



2019 ENERGY REPORT CARD

ST. LUCIA



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INTRODUCTION

This document presents Saint Lucia's Energy Report Card (ERC) for 2019.

The ERC provides an overview of the energy sector performance in Saint Lucia. The ERC also includes energy efficiency, projects, 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.

The image shows a landscape with several wind turbines on hills. A large white rectangle is overlaid in the center, containing the word 'CONTENTS' in bold black letters at the top. Below the title are ten horizontal black lines, indicating a list of contents. In the top right corner, there is a blue and yellow geometric shape that looks like a stylized flag or a piece of paper.

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ENERGY SECTOR SUMMARY

Key Data and Information - Energy Sector	
Population	179,995 [1]
GDP (USD) Per Capita	11,791.70 [1]
Debt as % of GDP	59.6 [1]
Human Development Index (2018)	0.759 [2]
National Development Plan/Overall Country Development Strategy	Saint Lucia National Vision Plan [3]
National Energy Policy	Saint Lucia National Energy Policy (2010) [4]
Renewable Energy (RE) Policy	None
RE Target	50% by 2030 [6]
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]
No. of Persons Employed in Energy Sector	590 [7]
Total Oil Import (BOE) per day	3,982.36 [8]

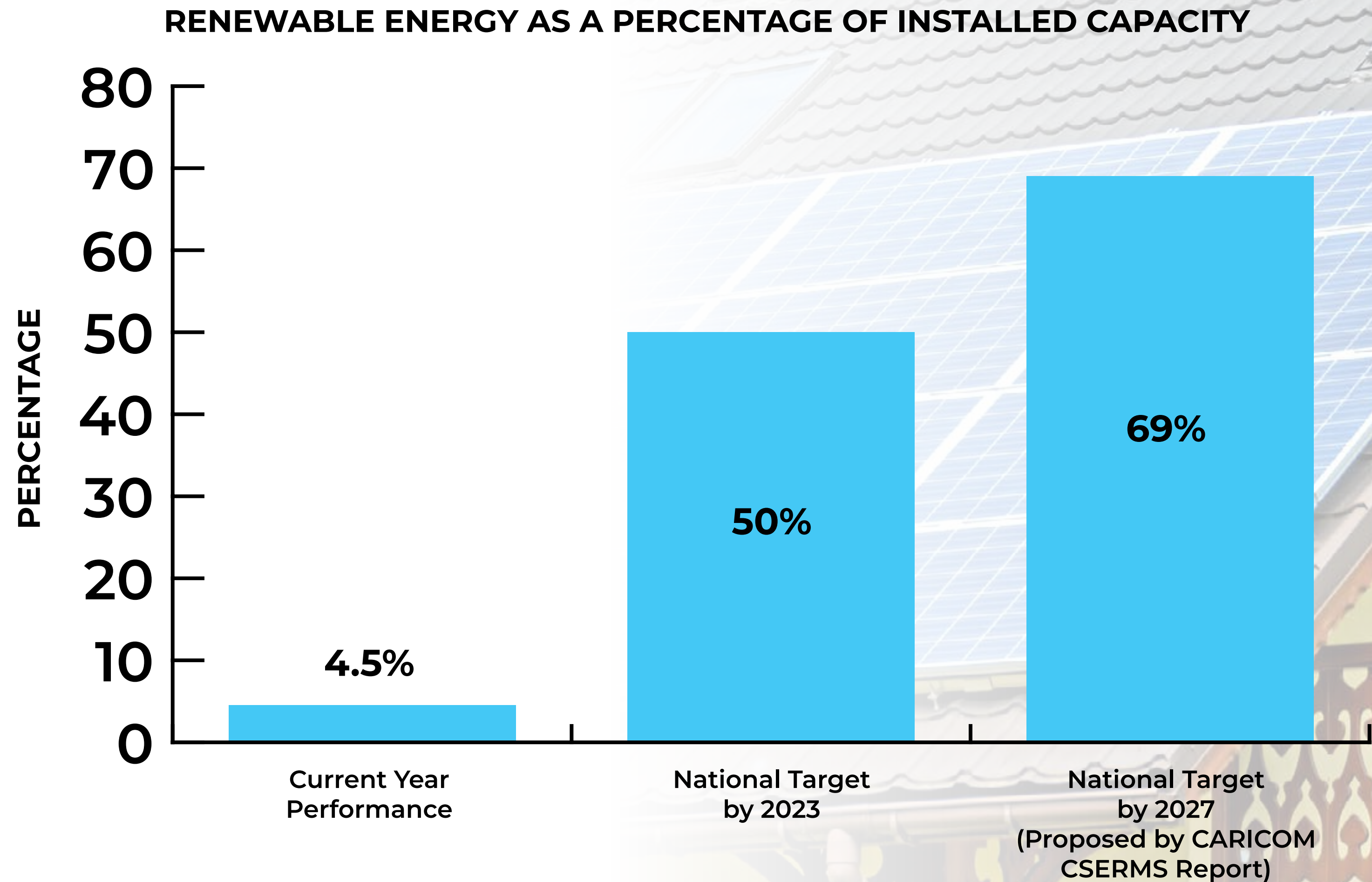


ENERGY SECTOR SUMMARY CONT'D

Key Data and Information - Energy Sector	
Total Oil Export (BOE) per day	0 [8]]
Total Installed Capacity (MW)	92.54 [9]
Total Installed RE (MW)	4.14 [9]
Electricity System Losses (%)	6.4 [9]
Energy Use (kWh) Per Capita	2,049.72 [9]
Fuel and Oil Imports as % of GDP	5.06 [1]
Climate Change Policy	The Saint Lucia Climate Change Adaptation Policy [10]
Electric Vehicle Stock	23 [11]
National Determined Contributions (NDC)	16% versus business as usual by 2025 23% versus business as usual by 2030 [5]
National Repository for Energy Data	None



ENERGY SECTOR PERFORMANCE AGAINST TARGETS





KEY ENERGY STAKEHOLDERS

Government Ministries, Departments and Agencies

- Ministry of Infrastructure, Ports, Energy, and Labour
 - Renewable Energy Division
 - Electrical Department
- Ministry of Education, Innovation, Gender Relations and Sustainable Development
 - Department of Sustainable Development

Fuel Importers & Suppliers

- Buckeye Partners Limited
- Sol Petroleum
- Rubis Caribbean

Electric Utility

- Saint Lucia Electricity Services Limited (LUCELEC)

Independent Power Producer(s)

- None

Electricity Regulator

- National Utilities Regulatory Commission (NURC)

Transportation

- Ministry of Economic Development, Housing, Urban Renewal, Transport and Civil Aviation
 - Transport Division
- Saint Lucia Air & Sea Ports Authority

Other

- Saint Lucia Bureau of Standards
- Sir Arthur Lewis Community College



ELECTRICITY SECTOR: POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK

	Completed	Draft	Not Completed
Energy Policy and Energy Action Plan	✓		
RE Target	✓		
EE Target (for the Public Sector)	✓		
Electricity Regulator	✓		
Net Billing / Net Metering			✓
Interconnection Policy/Standards		✓	
Feed-in-tariff		✓	
RE/EE Act		✓	

Policies and Legislation Relevant to the Energy Sector

- Policies:
- Saint Lucia National Energy Policy (2010) [4]
 - Saint Lucia National Energy Transition Strategy and Integrated Resource Plan (2017) [14]

Policies and Legislation Relevant to the Transportation Sector

- Legislation & Regulation:
- The Motor Vehicle and Road Traffic Act: 2003 Last Amendment: 2015 [16] [17]
 - The Motor Vehicle and Road Traffic (Driving Code) Regulations: 2006 [18]

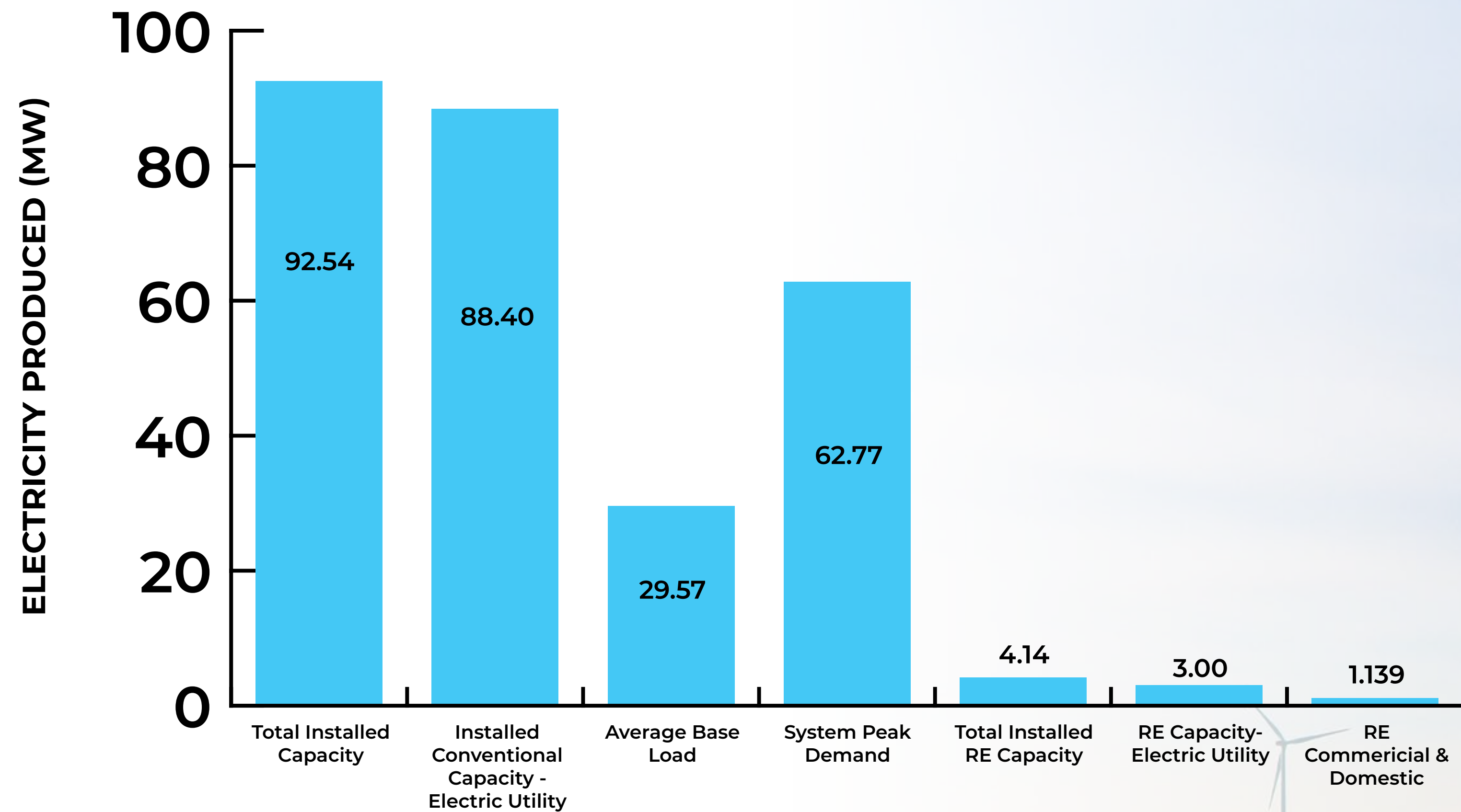
KEY ACHIEVEMENTS: PLR FRAMEWORK TIMELINE FOR ELECTRICITY SECTOR

Name	Year
Electricity Supply Act [12]	1991/1994
Electricity Supply Act (last amendment) [12]	2008
National Energy Policy [4]	2010
National Utilities Regulatory Commission Act [13]	2016
Saint Lucia National Energy Transition Strategy and Integrated Resource Plan [14]	2017
Electricity Supply Services Bill (draft) [15]	2017



ELECTRICITY & ENERGY EFFICIENCY

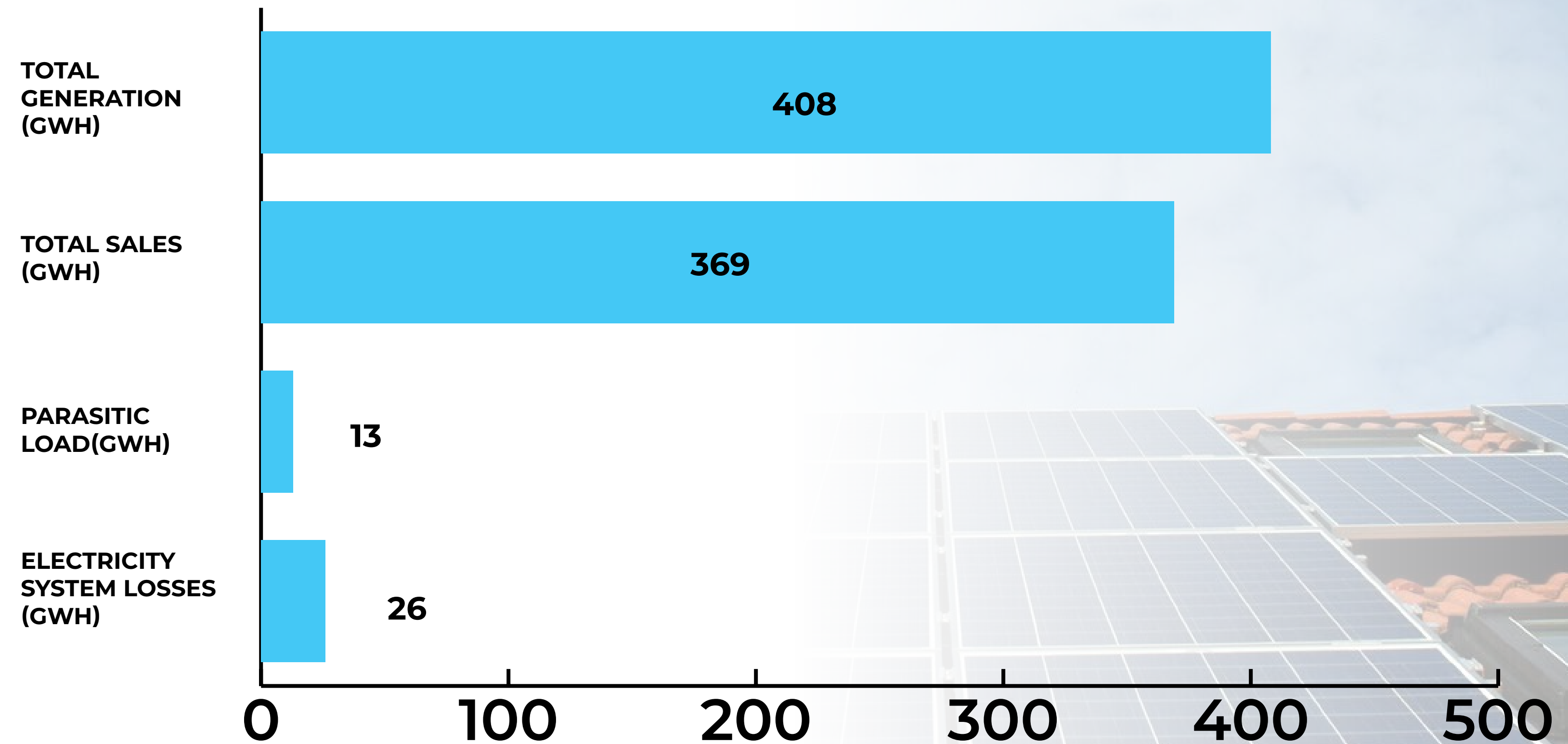
ELECTRICITY GENERATION





ELECTRICITY & ENERGY EFFICIENCY (CONT'D)

ELECTRICITY CONSUMPTION





ELECTRICITY & ENERGY EFFICIENCY (CONT'D)

TARRIFS

Rate	Monthly Consumption / Demand	Tariff / (US\$/kWh)
Residential	≤ 180 kWh	0.281
	≥ 180 kWh	0.299
Commercial – all units (Low Tension)		0.336
Commercial – bulk (High Tension)		0.321
Industrial/Large Power – all units (Low Tension)		0.336
Industrial/Large Power – bulk units (High Tension)		0.321
Hotel (Us\$/kWh) - all units (low tension)		0.336
Hotel (Us\$/kWh) - bulk (high tension)		0.321
Streetlights		0.334

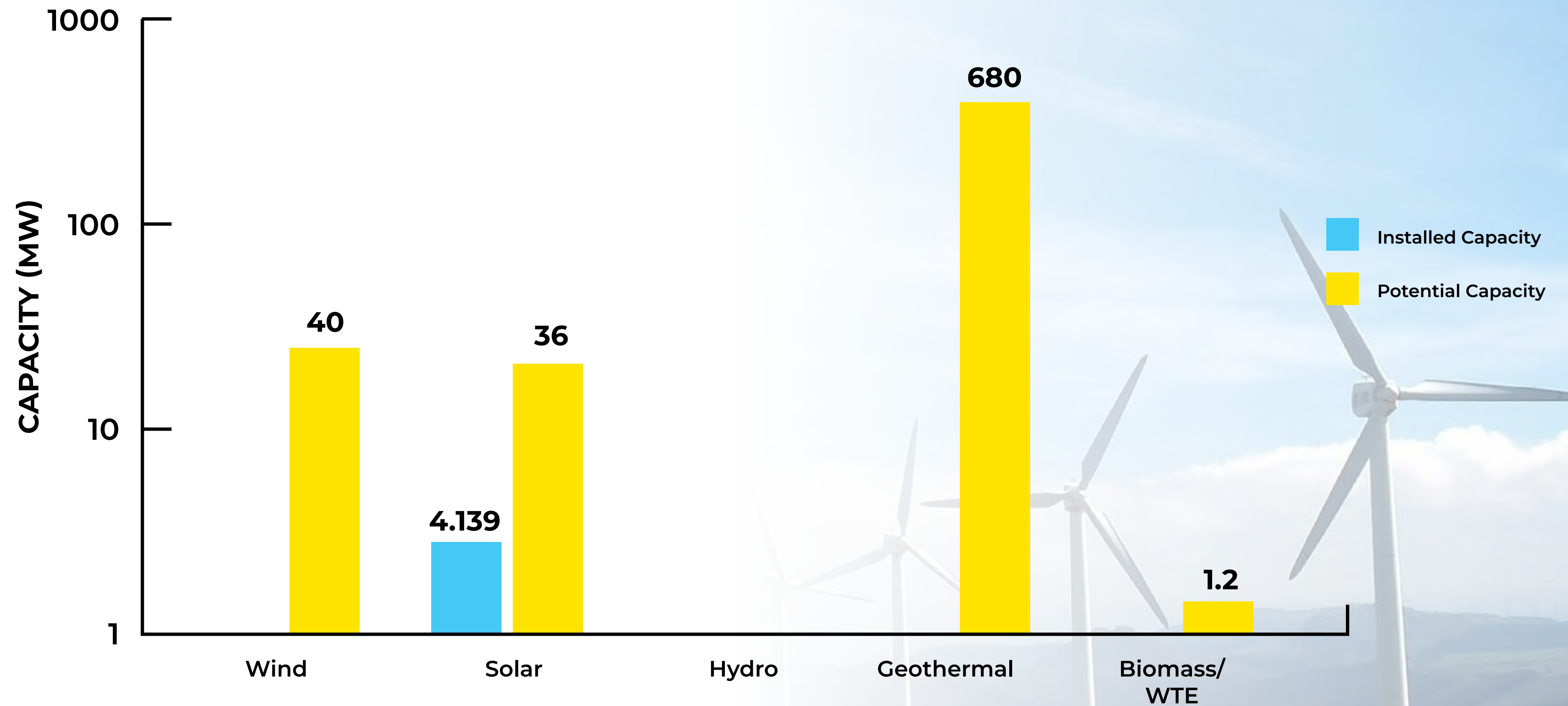
EFFICIENCY

Electricity System Heat Rate (kJ/kWh)	8,609.3
EE Target	20% by 2020 for the public sector
Electricity System Losses (%)	6.4
Energy Use (kWh) Per Capita	2,049.7
Name of Energy Knowledge Management System	NONE
Name of Energy Data Management System	NONE



ELECTRICITY & ENERGY EFFICIENCY (CONT'D)

RENEWABLE ENERGY POTENTIAL





PROJECTS IN THE PIPELINE

RENEWABLE ENERGY PROJECTS

Renewable Energy Source	Resource and Projects Capacity (MW)	Development Partner	Total Estimated Cost (USD)	Funding Source
Solar Photo-Voltaic	0.054	Italian Government - Ministry of Environment, Land and Sea (IMELS)	Cost not available	CARICOM/ Italy MOU
Solar Photo-Voltaic	0.2	World Bank	Cost not available	SIDS DOCK
Solar Photo-Voltaic	0.021	Government of Japan/UNDP	Cost not available	Japan Caribbean Climate Change Partnership (J-CCCP)
Solar Photo-Voltaic	0.75	United Arab Emirates (UAE)	2.3M	UAE - Caribbean Renewable Energy Funds
Solar Photo-Voltaic	10	International Renewable Energy Agency (IRENA) / ADFD Facility	31.2M	Abu Dhabi Fund for Development (ADFD) Facility
Solar Photo-Voltaic	0.025	Republic of China on Taiwan ¹	92,016.00	Concept to Action Project
Solar Photo-Voltaic	0.025	Republic of China on Taiwan ²	92,016.00	Concept to Action Project
Geothermal	30	World Bank	22.375M	Clean Technology Fund (CTF); International Development Fund; United Kingdom Department for International Development; The SIDS DOCK Support Program

¹As referenced by the Department of Renewable Energy in St. Lucia

²As referenced by the Department of Renewable Energy in St. Lucia



NUMBER AND TYPE OF TERTIARY LEVEL & VOCATIONAL TRAINING SUSTAINABLE ENERGY PROGRAMMES OFFERED

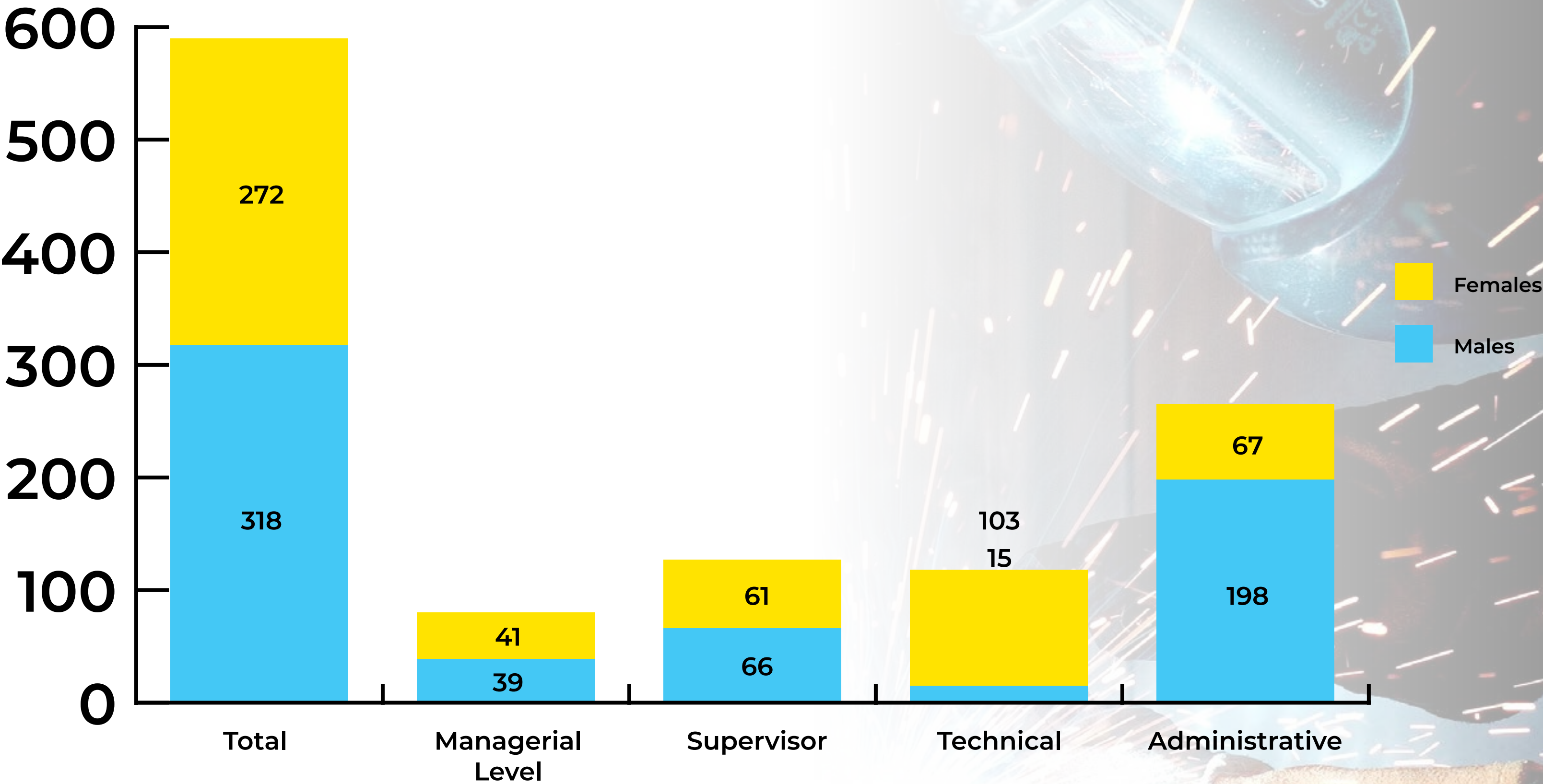
Name of Education Programme Provider	Name of Programme	No. of Persons Enrolled
National American Board of Certified Energy Practitioners (NABCEP) ³	PV Associate Certificate	20
Sir Arthur Lewis Community College ⁴	Electric and Hybrid Vehicle Repair and Replacement Certification	15
Leadership in Energy and Environment Design (LEED) ⁵	Leadership in Energy and Environment Design (LEED)	50

³ Regional Training course with Grenada and St. Lucia. 11 persons passed examination and received NABCEP Certification. Occurred in 2019.
⁴ One week training course. Occurred in 2019.
⁵ Training course where 34 persons passed the examination and received LEED Green Associate Accreditation. Occurred in 2019.



WORKFORCE

NO. OF PERSONS EMPLOYED IN ENERGY IN THE ENERGY SECTOR



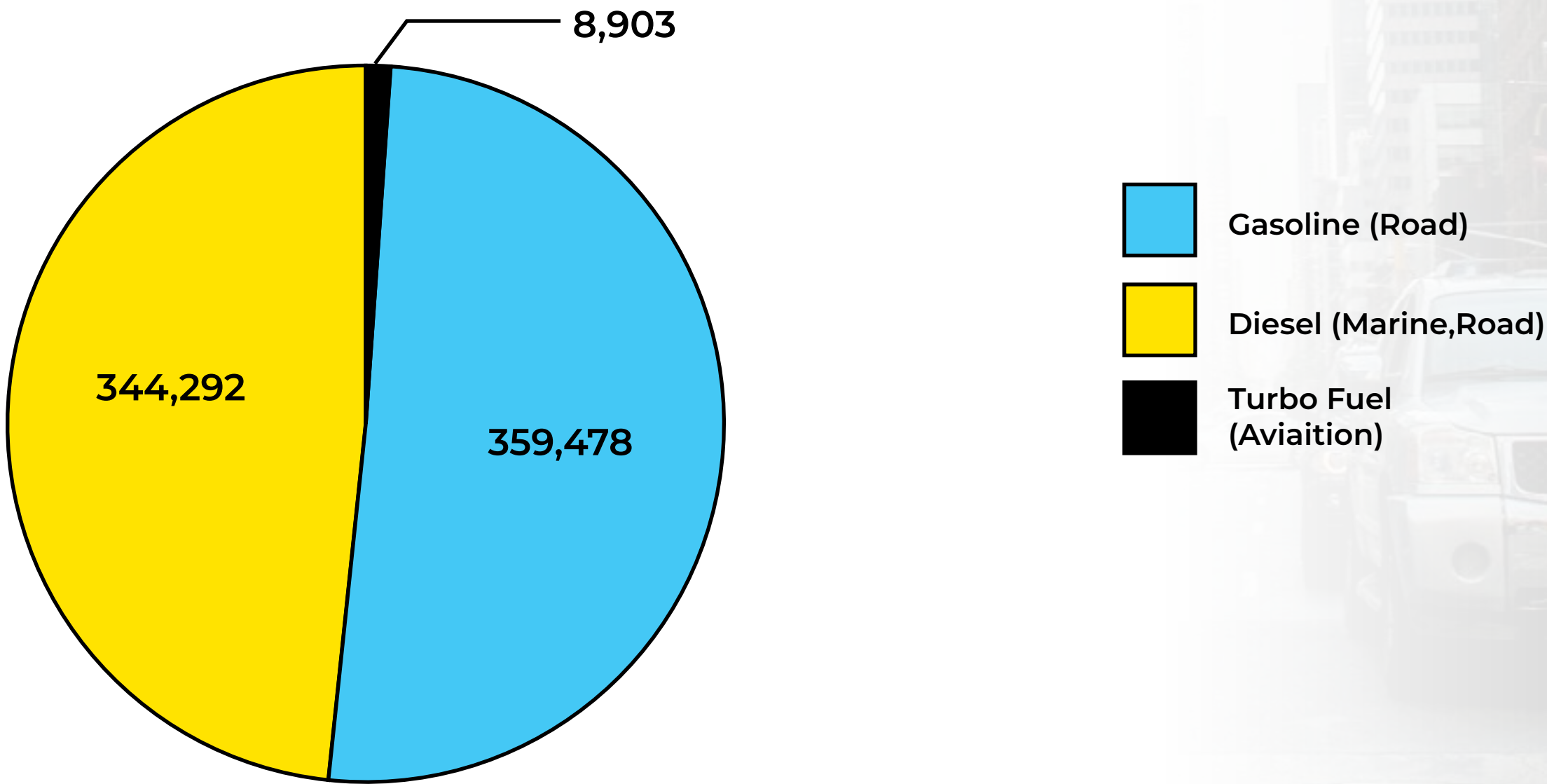


TRANSPORTATION SECTOR

KEY TRANSPORTATION DATA AND INFORMATION

Fuel consumption, Transportation (BOE)	712,673
Energy Related Transportation targets	Efficient Vehicles, Improved and Expanded Public Transit
Sustainable/Alternative fuels used	N/A
Total Imports for Alternative fuels	N/A
Conventional Vehicle Stock/Vehicle Registration	3850

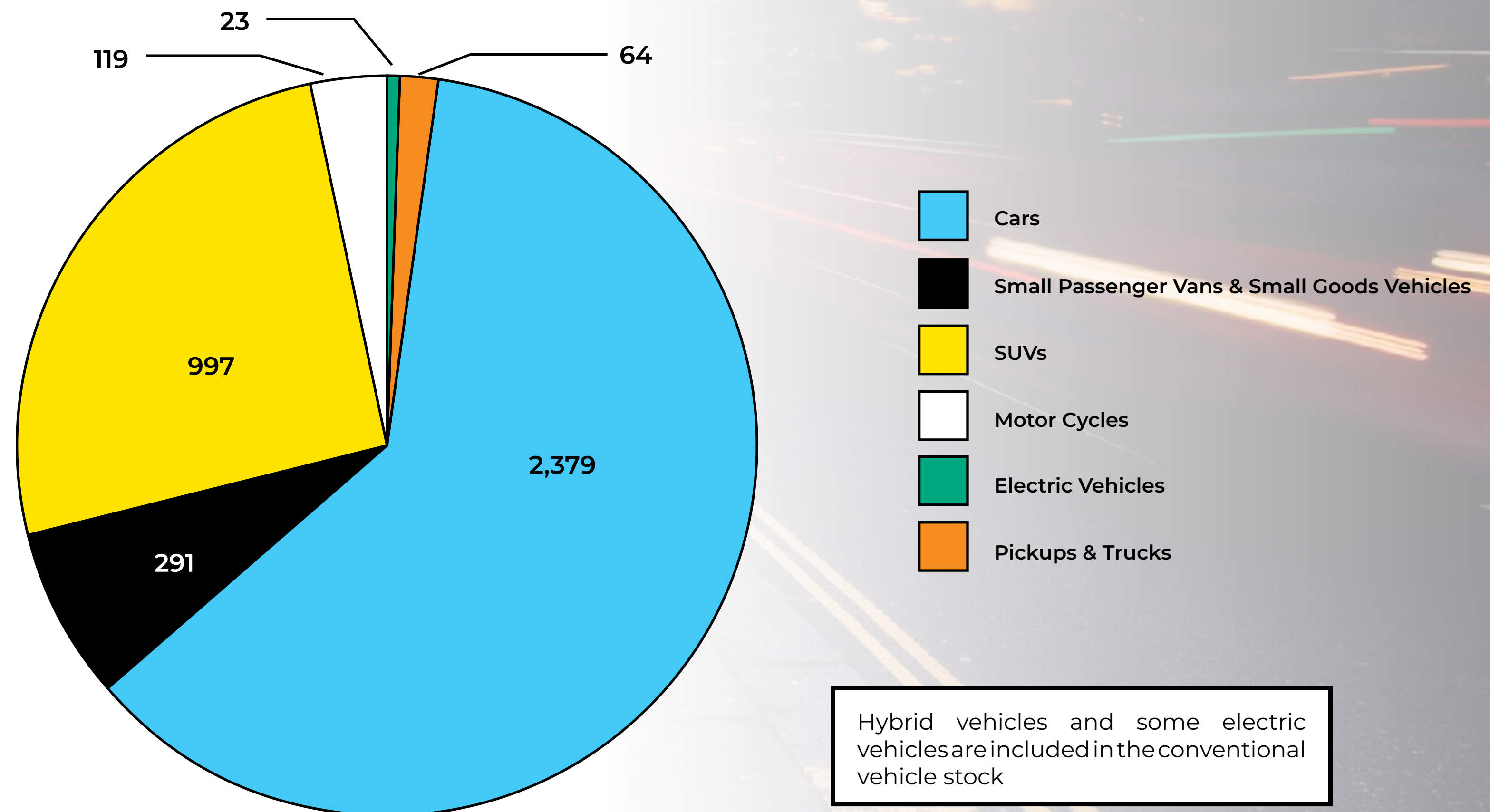
FUEL USE IN THE TRANSPORTATION SECTOR (BOE)





TRANSPORTATION SECTOR (CONT'D)

MOTOR VEHICLE REGISTRATION





CLIMATE CHANGE FRAMEWORK

Climate Change Policy	Climate Change Bill (Draft) The Saint Lucia Climate Change Adaptation Policy [10] Environment Management Bill (Draft) [19]
National Determined Contributions	16% versus BAU by 2025 23% versus BAU by 2030 [5]
Emissions Reduction Target	121 GgCO2-eq by 2023 188 GgCO2-eq by 2030 [5]
Priority Sectors for NDC	Energy, Waste, Industrial Processes, Agriculture
National Communications (NC) to the UNFCCC	First National Communications (2001) [20]
	Second National Communications (2012) [21]
	Third National Communications (2017) [22]

GREENHOUSE GAS (GHG) INVENTORY [23]

Gas	Sector	Volume / Gg CO2 equivalent
Carbon Dioxide (CO ₂)	Energy	251.0
	Manufacturing Industries & Construction	6.9
	Road Transportation	197.0
	Water Bourne Navigation	3.6
	Commercial/Institutional	4.6
	Residential	20.2
	Agriculture/Forestry/Fishing	5.6
	Marine International Bunker	3.6
	Aviation International Bunker	104.4



CLIMATE CHANGE FRAMEWORK

CONT'D

Gas	Sector	Volume / Gg CO2 equivalent
Methane (CH ₄)	Energy	0.0120
	Road Transportation	0.0430
	Commercial/Institutional	0.0010
	Residential	0.0610
	Agriculture/Forestry/Fishing	0.0010
	Waste	68.400
	Marine International Bunker	0.0020
	Aviation International Bunker	0.0007
Nitrous Oxide (N ₂ O)	Energy	0.0021
	Road Transportation	0.0017
	Residential	0.0010
	Agriculture/Forestry/Fishing	21.3000
	Waste	0.0122
	Aviation International Bunker	0.0009



CLIMATE CHANGE FRAMEWORK

CONT'D

Gas	Sector	Volume / Gg CO2 equivalent
(NOx)	Energy	0.687
	Manufacturing Industries & Construction	0.016
	Road Transportation	1.856
	Water Borne Navigation	0.074
	Commercial/Institutional	0.007
	Residential	0.0520
	Agriculture/Forestry/Fishing	0.0080
Carbon Monoxide (CO)	Energy	0.07
	Manufacturing Industries & Construction	0.001
	Road Transportation	16.238
	Water Borne Navigation	0.049
	Commercial/Institutional	0.002
	Residential	1.0000
	Agriculture/Forestry/Fishing	0.0020
NMVOC	Energy	0.018
	Road Transportation	3.056
	Water Borne Navigation	0.01
	Residential	0.1150
	Crude Oil Storage (Fugitive Emissions)	0.2090



CLIMATE CHANGE FRAMEWORK

CONT'D

Gas	Sector	Volume / Gg CO2 equivalent
Sulphur Dioxide (SO ₂)	Energy	0.08
	Manufacturing Industries & Construction	0.002
	Road Transportation	0.064
	Residential	0.0410
	Agriculture/Forestry/Fishing	0.0020



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