

# ***SAINT LUCIA***

## **NATIONAL ENERGY POLICY**

**From 2023 to 2030**



## **ACTION PLAN**

**October 2023**

**Government of Saint Lucia**



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# ACRONYMS AND ABBREVIATIONS

<b>AGC</b>	Attorney General's Chambers	<b>MIPTPDUR-ED</b>	Energy Division of the Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal
<b>AGIT</b>	Alliance for Green Innovation and Technology	<b>MIPTPDUR-PUD</b>	Public Utilities Division of the Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal
<b>APE</b>	Association of Professional Engineers	<b>MIPTPDUR-PPS</b>	Physical Planning Section of the Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal
<b>BASL</b>	Bankers Association of Saint Lucia	<b>MIPTPDUR-TD</b>	Transport Division of the Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal
<b>BELFUND</b>	James Belgrave Micro Enterprise Development Fund	<b>MoA</b>	Ministry of Agriculture
<b>CAB</b>	Caribbean Association of Banks	<b>MoC</b>	Ministry of Commerce
<b>CARICOM</b>	Caribbean Community	<b>MoED</b>	Ministry of Economic Development
<b>CAWASA</b>	Caribbean Water and Sewerage Association Inc .	<b>MoT</b>	Ministry of Tourism
<b>CED</b>	Customs and Excise Department	<b>MPSHALGA</b>	Ministry of the Public Service, Home Affairs, Labour and Gender Affairs
<b>CoM</b>	Cabinet of Ministers	<b>MSTE</b>	Ministry of Social Transformation and Equity
<b>DoED</b>	Department of Economic Development	<b>NADS</b>	National Association of Driving Schools
<b>DoS</b>	Department of Statistics	<b>NCA</b>	National Consumers Association
<b>DPD</b>	Department of Physical Development	<b>NCOPT</b>	National Council on Public Transportation
<b>ECS</b>	Eastern Caribbean Dolllar	<b>NDC</b>	National Determined Contribution
<b>EdD</b>	Education Division	<b>NDCPP</b>	Partnership Plan for Nationally Determined Contributions
<b>ElecD</b>	Electrial Division	<b>NDD</b>	National Development Division
<b>EPD</b>	Economic Planning Division	<b>NEMO</b>	National Emergency Management Office
<b>ESCO</b>	Energy Service Company	<b>NETS</b>	National Energy Transition Strategy
<b>EV</b>	Electric Vehicle	<b>NSDC</b>	National Skill Development Centre
<b>GAD</b>	Gender Affairs Division	<b>NSO</b>	National Statistics Office
<b>ISL</b>	Invest Saint Lucia	<b>NURC</b>	National Utilities Regulatory Commission
<b>LEED</b>	Leadership in Energy & Environmental Design	<b>PPS</b>	Physical Planning Section
<b>LUCELEC</b>	Saint Lucia Electricity, Limited	<b>PUD</b>	Public Utilities Division
<b>MED</b>	Ministry of Economic Development	<b>RE</b>	Renewable Energy
<b>MESDISTVT</b>	Ministry of Education, Sustainable Development, Innovation, Science Technology and Vocational Training	<b>SALCC</b>	Sir Arthur Lewis Community College
<b>MESDISTVT-ED</b>	Education Division of the Ministry of Education, Sustainable Development, Innovation, Science Technology and Vocational Training	<b>SDD</b>	Sustainable Development Division
<b>MESDISTVT-SDD</b>	Sustainable Development Division of the Ministry of Education, Sustainable Development, Innovation, Science Technology and Vocational Training	<b>SLASPA</b>	Saint Lucia Air and Sea Ports Authority
<b>MESDISTVT-TVET</b>	Vocational Unit of the Ministry of Education, Sustainable Development, Innovation, Science, Technology and Vocational Training	<b>SLBS</b>	Saint Lucia Bureau of Standards
<b>MFEDYE</b>	Ministry of Finance Economic Development and Youth Economy	<b>SLCC</b>	Saint Lucia Chamber of Commerce
<b>MFEDYE-CE</b>	Customs and Excise Department of the Ministry of Finance Economic Development and Youth Economy	<b>SLHTA</b>	Saint Lucia Hospitality and Tourism Association
<b>MIPTPDUR</b>	Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal	<b>SLMA</b>	Saint Lucia Manufacturers Association

# EXECUTIVE SUMMARY

## Contents of the Action Plan

The Action Plan, designed to keep Saint Lucia's National Energy Policy (NEP) on track for achieving the country's vision of the energy sector in 2030, consists of three sections. Section 1 describes the governance framework, timed actions, and institutional responsibilities supporting the NEP's goals. Section 2 presents the framework for monitoring and evaluation. Section 3 discusses the risk analysis and designates institutions responsible for risk management.

## Governance for NEP Implementation

The Energy Division of the Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal (MIPTPDUR) will have overall responsibility for implementing the Action Plan. A Monitoring and Reporting Group will be created to coordinate the actions of the various stakeholders and report on progress. This group will prepare an annual progress report, a mid-period report in 2026, and a final report in 2030.

## Overview of Goals, Objectives and Actions

Table 1 presents the NEP's seven goals, and 30 supporting objectives. It also shows the allocation, by objective, of the 145 actions described in Section 1.

Goal 1 looks at the overall development of renewable energy (RE) resources to replace fossil fuels, aiming for a target of 50 percent penetration of renewable energy by 2030. This goal supports five objectives and 33 related actions to secure a reliable, affordable, greener, and transparent energy sector.

Goal 3 has the largest number of objectives (10) and actions (49). It focuses on making reduction in energy intensity a key driver of the energy sector's decarbonisation. In support of this goal, Objective 7 has the highest number of actions (10) and directs its attention to reducing fuel consumption of internal combustion engine (ICE) vehicles.

The other five goals each have between two and four objectives and five to twenty actions. They focus on decarbonisation of thermal applications (15 actions) and the transport sector (20 actions); the reliability, affordability, storage, and safety of petroleum supplies (8 actions); the adequacy of human, technical and institutional capacities to manage the transition to a decarbonised energy sector (15 actions); and access to financing for energy efficiency improvements and RE expansion (5 actions).

Among the key organizations to implement the Action Plan, in addition to MIPTPDUR are: Ministry of Education, Sustainable Development, Innovation, Science Technology and Vocational Training (MESDISTVT); Cabinet of Ministers (CoM); Ministry of Commerce (MoC); Saint Lucia Bureau of Standards (SLBS); Ministry of Tourism (MoT); National Utilities Regulatory Commission (NURC); Water Resource Management Agency (WRMA); Saint Lucia Electricity Limited (LUCELEC); Alliance for Green Innovation and Technology National Consumers Association; and the James Belgrave Micro Enterprise Development Fund (BELFUND).

► **TABLE 1: OVERVIEW OF THE ACTION PLAN FOR SAINT LUCIA'S NATIONAL ENERGY POLICY (2023–30)**

<b>GOALS AND OBJECTIVES</b>		<b>NO. OF ACTIONS</b>
<b>GOAL 1</b>	<b>Ensure a secure, reliable, affordable, transparent, greener, and resilient energy sector</b>	<b>33</b>
Objective 1	Meet the target of 50% penetration of renewable energy in the electricity mix by 2030.	12
Objective 2	Establish a consistent and stable legal framework that enhances predictability in the energy sector and fosters investments in renewable energy.	6
Objective 3	Ensure a stable, predictable and consistent institutional framework.	3
Objective 4	Reduce the environmental impact of electricity production and distribution.	8
Objective 5	Integrate resilience considerations into energy planning.	4
<b>GOAL 2</b>	<b>Decarbonise thermal applications</b>	<b>15</b>
Objective 1	Promote installation of solar water heaters.	5
Objective 2	Promote the use of innovative thermal applications in residential and commercial sectors.	3
Objective 3	Promote the use of efficient cooking technologies.	5
Objective 4	Promote the use of innovative thermal applications in the industrial and tourism sectors.	2
<b>GOAL 3</b>	<b>Make reduction in energy intensity a key driver of decarbonisation</b>	<b>49</b>
Objective 1	Define and approve energy-efficiency targets.	2
Objective 2	Demonstrate government leadership in energy-efficiency measures.	4
Objective 3	Ensure that appliances are as energy-efficient as possible.	6
Objective 4	Reduce or eliminate soft barriers to the uptake of energy conservation and efficiency projects.	8
Objective 5	Promote the use of energy efficient-technologies in water production.	3
Objective 6	Ensure that energy efficiency is incentivised through the correct tariff mechanism.	2
Objective 7	Reduce the fuel consumption of vehicles with internal combustion engines.	10

Objective 8	Retrofit existing buildings for energy-efficiency enhancement.	6
Objective 9	Apply energy-efficiency measures in new buildings.	4
Objective 10	Develop a suitable, effective regulatory and institutional framework to ensure timely, systematic implementation of energy-efficiency measures.	4
<b>GOAL 4</b>	<b>Decarbonise the transport sector</b>	<b>20</b>
Objective 1	Promote the use of alternative fuels where feasible.	2
Objective 2	Minimise the time use of vehicles.	8
Objective 3	Encourage the adoption of a greater percentage of electric vehicles and hybrids in the national vehicle fleet and establish a framework for the development of sustainable road transport.	10
<b>GOAL 5</b>	<b>Ensure a safe, reliable, and affordable supply of petroleum products along with their efficient, environmentally safe storage, handling, and use during the transition phase</b>	<b>8</b>
Objective 1	Foster a resilient and transparent supply of oil products.	2
Objective 2	Ensure that oil supply meets the required environmental criteria.	6
<b>GOAL 6</b>	<b>Ensure that human, technical and institutional capacities are aligned with the needs of the energy sector and objectives of the national energy policy, by the integration of social and gender aspects in the development of the sector</b>	<b>15</b>
Objective 1	Improve education on sustainable energy issues.	5
Objective 2	Ensure that the institutions required to implement the training programmes in the Action Plan have sufficient and adequately trained staff.	2
Objective 3	Ensure adequate education on the content of the national energy policy so that it is widely known and accepted by society.	4
Objective 4	Promote a gender balance in the energy sector.	4
<b>GOAL 7</b>	<b>Facilitate access to financing for renewable energy and energy-efficiency measures</b>	<b>5</b>
Objective 1	Facilitate local financing and enfranchisement for green-energy projects.	3
Objective 2	Facilitate access to innovative ways of financing green-energy projects.	2

## Risk Analysis and Management

Table 2 summarizes the key findings of the risk assessment for the NEP's implementation. This assessment has taken account of the potential severity of a risk's negative impact and the likelihood that it could materialize. It has identified nine risk categories, defined as minor, medium, significant or critical. In all, 29 risks have been identified across the nine categories. About 59 percent of these risks are considered critical or significant. The remaining 41 percent are rated minor or medium. Of greatest concern are the four risks identified as critical.

Two of these critical risks fall within the category of inadequacy of infrastructure. One concerns the possible inability of the electricity grid to integrate distributed renewable energy resources (DER), a key feature of the NEP.

The critical rating is drawn from an assessment of the probability as *high* and the severity of impact as *critical*. The related mitigation measure is to implement a tariff review program to ensure that tariffs are cost-reflective and that they encourage infrastructure development.

A second critical risk in the infrastructure category is lack of sufficient staff at the Saint Lucia Bureau of Standards (SLBS) to implement a program of creating energy-efficiency standards for products. The probability is rated *medium* but the potential impact is rated *critical*. The proposed mitigation measure is a review of staffing needs and the provision of adequate resources to implement the energy-efficiency program, a high priority of the NEP.

► **TABLE 2: SUMMARY RISK ANALYSIS OF THE NEP**

RISK CATEGORY	NUMBER OF RISKS BY RISK LEVEL			
	MINOR	MEDIUM	SIGNIFICANT	CRITICAL
Communications and Awareness	3	1	1	0
Implementation Costs	0	0	4	0
Inadequate Infrastructure	0	1	0	2
Increased Cost of Living	1	0	1	0
Increased Public Financing	0	1	0	0
Limited Knowledge of RE Technologies	0	0	1	0
Limited Support from Other Sectors/Actors	0	0	2	1
Loss of Revenues	0	1	1	1
Difficulties in Policy and Regulation	2	2	3	0
<b>TOTAL</b>	<b>6</b>	<b>6</b>	<b>13</b>	<b>4</b>

### DESCRIPTION OF RISK LEVELS

**MINOR:** Risks with low probability of taking place and low-to-medium impact to the successful implementation of the plan.

**MEDIUM:** Risks with medium probability and impact.

**SIGNIFICANT:** Risks with a high likelihood of happening but a low-to-medium impact to the development of the plan, or risks with a severe impact to the plan, but a low-to-medium probability of occurrence.

**CRITICAL:** Risks that have a high probability of occurrence and may have a severe impact on planned implementation.

Source: Presentation by World Bank Staff based on findings in Mercados-Aries International.

**SAINT LUCIA**  
**NATIONAL**  
**ENERGY POLICY**  
**(2023–30)**



**ACTION PLAN**

**Governance,  
Timed Actions,  
and Institutional  
Responsibilities**

# GOVERNANCE

The transformation to a decarbonised energy sector requires strong government leadership to develop the required legal and regulatory framework, educate the public on the benefits of the transformation, and provide incentives for the private sector to develop opportunities for RE generation. In its leading role for the Action Plan's implementation, the ministry with responsibility for energy and public utilities will need to coordinate a variety of stakeholders, including other government agencies, the private sector, and academia.

To keep the transition on track for attaining the seven goals of the NEP, a Monitoring and Reporting Group will be created for monitoring the NEP's progress in line with planned outputs and indicators. This working group will be led by the ministry responsible for energy and public utilities and will include representatives from all entities engaged in the Action Plan's implementation. The group will meet on a quarterly basis to allow for timely identification of barriers and risks, for progress evaluation, and adoption of mitigating measures for potential risks.

In addition to MIPTPDUR, other key governmental institutions and non-governmental entities, will play a key role in the Action Plan's implementation. These include: Ministry of Education, Sustainable Development, Innovation, Science Technology and Vocational Training (MESDISTVT); Cabinet of Ministers (CoM); Ministry of Commerce (MoC); Saint Lucia Bureau of Standards (SLBS); Ministry of Tourism (MOT); National Utilities Regulatory Commission (NURC); Water Resource Management Agency (WRMA); Saint Lucia Electricity Limited (LUCELEC); Alliance for Green Innovation and Technology National Consumers Association; and the James Belgrave Micro Enterprise Development Fund (BELFUND). This group will abide by an operating manual defining governance and procedures.

This *first section* of the Action Plan consists of tables that detail institutional responsibilities and timing for planned actions, organized by related goals and supporting specific objectives for 2023-2030. Most actions should be in place by 2025-2026: (i) development of the legal and regulatory framework for RE expansion; (ii) standards for energy efficiency; (iii) incentives for private-sector development in the RE market; and (iv) targets for reduced GHG emissions.

*Section 2* presents the monitoring and evaluation framework with outputs and performance indicators, which the Monitoring and Reporting Group will use to assess the Action Plan's progress. This group will issue annual reports, a midterm report in 2026 and a final report in 2030.

*Section 3* presents the results of a preliminary risk analysis, recommending mitigation measures and designating the institutions responsible for risk management and mitigation throughout implementation.

# TIMED ACTIONS AND RESPONSIBILITIES

## GOAL 1 Ensure a secure, reliable, affordable, transparent, greener, and resilient energy sector

### Objective 1: Meet the Target of 50% Penetration of Renewable Energy in the Electricity Mix by 2030

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Implement net billing and appropriate tariff mechanisms to enable integration of renewable energy (RE) in the power system.	2023	NURC (lead) LUCELEC
<b>ACTION 2</b>	Update the National Energy Transition Strategy (NETS) to be consistent with NEP goals.	2024	MIPTPDUR-ED (lead) LUCELEC, NURC
<b>ACTION 3</b>	Develop an Integrated Resource and Resilience Plan (IRRP) from the existing Integrated Resource Plan (IRP) from 2016.	2024	MIPTPDUR-ED (lead) LUCELEC, NURC
<b>ACTION 4</b>	Conduct a pre-feasibility study for offshore wind or tidal energy systems, considering Category 5 hurricane resistance, to assess financial, economic and technical viability, as well as resilience requirements.	2026	MIPTPDUR-ED (lead)
<b>ACTION 5</b>	Review and adjust the draft Grid Code to ensure consistency and readiness to implement the NEP, seek necessary approvals, initiate approved Grid Code implementation.	2023	NURC (lead)
<b>ACTION 6</b>	Following the results of the updated IRRP (Action 3 above), continue geothermal exploration and if feasible, incorporate geothermal resources into the energy mix.	2023–25	MIPTPDUR-ED (lead)
<b>ACTION 7</b>	Develop and implement a public awareness campaign and dissemination plan for the energy-sector.	2023–30	MIPTPDUR-ED (lead)
<b>ACTION 8</b>	Assess the human, institutional, and technical capacity gaps in the energy sector.	2024	MIPTPDUR-ED (lead) MESDISTVT-ED, SALCC
<b>ACTION 9</b>	Offer additional tax incentives to motivate investment in sustainable energy technologies (e.g., VAT exemption).	From 2023 onward	MFEDYE (lead) MIPTPDUR-ED
<b>ACTION 10</b>	Promote the use of renewable energy (RE) technologies for water delivery and treatment.	From 2024 onward	MIPTPDUR-ED (lead) CAWASA, WASCO, WRMA
<b>ACTION 11</b>	Develop a central energy-sector database.	From 2024 onward	MIPTPDUR-ED (lead) DoS, LUCELEC, MESDISTVT
<b>ACTION 12</b>	Mandate specific levels of local participation in new RE investments.	By 2024/2025	MFEDYE (lead) CoM, DoED, ISL, NURC

continued

Goal 1: Ensure a secure, reliable, affordable, transparent, greener, and resilient energy sector

**Objective 2: Establish a Consistent and Stable Legal Framework that Enhances Predictability in the Energy Sector and Fosters Investments in Renewable Energy**

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Enact legislation for the electricity sector to establish rules governing sector organisation, market entry, and rights and obligations of all stakeholders.	2023	MIPTPDUR-ED (lead) AGC, Parliament
<b>ACTION 2</b>	Pass legislation for the creation of a legal framework for the exploration and development of geothermal resources.	By 2025	MIPTPDUR-ED (lead) Sustainable Development Piton Management Area (PMA), AGC, Parliament
<b>ACTION 3</b>	Establish a transparent and competitive procurement process for utility-scale, new RE generation projects.	2023	NURC (lead)
<b>ACTION 4</b>	Approve clear rules on monitoring and implementation of electricity-sector planning to safeguard sector policies and government commitments.	2023	NURC (lead) LUCELEC, MIPTPDUR-ED
<b>ACTION 5</b>	Approve other regulations and performance standards needed to implement the Electricity Act.	2023–26	MIPTPDUR-ED (lead) AGC, Parliament
<b>ACTION 6</b>	Ensure, in coordination with the corresponding authorities, adoption of other sectoral legislation applicable to RE projects, such as environmental regulations.	From 2023 onward	MESDISTVT-SDD (lead) MIPTPDUR-ED, AGC, Parliament

**Objective 3: Ensure a Stable, Predictable, and Consistent Institutional Framework**

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Grant legal authority to the Energy Division of MIPTPDUR to adopt and implement a comprehensive policy and plan for the entire energy sector, including oil, ensuring that it has the appropriate human resources to perform this function.	2023–24	MIPTPDUR-ED (lead) AGC, MoPS, Cabinet headed by the Prime Minister, Parliament

*continued*

Goal 1: Ensure a secure, reliable, affordable, transparent, greener, and resilient energy sector

Objective 3: Meet the target of 50% penetration of renewable energy in the electricity mix by 2030

<b>ACTION 2</b>	Review and clarify the allocation of functions for oversight of the oil sector, between the Ministry of Finance and the Energy Division of MIPTPDUR.	By 2025	MIPTPDUR-ED (lead) AGC, Caabinet headed by the Prime Minister, MFEDYE, Parliament
<b>ACTION 3</b>	Revise and amend, as necessary, the Cabinet Decision granting functions to the Energy Division of MIPTPDUR, to prevent overlapping with regulatory functions of the NURC.	2023	MIPTPDUR-ED (lead) Cabinet headed by the Prime Minister

#### Objective 4: Reduce the Environmental Impact of Electricity Production and Distribution

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Set targets and monitor SO <sub>x</sub> , NO <sub>x</sub> , and related pollutants.	Set targets by 2025. Monitor pollutants annually thereafter	MESDISTVT-SDD (lead)
<b>ACTION 2</b>	Establish a clear system for end-of-life disposal of renewable energy equipment and associated technologies, such as batteries.	By 2025	SWMA (lead) MIPTPDUR-ED, MESDISTVT-SDD, MIPTPDUR-TD
<b>ACTION 3</b>	Develop and approve environmental standards for the decommissioning of generation units using thermal and renewable energy.	2024	SWMA (lead) MESDISTV-SDD, SLBS
<b>ACTION 4</b>	Establish information systems and infrastructure that promote knowledge-sharing on environmental standards, best practices, and legislation.	By 2025	SLBS (lead) MESDISTV-SDD
<b>ACTION 5</b>	Ensure an evaluation of environmental issues in the energy sector is integral to energy planning.	From 2023 onward	MIPTPDUR-ED (lead) MESDISTVT-SDD
<b>ACTION 6</b>	Update studies on waste streams and evaluate the potential of waste-to-energy (WTE) technologies for power generation.	2024	SWMA (lead) MESDISTVT, MIPTPDUR-ED, WASCO

*continued*

Goal 1: Ensure a secure, reliable, affordable, transparent, greener, and resilient energy sector

Objective 4: Meet the target of 50% penetration of renewable energy in the electricity mix by 2030

<b>ACTION 7</b>	If WTE technologies are feasible (See Action 6 above), develop regulations for environmentally-friendly electricity generation from waste.	By 2025	SWMA (lead) NURC, WASCO
<b>ACTION 8</b>	Enact legislation to ensure the development of power plants based on RE, in line with environmental and social standards.	2025	MIPTPDUR-ED (lead) Attorney General's Chambers, NURC, LUCELEC

### Objective 5: Integrate Resilience Considerations Into Energy Planning

	ACTIONS	TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Increase system resilience by promoting self-generation of renewable energy in combination with combined heat and power generation (co-generation) in tourism and industrial sectors of the economy.	From 2023	MIPTPDUR-ED (lead) SLCC, SLHTA, SLMA
<b>ACTION 2</b>	Conduct technical studies to determine the need and indicative location of grid-tied, energy-storage systems, and micro-grids, taking account of resilience considerations, and implement enabling regulation.	By 2024	LUCELEC (lead) MIPTPDUR-ED, NURC
<b>ACTION 3</b>	Mandate a triennial study to enhance technical resilience of the energy system (generation, storage, transmission and distribution) for system planning and operation.	From 2023	LUCELEC (lead) MIPTPDUR-ED
<b>ACTION 4</b>	Assess the need for cybersecurity analysis and legislation geared at protecting the national grid from cyber attacks.	From 2024	LUCELEC (lead) Ministry of Home Affairs, MIPTPDUR-ED, Parliament

## GOAL 2 Decarbonise thermal applications

### Objective 1: Promote Installation of Solar Water Heaters

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Analyse if further incentives are needed to bolster the deployment of solar water heaters (SWH).	By 2025	MFEDYE (lead) MIPTPDUR-ED
<b>ACTION 2</b>	Collaborate with international and regional stakeholders to set appropriate standards for SWH.	2023–24	SLBS (lead)
<b>ACTION 3</b>	Conduct training programs to build local capacity for SWH manufacture, installation, and maintenance.	2023–25	NSDC, MESDISTVT-TVET, SALCC, Solar installers
<b>ACTION 4</b>	Enhance public awareness campaigns about the benefits of SWH.	2023–25	MIPTPDUR-ED (lead) MESDISTVT-ED, NSDC
<b>ACTION 5</b>	Set targets for installation of SWH equipment in government buildings, hospitals, schools, and community centres.	By 2023	MIPTPDUR-ED (lead)

### Objective 2: Promote the Use of Innovative Thermal Applications in the Residential and Commercial Sectors

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Demonstrate and promote significant use of thermal applications beyond domestic SWH (solar cooling, geothermal hot-water systems, solar dryers for agriculture, etc.).	2023–26	MIPTPDUR-ED (lead) ESCOs, MESDISTVT-ED, MoA, Private-sector installers of solar energy equipment
<b>ACTION 2</b>	Provide incentives and financial assistance to facilitate adoption of technologies noted in Action 1.	2023–30	MFEDYE (lead)
<b>ACTION 3</b>	Collaborate with international and regional stakeholders to implement appropriate standards for thermal applications noted in Action 1.	2023–24	SLBS (lead)

*continued*

## Goal 2: Decarbonise thermal applications

### Objective 3: Promote the Use of Efficient Cooking Technologies

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Facilitate financial assistance to increase the uptake of modern, efficient electric cooking appliances.	2023–30	MFEDYE (lead) Financial Institutions
<b>ACTION 2</b>	Set optimum efficiency and environmental standards for electric cooking appliances.	2023–24	SLBS (lead) MIPTPDUR-ED
<b>ACTION 3</b>	Develop public awareness campaigns on the benefits of using electricity for cooking (lower GHG emissions, cleaner homes, etc.).	2023–25	MIPTPDUR-ED (lead) MESDISTVT-EdD, NSDD
<b>ACTION 4</b>	Revise the structure of taxes and subsidies to encourage use of energy-efficient cooking appliances.	2023–24	MFEDYE (lead) NURC
<b>ACTION 5</b>	Assess potential for the use of biogas technology or other sources of renewable energy for cooking.	2023–24	MESDISTVT-SDD (lead) MoA, AGIT

### Objective 4: Promote the Use of Innovative Thermal Applications in the Industrial and Tourism Sectors

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Develop a full-fledged analysis of potential electrification of existing thermal applications in industries and hotels.	2023–26	MIPTPDUR-ED (lead)
<b>ACTION 2</b>	Conduct a pre-feasibility analysis on technical requirements, costs, and energy savings to be gained from the adoption of solar-thermal technology.	2023–26	MIPTPDUR-ED (lead) SLMA

## GOAL 3 Make reduction in energy intensity a key driver of decarbonisation

### Objective 1: Define and Approve Energy Efficiency Targets

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Develop economic and technical studies to define a credible energy efficiency (EE) target, based on draft EE legislation.	2023–25	MIPTPDUR-ED (lead) MESDISTVT-SDD, SLBS
<b>ACTION 2</b>	Set a target for energy-intensity reduction by relevant sectors for 2030, based on the 2010 baseline for intensity.	By 2025	MIPTPDUR-ED (lead)

### Objective 2: Demonstrate Government Leadership in Energy Efficiency Measures

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Align energy conservation and efficiency initiatives with Government procurement guidelines and practices.	2023–35	MIPTPDUR-ED (lead) MESDISTVT-SDD
<b>ACTION 2</b>	Implement measures to reduce energy consumption in government and public facilities by 20% over the next 10 years, based on the 2010 baseline.	2023–30	MIPTPDUR-ED (lead) Government institutions, MESDISTVT
<b>ACTION 3</b>	Implement a monitoring programme and a monitoring-reporting-validation scheme for energy consumption at government facilities.	2023–25	MIPTPDUR-ED (lead)
<b>ACTION 4</b>	Complete implementation of the Street Lighting LED Retrofit Project.	2023–25	MIPTPDUR-ED (lead) MOED

*continued*

### Goal 3: Make reduction in energy intensity a key driver of decarbonisation

#### Objective 3: Ensure that Appliances are as Efficient as Possible

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Encourage mandatory labelling of all energy-using equipment.	By 2025	SLBS (lead) MIPTPDUR-ED
<b>ACTION 2</b>	Implement a campaign with local retailers to inform customers on energy-efficient appliances and energy labels.	By 2025	MoC (lead) AGIT, MIPTPDUR-ED, NCA, SLBS, SLCC
<b>ACTION 3</b>	Introduce mandatory minimum standards of energy efficiency for electrical equipment, including air-conditioning units, refrigerators, indoor and outdoor lighting fixtures, water-heating devices and televisions.	By 2025	SLBS (lead) MIPTPDUR-ED
<b>ACTION 4</b>	Ban import and trade of electrical devices or appliances that do not fulfil mandatory minimum efficiency performance standards (established under Action 3 above).	By 2025	MESDISTVT-SDD (lead) CED, MFEDYE, SLBS
<b>ACTION 5</b>	Ban the import of incandescent light bulbs.	By 2025	MESDISTVT-SDD (lead) CED, MFEDYE, SLBS
<b>ACTION 6</b>	Define a monitoring, reporting and verification mechanism to monitor compliance.	By 2025	SLBS (lead)

continued

### Goal 3: Make reduction in energy intensity a key driver of decarbonisation

#### Objective 4: Reduce or Eliminate soft Barriers to the Uptake of Energy Conservation and Efficiency Projects

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Introduce demand-side management programme, incorporating international best practices and findings from market surveys.	2023–25	NURC (lead) LUCELEC, MIPTPDUR-ED, SLBS
<b>ACTION 2</b>	Develop educational programs and market-based mechanisms, such as rebates, to enhance consumer awareness of the benefits of improved energy efficiency.	2023–25	MIPTPDUR-ED (lead)
<b>ACTION 3</b>	Develop training programs for public awareness and education on the importance of improving energy efficiency.	2023–25	MESDISTVT-ED (co-lead) MIPTPDUR-ED (co-lead)
<b>ACTION 4</b>	Identify energy-efficiency skill requirements across different sectors of the economy.	2023–25	MESDISTVT-ED and TVU-TVET (lead) MIPTPDUR-ED, EDSALC
<b>ACTION 5</b>	Establish cooperative programmes among government agencies, private-sector entities, and academic institutions to develop energy-efficient technologies.	2023–25	MIPTPDUR-ED (lead) AGI, MESDISTVT-SDD, MESDISTVT-SDD-EdU, SALCC, SLBS
<b>ACTION 6</b>	Establish mechanisms for annual reporting on improvements to energy efficiency based on actual energy use and in relation to annual national benchmarks for energy use.	2023–25	MIPTPDUR-ED (lead) NSO
<b>ACTION 7</b>	Provide and promote information on energy-efficient housing options.	2023–25	MIPTPDUR-DPD (lead)
<b>ACTION 8</b>	Support and assist the establishment of Energy Service Companies (ESCOs <sup>1</sup> ).	2023–25	MoC (lead) BELFUND

<sup>1</sup> ESCO: Energy Service Companies, which offer their customers a variety of solutions for saving energy. ESCO services include energy auditing, redesign and retrofitting, as well as new investments that aim to improve energy efficiency. These companies are remunerated from the energy savings achieved.

*continued*

### Goal 3: Make reduction in energy intensity a key driver of decarbonisation

#### Objective 5: Promote the Use of Energy Efficient Technologies in Water Production

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Assess current energy efficiency in water production and distribution and recommend improvements as required.	2023–24	WASCO (lead) WRMA, MIPTPDUR-ED, NURC
<b>ACTION 2</b>	Develop a roadmap to implement the any improvements recommended as a result of Action 1.	2024–25	WASCO (lead) MIPTPDUR-ED
<b>ACTION 3</b>	Implement the recommendations from the energy audit of WASCO.	2023–25	WASCO (lead) MIPTPDUR-ED

#### Objective 6: Ensure that Energy Efficiency is Incentivised Through the Correct Tariff Mechanism

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Evaluate tariff studies on various incentives for customers to improve energy efficiency while maintaining financial viability of the utility.	2023–24	NURC (lead) LUCELEC, MIPTPDUR-PUD
<b>ACTION 2</b>	Implement an electricity-tariff reform that integrates the results of Action 1.	2024–25	NURC (lead) LUCELEC, MIPTPDUR-PUD

continued

### Goal 3: Make reduction in energy intensity a key driver of decarbonisation

#### Objective 7: Reduce the Fuel Consumption of Vehicles with Internal Combustion Engines

	ACTIONS	TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Set allowed emission standards/targets for vehicles with internal combustion engines (ICEs) and encourage the use of low-emission vehicles.	By 2025	MIPTPDUR-TD (lead) MIPTPDUR-ED, SLBS
<b>ACTION 2</b>	Introduce a mandatory emissions labelling mechanism for ICE vehicles with tax/duty repercussions.	By 2025	SLBD (lead) MESDISTVT-SDD, MFEDYE, MIPTPDUR-TD
<b>ACTION 3</b>	Discourage the import of ICE vehicles below the minimum standards set under Action 1.	By 2025	SLBS (lead) MIPTPDUR-ED, MIPTPDUR-TD
<b>ACTION 4</b>	Establish a system of penalties for owners of existing ICE vehicles that do not meet emissions standards.	By 2025	SLBS (lead) MFEDYE-CE, MIPTPDUR-TD
<b>ACTION 5</b>	Impose penalties on importers and dealers involved in the sale of ICE vehicles that do not meet efficiency standards.	By 2025	SLBD (lead) MFEDYE-CE, MIPTPDUR-TD
<b>ACTION 6</b>	Encourage sustainable driving-pattern programmes that minimise increased fuel consumption and vehicle emissions.	By 2025	MIPTPDUR-TD (lead) NCOPT, NADS, MESDISTVT-SDD
<b>ACTION 7</b>	Develop awareness campaigns on the benefits of regular preventive maintenance, including oil changes, to ensure that ICE vehicles operate at optimum efficiency.	By 2024	MIPTPDUR-TD (lead) SALCC, NADS, MESDISTVT-SDD
<b>ACTION 8</b>	Evaluate the potential impact of introducing mandatory periodic vehicle inspections (minimum conditions to pass, frequency, etc.), and hold a related open public consultation.	By 2025	MIPTPDUR-TD (lead) SLBS
<b>ACTION 9</b>	Adopt the necessary legislation to implement mandatory vehicle inspections, following the results of open public consultation on Action 8.	2023–24	MIPTPDUR-TD (lead) MESDISTVT-SDD SLBS
<b>ACTION 10</b>	Ensure that ICE vehicle compliance with emissions standards is permanently monitored.	From 2023 onwards	MIPTPDUR-TD (lead)

continued

Goal 3: Make reduction in energy intensity a key driver of decarbonisation

**Objective 8: Retrofit Existing Buildings for Energy Efficiency Enhancement**

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Encourage retrofitting of existing tourism and industrial facilities to maximise energy efficiency.	2023–30	MIPTPDUR-ED (lead) MOT, SLHTA, SLCC
<b>ACTION 2</b>	Facilitate retrofitting of existing structures by providing adequate incentives, following feasibility analysis by the Ministry of Finance.	2023–30	MFEDYE (lead) MIPTPDUR-ED
<b>ACTION 3</b>	Adopt lighting and appliance efficiency schemes.	By 2024	SLBS (lead) MIPTPDUR-ED
<b>ACTION 4</b>	Conduct standardised energy audits of all buildings owned and occupied by the government and encourage retrofitting if necessary.	By 2025	MIPTPDUR-ED (lead)
<b>ACTION 5</b>	Establish training and capacity-building on energy auditing, efficiency improvements and conservation options.	By 2025	MIPTPDUR-(lead) MESDISTVT-ED and TVET (lead) SALCC
<b>ACTION 6</b>	Encourage the implementation of CREEBC and SLBS standards for energy efficiency in retrofit projects for buildings.	By 2025	SLBS (lead) MIPTPDUR-ED

**Objective 9: Apply Energy Efficiency Measures in New Buildings**

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Encourage compliance with CARICOM’s Regional Energy-Efficiency Building Code (CREEBC) in the construction of new buildings.	2023–30	MIPTPDUR-PPS (lead) MIPTPDUR-ED, SLBS
<b>ACTION 2</b>	Promote best practices to maximise energy efficiency (EE) and reduce energy operational costs in the design of new tourism and industrial facilities.	2023–30	MIPTPDUR-PPS (lead) SLHTA, SLCC, SLMA
<b>ACTION 3</b>	Develop minimum energy performance standards for buildings.	By 2024	SLBS (lead)
<b>ACTION 4</b>	Develop a green-energy certification programme that monitors compliance with EE measures and other environmental standards.	By 2025	MIPTPDUR-PPS (lead) MESDISTVT-SDD, SLBS, SLHTA, SLCC, SLMA

continued

### Goal 3: Make reduction in energy intensity a key driver of decarbonisation

#### Objective 10: Develop a Suitable, Effective Regulatory and Institutional Framework to Ensure Timely, Systematic Implementation of Energy Efficiency Measures

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Enhance the enforcement powers of the institutions responsible for adopting, monitoring and enforcing all legislation related to energy efficiency.	By 2025	MIPTPDUR (lead) CoM, AGC, SLBS
<b>ACTION 2</b>	Enact the Energy Efficiency Bill.	2023–25	MIPTPDUR-(lead) AGC, Parliament
<b>ACTION 3</b>	Adopt regulations necessary for the implementation of the Energy Efficiency Act resulting from Action 2.	2023–25	MIPTPDUR-ED (lead)
<b>ACTION 4</b>	Implement continuous assessment of capacity-building and training for staff performing EE-related functions in existing institutions.	Annually, from 2023 onward	MIPTPDUR-EPU (lead) SALCC, APE

## GOAL 4 DECARBONISE THE TRANSPORT SECTOR

#### Objective 1: Promote the Use of Alternative Fuels Where Feasible

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Promote research and development of alternative fuels and identify potentially feasible projects.	Starting 2023, with project identification by 2025	MESDISTVT (lead) MoA, MIPTPDUR-TD, MIPTPDUR-ED
<b>ACTION 2</b>	Develop the necessary regulatory framework for the introduction of new fuels.	By 2025	SLBS (lead) MESDISTVT

continued

## Goal 4: Decarbonise the transport sector

### Objective 2: Minimise the Time Use of Vehicles

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Research traffic routing and patterns to address congestion points and/or routes.	2023–24	MIPTPDUR-TD (lead) MIPTDUR-TD
<b>ACTION 2</b>	Evaluate alternatives to move towards a more efficient and effective transport sector.	2023–24	MIPTPDUR TD (lead) MIPTPDUR-ED, MESDISTVT-SDD
<b>ACTION 3</b>	Promote carpooling opportunities.	2023	MIPTPDUR-TD (lead)
<b>ACTION 4</b>	Encourage sustainable transport.	2023–24	MIPTPDUR-TD (lead) MIPTPDUR-ED, MESDISTVT-SDD
<b>ACTION 5</b>	Conduct public awareness campaigns and dialogue among stakeholders to promote efficient transportation.	2023–25	MIPTPDUR-TD (lead) MIPTPDUR- ED, MESDISTVT-SDD
<b>ACTION 6</b>	Optimise routes and operation times of the public transportation system.	2023–25	MIPTPDUR-TD (lead) MIPTPDUR-TD
<b>ACTION 7</b>	Establish incentives for the use of public transport.	2023–24	MIPTPDUR-TD (lead) MFEDYE–National Development & Economic Planning Divisions, NCOPT
<b>ACTION 8</b>	Identify infrastructure needs to establish an efficient and resilient transport system offering island-wide coverage.	2023–24	MIPTPDUR-TD (lead) MFEDYE–National Development & Economic Planning Division

continued

## Goal 4: Decarbonise the transport sector

### Objective 3: Encourage the Adoption of a Greater Percentage of Electric Vehicles and Hybrids in the National Vehicle Fleet and Establish a Framework for the Development of Sustainable Road Transport

	ACTIONS	TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Develop a roadmap for the penetration of electric vehicles (EVs) and hybrid vehicles in the government vehicle fleet by 2030.	By 2025	MIPTPDUR-TD (lead) MIPTPDUR-ED
<b>ACTION 2</b>	Develop a certification programme for technicians to be qualified to work on EVs and hybrid vehicles.	By 2023	MIPTPDUR-TD (lead) APE, SLBS
<b>ACTION 3</b>	Enhance training for local institutions/companies to provide maintenance on EVs and hybrid vehicles.	2023–25	MIPTPDUR-ED (lead) MIPTPDUR-TD
<b>ACTION 4</b>	Educate the public on comparative operation and maintenance costs of running diesel or gasoline vehicles compared to EVs and hybrids.	2023–25	MIPTPDUR-ED (lead) MESDISTVT-SDD MIPTPDUR-TD
<b>ACTION 5</b>	Create additional incentives for importing EVs.	2023–24	MFEDYE (lead) MIPTPDUR-ED
<b>ACTION 6</b>	Identify locations and needs of charging infrastructure, with special consideration given to petrol stations.	2023–25	MIPTPDUR-ED (lead) LUCELEC, MIPTPDUR-TD
<b>ACTION 7</b>	Facilitate public demonstration of technical and environmental performance of EVs.	2023–25	MIPTPDUR-ED (lead) MIPTPDUR-TD
<b>ACTION 8</b>	Adopt legal and institutional frameworks that support implementation of the electric mobility strategy.	2023–25	MIPTPDUR-PUD (lead), AGC (lead) MIPTPDUR-TD
<b>ACTION 9</b>	Develop economic and technical studies to define a credible energy efficiency (EE) target, based on draft EE legislation.	2023–25	MIPTPDUR-EPUD (lead) MIPTPDUR-TD, SLBS
<b>ACTION 10</b>	Develop a monitoring, reporting and verification system to track EV performance.	2023–25	MIPTPDUR-TD (lead) MIPTPDUR-ED

**GOAL 5**

Ensure a safe, reliable, transparent and affordable supply of petroleum products along with their efficient, environmentally safe storage, handling and use during the transition phase

**Objective 1: Foster a Resilient and Transparent Supply of Oil Products**

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Ensure that management of energy reserves provides sufficient availability, especially in emergency or other special conditions.	2023–25	MIPTPDUR-ED (lead) MFEDYE
<b>ACTION 2</b>	Establish regulatory regimes for the petroleum sector to ensure efficient procurement, sourcing, indexation, and pricing of petroleum products on a competitive basis, and in a transparent manner.	2023–25	MFEDYE (lead) MESDISTVT-SDD, SLPA

**Objective 2: Ensure That Oil Supply Meets the Required Environmental Criteria**

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Implement a plan for the management and mitigation of oil spills.	2024	NEMO (lead) MESDISTVT-SDD, MIPTPDUR-SLASPA, SLPA
<b>ACTION 2</b>	Define a policy for the mitigation of fuel transport disasters.	2024	MESDISTVT-SDD (lead) NEMO, SLPA
<b>ACTION 3</b>	Mandate the utilisation of catalysts or particle filters.	By 2024	SLBS (lead) AGC, MESDISTVT-SDD
<b>ACTION 4</b>	Implement a policy for compulsory recycling of used oil.	2025	MESDISTVT-SDD (lead) SWMA
<b>ACTION 5</b>	Mandate the import and trade of petroleum products with low-sulphur content.	2023–30	MESDISTVT-SDD (lead) AGC, MFEDYE, SLBS
<b>ACTION 6</b>	Revise the Minerals (Vesting) Act, identify gaps, and make necessary amendments.	By 2024	MESDISTVT-SDD (lead) AGC

**GOAL 6**

Ensure that human, technical, and institutional capacities are aligned with the needs of the energy sector and national energy policy objectives, by the integration of social and gender aspects in the development of the sector

**Objective 1: Improve Education on Sustainable Energy Issues**

	ACTIONS	TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Institutionalise educational programs to train students on different energy topics, such as better ways to manage energy usage, encouraging an attitude shift towards responsible energy use.	By 2025	MESDISTVT-ED (lead) MIPTPDUR-EPUD, SALCC
<b>ACTION 2</b>	Deliver promotional campaigns on the use of renewable energy to primary, secondary and tertiary education centers.	2023–30	MIPTPDUR-ED (lead) MESDISTVT-ED MESDISTVT-SDD
<b>ACTION 3</b>	Establish a national energy education program to promote energy awareness in school curricula.	By 2025	MIPTPDUR-ED (lead) MESDISTVT-ED
<b>ACTION 4</b>	Facilitate professional training to incorporate sustainable energy technologies.	By 2024	MIPTPDUR-ED (lead) MESDISTVT-ED, SALCC
<b>ACTION 5</b>	Create a dynamic information infrastructure for consumers and investor, with easy access to information on sustainable energy activities.	By 2024	MIPTPDUR-ED (lead) Private-sector installers of solar energy equipment, AGIT

**Objective 2: Ensure That Institutions Required to Implement the Training Programmes in the Action Plan Have Sufficient and Adequately Trained Staff**

	ACTIONS	TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Identify training needs of institutions on matters related to sustainable energy.	By 2024	MIPTPDUR-ED (lead)
<b>ACTION 2</b>	Develop and implement training plans related to policy goals.	2023–25	MIPTPDUR-ED (lead) MESDISTVT-TVET, SALCC

*continued*

Goal 6: Ensure that human, technical, and institutional capacities are aligned with the needs of the energy sector and national energy policy objectives, by the integration of social and gender aspects in the development of the sector

**Objective 3: Ensure Adequate Education on the Content of the National Energy Policy so That it is Widely Known and Accepted by Society**

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Evaluate the most efficient way to provide social-protection mechanisms to the vulnerable population, to ensure that energy services are accessible to all citizens.	By 2025	MFEDYE (lead) MSTE, CoM MIPTPDUR-PUD
<b>ACTION 2</b>	Create an information campaign promoting the use of energy-efficient products.	By 2024	MFEDYE (lead) MIPTPDUR-ED
<b>ACTION 3</b>	Involve NGOs in education campaigns related to sustainable aspects of the energy sector, such as energy efficiency.	By 2024	MIPTPDUR-ED (lead) MESDISTVT-ED MESDIKSTVT-SDD
<b>ACTION 4</b>	Ensure that stakeholders are engaged in decision-making at all stages of energy sector transformation.	By 2023–30	MIPTPDUR-ED (lead) MESDISTVT

**Objective 4: Promote a Gender Balance in the Energy Sector**

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Ensure the understanding of energy-efficiency aspects in the domestic environment, encourage the choice of more efficient energy products and technologies, promote educational campaigns and collaboration with NGOs, and support expanded opportunities for women.	2023–25	MIPTPDUR-EPUD (lead) MESDISTVT-ED MPSHALGA-GAD
<b>ACTION 2</b>	Involve NGOs supporting women’s development, in public consultations related to energy matters. (i.e., public hearings).	From 2023 onward	MIPTPDUR-ED (lead) MESDISTVT-ED, MPSHALGA-GAD
<b>ACTION 3</b>	Promote equal opportunities for women in the energy sector’s labour force and promote women’s education in STEM studies linked to the energy sector.	From 2023 onward	MESDISTVT-ED (lead) MIPTPDUR-ED (lead) MPSHALGA-GAD, SALCC
<b>ACTION 4</b>	Implement a grant to encourage higher female participation in STEM programmes at Sir Arthur Lewis Community College.	By 2023	MoC (lead) MESDISTVT-ED, MPSHALGA-GAD, SALCC

## GOAL 7 Facilitate access to financing for renewable energy and energy efficiency measures

### Objective 1: Facilitate Local Financing and Enfranchisement for Green Energy Projects

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Facilitate sourcing of low-cost development funds for productive enterprises to design and develop energy technology projects.	2023–30	MFEDYE (lead) MIPTPDUR-ED, MESDISTVT-SDD, MoED
<b>ACTION 2</b>	Provide the mechanisms and infrastructure for mitigation outcomes.	2023–30	MFEDYE (lead) MESDISTVT-SDD
<b>ACTION 3</b>	Promote local enfranchisement in green-energy projects.	2023–30	MFEDYE (lead) MoC

### Objective 2: Facilitate Local Financing and Enfranchisement for Green Energy Projects

ACTIONS		TIMING	RESPONSIBLE INSTITUTIONS
<b>ACTION 1</b>	Train local financial institutions in evaluating the risks associated with investment in renewable energy or energy-efficiency projects, including mechanisms to reduce risk and develop viable business models.	2023–25	MFEDYE (lead) BASL, MESDISTVT-SDD, MIPTPDUR-ED
<b>ACTION 2</b>	Study the feasibility of developing a local financing market for green-energy projects, by providing insurance to financial institutions.	2023–25	MFEDYE (lead) BASL, ISL and MoC, MIPTPDUR-ED

**SAINT LUCIA**  
**NATIONAL**  
**ENERGY POLICY**  
**(2023–30)**



**ACTION PLAN**

**Monitoring  
and Evaluation  
Framework**

# MONITORING AND EVALUATION FRAMEWORK

## OVERVIEW

The NEP's seven goals are designed to support far-reaching transformation of the country's energy system from 2023 to 2030, to meet an overarching target of reducing Saint Lucia's greenhouse gas (GHG) emissions by the energy sector to seven percent below the level of emissions in 2010. To achieve this reduction, the Government envisions about half of electricity supply to be generated from renewable energy (RE). This target compares to around only five percent of electricity currently generated from RE sources and 95 percent generated from imported oil.

By 2030, the Government plans to have at least one third of its vehicles running on electricity and to achieve major reductions in energy use through improvements to energy-efficiency and conservation measures. In order to achieve such ambitious developments in just seven years, the Government has assigned institutions to each of the 145 actions supporting the 30 objectives of the seven goals; it has also set related timelines.

To ensure progress toward meeting NEP goals, the Government has designed a preliminary monitoring and evaluation framework consisting of: (a) a set of outputs to be delivered by specific institutions according to planned timeline (Table 2.1); and (b) a set of Key Performance Indicators (KPIs) to show the extent to which the NEP is on track to meet its goals (Table 2.2).

A Monitoring and Evaluation Group, described in Section 1, will assess progress in the delivery of outputs and meeting KPIs, at least annually. This group will also produce a midterm evaluation report in 2026 and a final evaluation report in 2030.



► **TABLE 2.1: PLANNED OUTPUTS**

GOAL NUMBER	OBJECTIVE NUMBER	ACTION NUMBER	OUTPUT / DELIVERABLE	RESPONSIBLE INSTITUTION (LEAD)	TIMELINE
1	1	1	Implementation of net billing and appropriate tariff mechanism.	NURC	2023
1	1	2	Adopted NETS.	MIPTPDUR-ED	2024
1	1	3	Adopted IRRP.	MIPTPDUR-ED	2024
1	1	4	Published offshore feasibility study.	MIPTPDUR-ED	2026
1	1	5	Established Grid Code.	NURC	2023
1	1	11	Updated central database on energy sector.	MIPTPDUR-ED	From 2023
1	2	1	Enacted Electricity Sector Bill.	MIPTPDUR-ED	2023
1	2	2	Enacted Geothermal Energy Bill.	MIPTPDUR-ED	By 2025
1	2	4	Established procurement process for new RE generation projects to sell electricity to LUCELEC.	MIPTPDUR-ED	2023–2026
1	3	2	Revised ministerial functions related to oil.	MIPTPDUR-ED	By 2025
1	3	3	Revised functions of the ministry in charge of energy and public utilities.	MIPTPDUR-ED	2023
1	4	1	SOX, NOX metric and targets, as well as targets for any other GHG emissions.	MESDISTVT-SDD	2025
1	4	2	Guidelines for end-of-life disposal of RE equipment.	SWMA	By 2025
1	4	3	Mandatory environmental standards for thermal decommissioning.	SWMA	2024
1	4	4	Updated information systems related to energy-sector guidelines.	SLBS	By 2025
1	4	6	Updated waste-to-energy (WTE) feasibility study .	SWMA	2024
1	4	7	Updated WTE regulations depending on the results of the WTE feasibility study (Action 1.4.6).	SWMA	By 2025
1	4	8	Enacted legislation on social and environmental standards for the development of RE -based power plants.	Physical Planning	2025
2	1	1	Study on the potential need for additional incentives to encourage the development of SWH.	MFEDYE	By 2025
2	1	1	Updated incentives scheme (including fiscal structure) for SWH and other solar-thermal applications, as well as energy-efficient stoves, and e-cooking devices.	MFEDYE	See related actions.
2	2	2			
2	3	1			
2	3	4			
2	1	2	Establishment of SWH standards.	SLBS	2023–2024
2	3	5	Study on the potential to harness basic biogas or other RE for cooking.	MESDISTVT-SDD	2023–2024

Continued

► TABLE 2.1: PLANNED OUTPUTS

GOAL NUMBER	OBJECTIVE NUMBER	ACTION NUMBER	OUTPUT / DELIVERABLE	RESPONSIBLE INSTITUTION (LEAD)	TIMELINE
2	4	1	Study on potential electrification of existing thermal applications in industries and hotels.	MIITPDUR-ED	2023–2026
3	1	1	Comprehensive economic and technical study on energy intensity and energy efficiency.	MIITPDUR-ED	2023–2025
3	1	1	Adopted EE target for energy intensity based on the draft EE legislation.	MIITPDUR-ED	2023–2025
3	2	4	Finalised street lighting LED retrofits.	MIITPDUR-ED	2023–2024
3 3	3 3	1 3	Establishment of a mandatory labelling framework for all energy-using products, including minimum standards.	SLBS	By 2025
3	3	2	Promotion campaigns developed with local retailers to inform customers on energy efficiency of appliances, including product labels.	MoC	By 2025
3 3	3 3	4 5	Issue legislation banning the import and trade of energy-using products that do not fulfil mandatory minimum efficiency-performance standards, including incandescent light bulbs.	MESDISTVT-SDD	By 2025
3	3	6	Define and implement MRV mechanism for EE standards.	SLBS	By 2025
3	4	1	Implement demand-side management programmes.	NURC	2023–2025
3	4	4	Study to identify EE skills requirements across the economy.	MESDISTVT-SDD	2023–2025
3	4	5	Establishment of networks/partnerships across government, private and academic sectors.	MIITPDUR-ED	2023–2025
3	4	6	An annual national statistical report on energy-use benchmarks.	MIITPDUR-ED	2023–2025
3 3	5 5	1 2	Study on the potential for energy-efficiency improvement in water production and distribution, along with a corresponding roadmap.	WASCO	2023–2025
3 3	7 7	1 4	A mandatory framework labelling car efficiency, including penalties for non-labelled cars.	MIITPDUR-TD SLBS	By 2025
3	7	7	An awareness campaign on fuel consumption, encouraging preventive maintenance.	MIITPDUR-TD	By 2024
3	7	8	Study evaluating the introduction of mandatory vehicle inspections.	MIITPDUR-TD	By 2025
3	8	1	Legislation encouraging the retrofit of existing hotels and industrial facilities to maximize EE.	MIITPDUR-ED	2023–2030
3	8	4	Energy audits of buildings owned and occupied by the government, covering least 20 % of facilities per year.	MIITPDUR-ED	By 2025

Continued

► TABLE 2.1: PLANNED OUTPUTS

GOAL NUMBER	OBJECTIVE NUMBER	ACTION NUMBER	OUTPUT / DELIVERABLE	RESPONSIBLE INSTITUTION (LEAD)	TIMELINE
4	1	1	Study on development of alternative transport fuels.	MESDISTVT	From 2023
4	1	2	Preparation and approval of a regulatory framework for introduction of alternative fuels (if deemed adequate).	SLBS	By 2025
4	2	1	Study on traffic routing and traffic patterns to address congestion.	MIPTPDUR-TD	2023–2024
4 4	2 3	8 1-6	Study on the infrastructure needs for the establishment of a proper e-transport system, including identification of locations and the capacity of charging infrastructure to include grid-connected energy storage.	MIPTPDUR-ED and TD	2023–2025
4	3	1	A roadmap for the penetration of electric and hybrid vehicles.	MIPTPDUR-TD	By 2025
4	3	2	Development of a certification programme for technicians working on EV/hybrid vehicles.	MIPTPDUR-TD	By 2024
4	3	5	Updated incentives for the importation of EVs.	MFEDYE	2023–2024
4	3	9	Issuance of technical and safety regulations applicable to recharging of vehicles.	MIPTPDUR-ElecD	2023–2025
5	1	1	Update of regulatory framework for energy and fuel reserves/stocks.	MIPTPDUR-ED	2023–2025
5	1	2	Update of regulatory regimes for the petroleum sector, to ensure efficient procurement, sourcing, indexation and pricing of petroleum and petroleum products.	MFEDYE	2023–2025
5	2	2	Guidelines and institutional arrangements for petroleum fuel transport mitigation.	MESDISTVT-SDD	2024
5	2	3	Passage of legislation mandating the use of catalysts or particle filters.	SLBS	By 2024
5	2	4	Establishment of a policy mandating recycling of used oil.	MESDISTVT-SDD	2025
5	2	6	Adoption of a new Minerals (Vesting) Act.	MESDISTVT-SDD	By 2024
6	1	1	Establishment of educational programs on sustainable energy.	MESDISTVT-ED	By 2025
6	2	1	Completion of a study on the training needs of authorities on matters related to NEP content and specific training plans on sustainable energy.	MIPTPDUR-ES	By 2024
6	4	2	Implementation of education campaigns and collaboration with NGOs supporting women on the development of ways to improve the efficiency of domestic energy use.	MIPTPDUR-ED	From 2023 on
7	1	1	Facilitated sourcing of low-cost development funds for productive enterprises engaged in in energy technology projects.	MFEDYE	2023–2030
7	1	3	Establishment of a mechanism and infrastructure to internationally transfer mitigation outcomes.	MFEDYE	2023–2030

► **TABLE 2.2: PERFORMANCE INDICATORS, BY NEP GOAL**

GOAL 1	Ensure a secure, reliable, affordable, transparent, greener, and resilient energy sector.
GOAL 2	Decarbonise thermal applications.
GOAL 3	Make reduction in energy intensity a key driver of decarbonisation.
GOAL 4	Decarbonise the transport sector.
GOAL 5	Ensure a safe, reliable and affordable supply of petroleum products along with their efficient, environmentally safe storage, handling and use during the transition phase.
GOAL 6	Ensure that human, technical and institutional capacities are aligned with the needs of the energy sector and objectives of the national energy policy, by the integration of social and gender aspects in the development of the sector.
GOAL 7	Facilitate access to financing for renewable energy and energy efficiency-measures.

GOAL NUMBER	INDICATORS	BASELINE	TARGET	TIMING OF REPORTING
1	Share of generation capacity from RE in total installed generation capacity (%).	4.67		Annually, in annual report
1	Number of net billing customers (no.).	0		Annually, in annual report
1	Solar PV installations (utility size and rooftop (in MW).	4.53		Annually, in annual report
1	Geothermal installations (MW).	0 MW		Annually, in annual report
1	Annual investment in RE projects (EC\$ or USD/year).	N/A		Biannually, in annual report
1	Share of water production based on RE in total water production (%).	N/A		Biannually, in annual report
1	Share of local investment in total new RE investments (%).	N/A		Biannually, in annual report
1	Carbon intensity of the power sector (carbon emissions per KWh generated (gCO <sub>2eq</sub> /kWh).	N/A		Biannually, in annual report
1	NO <sub>x</sub> concentration (ppm).	N/A		Biannually, in annual report
1	SO <sub>x</sub> concentration (ppm).	N/A		Biannually, in annual report
2	Number of SWHs installed .	N/A		Annually, in annual report
2	Number of e-cooking devices imported over the last year.	N/A		Annually, in annual report

Continued

► **TABLE 2.2: PERFORMANCE INDICATORS, BY NEP GOAL**

GOAL NUMBER	INDICATORS	BASELINE	TARGET	TIMING OF REPORTING
3	Share of street lights using LED technology of total streetlights (%).	N/A		Biannually, in annual report
3	Number of buildings EE retrofitted .	N/A		Biannually, in annual report
3	Share of buildings complying with CREEBC (%).	N/A		Biannually, in annual report
4	Share of vehicles using alternative biofuels (%).	N/A		Annually, in annual report
4	Share of EV and hybrid vehicles in total vehicle fleet (%).	0.55		Annually, in annual report
4	Number of EV and hybrid vehicles.	231		Annually, in annual report
4	Number of public EV-charging stations .	4		Annually, in annual report
5	Number of oil spills over the past year.	N/A		Annually, in annual report
5	Annual average number of days of petroleum reserves.	N/A		Annually, in annual report
6	No. of people with specialised training in energy-sector-related disciplines.	247		Every 3 years, in annual report
6	Share of RE in total final energy consumption of schools and universities.	N/A		Every 3 years, in annual report
6	Number of personnel certified by specific training developed by the actions of Goal 6.	N/A		Every 3 years, in annual report
6	Share of women working in the energy sector (%).	31.7		Every 3 years, in annual report
6	Share of women in STEM programmes at Sir Arthur Lewis Community College (%).	N/A		Every 3 years, in annual report
7	Carbon credit generated by sustainable energy projects (number of credits and/or tCO <sub>2</sub> <sub>eq</sub> ).	N/A		Biannually, in annual report

**SAINT LUCIA**  
**NATIONAL**  
**ENERGY POLICY**  
**(2023–30)**



**ACTION PLAN**

**Risk**  
**Analysis and**  
**Management**

# RISK ANALYSIS AND MANAGEMENT

## Summary Results Classification and Methodology

With the assistance of Mercados-Aries International, the Government of Saint Lucia has conducted a qualitative evaluation of the risks to successful implementation of the NEP's Action Plan. This evaluation has identified 28 risks subsumed under nine general categories of concern:

- ▶ **Limited communication and awareness of RE benefits**, possibly constraining NEP buy-in by key stakeholders.
- ▶ **Higher implementation costs than planned**, due to inadequate planning or unforeseen market developments.
- ▶ **Insufficient infrastructure and staffing** to support and promote the substitution of RE for fossil fuels.
- ▶ **Elevated cost of living**, resulting from the switch to electric vehicles in public and private transportation.
- ▶ **Shortfalls in public financing**, possibly limiting or delaying the switch to RE in government infrastructure.
- ▶ **Lack of knowledge regarding RE technologies**, limiting adoption by the hotel sector.
- ▶ **Lower level of support than required in key sectors:** oil and gas, electricity, and financial intermediation.
- ▶ **Revenue loss in the public and private sectors**, due to the transition away from fossil fuels.
- ▶ **Deficiencies in the policy and regulatory framework**, as a result of a lack of approval or a delay in approval of necessary legislation, regulations, and standards.

The qualitative evaluation has rated the overall level of each risk identified, as *critical, significant, medium, or minor*. The overall level of risk is based on two factors:

- ▶ Likelihood of the risk materializing, rated as either *low, medium, or high*.
- ▶ Potential severity of negative impact on NEP implementation or on the economy if the risk materializes, rated as either *small, medium, high, or critical*.

For example, under the category of deficiencies in the policy and regulatory framework, the risk of not having clear market rules for new players in the wholesale energy market, a key element in the promotion of RE substitution for fossil fuels, is rated as *low* in the likelihood of materializing. But due to the importance of these rules to meeting the goals of the NEP, the potential negative impact is rated *critical*. The combination of a likelihood of materializing rated *low* with a potential negative impact rated *critical* results in an overall risk level of *significant*.

Sub-section B shows the evaluation of each of the 28 risks identified by risk category, along with the overall risk rating and its components. Deficiencies in the policy and regulatory framework are associated with the largest number of the risks -- 7 out of 28. Five risks are related to limited communication and awareness of RE benefits. The other categories of risks have between one and three risks each.

Sub-section C profiles the risks by risk level, focusing on mitigation measures and designating the institution responsible for risk management. Of the 28 risks, four are rated *critical*, 12 are rated *significant* and the remaining 12 are evenly divided between *medium* and *minor*.

## Critical Risks

Of primary concern are the four risks rated *critical*: (i) the lack of sufficient infrastructure to integrate distributed energy resources (DER) in the power grid; (ii) limited cooperation of the oil and gas sector in the energy transition away from fossil fuels; (iii) inadequate staffing of SLBS to implement an energy-labelling system that is designed to encourage consumers to choose more energy-efficient products; and (iv) loss of government revenue, due to decreasing revenues from taxes on fossil fuels as the energy sector moves toward a system focused on renewable energy (RE).

## Significant Risks

Among the 12 *significant* risks, the one that could adversely affect overall NEP implementation is a possible change in the political climate following elections, which could impede or delay the energy transition. Mitigation for this is to ensure full coordination of any incoming government teams involved in the NEP with outgoing governmental teams regarding content and implementation schedule of the Action Plan.

Three of aforementioned twelve concern possible delays in creating the policy and regulatory framework to govern the energy transition. Mitigation measures will need to identify any barriers to obtaining land for utility-sized RE projects and pass legislation for regulations to implement the NEP. Three additional risks relate to higher-than-expected costs for EVs, EV-charging infrastructure, and solar energy for cooling. Proposed mitigation measures consist of designing incentive schemes for investing in new infrastructure and working with financial institutions to facilitate financing.

The mitigation of the aforementioned risks will require: (i) efforts to ensure tariffs are cost-reflective, to encourage integration of DER in the power system operated by LUCELEC; (ii) provision of sufficient resources to SLBS for adequate staffing; (iii) continued dialogue with stakeholders in the oil and gas sector on the benefits of the energy transition to Saint Lucia as well as business opportunities for their expertise in the transformed sector; and (iv) exploration of potential sources for government revenues to replace declining tax revenues from imported petroleum products.

The two institutional risks are: (i) limited cooperation of LUCELEC in opening up the electricity market for private suppliers of RE; and (ii) diminished support from financial institutions, which may view lending for RE development as too risky due to inadequate pricing mechanisms. Mitigation consists of reviewing electricity tariffs to ensure that they are cost-reflective and working with financial institutions on risk analysis and mitigation.

The remaining three risks are: (i) increases in the rates required for public transport to recoup investment in electrified infrastructure, to be mitigated by a tariff structure to ensure affordability; (ii) lack of education on absorption chiller technologies<sup>2</sup> for the hotel sector, to be mitigated by awareness campaigns on international experience of the benefits of these technologies in improving energy efficiency; (iii) loss of revenue to importers and dealers in fossil fuels due to the planned decarbonisation, to be mitigated by creating working groups to discuss opportunities for importers and dealers in the RE sector.

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<sup>2</sup> <https://theengineeringmindset.com/absorption-chiller-works/>

## Medium Risks

Six risks are rated *medium*. Two of these relate to policy and regulation: (i) failure to implement a net billing scheme, which allows consumers to balance electricity they consume with electricity injected into the grid; and (ii) a delay in establishing clear roles for government ministries dealing with the oil and gas sector. Mitigating these risks will require legislation, planned for 2023-2024.

There are four additional risks: (i) lack of clarity regarding mechanisms for incorporating DER in the power grid; (ii) insufficient charging stations for EV use; (iii) potential shortfalls in financing for a major investment program to improve energy efficiency; and (iv) loss of revenue for dealers and mechanics involved in the sale and maintenance of in vehicles with internal combustion engines (ICEs), which a be gradually replaced by electric vehicles (EVs).

The mitigation measures for the aforementioned risks are: (i) an Internet-based information platform for incorporating DER into the power grid; (ii) a plan for installing EV-charging-stations in strategic locations; (iii) a working group to evaluate financial solutions for investment in energy efficiency; and (iv) training programs to help transition the oil and gas sector workforce for work in the RE sector.

## Minor Risks

Of the six risks rated *minor*, three relate to public perception of the NEP and LUCELEC. Specifically, the concern: (i) not obtaining sufficient buy-in of the population for a major switch to EVs; (ii) lack of awareness regarding the importance of the transition to an energy sector driven primarily by RE, which is the core of the NEP; and (iii) mistrust of LUCELEC by potential investors in RE for electricity, due to the company's monopoly in the electricity market. Proposed mitigation measures include: (i) education campaigns on the importance of RE to Saint Lucia's economy and environment, indicating the pros and cons of RE technologies; and (ii) an information campaign focused on transparency of contracting between LUCELEC and providers of DER to the grid.

Two risks concern deficiencies in the policy and regulatory framework: (i) the lack of clear targets for the reduction of GHG emissions and (ii) no mandatory energy-efficiency standards for new construction. Mitigation measures for these risks are drafting and passing related legislation in 2023-2024 as well as mandating targets and standards. The sixth and final risk concerns the increase in cost of living due to the high cost of EV-charging stations. To mitigate this risk, NURC will be reviewing financial incentive schemes to enhance affordability.

# ASSESSMENT OF RISK LEVEL BY SUBJECT CATEGORY

## Limited Communication and Awareness of RE Benefits

Risks Identified (5)	Assessment of Risk Level		
	Likelihood of Materializing	Potential Severity of Impact	OVERALL RATING
Lack of education on EVs may impede efforts to get public buy-in to replace ICE vehicles with EVs.	Medium	Small	MINOR
Limited public knowledge of benefits of RE may reduce the general public's support of the NEP.	Low	Small	MINOR
Lack of clarity in the licensing process for DER and the purchasing tariffs may hinder DER development.	Medium	Medium	MEDIUM
Historic mistrust of LUCELEC as a monopoly distributor and generator of electricity may discourage potential investors.	Medium	Small	MINOR
Political risk of discontinuation or modification to, the energy transition programme, after governmental elections.	Low	Critical	SIGNIFICANT

## Higher Implementation Costs than Planned

Risks Identified (3)	Assessment of Risk Level		
	Likelihood of Materializing	Potential Severity of Impact	OVERALL RATING
Upfront cost of EVs is prohibitive and may slow the transition from ICE vehicles.	High	Medium	SIGNIFICANT
Costs of EV-charging-stations may be too high if not properly planned.	High	Small	SIGNIFICANT
Costs of solar air-conditioning solutions may hinder their development in the market.	Medium	Critical	SIGNIFICANT

## Insufficient Infrastructure and Staffing

Risks Identified (3)	Assessment of Risk Level		
	Likelihood of Materializing	Potential Severity of Impact	OVERALL RATING
Grid limitations to integrate DER.	High	Critical	CRITICAL
Limited charging stations across the island may slow use of EVs.	Medium	Medium	MEDIUM
Constrained capability of SLBS staff to launch and manage a major program to label equipment for energy efficiency.	Medium	Critical	CRITICAL

## Elevated Cost of Living

Risks Identified (2)	Assessment of Risk Level		
	Likelihood of Materializing	Potential Severity of Impact	OVERALL RATING
Public transportation rates may have to increase in order to recoup investment costs of electric transport vehicles in a reasonable timeframe.	Medium	Critical	SIGNIFICANT
Costs of a at-home charging stations for EVs may be too high.	Medium	Small	MINOR

## Shortfalls in Public Financing

Risks Identified (1)	Assessment of Risk Level		
	Likelihood of Materializing	Potential Severity of Impact	OVERALL RATING
Implementation of energy-efficiency measures in governmental buildings or other infrastructure may run short of financing.	Medium	Medium	MEDIUM

## Lack of Knowledge Regarding RE Technologies

Risks Identified (1)	Assessment of Risk Level		
	Likelihood of Materializing	Potential Severity of Impact	OVERALL RATING
Lack of education on absorption chiller technologies may result in hotels not buying into this technology.	Medium	Medium	MEDIUM

## Lower Level of Support than Required in Key Sectors

Risks Identified (3)	Assessment of Risk Level		
	Likelihood of Materializing	Potential Severity of Impact	OVERALL RATING
Limited cooperation from oil and gas sector may disrupt the energy market and slow NEP implementation.	High	Critical	CRITICAL
Limited cooperation from LUCELEC to open up the market for RE and DER may constrain NEP advancement.	Medium	Critical	SIGNIFICANT
Lack of support from financial institutions in expanding RE capacity because they view RE projects as risky due to inadequate pricing mechanisms.	Medium	Critical	SIGNIFICANT

## Revenue Loss in the Public and Private Sectors

Risks Identified (3)	Assessment of Risk Level		
	Likelihood of Materializing	Potential Severity of Impact	OVERALL RATING
Loss of government revenue stream from fossil fuel taxes, as the energy sector reduces dependence on them.	High	Critical	CRITICAL
Loss of revenue stream for car dealers and mechanics of traditional ICE vehicles.	Medium	Medium	MEDIUM
Loss of revenue stream for importers and dealers in the fossil fuel market.	High	Medium	SIGNIFICANT

## Deficiencies in the Policy and Regulatory Framework

Risks Identified (7)	Assessment of Risk Level		
	Likelihood of Materializing	Potential Severity of Impact	OVERALL RATING
Not implementing the net billing scheme may reduce investment in this mechanism for RE integration.	Medium	Medium	MEDIUM
Land-use policy and the planning approval process may obstruct energy transition, as the value of residential and commercial land increases.	Medium	Critical	SIGNIFICANT
Lack of clear market rules for new players in the wholesale energy market.	Low	Critical	SIGNIFICANT
Delayed parliamentary approval of bills critical to the NEP's success may hinder NEP implementation.	Low	Critical	SIGNIFICANT
Lack of clear targets to monitor the planned reduction in GHG emissions and progress of energy-efficiency programs may delay their successful implementation.	Medium	Small	MINOR
Lack of mandatory standards for energy efficiency of buildings may impact public buy-in.	Medium	Small	MINOR
Delay in establishing clear roles for ministries in charge of the energy sector may lead to insufficient coordination.	Medium	Medium	MEDIUM

# RISK MITIGATION MEASURES AND MANAGEMENT RESPONSIBILITY

## Critical Risks: 4

Risk Category	Risks Identified	Proposed Mitigation Measures	Mitigation Timing	Responsible Institutions
Insufficient infrastructure and staffing.	Grid limitations to integrate DER.	Implement a tariff review program to ensure tariffs are cost-reflective.	2023–2030	LUCELEC NURC
Insufficient infrastructure and staffing.	Lack of sufficient SLBS staff to implement labelling standards.	Review staffing needs and provide adequate resources.	As needed	SLBS
Lower level of support than required in key sectors.	Limited cooperation from the oil and gas sector may disrupt the market and slow NEP implementation.	Continued dialogue with the stakeholders in the oil and gas sector on the benefits to Saint Lucia of the energy transition as well as business opportunities for their expertise in the transformed sector.	As needed	MIPTPDUR-ED
Revenue loss in the public and private sectors.	Loss of revenue stream for the Government due to lower tax revenues from fossil fuels.	Identify additional sources of revenues.	As needed	MIPTPDUR-ED

## Significant Risks: 12

Risk Category	Specific Risks Identified	Proposed Mitigation Measures	Mitigation Timing	Responsible Institutions
Limited communication and lack of awareness of RE benefits.	Political risk of discontinuation of the energy transition programme after governmental elections.	Ensure full coordination of outgoing governmental teams with public disclosure of plans.	As needed	Cabinet
Higher implementation costs than planned.	Upfront cost of EVs is prohibitive and may slow down the transition to this solution.	Review incentive schemes (VAT, import duties, subsidies, etc.).	2023–30	MIPTPDUR-ED
Higher implementation costs than planned.	Costs of charging stations may be too high if not properly planned.	Create a working program with financing institutions to facilitate financing for the plan.	2023–30	MIPTPDUR-ED
Higher implementation costs than planned.	Costs of solar air-conditioning solutions may hinder their development in the market.	Review incentive schemes (VAT, import duties, subsidies, etc.)	2023–30	MIPTPDUR-ED
Elevated cost of living.	Public transportation rates may increase in order to recoup investment costs in a reasonable timeframe.	Revision of public transportation tariffs and regulations to ensure affordability.	2023–30	MIPTPDUR-ED
Lack of knowledge of RE technologies.	Lack of education on absorption chiller technologies may result in hotels not buying into this technology.	Develop awareness campaigns and events to share international experience in energy efficiency in the hospitality sector.	To be determined	MIPTPDUR-ED
Lower level of support than required in key sectors.	Limited cooperation from LUCELEC to open up the market for RE and DER.	Implement a tariff review program to ensure tariffs are cost reflective.	2023–25	NURC
Lower level of support than required in key sectors.	Lack of support from financial institutions that may view RE as risky due to inadequate pricing mechanisms for energy sold.	Work with financing institutions to create confidence in RE technologies by showing governmental support.	2023–30	MIPTPDUR-ED
Revenue loss in public and private sectors.	Loss of revenue stream for fuel importers and dealers.	Develop working groups with stakeholders in the oil and gas sector to identify opportunities for them in the RE sector.	2023–25	MFEDYE
Deficiencies in policy and regulatory framework.	The approval process for land-use policy and planning may impede energy transition, as the value of land for residential and commercial purposes increases.	Review the actual process and identify existing barriers to be overcome to allow for utility-sized RE projects.	2023–24	MIPTPDUR-ED
Deficiencies in policy and regulatory framework.	Lack of clear market rules for new players in the wholesale energy market.	Identify and draft corresponding regulations.	2023–24	NURC
Deficiencies in policy and regulatory framework.	Not approving the necessary bills on time may delay the timely implementation of the NEP.	Enact corresponding legislation.	By 2023	MIPTPDUR-ED

## Medium Risks: 6

Risk Category	Risks Identified	Proposed Mitigation Measures	Mitigation Timing	Responsible Institutions
Limited communication and lack of awareness of RE benefits.	Lack of clarity in the licensing process for DER and purchasing tariffs may hinder the development.	Enact corresponding regulations and create a web-based information platform.	By 2023	NURC
Insufficient infrastructure and staffing.	Limited charging stations across the island may limit EV use.	Develop an installation program that covers all needs and routes.	2023–24	MIPTPDUR-PDD
Shortfalls in public financing.	Implementation of energy-efficiency measures in governmental buildings or other infrastructure may run short of financing.	Establish a working group to identify financing solutions for RE transition.	2023–24	MFEDYE
Revenue loss in the public and private sectors.	Loss of revenue stream and economic activity for car dealers and mechanics of traditional ICE vehicles.	Develop training programs to upgrade workforce skills given the changing market.	2023–30	MESDISTVT
Deficiencies in policy and regulatory framework.	Not implementing the net billing scheme may discourage investment in RE.	Enact the regulations necessary to achieve NEP goals.	2023–24	NURC
Deficiencies in policy and regulatory framework.	Delay in establishing clear roles for the ministries in charge of the energy sector.	Enact corresponding legislation.	By 2023	MIPTPDUR-ED

## Minor Risks: 6

Risk Category	Risks Identified	Proposed Mitigation Measures	Mitigation Timing	Responsible Institutions
Limited communication and lack of awareness of RE benefits.	Lack of education on EVs could limit public buy-in.	Launch a national communication campaign to disclose pros and cons of the technology.	By 2023	MIPTPDUR-ED
Limited communication and lack of awareness of RE benefits.	Limited public knowledge of benefits of RE may get reduced buy-in from the population.	Launch a national communication campaign to disclose pros and cons of the technology.	By 2023	MIPTPDUR-ED
Limited communication and lack of awareness of RE benefits.	Historic mistrust of the utility as a monopoly distributor and generator may discourage potential investors.	Equip relevant institutions with information and training to build confidence in the transparency of the process and attract investors.	By 2023	NURC
Elevated cost of living.	Costs of using at-home charging stations maybe too high.	Review incentive schemes (VAT, tariff subsidies, etc.) for development and use of these stations.	2023–30	NURC
Deficiencies in policy and regulatory framework.	Not setting clear targets for monitoring GHG-emissions reductions and energy-efficiency programs may delay their successful implementation.	Draft legislation for the required regulatory framework to achieve-GHG emission targets, provide incentives for energy efficiency.	2023–24	MIPTPDUR-ED
Deficiencies in policy and regulatory framework.	Not setting mandatory standards for energy efficiency in construction could alienate efforts to get public buy-in.	Enact corresponding legislation.	2023–24	SLBS

**Government of Saint Lucia**