in absolute terms corresponds to 103 million t CO_2eq.
Baseline	2013
Scope- Sector	Transportation, energy and industry. GHGs considered for the definition of the targets are carbon dioxide, methane and nitrous oxide.
Application period	Until 2030
Review	Undefined

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS
Ministry of Planning and Sustainable Development; National Climate Change Policy; Carbon Reduction Strategy.

CONTRIBUTIONS	
CONDITIONAL	UNILATERAL OR UNCONDITIONAL
The estimated cost to achieve the target of a 15% reduction in emissions by 2030, is USD 2 billion, expected to be partially covered by internal financing, as well as international funding resources, even through the Green Climate Fund.	Trinidad and Tobago will commit to unconditionally reduce its emissions in the public transportation sector by 30% or one million seven hundred thousand tonnes of CO_2eq by 2030, taking as base the BAU scenario estimate since year 2013.

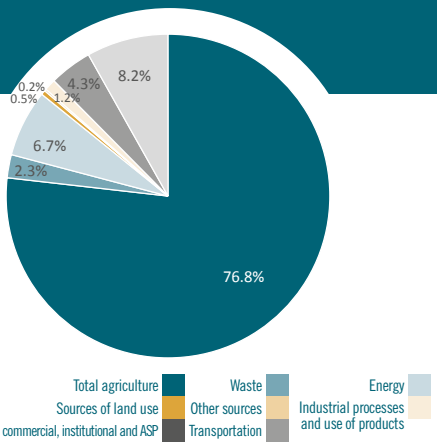
MITIGATION ACTIONS	ADAPTATION ACTIONS
In a very general way, it has been established that mitigation actions will be carried out through the implementation of clean technology, fuel replacement and the promotion of energy efficiency. The Government of Trinidad and Tobago has given the same relevance to mitigation and to adaptation, as it acknowledges the need to develop a low carbon emission economy to help achieve the Sustainable Development Goals. With this purpose, Trinidad and Tobago has started to establish the necessary regulatory framework and has committed to adopt unconditional mitigation measures that are coherent with the application of the National Climate Change Policy. Additionally, solid policy measures are in place for the management of forests, land use, and natural resources, that will result in a greater mitigation of greenhouse gases.	Undefined.

URUGUAY | READ ONLINE PUBLICATION

GDP annual growth rate by 2015 (%)	1
Prevalence of underfeeding (%)	< 5%
Agricultural area (% of total land surface)	82.56
Forest area (% of total land surface)	10.41
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	0.3
CO_2 Emissions (metric tonnes per capita) according to INDC	6.1
Total population by 2015 (thousands)	3 432
Urban Population by 2015 (%)	95.31
Rural Population by 2015 (%)	4.69

Source: FAO and World Bank

EMISSIONS PER SECTOR IN 2010 (CO_2EQ)



Note: Mitigation in forests corresponds to 61.6% of total emissions.

TARGETS

Target	In the "Land use, land use change and forestry" (LULUCF) sector, the net unconditional removal of CO_2 by 2030, is estimated at 132 000 CO_2eq. Gg per year, and the conditional removal could be 192 000 CO_2eq. Gg. In the "Energy" sector, the net unconditional removal of CO_2 by 2030 is estimated at 25% in the intensity of emissions regarding the GDP, and the conditional removal could be 40% in the intensity of emissions regarding the GDP. Due to the carbon catchment in the "Land use, land use change and forestry" sector, and the low emissions of the energy sector, Uruguay is expected to constitute, by 2030, a net CO_2 remover country.
Baseline	The base year to estimate the BAU scenario considers year 2010, for the targets of LULUCF and Energy sectors.
Scope- Sector	Contributions reach all emission sectors acknowledged by the IPCC inventory guidelines and all national territory. The following gases are consid-ered: Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O).
Application period	2010-2030
Review	Undefined

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Ministry of Housing, Territorial Order and Environment; National Response System to Climate Change and Variability (SNRCC); National Climate Change Response Plan of Uruguay, year 2009; Metropolitan Region Climate Plan; National Plan for the integrated management of natural resources within the framework of climate change and variability; Order Plans in Vulnerable Territories and Pluvial Water Plans; National Coastal Sector Adaptation Plan; Sudden Disaster and Emergency Response Protocol; Project for Development and Adaptation to Climate Change in the agriculture and livestock sector.

CONTRIBUTIONS

CONDITIONAL

ULUCF: Remove annually 19 200 CO_2eq Gg by 2030.

Energy: reduce the intensity of emissions by 40% regarding the GDP. Keep electric generation emissions below 20 g CO_2/kWh.

Industrial Processes: reduce the intensity of emissions by 40% regarding the GDP.

Beef production (represents 78% of CH_4 emissions as of 2010)**:** reduce 46% the intensity of emissions in regards to the kg of beef.

Waste (represents 7% of CH_4 emissions as of 2010)**:** reduce the intensity of emissions by 68% regarding the GDP.

Other sectors and activities (represent 15% of CH_4 emissions as of 2010)**:** reduce the intensity of emissions by 60% regarding the GDP.

Beef production (represents 61% of N_2O emissions as of 2010)**:** reduce 41% the intensity of emissions in regards to the kg of beef.

Other sectors and activities (represent 39% of N_2O emissions as of 2010)**:** reduce 55% the intensity of emissions in regards to the GDP.

UNILATERAL OR UNCONDITIONAL

Since 2010 and until 2030, with its own resources, Uruguay plans to contribute with an additional increase of the forest plantation area estimated at 300 000 hectares, that will represent the annual removal of 11,200 CO_2 Gg by 2030.

LULUCF: remove 13 200 CO_2 Gg per year.

Energy: reduce the intensity of emissions by 25% regarding the GDP. Keep electric generation emissions below 40 gCO_2/kWh.

Industrial Processes: maintain the intensity of emissions regarding the GDP in the reference value.

Beef production (represents 78% of CH_4 emissions as of 2010)**:** reduce 33% the intensity of emissions in regards to the kg of beef.

Waste (represents 7% of CH_4 emissions as of 2010)**:** reduce the intensity of emissions by 44% regarding the GDP.

Other sectors and activities (represent 15% of CH_4 emissions as of 2010)**:** reduce the intensity of emissions by 45% regarding the GDP.

Beef production (represents 61% of N_2O emissions as of 2010)**:** reduce 31% the intensity of emissions in regards to the kg of beef.

Other sectors and activities (represent 39% of N_2O emissions as of 2010)**:** reduce 40% the intensity of emissions in regards to the GDP.

MITIGATION ACTIONS

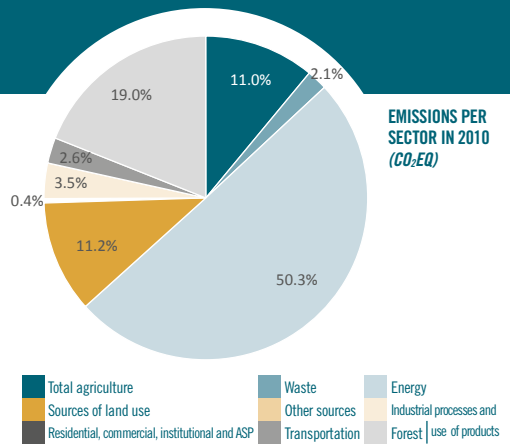
Uruguay proposes reducing the intensity of emissions through the improvement to productivity and efficiency, mainly in the production of beef, dairy and rice.

The country commits to achieve mitigation targets through the reduction of intensity of emissions from the manure in soils, the increase of the surface of forest plantations, the increase of the surface of native forests and the reduction of degradation; the increase of the carbon stocks in soils under natural grasslands, the increase of irrigated surfaces, the reduction of methane emissions in rice production through flood management and other practices; the efficient use of nitrogen fertilizers, the inclusion of energy storage systems for the management of wind surpluses; the implementation of BRT corridors of metropolitan public transportation, the introduction of hybrid and electric private and public vehicles; the increase in the percentage of biofuels in gasoline and gasoil blends; the introduction of private and public vehicles that allow a the use of a greater percentage of biofuel blends; the improvement of the vehicle fleet with higher standards of energy efficiency and lower emissions; improvement of freight transportation through the inclusion of new multi-modal systems, inclusion of railways and fluvial transportation; the introduction of new technologies for emission reduction in the cement manufacturing process; the improvement of treatment and final disposal systems of urban solid waste; the improvement of treatment systems for industrial residual waters and effluents from intensive livestock breeding establishments, and the improvement of industrial and agroindustrial solid waste management.

ADAPTATION ACTIONS

To promote climate change adaptation, Uruguay will promote the creation and implementation of national, subnational and sectoral participative plans for adaptation to climate variability and change, and the inclusion of monitoring and reporting systems for adaptation and for losses and damages; the development of early warning systems and new hydrometeorological insurance within the framework of the disaster risk reduction actions, for the agriculture and livestock, coastal and health sectors, as well as for urban zones subject to flood, infrastructure and other vulnerable areas; and, to further climate risk management upon floods, through the extension of the relocation processes for vulnerable population and the inclusion of new territorial order measures.

Additionally, actions will be promoted for the strengthening of drought management, the identification of new water sources, the promotion of associative work construction, such as multi-property dams, and the improvement in water use efficiency; the improvement of the protection to ground and surface water sources, through the promotion of good practices in well construction, the control of spot and diffuse contamination sources, and the implementation of conservation and restoration measures for riverine forests; the promotion of ecosystem-based adaptation, the deepening of ecosystem and biodiversity conservation strategies; the design, adaptation and maintenance of resilient infrastructure; the organization and development of new information systems and integrated climate services, for the systematic observation, risk mapping and the assessment of losses and damages; capability generation for research, development and innovation to facilitate the national response to variability and climate change; the improvement of the visualization of climate change adaptation activities among the national budget entries, developing a national system of environmental indexes; the implementation of educational, training and awareness programs that incorporate the requirements of climate change response.



EMISSIONS PER SECTOR IN 2010 (CO_2EQ)

Note: Mitigation in forests corresponds to 7.9% of total emissions.

GDP annual growth rate by 2015 (%)	SD
Prevalence of underfeeding (%)	< 5%
Agricultural area (% of total land surface)	24.49
Forest area (% of total land surface)	53.11
Population living on less than 1.25 dollars PPP per day as of 2015 (%)	5.6
CO_2 Emissions (metric tonnes per capita) according to INDC	6.1
Total population by 2015 (thousands)	31 108
Urban Population by 2015 (%)	88.99
Rural Population by 2015 (%)	11.01

Source: FAO and World Bank

TARGETS	
Target	Reduction of greenhouse gas emissions (GHG) of the country by at least 20% in reference to the "business as usual" (BAU) scenario by 2030.
Baseline	2005
Scope- Sector	Oil, energy, agriculture and forestry sectors.
Application period	2010- 2030
Review	Undefined

INSTITUTIONS, PLANNING AND NATIONAL LAWS ON CLIMATE MATTERS

Deputy Minister for Risk Management and Civil Protection; Municipal Offices of Technological and Social-Natural Risks; Office of the Deputy Minister of New Sources and Rational Use of Electric Energy; Energy efficient and rational use act; Technological and Social-Natural Risks Integral Management Act (2009), that explicitly considers risks associated to climate change; Draft law on residue management and recovery as secondary raw materials for their inclusion in the national industry; Educational, community participation and social-environmental training policies to combat climate change; National Strategy for Biological Diversity Conservation 2010 - 2020; Popular participation and environmental education training program of the Ministry of Popular Power for Eco-Socialism and Waters; Social and economic development plan of the Nation - 2013 (Goal 5); National Action Plan (PAN) regarding the National Strategy for Biological Diversity Conservation; National Reforestation Plan: Misión Árbol (Tree Mission); National plan for the clearing of dumps and construction of landfills; Integral strategic plan for the provision of equipment and machinery for solid waste and residue management; Integrated management and order plan of coastal zones (POGIZC) of the Bolivarian Republic of Venezuela; National risk management plan: Project within the framework of article 55 of the Constitution of the Bolivarian Republic of Venezuela; Territorial order national plan draft (2010); Territorial order plan of the Orinoco oil strip "Hugo Chávez Frías"; Project for the monitoring of canopy changes in the Amazon Region of Venezuela; National Project for the Progressive Elimination of Substances that Deplete the Ozone Layer; Venezuelan congress on biological diversity: encounter of knowledge and experience exchange; Legal instruments for the preservation of the forest heritage and the sustainable use of forests.

CONTRIBUTIONS	
CONDITIONAL	UNILATERALES O INCONDICIONALES
	Mitigation plan that covers greenhouse gas emitting productive sectors, as a national voluntary contribution to the efforts to save the planet.

MITIGATION ACTIONS	ADAPTATION ACTIONS
Oil: For the 2016 - 2019 period, the country has planned, through the oil sector, ceasing to emit to the atmosphere the amount of 538.2 Kt CO_2Eq per year. **Energy:** since 2006 until the first half of 2015, 206 million compact fluorescent bulbs (CFL) have been installed through the program for the replacement of incandescent bulbs for energy saving bulbs. Additionally, the program for the replacement of air conditioning units and refrigerators for efficient equipment, will move ahead. During year 2012, 3 077 refrigerators have been replaced, as well as 42 504 air conditioning units (between years 2011-2013). On the other hand, two high capacity wind power parks (Paraguaná and La Guajira) will be built in the country, the "seeding light" program will be implemented, which allows supplying electricity to isolated communities, through hybrid solar and wind power systems; and mass transportation systems will be expanded with the resulting reduction of car use. The enactment of energy efficiency legal regulations (Energy efficient and rational use act) is also proposed; as well as the implementation of the Plan Banda Verde (Green Strip Plan) focused on the residential sector, through which homes within the energy consumption strips established for each region in the country, receive a subsidy in the electricity rate; the enactment of ministerial resolutions to reduce electricity consumption in the public and private sectors. As a result of these actions, a 12% reduction has been achieved to date in electric energy consumption for the public sector, and 8% for the private sector. **Forests:** for the 2016-2019 period, the configuration of 2 184 additional hectares of agricultural and forestry systems has been considered, as well as the generation of legal instruments for the preservation of the forest heritage and the sustainable use of forests. A loss of 453 135 t/year CO_2eq is estimated as baseline for the use of conventional forest techniques. **Others:** Additionally, the implementation of the National Project for the Progressive Elimination of Substances that Deplete the Ozone Layer is planned, which would imply a reduction of 2.5 Mt CO_2eq.	The construction of three million housing units is proposed as accumulated target for 2019, in response to losses and damages from extreme rain events for approximately 150 thousand people affected and a reduction of vulnerability upon climate change effects for more than 12 million people. Currently, there are 7 454 water technical boards throughout the national territory. The effort to be made will be to increase national capacities for hydrometeorological monitoring and weather forecasting. The country will implement a national plan for the removal of dumps and the construction of landfills, will reorganize the National Environmental Authority, will execute the integrated management and order plan of coastal zones, will execute the national risk management plan, will prepare the national information register for the integrated disaster risk management, and will establish vulnerability indexes and create the atlas of exposure to technological and social-natural threats. The country believes that the strengthening of social organization is critical to reduce vulnerability to climate change. Therefore, educational policies will be developed, and community participation and social-environmental training to combat climate change will be promoted.

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