



SAINT LUCIA

INTENDED NATIONALLY DETERMINED CONTRIBUTION UNDER THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)

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NATIONAL CONTEXT

Like all Small Island Developing States (SIDS), Saint Lucia faces an uncertain future as a consequence of both the emerging and anticipated impacts of global climate change on all aspects of its development. These include, but are not limited to, threats to coastal infrastructure and economic assets from sea level rise; the impacts of more intense and possibly more frequent extreme weather events; negative impacts on human and ecosystem health, water, food production and financial services sectors; changes in rainfall distribution and intensity, resulting in both floods and droughts; degradation of coastal resources; and saline intrusion into aquifers. Some of these impacts are already being felt, resulting in high outlays of financial resources for corrective and restorative measures, negative impacts on livelihoods, pressures on public sector finances and loss of life. In addition, Saint Lucia like other SIDS, faces the prospect of irreversible and permanent loss and damage resulting from human-induced climate change, despite best efforts at adaptation and mitigation.

Cognizant of this challenge to its sustainable development, the Government of Saint Lucia has taken decisive measures to address the climate change phenomenon. As a first step, Saint Lucia ratified the United Nations Framework Convention on Climate Change (UNFCCC) in June 1993 and the Kyoto Protocol in August 2003. It has also met its commitments under Article 4 (1) by submitting its Initial National Communication to the Conference of the Parties in 2001 and its Second National Communication (SNC) in 2012. The country is currently preparing its Third National Communication (TNC) for submission in 2016.

Under the Initial National Communication process, vulnerability and adaptation assessments of key economic, social and environmental sectors were conducted and used as the basis for preparing the 2003 National Climate Change Policy and Adaptation Plan. An updated version of this plan was endorsed by the Cabinet of Ministers in 2015. In addition, several sector-focused vulnerability assessments were conducted to inform related adaptation policies and interventions. Government and the local NGO community have also undertaken sector-based and wider public education and awareness programmes to inform various publics of the anticipated and emerging consequences of climate change and to seek to build resilience to these impacts.

Saint Lucia's greenhouse gas emissions are miniscule in global terms, with the country having contributed approximately 0.0015% of global emissions in 2010 at a per capita rate of 3.88 tCO₂-eq. Notwithstanding this low contribution to the climate change phenomenon, the

country is committed to global efforts to reduce greenhouse gas emissions to levels which will restrict global temperature increase to well below 1.5⁰C above preindustrial levels.

To this end, the country developed a Sustainable Energy Plan in 2001 and has committed to providing up to 35% of electricity generation from renewable sources by 2020. The country’s commitment is further reflected in its Energy Policy (2010) and the ongoing review of the Electricity Supply Services Act to help to create an enabling environment to achieve this goal.

Against this background, the Government of Saint Lucia responds to Decisions 1/CP.19 and 1/CP.20 of the Conference of the Parties to the UNFCCC by communicating to the Parties its intended Nationally Determined Contribution to global efforts to reduce greenhouse gas emissions, consistent with Article 2 of the Convention.

MITIGATION

Intended Nationally Determined Contribution

The mitigation targets of this iNDC are set against a Business As Usual (BAU) projection and consider emissions reductions from the Energy Demand, Electricity Generation and Transportation sectors.

Table 1: Nationally Determined Mitigation Targets

Baseline (all sectors)	2010	643 GgCO ₂ .eq	
Unconditional Target	Not stated		
Conditional Target measured against the BAU emissions projections	Year	% change relative to BAU projection	Emissions Reductions
	2025	16% reduction	121 GgCO ₂ .eq
	2030	23% reduction	188 GgCO ₂ .eq

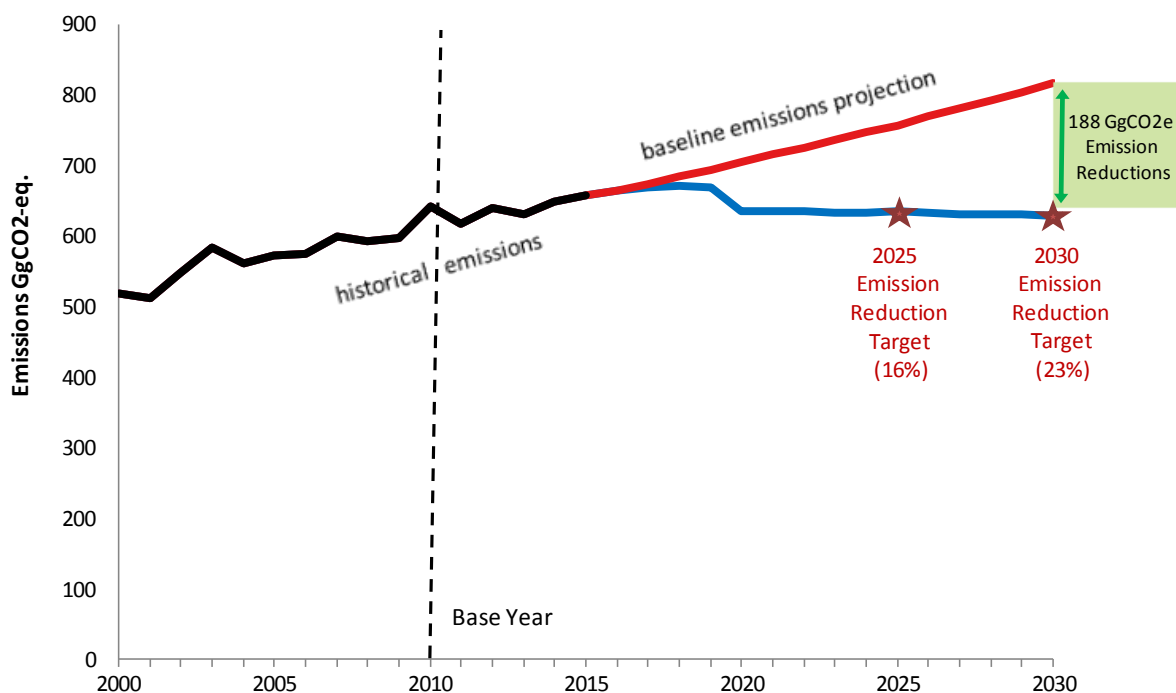


Figure 1: Graphical Representation of Intended Nationally Determined Contribution Methodological Approach

Table 2: Coverage, Scenarios and Methodological Approaches

Types of Targets	Emissions reductions targets are based on projected reductions for 2025 and 2030 calculated from the BAU emissions projections
Coverage	A sector-based approach across the entire economy is used to determine reduction targets for the energy sector.
Gases Covered	<ul style="list-style-type: none"> • Carbon Dioxide (CO₂), Methane (CH₄) and Nitrous Oxide (N₂O)
Sectors Covered	<ul style="list-style-type: none"> • Energy • Electricity Generation • Transport
BAU Scenario	2010: 643 GgCO ₂ .eq 2025: 758 Gg CO ₂ .eq 2030: 816 GgCO ₂ .eq
Mitigation Scenario	GHG mitigation projections to 2030 were estimated with 2010 emissions as the baseline against which growth and the impact of mitigation measures were calculated. The drivers of emissions growth considered were economic growth, changes in population, energy supply and prices, the adoption of new technologies and the impact of government policies and measures.

<p>Methodology for Estimating Emissions</p>	<p>Saint Lucia's GHG inventory produced for the TNC provided historical emissions data between 2000 and 2010 that align with the 1996 Intergovernmental Panel on Climate Change (IPCC) guidelines for conducting emission inventories. Projections to 2030 were developed for each individual source category for CO₂, CH₄ and N₂O. A single baseline was selected in order to have a single starting point for the mitigation options analysis. The sectors covered were: Energy Demand: Electricity Generation; Transport; Industrial Processes; Agriculture; and Waste. Land-Use, Land-Use Change and Forestry (LULUCF) was not included in the baseline projection because of the high degree of uncertainty in developing projections of sources and sinks within this sector. Following a prioritization of all possible mitigation actions, emissions projections were made based on assumed economic growth, changes in population, energy supplies and prices, as well as the adoption of new technologies and the impacts of government policies. Further, it was decided that to balance pursuing an aggressive mitigation target with realistic outcomes for the iNDC, projected emissions reductions from the Energy, Electricity Generation and Transportation sectors only will be considered. Uncertainties over the permanence of projected emissions reductions from the Agro-Forestry, Reforestation and LULUCF sectors, and the absence of decisive international action to phase out HFCs persuaded the exclusion of related projected emissions reductions in this analysis. Further, the small estimated 2030 emissions of 2.1 GgCO₂-eq persuaded the exclusion of the Waste sector from the analysis, as well as that of Industrial Processes, which was eliminated during the prioritization process because of its small size compared to the rest of the economy. Related emissions are captured under the energy sector. It must be noted though, that while LULUCF is not included in terms of specific projected emissions reductions, there is recognition in this report, that Saint Lucia's forestry cover acts as a sink, whose value should not be underestimated. Significant work is currently being conducted to improve forest inventory data, develop policies for forest management and protection and to identify reforestation projects. While estimates of potential greenhouse gas emission reductions have not been included in the iNDC, preliminary information indicates that LULUCF projects could potentially contribute as much as 4% additional emission reductions relative to the BAU by</p>
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	2030. LULUCF sector contributions may be included in future updates to the iNDC if sufficient data become available.
Market Instruments	National level market-based instruments, such as cap-and-trade emission trading schemes and offsetting, are crucial to price carbon emissions and keep the costs of mitigation in Saint Lucia low. These will be pursued to encourage implementation of the proposed mitigation measures drawing on any applicable international arrangements.

Table 3: Information to Facilitate Clarity, Transparency and Understanding.

Parameters	Information
Time frame	2030, with intermediate target in 2025
Type of commitment	Absolute economy-wide emissions reductions using a 2010 baseline and based on specific sector interventions against the BAU scenario
Baseline	758 GgCO ₂ .eq in 2025 and 816 GgCO ₂ .eq in 2030, excluding LULUCF
Proposed Interventions	Energy: <ul style="list-style-type: none"> • Energy Efficient Buildings • Energy Efficient Appliances • Water Distribution and Network Efficiency
	Electricity Generation: <ul style="list-style-type: none"> • 35% Renewable Energy Target by 2025 and 50% by 2030 based on a mix of geothermal, wind and solar energy sources. • Improvements to Grid Distribution and Transmission Efficiency
	Transport: <ul style="list-style-type: none"> • Efficient Vehicles • Improved and Expanded Public Transit
Estimated Impact of Emissions Reductions interventions	<ul style="list-style-type: none"> • Reduction of 121 GgCO₂-eq by 2025 • Reduction of 188 GgCO₂.eq by 2030.
Conditions	While national efforts are underway and will continue to be exerted toward emission reduction, external support is a pre-requisite to achieving the emissions reduction targets set out in this iNDC.
Reviews	Implementation will be reviewed every 5 years

Planning Process

Saint Lucia's iNDC was prepared through a consultative process involving key sector stakeholders who were engaged initially under the TNC process, to provide inputs into the development of the Greenhouse Gas Inventory and Mitigation Assessment chapters and then through a validation exercise, to seek national support for the proposed measures and targets. The effort received considerable technical support and guidance from Stiebert Consulting, Enviro Economics, Climate Analytics and the National Renewable Energy Laboratory (NREL) of the USA.

Fairness and Ambition

Conscious of the existential threat posed by climate change to Saint Lucia and indeed most SIDS, the government is steadfast in its conviction that global mitigation efforts should focus on stabilizing global GHG emissions at levels that will limit increases in global average temperatures to well below 1.5⁰C above preindustrial levels. As a demonstration of this conviction, and notwithstanding its minuscule contribution of about 0.0015% of global emissions (2010 estimate), the Government of Saint Lucia has decided to pursue an aggressive and ambitious plan to reduce its emissions by focusing on the Energy, Electricity Generation and Transportation sectors. Under the mitigation plan, and actions proposed in this iNDC, Saint Lucia expects its per capita emissions (excluding figures for LULUCF) to decrease from 3.88 tCO₂-eq (2010 estimate) to 3.29 tCO₂-eq by 2030, compared to the per capita emissions of 4.25 tCO₂-eq it would have increased to under the BAU scenario. This ambitious target must be considered against the background of the country's small, open economy and limitations in natural, financial, technological and human resources to implement the measures necessary to achieve the intended emissions reductions. It must also be noted that the value of Saint Lucia's forest cover as a carbon sink is recognized, despite the fact that these values are not included in the projections.

Common but Differentiated Responsibilities and National Circumstances

Saint Lucia embraces the principle of common but differentiated responsibilities and national circumstances enshrined in Article 4 of the Convention in its efforts to address climate change mitigation and adaptation.

In this regard, the country accepts the need for it to contribute to the global mitigation efforts but intends to pay greater attention to adaptation efforts, given its unique circumstances as a SIDS in one of the most vulnerable regions of the world. Despite Saint Lucia's minuscule GHG emissions, the country's unique national circumstances, including its importation of its fuel for electricity generation, means that there are co-benefits associated with its mitigation efforts, especially those related to environmental protection, foreign exchange savings and human health benefits, which may be achieved through, *inter alia*, renewable energy and energy efficiency initiatives.

Financial Requirements and Implementation Support

Total cumulative investment costs to achieve the mitigation targets by 2030 are expected to be in the order of US\$ 218 million (at 2015 prices) and government programme costs are estimated to be US\$ 23 million. Total cumulative investment costs to achieve the mitigation targets by 2025 are expected to be in the order of US\$ 183 million (at 2015 prices) and government programme costs are estimated to be US\$ 19 million. Investment costs refer to the total capital finance required to implement the mitigation actions that is incremental to baseline expenditures. This does not include the energy savings associated with implementing measures or changes in operating costs. Programme costs refer to expenditures by the government for supporting the programme and include costs for planning, conducting studies, developing strategies, implementing regulations, enforcement, capacity building and public awareness campaigns. The Government of Saint Lucia, recognising its current national effort toward emission reduction and being fully cognisant of its vulnerability to extreme events and the likelihood of being caught in a cycle of repair and recovery, commits to meeting the mitigation targets contained in this iNDC on condition that it receives financial and technological assistance to do so.

Enabling Environment

The Government of Saint Lucia has created a robust policy and legal framework to support reforms, which will accrue to net greenhouse gas emissions reduction. Where required, a review of relevant policies and legislation will be undertaken in order to ensure that stronger implementation possibilities are explored. Some of these are listed below.

Table 4: Key National Policies, Legislation and Actions that address Climate Change Mitigation¹ and Adaptation

Sector	Key National Policies, Legislation and Actions
Energy Demand / Electricity Generation	<ul style="list-style-type: none"> • Adopted National Energy Policy (2010) • 35% Renewable Energy Target by 2020 • Introduced incentives for renewable energy • Prepared draft of Revised Electricity Supply Act (2015) • Passed National Utility Regulatory Commission Bill (establishes an independent regulatory commission to oversee electricity production) • Draft Revised Building Code (includes energy efficiency measures) • National Energy Efficiency Labelling Standards (Air-Conditioning units, tubular and compact fluorescent lamps) • Developing draft Geothermal Development Bill
Transportation	<ul style="list-style-type: none"> • Introduced a new levy to control importation of used vehicles

¹ Draft Saint Lucia Mitigation Assessment (2015) (Stiebert Consulting, Enviro Economics)

Sector	Key National Policies, Legislation and Actions
	<ul style="list-style-type: none"> • Reduction of excise tax and duty for importers of fuel efficient vehicles and alternative energy vehicles • Escalating taxes on higher engine capacity vehicles • Proposed Transport Policy and Strategy²
Agriculture / Fisheries	<ul style="list-style-type: none"> • National Fisheries Plan 2013
Waste	<ul style="list-style-type: none"> • Secretariat of the National Water & Sewerage Commission to regulate water and wastewater operators activated in 2012 • Pursuing a Waste Management Strategy that includes the conversion of waste to energy
Land-Use, Land-Use Change and Forestry	<ul style="list-style-type: none"> • Conduct of a comprehensive forest inventory in 2009 • Development of natural resource management plan for the north-east part of Saint Lucia³ • Draft National Land Policy 2014
Industrial Processes	<ul style="list-style-type: none"> • Approved hydrochlorofluorocarbon (HCFCs) Phase Out Management Plan • Draft Code of Practice for Refrigeration and Air Conditioning Technicians
General	<ul style="list-style-type: none"> • Establishment of a multi-sectoral National Climate Change Committee • Adoption of a revised National Climate Change Adaptation Policy (2015) • Development of a Strategic Programme for Climate Resilience • Adoption of a National Coastal Zone Management Policy • Adoption of a National Environmental Policy and National Environment Management Strategy (2004; Revised 2014) • Sustainable Energy For All initiative⁴ • Annual observance of Energy Awareness Week. • Development of a Climate Change Public Education and Awareness Strategy Implementation Plan

Sustainable Development Benefits

Achievement of the mitigation targets will translate to significant sustainable development benefit for Saint Lucia. The medium-term vision for Saint Lucia is: *An innovative and*

² This indicates that there will be further potential for emission reduction in the transport sector when implemented

³ UNEP GEF Iyanola – Natural Resource Management of the NE Coast Project (GEF ID 5057)

⁴ Barbados Declaration on Achieving Energy for All in Small Island Developing States, Bridgetown, Barbados, (2012)

*industrious nation, grounded in the principles of patriotism, integrity, and good governance, striving towards sustainable development and equitable development for all.*⁵ The benefits to flow from the mitigation interventions are consistent with this vision and include significant investments and technological advancement, with the accompanying employment generation, significant savings of foreign exchange to pay for fuel, as well as savings in energy costs across all sectors. They will also result in reduced emissions, with accompanying benefits to the local and global environments, and human health.

ADAPTATION

Like all Small Island Developing States, Saint Lucia has a high and increasing vulnerability to climate change, precipitated by increasing global temperatures, sea level rise and extreme weather events. Projected impacts, several of which are already occurring, include infrastructural damage, floods and droughts, reduced agricultural productivity, reduced supply of potable water, erosion, declining marine biodiversity, health impacts and increasing insurance cost, among others. These and other impacts have claimed lives, adversely impacted livelihoods and diverted significant investments away from developmental to restorative and rebuilding investments. The island's vulnerability is accentuated by its small geographic area, high dependence on its natural resources for economic and social development and its location in one of the highest-risk areas of the planet.

Notwithstanding its minimal contribution to the climate change phenomenon, the Government of Saint Lucia accepts the need to contribute to the global mitigation effort but is aware of the need for its emphasis to be placed on adaptation. To this end, Government has recently approved the Saint Lucia Climate Change Adaptation Policy (CCAP) (2015). The CCAP seeks to ensure that Saint Lucia and its people, their livelihoods, social systems and environment are resilient to the risks and impacts of climate change. The CCAP also provides a framework for addressing the impacts of climate change in an integrated manner across all key sectors, based on three interconnected processes, namely:

- **Adaptation Facilitation**; which entails creating the appropriate policy, legislative and institutional environment;
- **Adaptation Financing**; which involves putting in place measures to ensure adequate and predictable financial flows; and
- **Adaptation Implementation**; which entails taking concrete actions to prepare for, or respond to, the impacts of climate change.

Implementation of the CCAP will encompass activities geared towards building the resilience of households, communities, vulnerable groups, enterprises, sectors and ultimately the nation. Implementation measures are being identified at the national and community levels, with regional and international support and backstopping provided through agreed modalities. Effort is being directed to achieving the following objectives by 2022:

- a) Priority adaptation measures to the adverse effects of climate change developed and implemented at all levels;

⁵ Saint Lucia Medium Term Development Strategic Plan 2011

- b) Identification of vulnerable priority areas and sectors and appropriate adaptation measures using available and appropriate information, recognizing that such information may be incomplete;
- c) Adaptation measures in vulnerable priority areas supported by existing data sets and traditional knowledge, or new data developed as necessary; and
- d) Appropriate adaptation measures integrated into national and sectorial development strategies and linked as far as national circumstances will allow to the national budgeting process.

During the development of the CCAP, a Strategic Programme for Climate Resilience (SPCR) also emerged and this has highlighted some key priority areas in need of urgent action, to complement ongoing efforts. These include, but are not limited to:

Adaptation Facilitation

- 1. National Level Policy, Legislative and Institutional Framework
- 2. Public Education and Outreach
- 3. Research and Systematic Observation and Data and Information Acquisition and Knowledge Management
- 4. Human Resource Capacity Building
- 5. Technology Transfer

Adaptation Implementation

- 1. Climate Resilience Measures in Critical Buildings
- 2. Coastal Zone Management for Climate Resilience
- 3. Community and National Level Interventions in Water Resource Conservation and Management
- 4. Food Security
- 5. Sustainable Land Management/Slope Stabilisation
- 6. Human Health

Adaptation Financing

A range of modalities for making adequate financing available and accessible to address climate change in the public sector, private sector and civil society as a whole.

Even as steps are being taken to pursue the objectives of the CCAP, it is intended that Saint Lucia's Third National Communication, which is currently under preparation, will draw upon the growing international understanding of the vulnerabilities of SIDS to the impacts of global climate change, as well as the expanding national policy framework and local understanding and experiences, to develop an adaptation strategy in keeping with emerging circumstances.

Notwithstanding, the following are among the many critical adaptation interventions identified in the Second National Communication:

Building Codes	Natural Defences (mangroves, wetlands etc.)
Comprehensive Land Use Plan	Early Warning Systems
Rainwater Harvesting	Irrigation Systems
Drainage Infrastructure	Research and Systematic Observation

Financing will be a critical constraint to Saint Lucia's ability to adapt to the impacts of climate change, with international funding through the UNFCCC architecture being critical. The Government of Saint Lucia will further pursue a mix of adaptation financing options and sources including, but not limited to, economic and fiscal incentives; private sector financing; support from regional agencies and programmes and bilateral processes; and in limited cases, highly concessional financing for the private sector, civil society and the general public.

CONCLUSION

In submitting this iNDC, Saint Lucia, as a small emitter of greenhouse gases, calls on all Parties to make their submissions, to ensure that their iNDCs are in keeping with their contributions to global emissions and to their respective responsibilities under the Convention and to take actions that will result in the restriction of global temperature increase to well below 1.5⁰C above preindustrial levels.