





# INTRODUCTION





# This is the Energy Report Card (ERC) for 2022 for St. Lucia.

The ERC provides an overview of the energy sector performance, highlighting the following areas:

- Installed Conventional and Renewable Power Generation Capacity
- Annual Electricity Generation, from Conventional and Renewable Plants
- Other Electricity Sector Metrics, such as Losses, Consumption, and Tariffs
- Renewable Energy Targets
- Renewable Energy Resource Potential
- Energy Efficiency Metrics, including Energy Intensity

The ERC also includes sectoral data and information on policies and regulations; workforce; training and capacity building; and related areas.

The data and information that are available in the ERC were mostly provided by the government ministries, agencies, and departments, that have responsibility for statistics and planning, in general, and the energy sector and electricity subsector including the electric utilities, in particular. The data and information collected was supplemented by desk based research and, in instances, information was generated from calculations and analyses that were performed by the CCREEE.

### **Quality Assurance**

The collection and treatment of data and information that is produced for the ERC is consistent with the International Recommendations for Energy Statistics (IRES), which provides a comprehensive methodological framework for the collection, compilation, and dissemination of energy statistics in all countries irrespective of the level of development of their statistical system. The ERC is produced in accordance with these performance standards that seek, as far as is possible, to ensure the quality (i.e., objectivity, utility, and integrity) of data and information that it disseminates to the public.

The CCREEE strives for transparency on the information and methods that are used within the production of the ERC, with a view to improve understanding on how the information should be treated and to facilitate reproducibility of the information. Nevertheless, the Centre recognizes that quality may be limited by the nature and source of the data and information disseminated.

### Disclaimer

The ERC includes data and information that is contained in a variety of public sources and, though every effort is made to validate the accuracy and validity of the contents, reliance on the information herein is strictly at the user's risk.

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If a substantive error is detected after the ERC is disseminated, the CCREEE will make corrections and issue an errata notice, or other notification as appropriate. Also, the information contained within the ERC may be revised, after initial dissemination to reflect more complete information or other significant changes in the underlying data. The ERC may, from time to time, include information that is preliminary and is expected to be revised, or information that is revised from previously disseminated versions. In such instances, those cases are clearly noted.

# **Requests for Correction**

The CCREEE has established administrative mechanisms to allow persons to seek and obtain, where appropriate, legitimate correction(s) to information maintained and disseminated through the ERC. Any request for corrections should be sent to: energyreportcard@ccreee.org, under the subject: REQUEST FOR CORRECTION TO ERC 2022 FOR ST. LUCIA.

# Acknowledgements

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# **ENERGY SECTOR SUMMARY**







Saint Lucia's Medium Term Development Strategy 2020-2023 [4]

National Development Plan/ Overall Country Development Strategy

Saint Lucia National Energy Policy (2010) [5]

**National Energy Policy** 

None

Renewable Energy (RE) Policy



# SOCIOECONOMICS

Population (Premliminary)

GDP (USD)

GDP (USD) Per Capita

Gross National Income (GNI) Per Capita (USD)

Debt as % of GDP

Human Development Index

**RE Target** 

183,251 <sup>[1]</sup>

\$ 2,329,896,980.27 [1]

\$12,718.60<sup>[1]</sup>

 $$11,160^{[2]}$ 

69.80%[1]

 $0.715^{[3]}$ 

50% penetration by renewable energy sources by 2030 [7]



Total Installed RE (MW)

Electricity System Losses (%)

Energy Use (kWh) Per Capita

National Repository for Energy Data 88.4 MW <sup>[9]</sup>

4.67 MW [9]

**5.74%** [9]

2,039.08 kWh

MRV Portal hosted Sustainable Development



# OTHER ENERGY SECTOR SUB-POLICIES

Climate Change Policy

National Determined Contributions (NDC)

Energy Performance Standards/Appliance Labelling Saint Lucia's National Adaptation Plan 2018 – 2028 [6]

7% Greenhouse Gas (GHG) emissions reduction in the energy sector relative to 2010, by 2030. [7]

**Core Appliance Labels** 

• SLNS 90: 2011- Energy Efficiency Labelling - Labelling of Incandescent Lamps.

• SLNS 91: 2011- Energy Efficiency Labelling - Labelling of Fluorescent Tubular and Compact Lamps

• SLNS 93: 2015- Specification for energy efficiency

Labelling of Air Conditioners

• SLNS 94: 2016- Energy Efficiency Labelling- Refrigerators

Fuel Quality Standards

• SLNS 65: 2012 - Specification for Diesel Fuel

• SLNS 76: 2011 - Standard Specification for Liquefied Petroleum Gases

• SLNS 67: 2014 - Specification for unleaded Gasoline

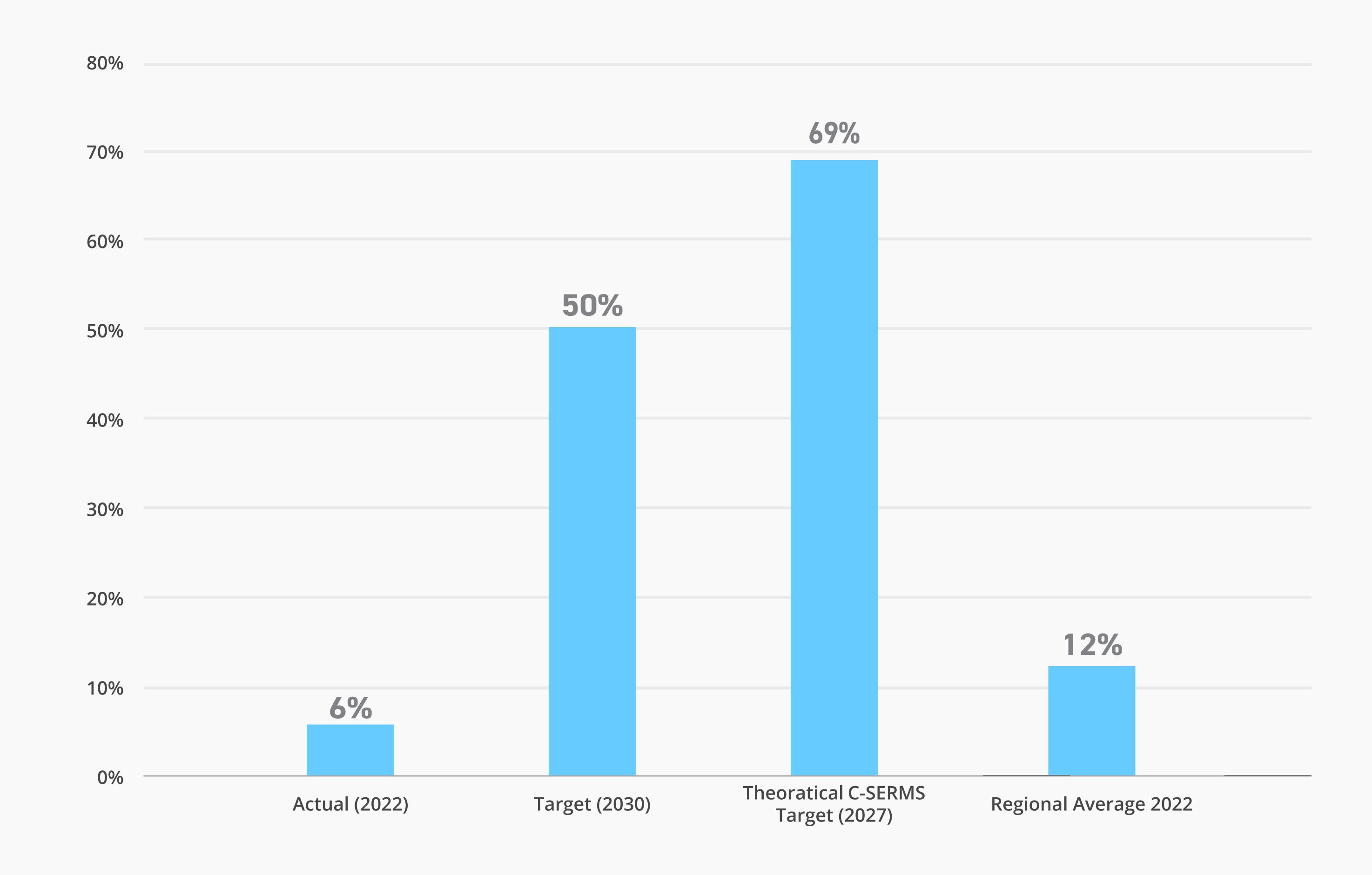
See Appendix for Additional Standards







# RENEWABLE ENERGY INSTALLED CAPACITY AGAINST TARGETS

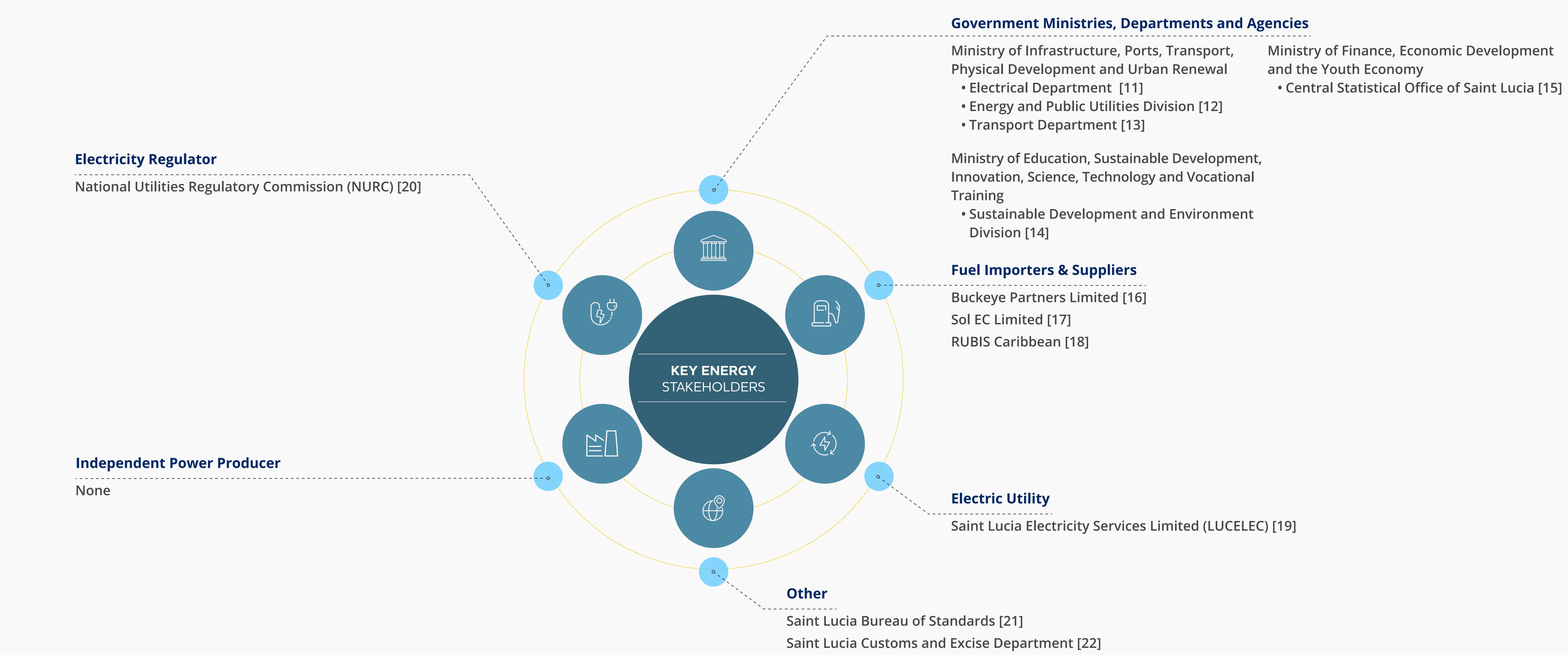


as % of Installed Capacity

# KEY ENERGY STAKEHOLDERS









# POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK





	YEAR
Energy Policy and Energy Action Plan [5]:	<b>2010</b> <sup>1</sup>
RE Target [7]:	2015
EE Target:	
Electricity Regulator [23]:	2016
Net Billing/Net Metering [24]:	2017 <sup>2</sup>
nterconnection Policy/Standards [24]:	2017
Feed-in-tariff [24]:	2017
RE/EE Act <sup>3</sup> :	



### POLICIES RELEVANT TO THE ENERGY SECTOR

### **Saint Lucia National Vision Plan [28]**

2008 The St. Lucia National Vision Plan highlights the challenges associated with transmission and distribution of electricity in the country and the possible alternatives, which includes renewables, that are available to be used for generation.

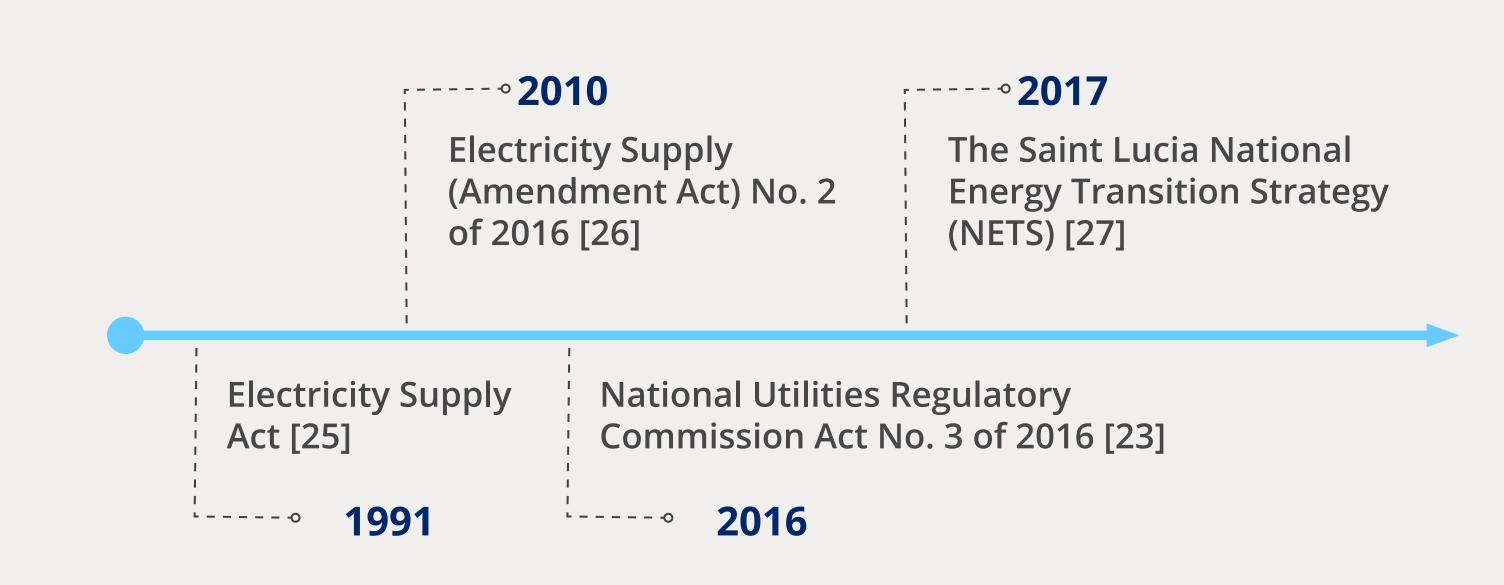
### **National Energy Policy [5]**

The National Energy Policy outlines the best energy practices for St. Lucia as the country attempts to become more energy secure. This energy security goal was outlined to include renewable energy from indigenous sources and diversify sources of petroleum.

### Saint Lucia National Energy Transition Strategy and Integrated Resource Plan [29]

2017 The Plan compares and examines technologies and proposed projects and defines the technoeconomic opportunities, pathways, and implications of the energy transition, established through the creation of an Integrated Resource Plan.







# LEGISLATION RELEVANT TO THE ENERGY SECTOR

#### Physical Planning and Development Act [30] (Amended 2005)

The Physical Planning and Development Act governs any land changes that are to occur within the island of St. Lucia including mining operations for geothermal energy.

# Motor Vehicle and Road Traffic Act (Amended 2015 [31] and 2021 [32])

The Act establishes the Licensing Authority as well as governs road usage and operations of the roads of St. Lucia.

#### **Geothermal Resources Development Bill [33]**

2011 A bill drafted to ensure the safe production of geothermal energy, effective land management in the development and use of geothermal resources as well as promoting the use of renewable energy.

### National Utilities Regulatory Commission Act

2016 An Act for the establishment of the National Utilities Regulatory Commission for the regulation of utility supply services and related matters.

### **Electricity Supply Act (First Enacted 1991)**

An Act to amend the Electricity Supply Act to provide for the regulation of Electricity Supply Services by the National Utilities Regulatory Commission. Provisions were made for the National Utilities Regulatory Commission (NURC) to regulate the energy sector and opened the generation of electricity from renewable energy sources to competition.

- 1. The National Energy Policy is being revised through stakeholder consultation. This defines with clarity Governments priorities within the energy sector
- 2. This was a pilot program that started in 2009 but was successfully completed in 2010. It is not a legislation, but LUCELEC operates on this framework.
- 3. The Energy Efficiency Bill is a draft



# POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK







POLICIES AND LEGISLATION RELEVANT TO THE FISCAL INCENTIVES:

Cabinet Conclusion #282 of 2014 extended by #186 of 2017 and amended with Cabinet Conclusion #5 of 2019 effective until 30th November 2023 4 [34]

2014

Reduced import duty and reduced excise tax rates for hybrid vehicles and vehicles operating on sustainable fuels.

Cabinet Conclusion #464 of 1999 and amended with Cabinet Conclusion #969 of 2020. [5] ●

Import duty exemptions on apparatus/machinery designed to produce motive power, heat, light, or electricity through the utilization of renewable sources of energy as approved by the Ministry responsible for sustainable development and on apparatus designed to conserve on the use of electricity and other sources of energy, as approved by the Ministry responsible for sustainable development. 5





IN FORCE DRAFT UPDATE BEING PREPARED

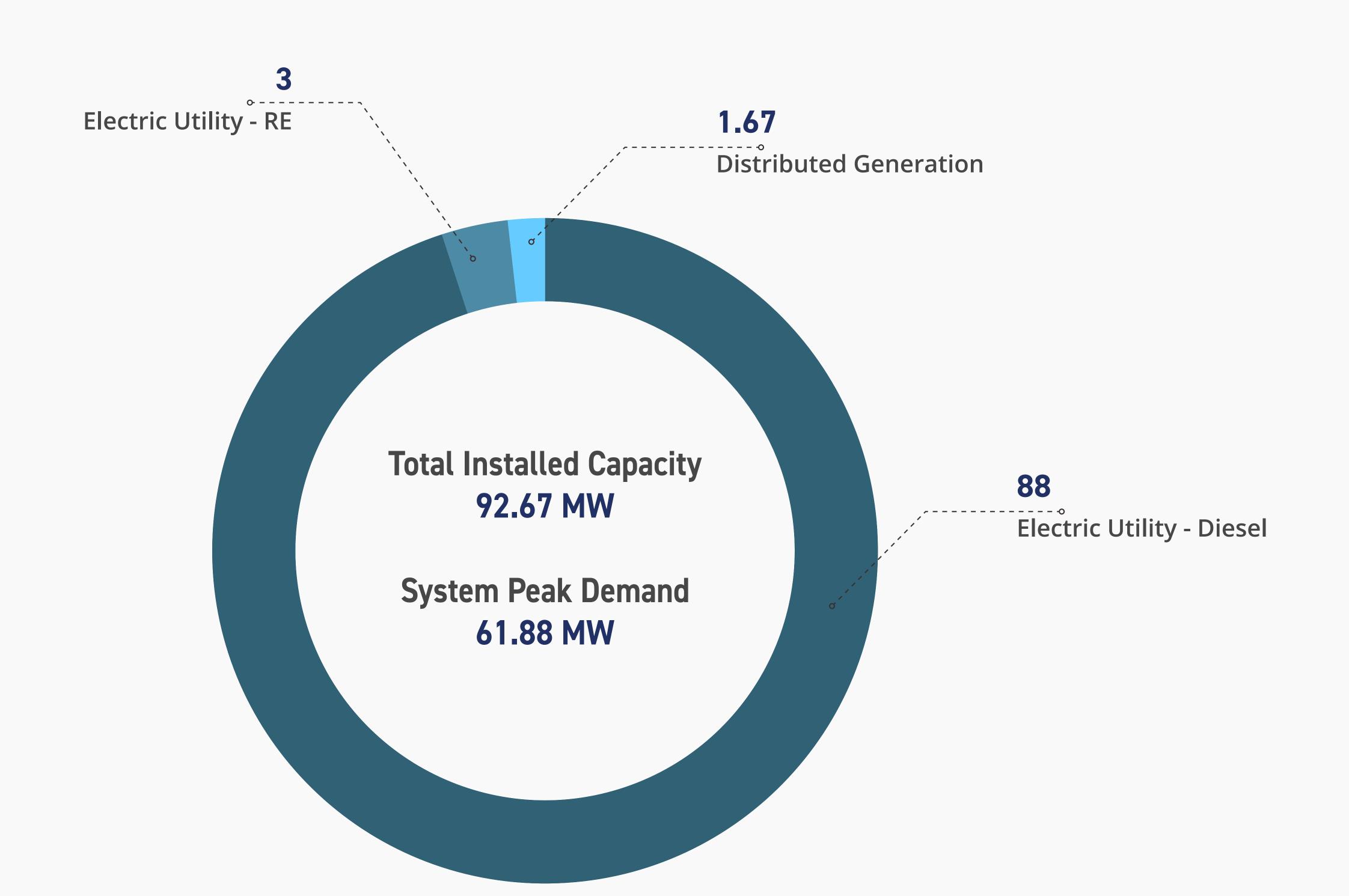
5. The 2020 amendment is no longer available for public reference.

# ELECTRICITY & ENERGY EFFICIENCY [10] [9]

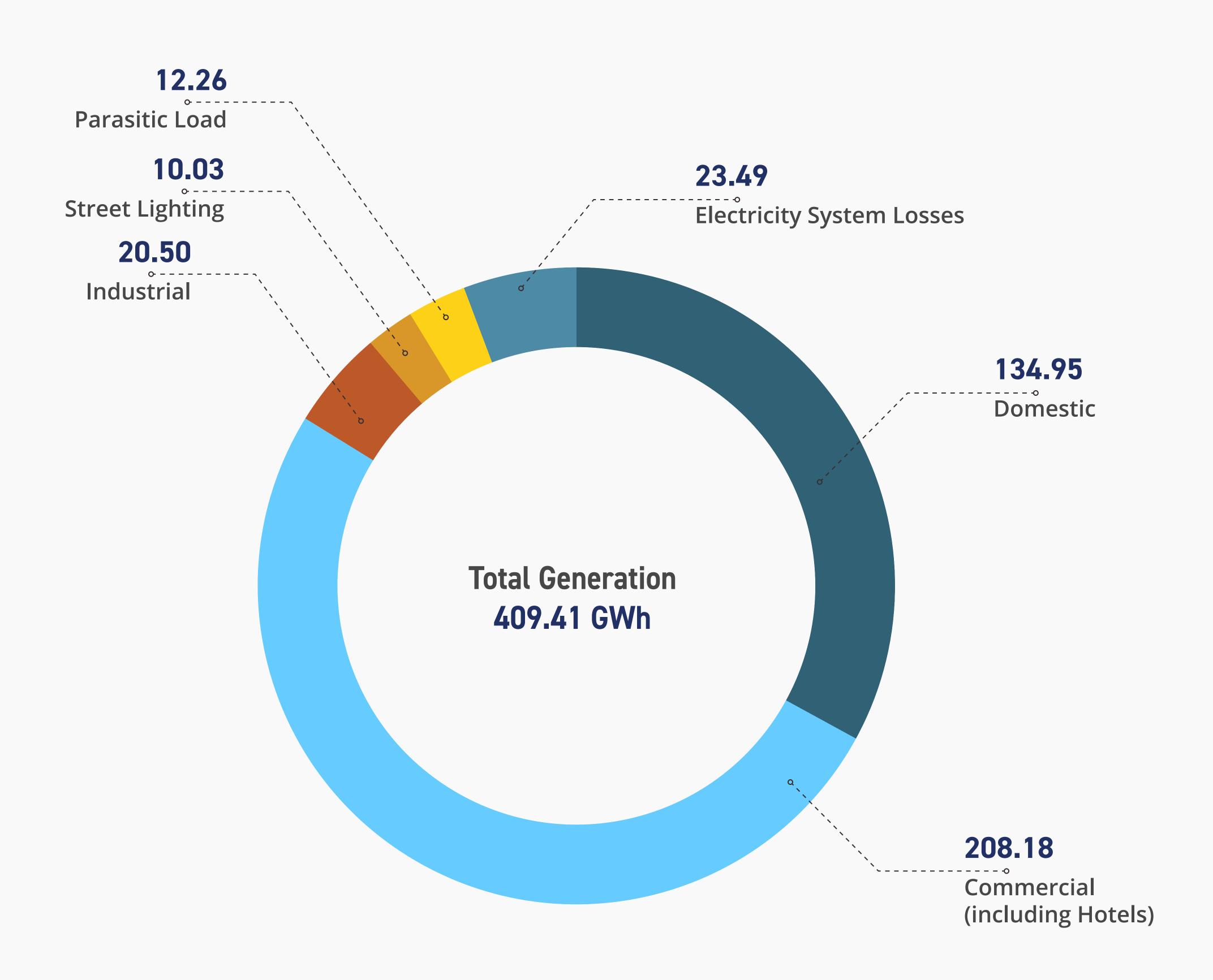










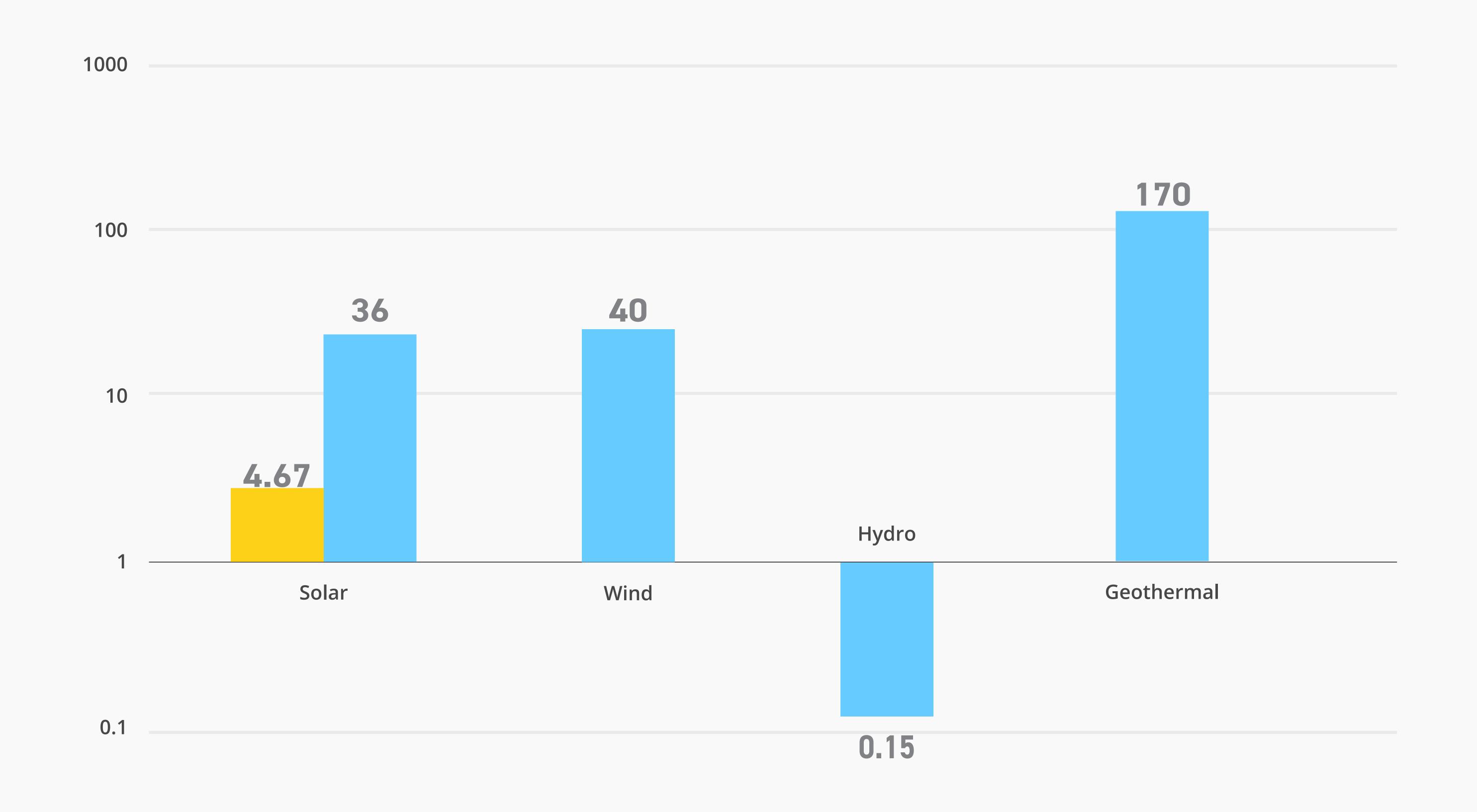








# RENEWABLE ENERGY RESOURCES







	Category	Tariff (US\$/kWh) <sup>7</sup>		
Decidential	from 1-180 units	0.35		
Residential	from 181 units upwards	0.37		
	Low Tension	0.41		
Commercial	High Tension	0.39		
	Low Tension	0.41		
Industrial/Hotels	High Tension	0.39		
	Low Tension	0.41		
Hospitals	High Tension	0.39		
Street Light	All Units	0.41		

# PROJECTS IN THE PIPELINE







# **ENERGY EFFICIENCY PROJECTS**

Energy Efficiency	Old/Existing Infrastructure	Consumption (kW)	Annual Costs (USD)	Energy Audits	Energy Service Companies	Change in Old/Existing Infrastructure Expected in Upcoming Calendar Year	Expected Change in Technology	Relative Difference in Operating Consumption/Costs
	21,959 High pressure	8,618,676 kWh	¢2 C47 000 00			Replace 21,959 High pressure Sodium lamps to LED.		
Street Lighting [36]	Sodium Lamps, 2650 LEDs (measured) \$2,647,000.00 Yes	Addition of 2,500 21Watt LEDs	HPS to LED	Not Available				



# SUSTAINABLE TRANSPORTATION PROJECT

Sustainable Transport Project	Project Focus	Development Partner	Total Estimated Cost (USD)	Funding Source
Supporting the Shift to Electric Mobility in Saint Lucia <sup>[36]</sup>	Supply 10 EVs for the public sector with supporting infrastructure	Department of Sustainable		Global Environment
	Education and Training	Development	US\$785,688.00	Facility (GEF) 7



# PROJECTS IN THE PIPELINE





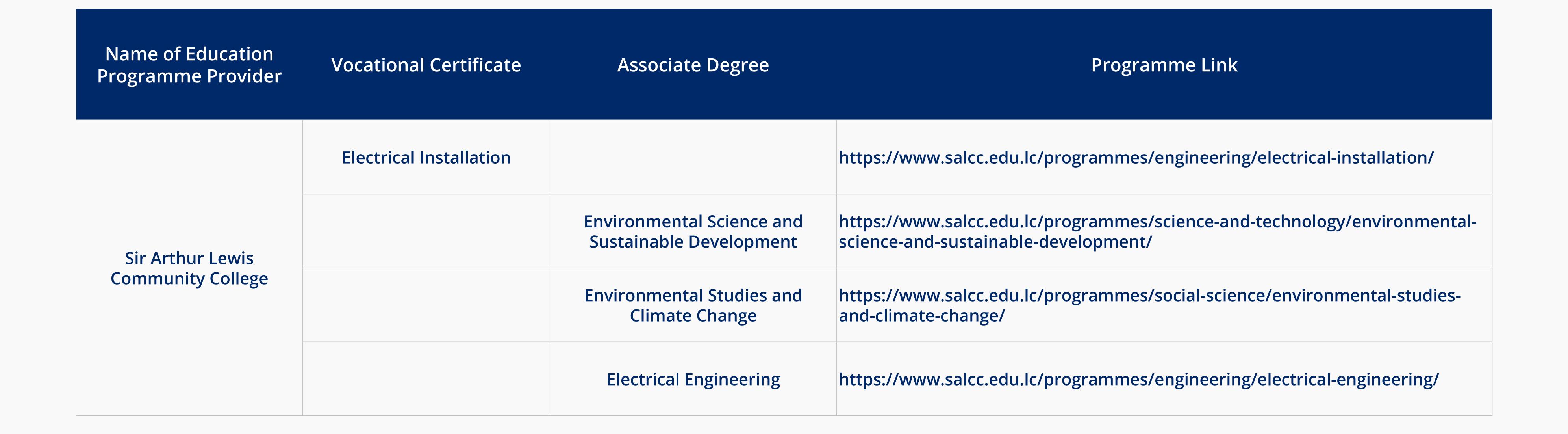


# RENEWABLE ENERGY PROJECTS

Renewable Energy Source	Resource and Projects Capacity	Development Partner	Total Estimated Cost (USD)	Funding Source	Implementing Partners	Ownership (PPA, utility owned, community-owned or public)
Solar Photo-Voltaic [36]	430 kW	United Arab Emirates (UAE)	2.3 Million	UAE - Caribbean Renewable Energy Funds	Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal	Public
	10 MW <sup>8</sup>	International Renewable Energy Agency (IRENA) / ADFD Facility	31.2 Million	Abu Dhabi Fund for Development (ADFD) Facility	Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal - Electrical Department	Utility Owned







# TRANSPORTATION SECTOR





No data was available for the transportation sector for 2022.



# CLIMATE CHANGE FRAMEWORK







SUMMARY OF ST. LUCIA'S GHG EMISSIONS AND REMOVALS (GG) FOR 2021 [41]

Climate Change Policy	Saint Lucia's National Adaptation Plan 2018-2028 (2018) [6]
National Determined Contributions [7]:	7% GHG emissions reduction in the energy sector relative to 2010, by 2030, equivalent to 37 GgCO <sub>2</sub> eq
Emissions Reduction Target [7]:	The reduction of 16% and 23% of national greenhouse gas emissions by 2025 and 2030, respectively (relative to those in 2010)
Priority Sectors for NDC [7]:	Energy: Electricity generation and transportation
	Saint Lucia's Initial National Communication on Climate Change (2001) [38]
National Communications (NC) to the UNFCCC:	Second National Communication on Climate Change for Saint Lucia (2011) [39]
	Third National Communication for Saint Lucia (2017) [40]

	Emissions (Gg CO <sub>2</sub> Equivalents)					
Categories	CO2	CH4	N2O			
Energy	249.4	0.22	0.65			
Manufacturing Industries & Construction	11.5	0.02	0.05			
Civil Aviation (Domestic Aviation)	5.1	0	0.04			
Road Transportation	245.1	1.33	7.2			
Navigation	3.6	0.01	0.03			
Commercial/Institutional	5.3	0.01	0			
Residential	19.5	3.9	0.72			
Agriculture/Forestry/Fishing	6.6	0.01	0.02			
Marine International Bunker	3.6	Data not available				
<b>Aviation International Bunker</b>	90	0	0			





- [1] Government of St. Lucia, "Economic and Social Review 2022," Government of St. Lucia, Casties, St. Lucia, 2022.
- [2] The World Bank Group, "GNI per capita, Atlas method (current US\$)," The World Bank Group, 2023. [Online]. Available: https://data.worldbank.org/indicator/NY.GNP.PCAP.CD. [Accessed 27 July 2023].
- [3] United Nations Development Programme, "Human Developemnt Report 2021/2022," 8 September 2022. [Online]. Available: https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf\_1.pdf. [Accessed 14 September 2022].
- [4] Government of St. Lucia, ""Saint Lucia's Medium Term Development Strategy 2020-2023," 2020. [Online]. Available: https://observatorioplanificacion.cepal.org/sites/default/files/plan/files/Saint%20Lucia%20MTDS%2020-2023.pdf. [Accessed 30 May 2023].
- [5] Government of St. Lucia, "Saint Lucia National Energy Policy," January 2010. [Online]. Available: https://www.oas.org/en/sedi/dsd/Energy/Doc/NEP\_StLucia\_web.pdf. [Accessed 30 May 2023].
- [6] Governemnt of St. Lucia, "Saint Lucia's National Adaptation Plan (NAP) 2018–2028," Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development, 2018.
- [7] Government of St. Lucia, "St. Lucia, "St. Lucia's Updated Nationally Determined Contribution communicated to the United Nations Framework Convention on Climate Change," January 2021. [Online]. Available: https://unfccc.int/sites/default/files/NDC/2022-06/Saint%20 Lucia%20First%20NDC%20%28Updated%20submission%29.pdf. [Accessed 8 June 2023].
- [8] Saint Lucia Bureau of Standards, "Standards List," [Online]. Available: https://www.slbs.org/services/standards-list-3/. [Accessed 5th June 2023].
- [9] St. Lucia Electricity Services Limited, "Annual Report 2022," 2023. [Online]. Available: https://www.lucelec.com/sites/default/files/annual-reports/LUCELEC%202022%20Annual%20Report%20-%20Interactive.pdf. [Accessed 31 May 2023].
- [10] A. Ochs , M. Konold, K. Auth, E. Musolino and P. Killeen, "Caribbean Sustainnable Energy Roadmap and Strategy (C-SERMS) Baseline Report and Assessment," Worldwatch Intitue, Washington, D.C., 2015.
- [11] Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal, "Electrical Services," [Online]. Available: https://infrastructure.govt.lc/ministries
- [12] Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal, "Energy, Science & Technology Unit," [Online]. Available: https://infrastructure.govt.lc/ministries/infrastructure-port-services-and-transport/energy-science-technology-unit." [Online]. Available: https://infrastructure.govt.lc/ministries/infrastructure-port-services-and-transport/energy-science-technology-unit." [Online]. Available: https://infrastructure.govt.lc/ministries/infrastructure-port-services-and-transport/energy-science-technology-unit." [Online]. Available: https://infrastructure.govt.lc/ministries/infrastructure-port-services-and-transport/energy-science-technology-unit."
- [13] Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal, "Transport," [Online]. Available: https://infrastructure.govt.lc/ministries/infrastru
- [14] Ministry of Education, Sustainable Development, Innovation, Science, Technology and Vocational Training, "Sustainable Development & Environment Division," [Online]. Available: https://education.govt.lc/ministries/education/sustainable-development-environment-division. [Accessed 15 August 2023].
- [15] Cerntral Statistics Office, St. Lucia, "Contact Us," [Online]. Available: https://stats.gov.lc/contact-us/. [Accessed 15 August 2023].
- [16] Buckeye Partners, "Buckeye Partners," [Online]. Available: https://www.buckeye.com/state/st-lucia/. [Accessed 15 August 2023].
- [17] SOL EC Limited, "Contact Us," [Online]. Available: https://stlucia.solpetroleum.com/. [Accessed 15 August 2023].
- [18] RUBIS, "RUBIS Service Stations St. Lucia," 2022. [Online]. Available: https://www.rubis-caribbean.com/locations-st-lucia/. [Accessed 15 August 2023].
- [19] St. Lucia Electricity Services Limited, "Brief History of LUCELEC," 2022. [Online]. Available: https://www.lucelec.com/content/brief-history-lucelec. [Accessed 6 June 2023].
- [20] National Utilities Regulatory Commission, "Functions of NURC," 2017. [Online]. Available: https://nurc.org.lc/about/functions-of-the-nurc/. [Accessed 6 June 2023].
- [21] Saint Lucia Bureau of Standards, "Saint Lucia Bureau of Standards Home Page," [Online]. Available: https://www.slbs.org/. [Accessed 6 June 2023].





- [22] Saint Lucia Customs and Excise Department, "Customs Core Legislation," 2023. [Online]. Available: http://www.customs.gov.lc/customs-core-legislation.php. [Accessed 6 June 2023].
- [23] Governemnt of St. Lucia, "National Utilities Regulatory Commission," 16 December 2015. [Online]. Available: https://nurc.org.lc/wp-content/uploads/2017/11/National-Utilities-Regulatory-Commission," 16 December 2015. [Online]. Available: https://nurc.org.lc/wp-content/uploads/2017/11/National-Utilities-Regulatory-Commission," 16 December 2015. [Online].
- [24] St. Lucia Electricity Services Limited, Electricity and Energy Efficiency Data, Castries, St. Lucia: Private Communication, 2022.
- [25] Government of St. Lucia, "Electricity Supply," 31 December 2008. [Online]. Available: https://nurc.org.lc/wp-content/uploads/2017/11/Electricity-Supply-Act-Cap-9-02-2008.pdf. [Accessed 11 June June].
- [26] Government of St. Lucia, "Electricity Supply (Ammendment Act) No. 2 of 2016," 2015. [Online]. Available: https://nurc.org.lc/wp-content/uploads/2017/11/Electricity-Supply-Amendment-Act-No-2-of-2016-003.pdf. [Accessed 11 June 2023].
- [27] K. S. D. J. L. S. M. S. T. R. T. Bunker, "Saint Lucia National Energy Transition Strategy," Rocky Mountain Insitute, 2017.
- [28] Government of St. Lucia, "Saint Lucia National Vision Plan," 2008. [Online]. Available: https://www.finance.gov.lc/resources/download/45/.pdf. [Accessed August 2023].
- [29] R. K. B. S. D. J. L. S. M. S. T. Torbert, "Saint Lucia National Energy Transition Strategy and Integrated Resource Plan," 2017. [Online]. Available: http://www.govt.lc/media.govt.lc/www/resources/publications/saint-lucia-nets-executive-summary-final.pdf. [Accessed September 2020].
- [30] Government of St. Lucia, 31 December 2005. [Online]. Available: https://observatoriop10.cepal.org/sites/default/files/documents/physical-planning-and-development-act-cap-5.12.pdf. [Accessed 25 August 2023].
- [31] "Road Traffic Act Amendment," 4 August 2015. [Online]. Available: https://www.govt.lc/news/road-traffic-act-amendment. [Accessed 25 February 2024].
- [32] Attorney General's Chambers, St. Lucia, "Motor Vehicle and Road Traffic Act Revised 2021," 2024. [Online]. Available: https://attorneygeneralchambers.com/laws-of-saint-lucia/motor-vehicles-and-road-traffic-act. [Accessed 25 February 2024].
- [33] Governemnt of St. Lucia, "Discussion Draft Revision of the Saint Lucia Geothermal Resources Development Bill, 2011," 2011. [Online]. Available: http://www.oas.org/en/sedi/dsd/Energy/Doc/5b.\_SLU\_Draft\_Geothermal\_Resource\_Development\_Bill.pdf. [Accessed 2024 February 2024].
- [34] Ministry of Sustainable Development, "New vehicle concessions to reduce energy intensity of transport sector," August 2014. [Online]. Available: https://www.govt.lc/news/new-vehicle-concessions-to-reduce-energy-intensity-of-transport-sector. [Accessed August 2023].
- [35] Saint Lucia Electricity Services Limited, "Rates and Services Standards," 2022. [Online]. Available: https://www.lucelec.com/content/rates-service-standards. [Accessed 21 June 2023].
- [36] Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal, Energy Sector Data and Projects, Castries, St. Lucia: Ministry of Infrastructure, Ports, Transport, Physical Development and Urban Renewal, 2023.
- [37] Energy Unit, Ministry of Public Utilities, Energy and Logistics, Energy Data, Projects in the Pipeline, Climate Change Data, Belize City, 2023.
- [38] Government of St. Lucia, "Saint Lucia's Initial National Communication on Climate Change," Sustainable Development & Environment & Housing, Castries, St. Lucia, 2001.
- [39] Government of St. Lucia, "Second National Communication on Climate Change for Saint Lucia," Ministry of Physical Development & Environment Division, Castries, St. Lucia, 2011.
- [40] Government of St. Lucia, "Third National Communication for Saint Lucia," Ministry of Education, Gender Relations & Sustainable Development, Castries, St. Lucia, 2017.
- [41] Department of Sustainable Development, Climate Change Data, Castries, St. Lucia: Department of Sustainable Development, 2022.





#### **Additional Standards**

- SLNS 90: 2011 EE Specification for Incandescent Lamps
- SLNS 91: 2011 EE Labelling Labelling of Fluorescent Tubular and Compact Lamps
- SLNS 92: 2020 EE Labelling Washing machines Specification and Test methods
- SLNS 93: 2015 EE Labelling of Air Conditioners
- SLNS 94: 2016 EE Labelling-Refrigerators
- SLNS/ISO 13065:2015 Sustainability criteria for bioenergy
- SLNS/ISO 14031:2013 Environmental management -- Environmental performance evaluation -- Guidelines
- SLNS/ISO 14064-1:2018 Greenhouse gases -- Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals
- SLNS/ISO 14067:2018 Greenhouse gases -- Carbon footprint of products -- Requirements and guidelines for quantification
- SLNS/ISO 14080:2018 Greenhouse gas management and related activities -- Framework and principles for methodologies on climate actions
- SLNS/ISO 17741:2016 General technical rules for measurement, calculation and verification of energy savings of projects
- SLNS/ISO 17742:2015 Energy efficiency and savings calculation for countries, regions and cities
- SLNS/ISO 17743:2016 Energy savings -- Definition of a methodological framework applicable to calculation and reporting on energy savings
- SLNS/ISO 18605:2013 Packaging and the environment -- Energy recovery
- SLNS/ISO 50001:2018 Energy management systems -- Requirements with guidance for use
- SLNS/ISO 50002:2014 Energy audits -- Requirements with guidance for use
- SLNS/ISO 50003:2014 Energy management systems -- Requirements for bodies providing audit and certification of energy management systems
- SLNS/ISO 50004:2014 Energy management systems -- Guidance for the implementation, maintenance and improvement of an energy management system
- SLNS/ISO 50006:2014 Energy management systems -- Measuring energy baselines (EnB) and energy performance indicators (EnPI) -- General principles and guidance
- SLNS/ISO 50007:2017 Energy services -- Guidelines for the assessment and improvement of the energy service to users
- SLNS/ISO 50015:2014 Energy management systems -- Measurement and verification of energy performance of organizations -- General principles and guidance
- SLNS/ISO 50047:2016 Energy savings -- Determination of energy savings in organizations





- SLNS/ISO/IEC 13273-1:2015 Energy efficiency and renewable energy sources -- Common international terminology -- Part 1: Energy efficiency
- SLNS/ISO/IEC 13273-2:2015 Energy efficiency and renewable energy sources -- Common international terminology -- Part 2: Renewable energy sources
- SLNS/ISO 3046-1:2002 Reciprocating internal combustion engines -- Performance --Part 1: Declarations of power, fuel and lubricating oil consumptions, and test methods- -- Additional requirements for engines for general use
- SLNS/ISO 9059:1990 Solar energy -- Calibration of field pyrheliometers bycomparison to a reference pyrheliometer
- SLNS/ISO 9845-1:1992 Solar energy -- Reference solar spectral irradiance at theground at different receiving conditions -- Part 1: Direct normal and hemisphericalsolar irradiance for air mass 1,5
- SLNS/ISO 9846:1993 Solar energy -- Calibration of a pyranometer using apyrheliometer
- SLNS 17225-8:2016 Solid biofuels -- Fuel specifications and classes -- Part 8: Gradedthermally treated and densified biomass fuels (ISO/TS 17225-8: 2016, IDT) \*\*\*\*
- SLNS CREEBC CARICOM Regional Energy Efficiency Building Code (Modification of International Energy Conservation Code)

### Additional Energy Performance Standards/Appliance Labelling

- SLNS/ISO 13065:2015 Sustainability criteria for bioenergy
- SLNS/ISO 17742:2015 Energy efficiency and savings calculation for countries, regions and cities
- SLNS/ISO 17743:2016 Energy savings -- Definition of a methodological framework applicable to calculation and reporting on energy savings
- SLNS/ISO 18605:2013 Packaging and the environment -- Energy recovery
- SLNS/ISO 50001:2018 Energy management systems -- Requirements with guidance for use
- SLNS/ISO 50002:2014 Energy audits -- Requirements with guidance for use
- SLNS/ISO 50003:2014 Energy management systems -- Requirements for bodies providing audit and certification of energy management systems
- SLNS/ISO 50004:2014 Energy management systems -- Guidance for the implementation, maintenance and improvement of an energy management system
- SLNS/ISO 50006:2014 Energy management systems -- Measuring energy baselines (EnB) and energy performance indicators (EnPI) -- General principles and guidance
- SLNS/ISO 50007:2017 Energy services -- Guidelines for the assessment and improvement of the energy service to users
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