

2020 ENERGY REPORT CARD

ST. LUCIA



CCREEE

CARIBBEAN CENTRE FOR RENEWABLE
ENERGY & ENERGY EFFICIENCY

AN INSTITUTION OF

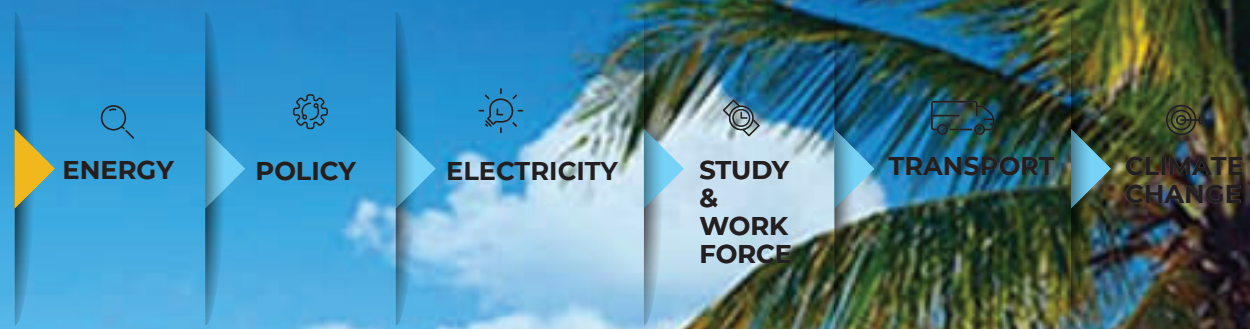
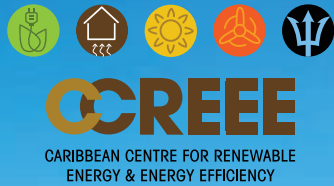


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2020 ENERGY REPORT CARD **INTRODUCTION**

This document presents St. Lucia's Energy Report Card (ERC) for 2020.

The ERC provides an overview of the energy sector performance in St. Lucia. The ERC also includes energy efficiency, technical assistance, workforce, training, and capacity building information, subject to the availability of data.

This ERC includes data and information that was provided by government ministries, agencies, or departments, with responsibility for energy, utilities, and statistical offices. The data collected was supplemented by internet research, author calculations and inferences. This data is a collection from a variety of public sources and, as such, is for general information only. It is not intended for decision-making purposes, and therefore reliance placed on the information herein is strictly at the user's risk.

ENERGY SECTOR SUMMARY

ENERGY

POLICY

ELECTRICITY

STUDY
&
WORK
FORCE

TRANSPORT

CLIMATE
CHANGE

National
Development
Plan
Saint Lucia Medium
Term Development
Strategy 2020-2023
[3]

Population
Projection
181,192
[1]

National
Energy Policy
Saint Lucia
National
Energy Policy
(2010)
[4]

RE Target
35% Electricity
generated by
renewable sources
by 2025 and
50% by 2030
[5]

National
Repository for
Energy Data
None

GDP (USD)
Per Capita
8,923
[1]

Human
Development
Index
0.759
(2019)
[2]

Climate
Change Policy
Saint Lucia
Climate Change
Adaptation
Policy (2015)
[10]

Fuel and Oil
Imports as % of
GDP
3.94%
[11]

National
Repository for
Energy Data
None

Debt as
% of GDP
86.50%
[1]

National
Determined
Contributions
(NDC)

No. of Persons
Employed in
Energy Sector
312
[7]

Total Oil
Import (kg) per
day
26,504.67
[8]

16% reduction relative
to business as usual by 2025
23% reduction relative
to business as usual
by 2030
[12]

Total
Installed
Conventional
Capacity (MW)
88.4
[9]

Electricity
System
Losses (%)
5.94%
[9]

Energy Use
(kWh) Per
Capita
1,826.5
[9]

Total Oil
Export (BOE)
per day
None

Renewable
Energy (RE)
Policy
None

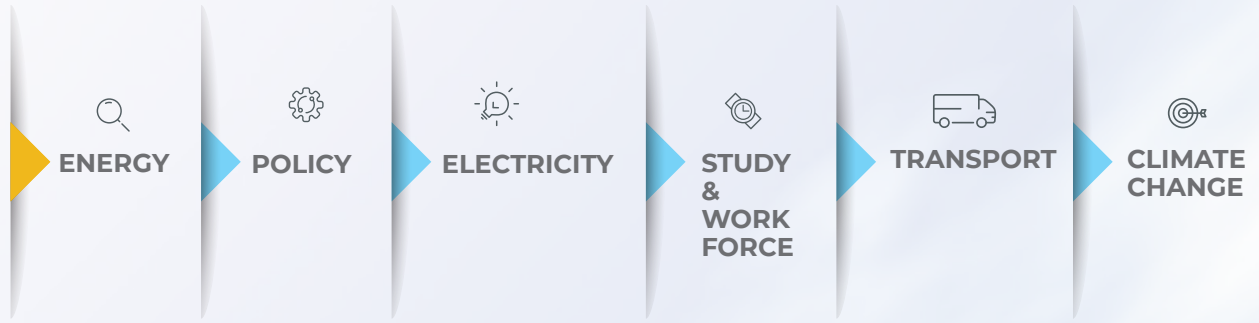
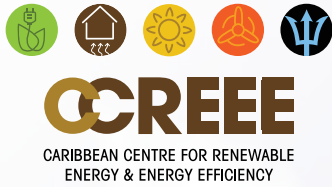
Electric and
Hybrid
Vehicles
231
[11]

Energy
Intensity
(BTU/\$)
**Not
Available**

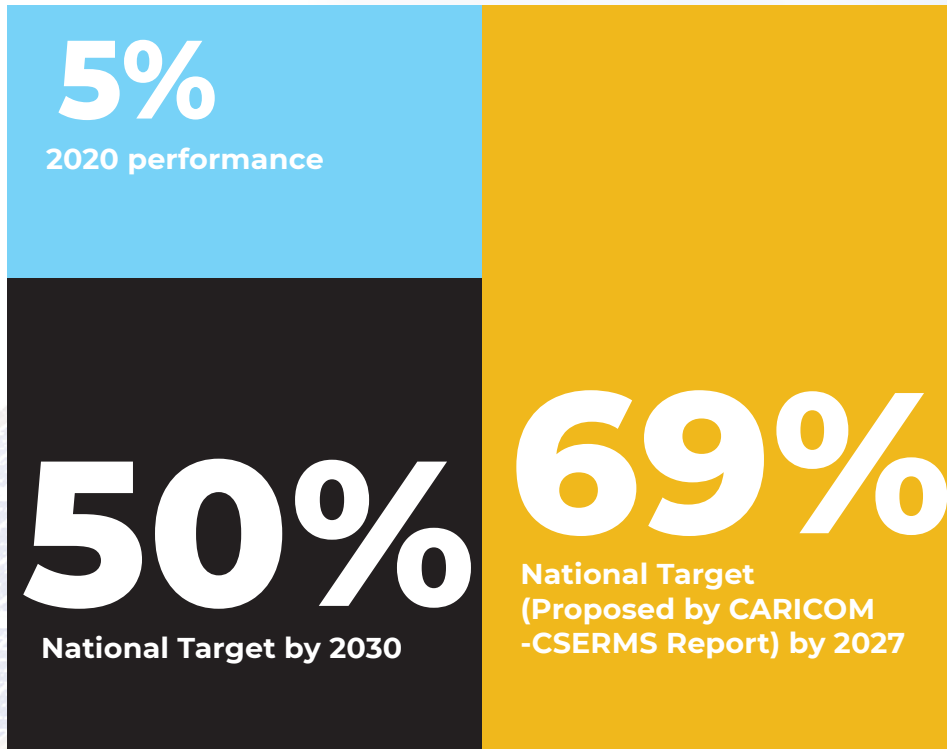
Total
Installed
RE (MW)
4.671
[9]

Energy Performance Standards/ Appliance Labelling

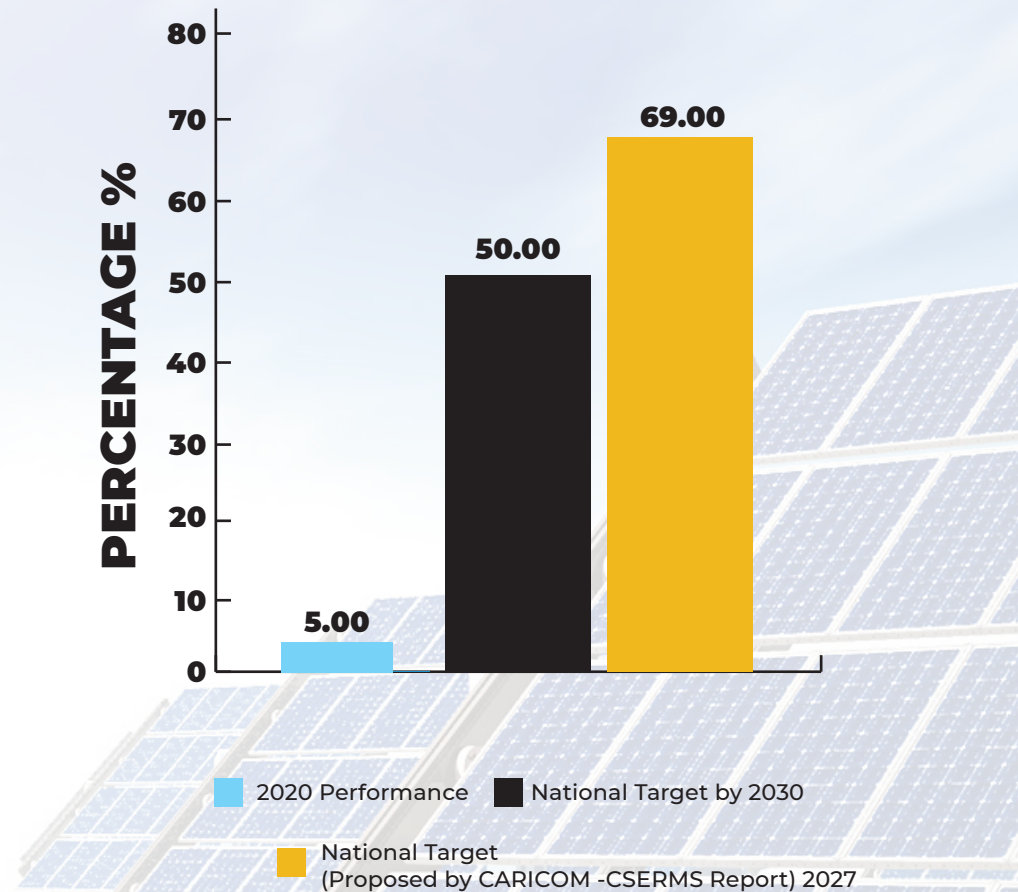
- SLNS 91: 2011 EE Labelling - Incandescent and Fluorescent Lamps
- SLNS 93: 2015 EE Labelling - Air Conditioners
- SLNS 94: 2016 EE Labelling - Refrigerators
- SLNS/ISO 13065:2015 Sustainability Criteria for Bioenergy
- SLNS/ISO 50001:2018 Energy Management Systems - Use
- SLNS/ISO 50002:2014 Energy Audits
- SLNS/ISO 50003:2014 Energy Management Systems - Audits
- SLNS/ISO 50004:2014 Energy Management Systems - Maintenance
- SLNS/ISO 50006:2014 Energy Management Systems - Measurements
- SLNS/ISO 50007:2017 Energy Services
- SLNS/ISO 50015:2014 Energy Management Systems - Measurements
- SLNS/ISO 50047:2016 Energy Savings
- SLNS/ISO 17742:2015 Energy Efficiency and savings calculation
- SLNS/ISO 17743:2016 Energy Savings - Methodological Framework
- SLNS/ISO /IEC 13273-1:2015; 13273-2:2015 EE and RE sources terminology
- SLNS/ISO 18605:2013 Packaging and the Environment - Energy Recovery [6]



RENEWABLE ENERGY SECTOR PERFORMANCE AGAINST TARGETS



PERFORMANCE AGAINST TARGETS



KEY ENERGY STAKEHOLDERS



Government Ministries, Departments and Agencies

Ministry of Infrastructure, Ports, Energy and Labour [13]
 -Energy, Science & Technology Unit
 -Electrical Department

Electricity Regulator

National Utilities Regulatory Commission (NURC) [17]

Fuel Suppliers

Buckeye Partners Limited [14]
 Sol Petroleum [15]
 RUBIS Caribbean [16]

Transportation

Ministry of Economic Development, Housing, Urban Renewal, Transport and Civil Aviation [18]

Electric Utility

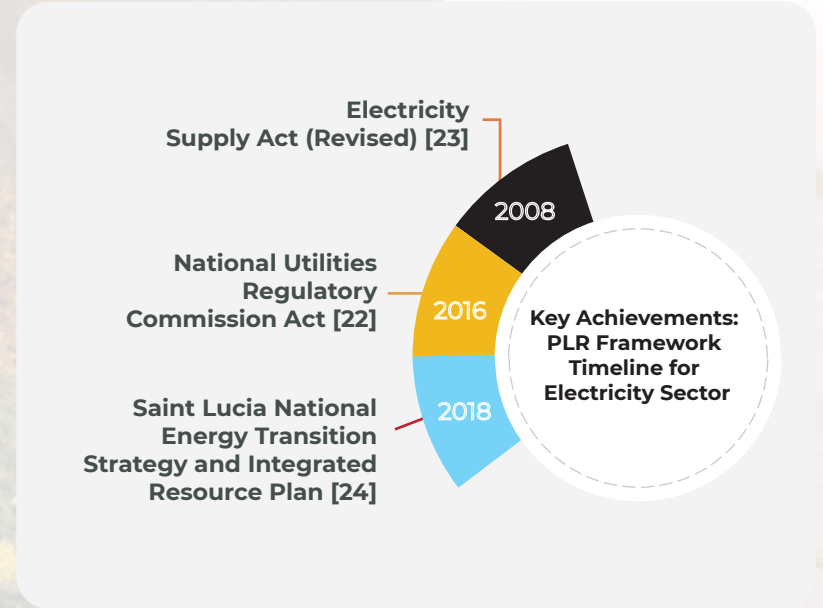
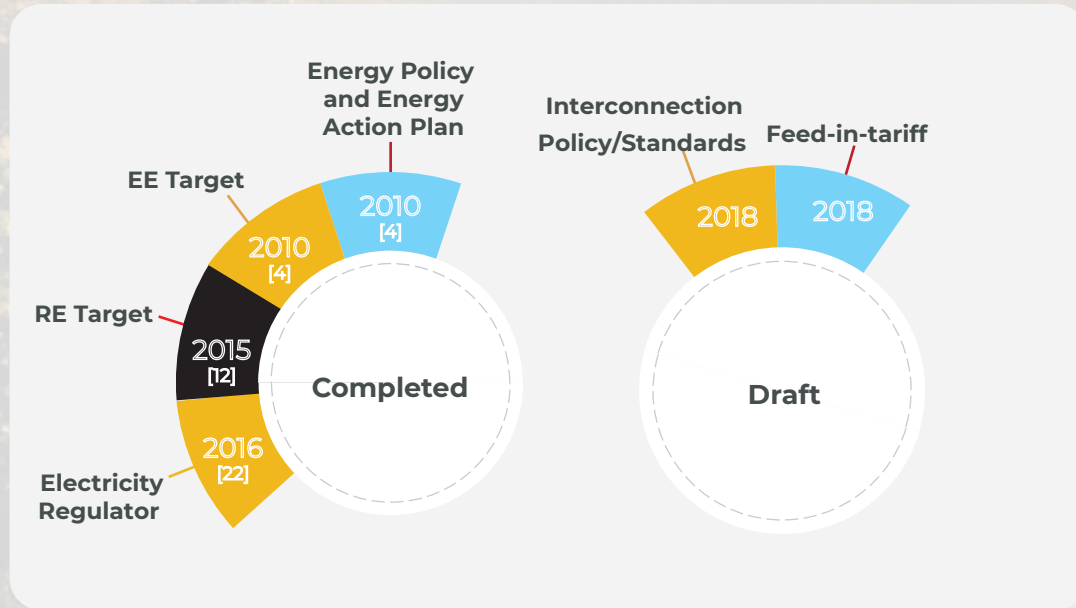
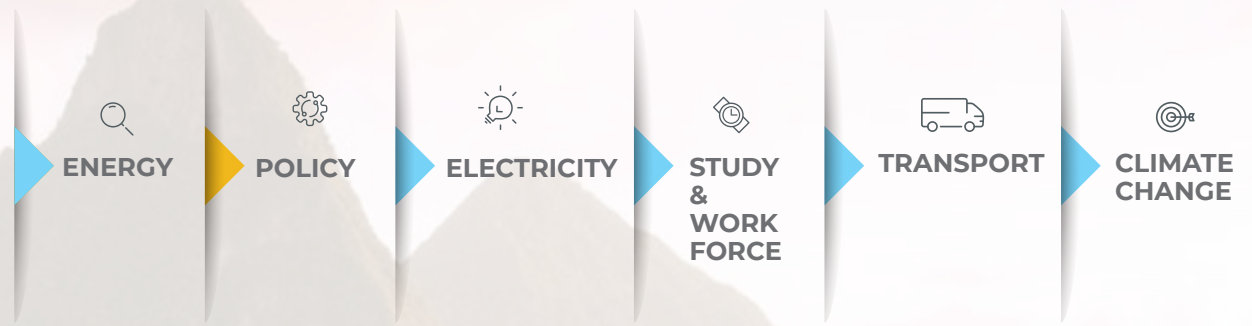
Saint Lucia Electricity Services Limited (LUCELEC) [9]

Transportation

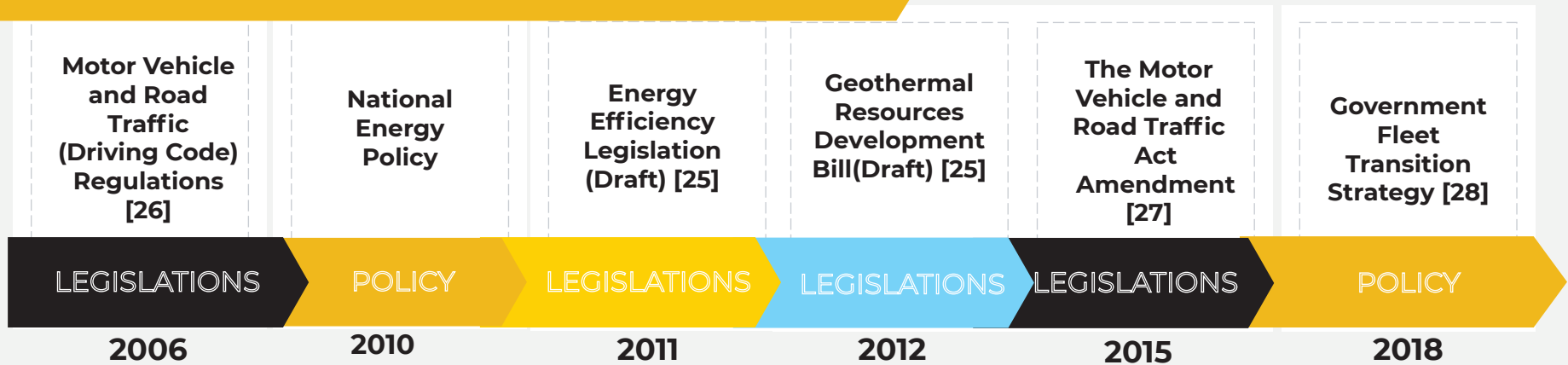
Ministry of Education, Innovation, Gender Relations and Sustainable Development [20]

-Department of Sustainable Development and Environment Division [21]

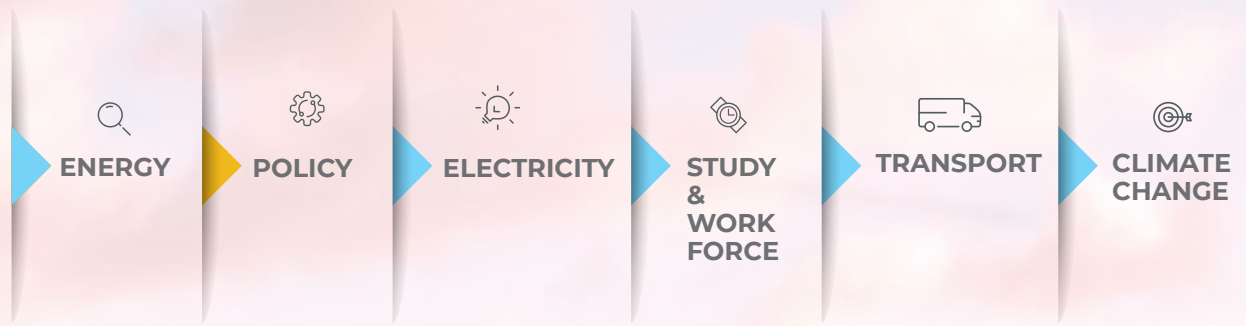
POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK



POLICIES AND LEGISLATION RELEVANT TO THE ENERGY SECTOR



POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK



POLICIES AND LEGISLATION RELEVANT TO THE TRANSPORTATION SECTOR

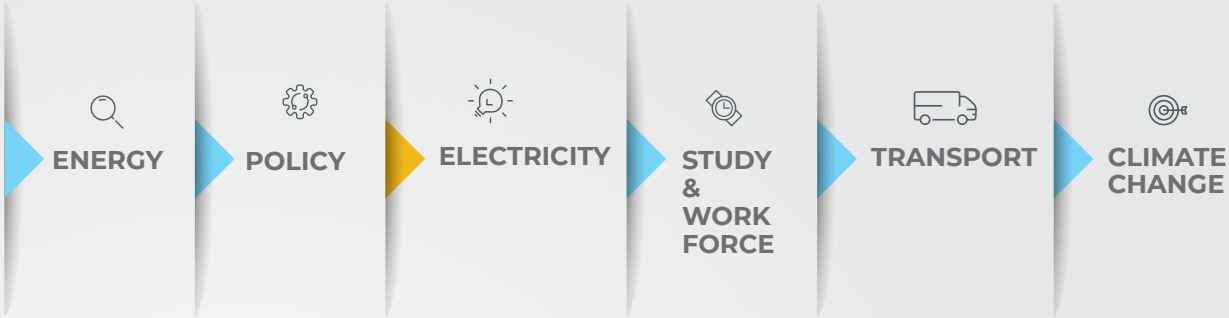
2015

**The Motor Vehicle
and Road Traffic Act
Amendment: 2015
[27]**

2018

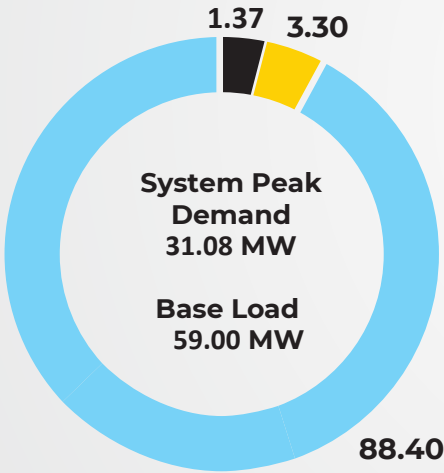
**Government Fleet
Transition Strategy
(2018) [28]**

ELECTRICITY AND ENERGY EFFICIENCY



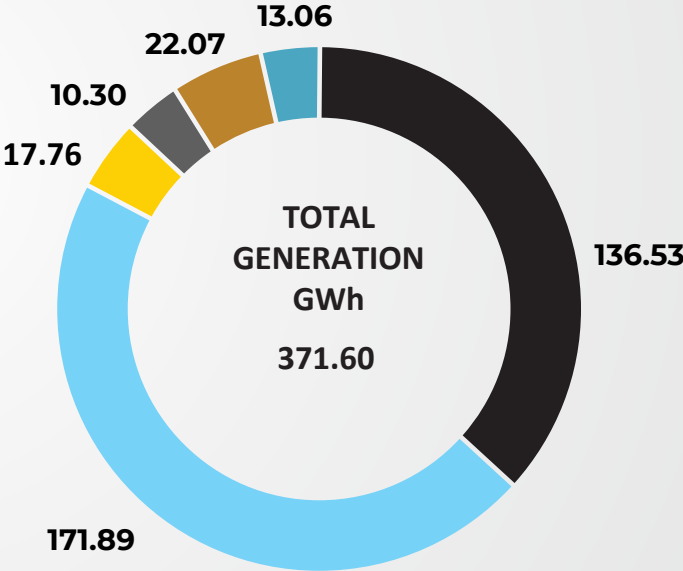
ELECTRICITY & ENERGY EFFICIENCY

Installed Capacity (MW)



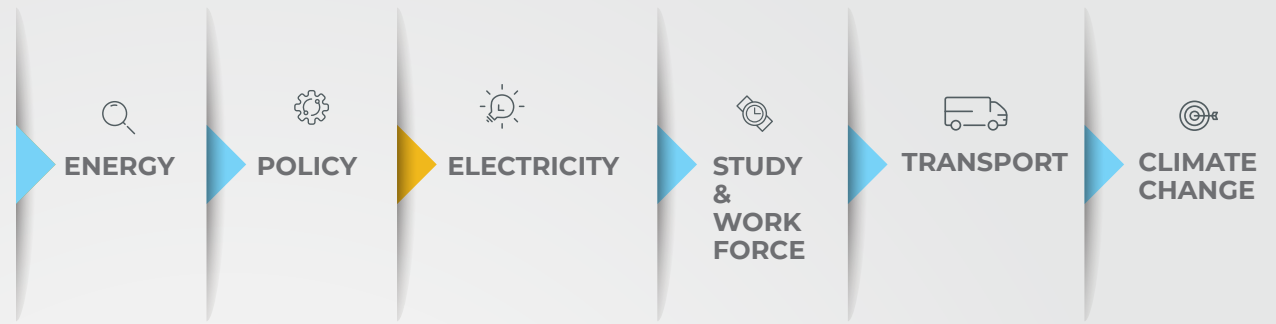
- Electric Utility - Diesel
- Residential and Commercial/Distributed Generation-RE
- Electric Utility-RE

ENERGY CONSUMPTION (GWh)

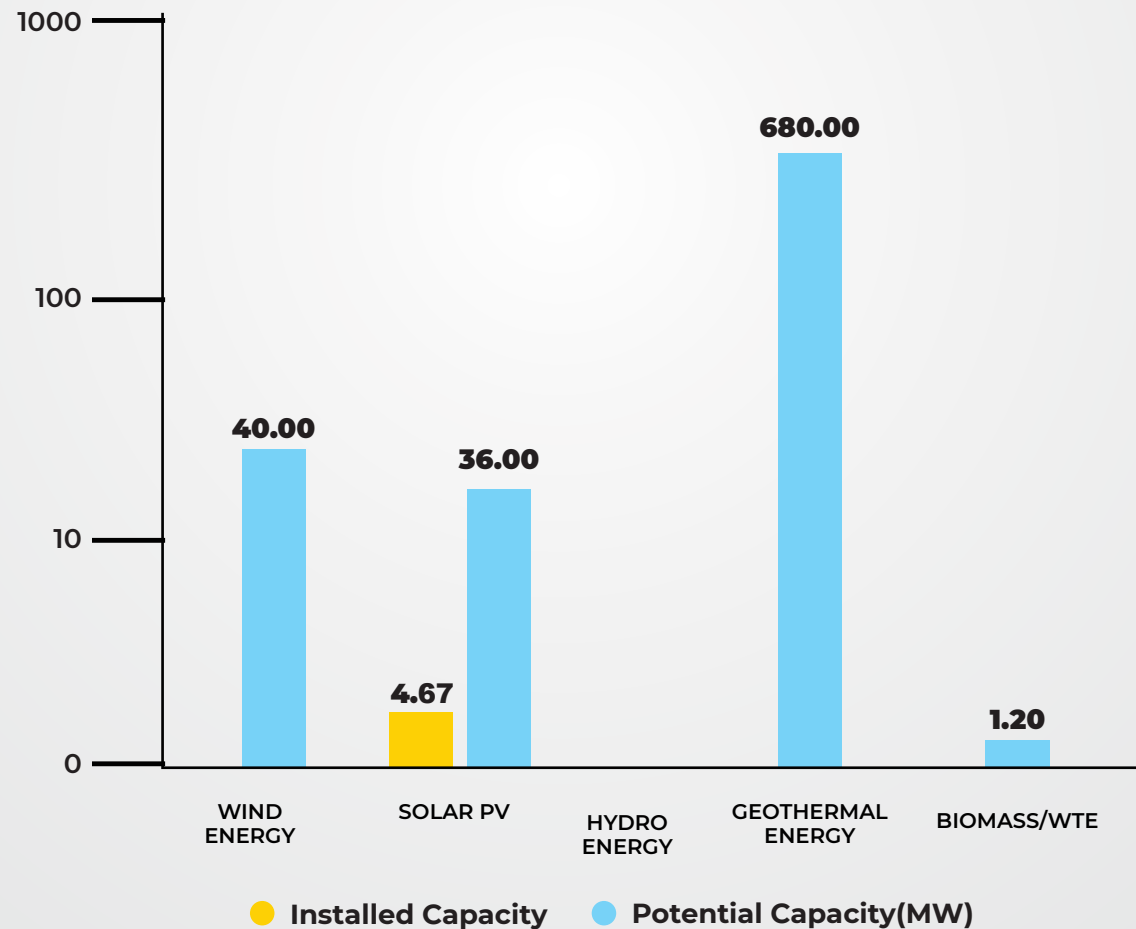


- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- STREET LIGHTING
- LOSSES
- PARASITIC LOAD

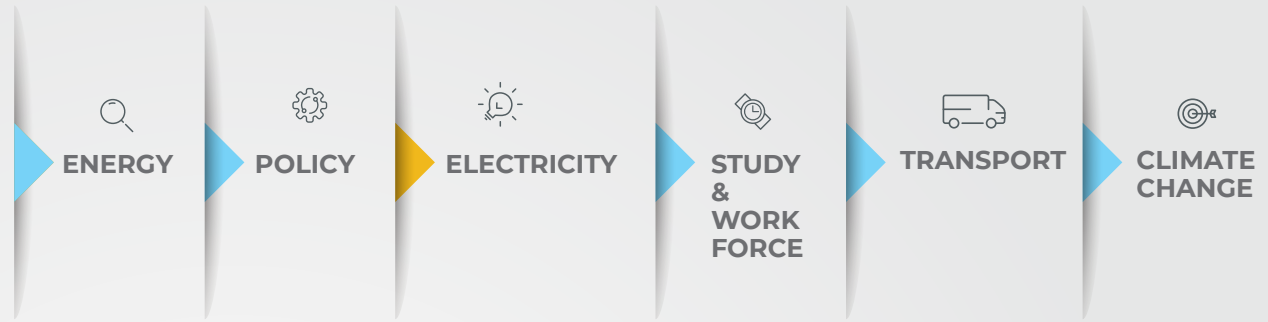
ELECTRICITY AND ENERGY EFFICIENCY



RENEWABLE ENERGY RESOURCES(MW)



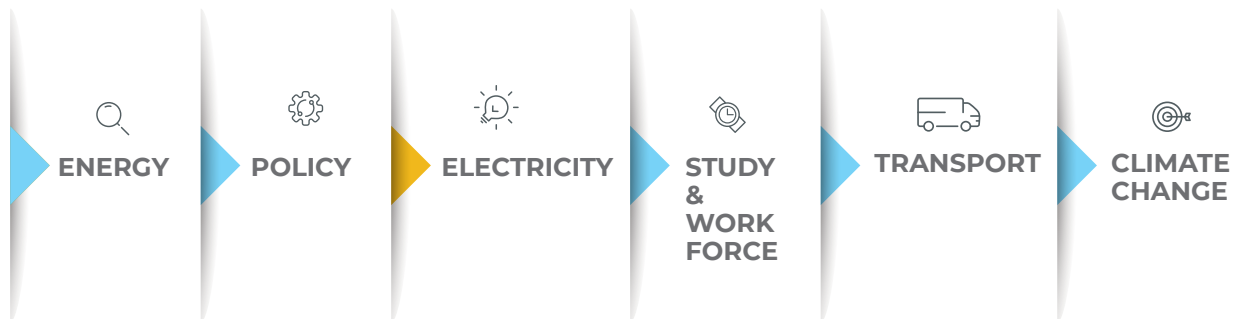
ELECTRICITY AND ENERGY EFFICIENCY



ELECTRICITY TARIFFS

RATE CLASS	MONTHLY CONSUMPTION / DEMAND (kWh)	TARIFF / (US\$/kWh)	TARIFF EXCLUDING SURCHARGE / (US\$/kWh)
RESIDENTIAL	FOR 1-180 UNITS	0.28	0.25
	OVER 180 UNITS	0.30	0.27
COMMERCIAL	ALL UNITS (LOW TENSION)	0.33	0.31
	BULK (HIGH TENSION)	0.32	0.29
INDUSTRIAL / HOTELS	ALL UNITS (LOW TENSION)	0.33	0.31
	BULK (HIGH TENSION)	0.32	0.29
STREETLIGHTS	ALL UNITS	0.33	0.30

PROJECTS IN THE PIPELINE



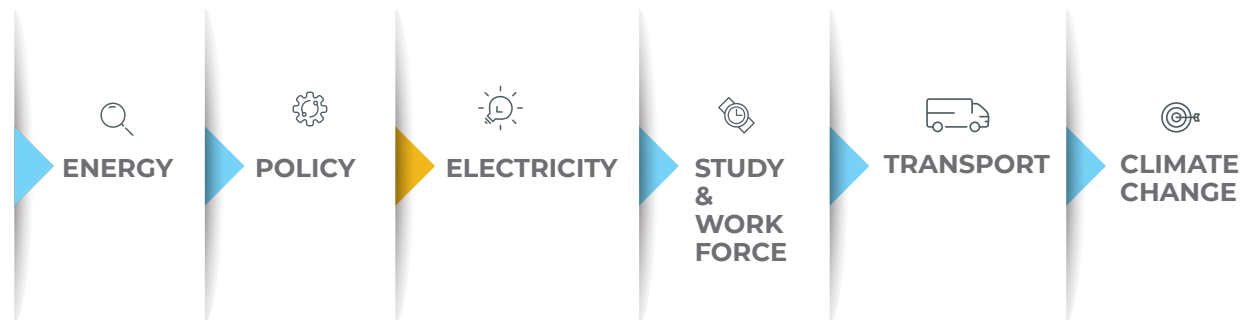
TECHNICAL ASSISTANCE PROJECTS

DONOR FUNDING AND TECHNICAL ASSISTANCE LANDSCAPE	DONOR ORGANIZATION & BANKS	TECHNICAL ASSISTANCE PROVIDERS	FUNDING AWARDS	YEAR
CAPACITY-BUILDING, PROCEDURAL DEVELOPMENT FOR REGULATING IPPS, RESEARCH ON RE CAPACITY LIMITS	GLOBAL GREEN GROWTH INSTITUTE	THE SUPPORT PROVIDED IS IN THE FORM OF A SENIOR REGULATORY ANALYST AT NURC	NOT AVAILABLE	2021
UNITED STATES TRADE AND DEVELOPMENT AGENCY (USTDA) SUPPORTING THE NURC	USTDA	ROCKY MOUNTAIN INSTITUTE (RMI)	NOT AVAILABLE	2021

ENERGY EFFICIENCY PROJECTS

ENERGY EFFICIENCY INITIATIVE	CAPACITY (kW)	ENERGY EFFICIENCY LEGISLATION OR REGULATIONS	ENERGY SERVICE COMPANIES	CHANGE IN OLD/EXISTING INFRASTRUCTURE EXPECTED IN UPCOMING CALENDAR YEAR
STREET LIGHTING	2,260	NONE	YES	18,000 70W HPS STREETLIGHTS TO BE REPLACED WITH 20W LEDS 4000 250W HPS STREETLIGHTS TO BE REPLACED WITH 75W LEDS

PROJECTS IN THE PIPELINE



RENEWABLE ENERGY PROJECTS

RENEWABLE ENERGY SOURCE	RESOURCE AND PROJECTS CAPACITY (MW)	DEVELOPMENT PARTNER	TOTAL ESTIMATED COST (US\$)	FUNDING SOURCE
SOLAR PHOTO-VOLTAIC - SOLAR CARPORT AT HEWANORRA INTERNATIONAL AIRPORT, VIEUX FORT	0.75	UNITED ARAB EMIRATES (UAE)	2.3M	UAE - CARIBBEAN RENEWABLE ENERGY FUNDS
SOLAR PHOTO-VOLTAIC-SOLAR PV SOLAR FARM AT TROUMASSE, MICOUD. TO HAVE 6.5MW BATTERY STORAGE	10.00	INTERNATIONAL RENEWABLE ENERGY AGENCY (IRENA)	31.2 M	ABU DHABI FUND FOR DEVELOPMENT (ADFD) FACILITY
GEOTHERMAL ENERGY	30.00	WORLD BANK	22.38 M	CLEAN TECHNOLOGY FUND (CTF); INTERNATIONAL DEVELOPMENT FUND; UNITED KINGDOM DEPARTMENT FOR INTERNATIONAL DEVELOPMENT; THE SIDS DOCK SUPPORT PROGRAM

TERTIARY PROGRAMMES OFFERED



NATIONAL ENRICHMENT AND LEARNING UNIT (NELU)

VOCATIONAL/ PROFESSIONAL CERTIFICATE

ELECTRICAL
INSTALLATION

**PERSONS
GRADUATED**

■

<http://education.govt.lc/ministries/education/national-enrichment-and-learning-unit>

OECS SUSTAINABLE ENERGY UNIT

NORTH AMERICAN
BOARD OF CERTIFIED
ENERGY PRACTITIONERS
(NABCEP) PHOTOVOLTAIC
ASSOCIATE COURSE (PVA)

**PERSONS
GRADUATED**

36

<https://pressroom.oecs.org/oecs-photovoltaic-training-and-certification-for-installers-and-electrical-inspectors>

NORTH AMERICAN BOARD OF
CERTIFIED ENERGY PRACTITIONERS
(NABCEP) PHOTOVOLTAIC SYSTEMS
INSPECTOR COURSE (PVS)

**PERSONS
GRADUATED**

36

<https://pressroom.oecs.org/oecs-photovoltaic-training-and-certification-for-installers-and-electrical-inspectors>

SIR ARTHUR LEWIS COMMUNITY COLLEGE

ASSOCIATE DEGREE

ENVIRONMENTAL STUDIES
AND CLIMATE CHANGE

**PERSONS
GRADUATED**

■

<https://salcc.edu.lc/science/env-sus.php>

ENVIRONMENTAL SCIENCE

**PERSONS
GRADUATED**

■

<https://salcc.edu.lc/ad.php>

CHEMISTRY²

**PERSONS
GRADUATED**

■

<https://salcc.edu.lc/ad.php>

THE ASSOCIATE DEGREE IN CHEMISTRY CONTAINS A COURSE CALLED "GREEN CHEMISTRY" WHICH COVERS RENEWABLE RESOURCES AND ALTERNATIVE ENERGY SOURCES.

ELECTRICAL
ENGINEERING

**PERSONS
GRADUATED**

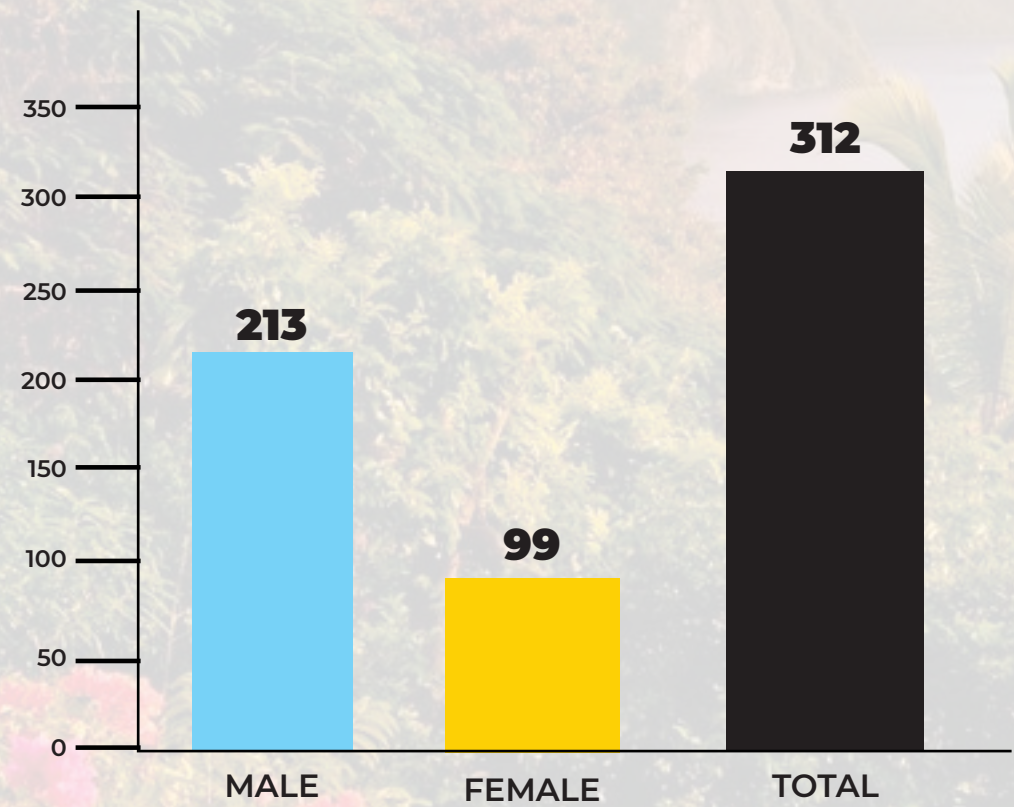
■

ELECTRICAL
INSTALLATIONS

**PERSONS
GRADUATED**

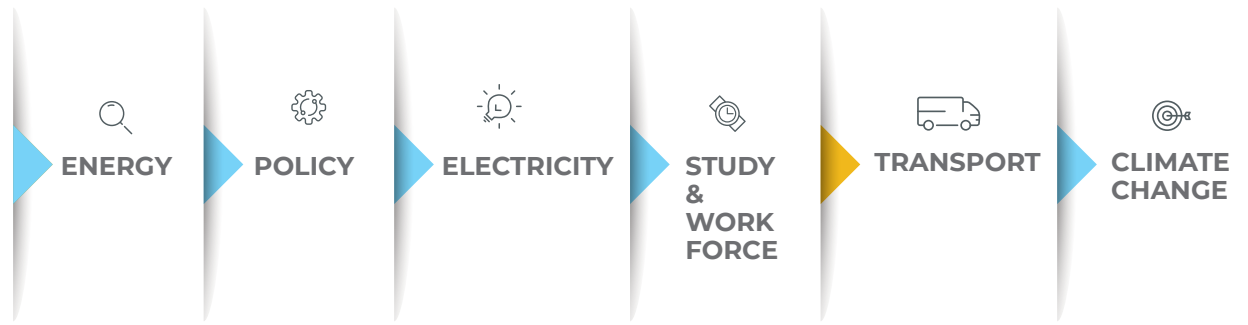
■

WORKFORCE

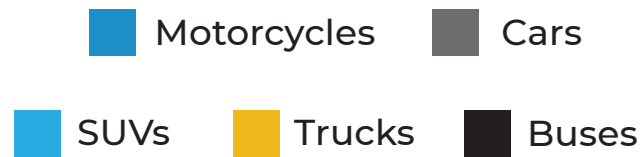
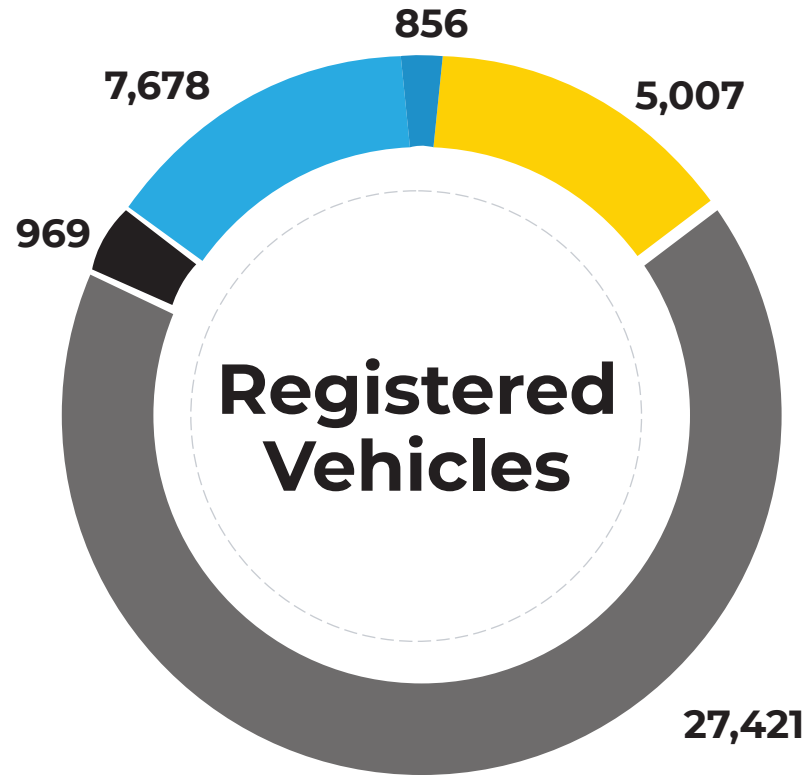


THIS IS NOT AN EXHAUSTIVE LIST OF THE WORKFORCE IN ST. LUCIA.

TRANSPORTATION SECTOR

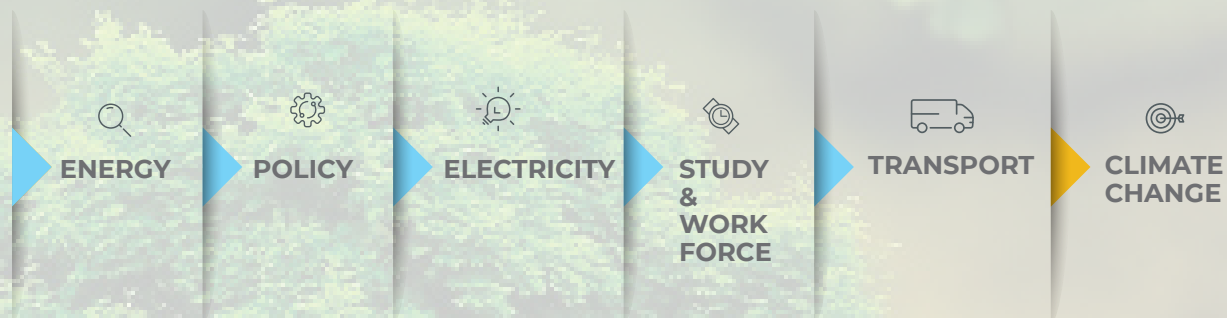


MOTOR VEHICLE STOCK



**THERE ARE ALSO 231 EV
AND HYBRID VEHICLES.**

CLIMATE CHANGE FRAMEWORK



SAINT LUCIA CLIMATE CHANGE ADAPTATION POLICY (2015) [10]

NATIONAL DETERMINED CONTRIBUTIONS:

7% GHG reduction from energy sector relative to 2010 levels, by 2030 [5]

PRIORITY SECTORS FOR NDCs

Energy Sector (electricity generation and transportation) [5]

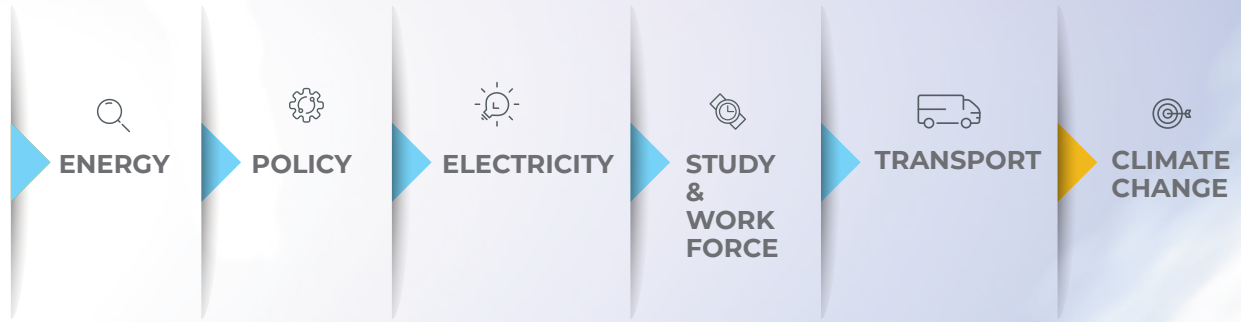
NATIONAL COMMUNICATIONS (NC) TO THE UNFCCC:

Saint Lucia's Initial National Communication on Climate Change (2001) [29]

Second National Communication on Climate Change for Saint Lucia (2011) [30]

Third National Communication on Climate Change for Saint Lucia (2017) [31]

CLIMATE CHANGE FRAMEWORK

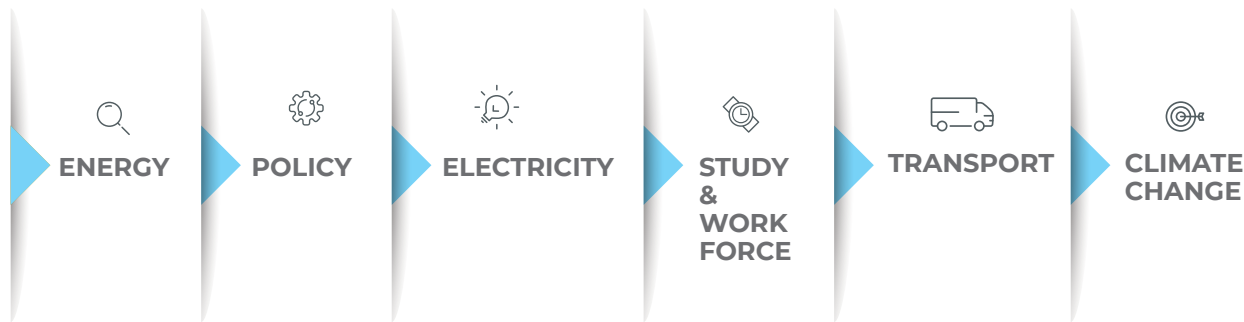


GREENHOUSE GAS INVENTORY [31]

EMISSIONS (Gg CO ₂ EQUIVALENT)			
CATEGORIES	CO ₂	CH ₄	N ₂ O
ENERGY	249.35	0.22	0.65
MANUFACTURING INDUSTRIES & CONSTRUCTION	11.49	0.16	0.32
CIVIL AVIATION	5.04	0.001	0.004
ROAD TRANSPORTATION	245.09	1.34	7.20
RESIDENTIAL	19.51	3.90	0.70
COMMERCIAL/ INSTITUTIONAL	19.51	0.009	0.003
NAVIGATION	3.62	0.007	0.03
AGRICULTURE / FORESTRY / FISHING	6.61	11.83	11.1
WASTE		68.91	0.00

*Gg represents giga grams

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[3] Department of Economic Development, Transport and Civil Aviation, Castries, St. Lucia, “Economic Growth on the A.R.I.S.E. – Nou Tout Ansanm: Medium Term Development Strategy 2020-2023,” 2020. [Online]. Available: <https://observatorioplanificacion.cepal.org/en/plans/medium-term-development-strategy-2020-2023-st-lucia>. [Accessed July 2021].

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[5] Government of Saint Lucia, “Saint Lucia Intended Nationally Determined Contribution under the United Nations Framework Convention on Climate Change (UNFCCC),” 17 November 2015.

[Online]. Available: <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/-Saint%20Lucia%20First/Saint%20Lucia%27s%20INDC%2018th%20November%202015.pdf>. [Accessed August 2020].

[6] Saint Lucia Bureau of Standards, “SLNS,” 2020. [Online]. Available: <https://www.slbs.org/?s=SLNS>. [Accessed September 2021].

[7] Energy Department, Electrical Department - Government of St. Lucia, SOL Petroleum, Sustainable Energy Unit - OECS, St Lucia Electrical Services, National Utilities Regulatory Commission, RUBIS, Buckeye Global Marine Terminals, Workforce Data, Private Communication, 2020.

[8] St Lucia Central Statistics Office, Saint Lucia Import Data, Castries: Private Communication, 2021.

[9] Saint Lucia Electricity Services Ltd (LUCELEC), Electricity and Energy Efficiency Data, Castries: Private Communication, 2020.

[10] Ministry of Sustainable Development, Energy, Science and Technology, “The Saint Lucia Climate Change Adaptation Policy,” 2015. [Online]. Available: <https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/laws/8512.pdf>. [Accessed August 2021].

[11] Customs and Excise Department, Electric and Hybrid Vehical Stock, Castries: Private Communication, 2021.

[12] Department of Sustainable Development, “Saint Lucia Intended Nationally Determined Contribution under the United Nations Framework Convention on Climate Change,” 17 November 2015. [Online]. Available: <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/-Saint%20Lucia%20First/Saint%20Lucia%27s%20INDC%2018th%20November%202015.pdf>. [Accessed 5 November 2021].

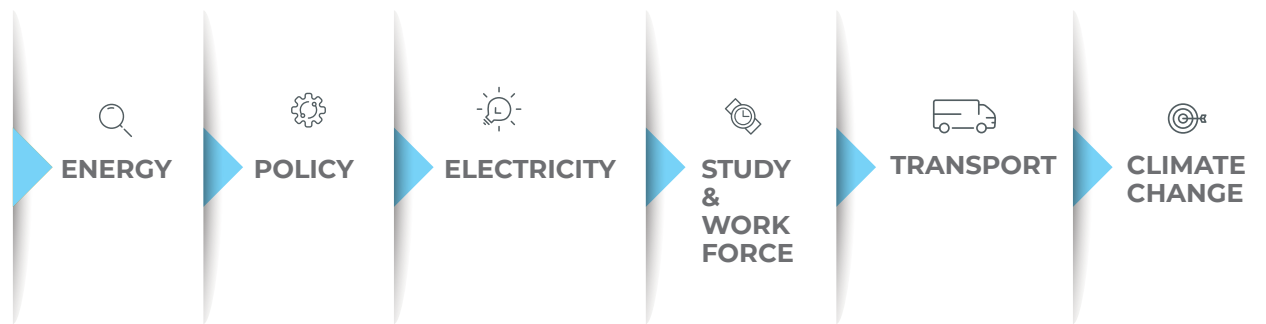
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[14] Buckeye Global Marine Terminals, Workforce Data, Castries: Private Communication, 2021.

[15] Sol Petroleum, Fuel Use and Workforce Data, Vieux Fort: Private Communication, 2021.

[16] RUBIS, Fuel Use and Workforce Data, Castries: Private Communication, 2021.

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[17] National Utilities Regulatory Commission (NURC), Projects in the Pipeline and Workforce Information, Castries: Private Communication, 2021.

[18] Regional Observatory on Planning for Development, "Ministry of Economic Development, Housing, Urban Renewal, Transport and Civil Aviation of Saint Lucia," 2021. [Online]. Available: <https://observatorioplanificacion.cepal.org/en/institutions/ministry-economic-development-housing-urban-renewal-transport-and-civil-aviation-saint-lucia>. [Accessed 6 December 2021].

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[21] Sustainable Development and Environment Department- Government of Saint Lucia, Climate Change Data, Castries: Private Communication, 2021.

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