



GRENADA

ENERGY REPORT CARD (ERC) FOR 2022

ST. GEORGE'S



INTRODUCTION



This is the Energy Report Card (ERC) for 2022 for Grenada.

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

The ERC also includes sectoral data and information on policies and regulations; 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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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 GRENADA**

Acknowledgements

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ENERGY SECTOR SUMMARY

+ SOCIOECONOMIC POLICIES

The National Sustainable Development Plan 2020-2035 ^[4]

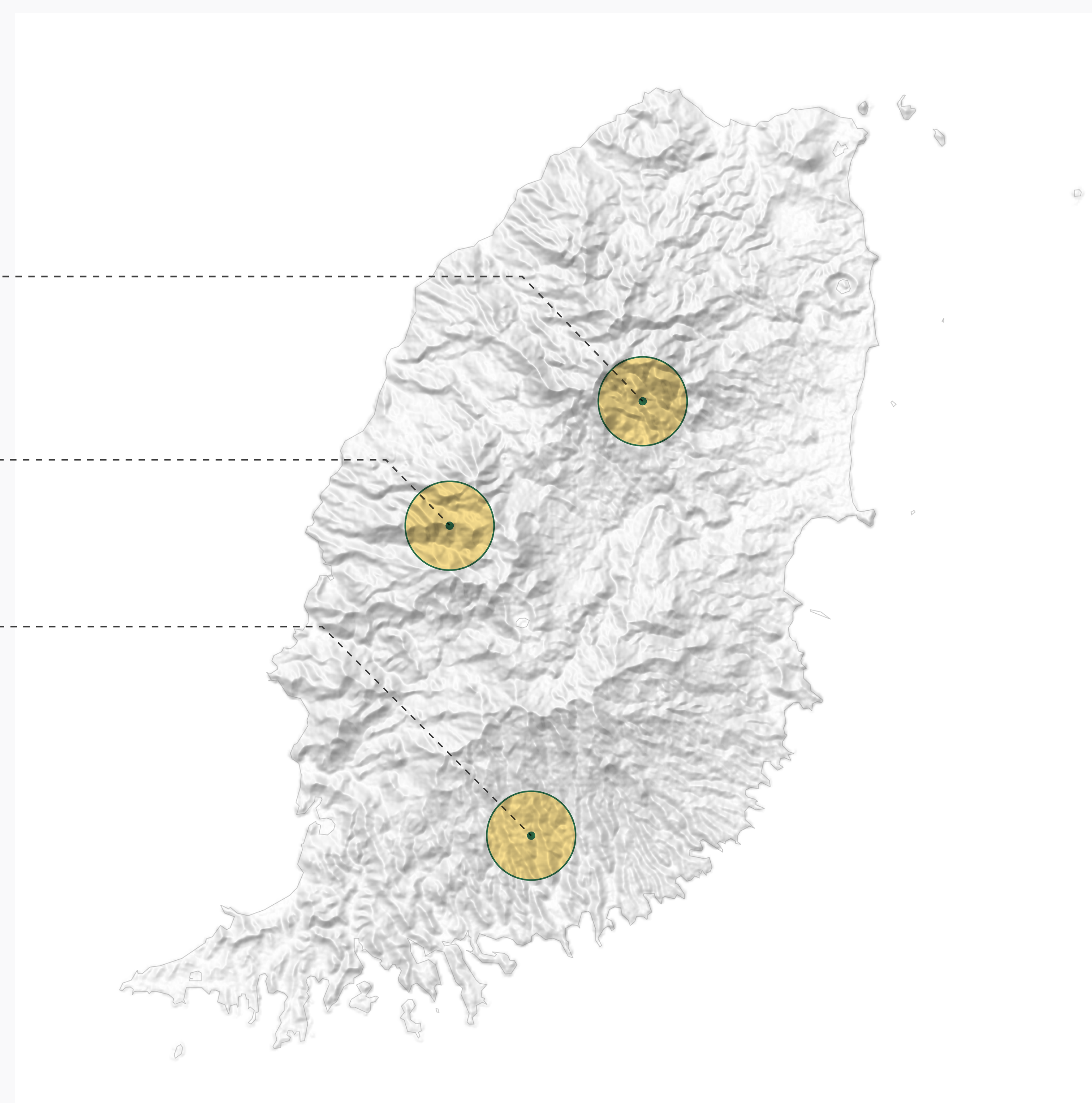
National Development Plan/ Overall Country Development Strategy

The National Energy Policy of Grenada ^{2 [5]}

National Energy Policy

None

Renewable Energy (RE) Policy



+ SOCIOECONOMICS

Population Census/ Projection	114,272 ^[1]
GDP (USD)	\$1,191,700,407.36
GDP (USD) Per Capita	\$10,428.63 ^{1 [1]}
Gross National Income (GNI) Per Capita (USD)	\$9,340.00 ^[2]
Debt as % of GDP	64.75% ^[1]
Human Development Index	0.795 ^[3]
RE Target	100% by 2030 ^[6] for Electricity and Transortation

Total Installed Conventional Capacity (MW)	56.02 ^[11]
Total Installed RE (MW)	3.95 ^[11]
Electricity System Losses ⁴ (%)	5.92% ^[11]
Energy Use (kWh) Per Capita	1,982.23
National Repository for Energy Data	None
Fuel and Oil Imports as % of GDP	4.2% ^[1]
Oil Imports as % of GDP	0.35% ^[1]

+ OTHER ENERGY SECTOR SUB-POLICIES

Climate Change Policy **National Climate Change Policy for Grenada, Carriacou and Petite Martinique (2017-2021) ^[7]**

Energy Performance Standards/Appliance Labelling ^{3 [10]} **National Climate Change Adaptation Plan for Grenada Carriacou and Petite Martinique ^[8]**

Caricom Energy Efficiency Building Code
GDS 1: Pt. 8: 2001 – Specification for the Labelling of Domestic Electrical Appliances

GDS 1 PART 10, 2022: Energy Labelling – Refrigerating Appliances Requirements (modified)

2022: Energy Labelling – Compact Fluorescent Lamps and Light Emitting Diodes (LED) Requirements ⁴

National Determined Contributions (NDC) ^[9] **Reduce carbon dioxide (CO2) emissions from the power sector by 40% by 2030.**

Reducing emissions from land transport 20% by 2025.

Using methane capture technologies for reducing waste management emissions by over 90%.

Doubling carbon storage in areas for protected forest by for example, planting indigenous (faster growing) species

Electric Vehicle Stock **55**

National Repository for Energy Data **The Energy Division ^{5 [12]}**

1. Market Price

2. Updated in early 2023 to The National Energy Policy of Grenada 2023-2035

3. The Minimum Energy Performance Standards (MEPS) developed by CARICOM Regional Organisation of Standards and Quality (CROSQ) were on the agenda for implementation before the start of 2023)

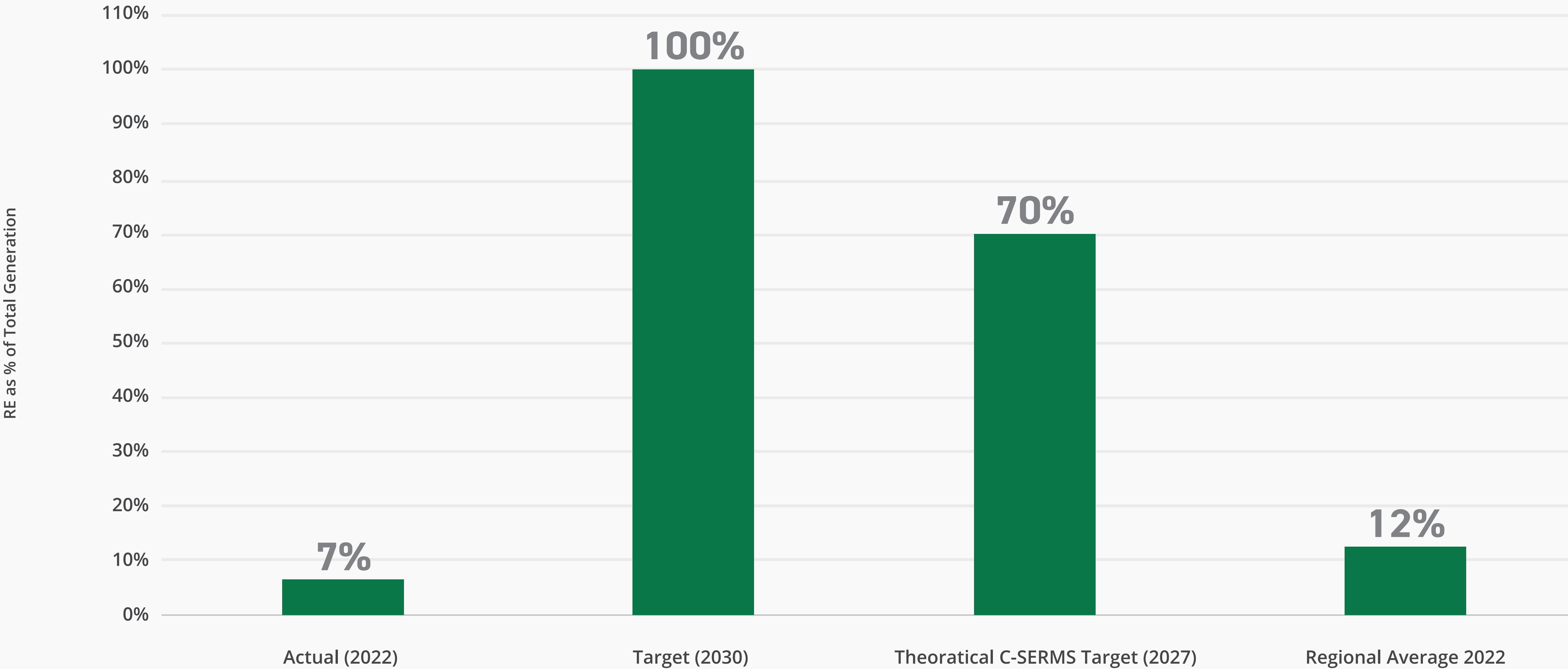
4. To be adopted

5. The Energy Division is the central repository for energy data in Grenada. However, energy data can be found at the other ministries (e.g., Transport and Climate) as well as at the Central Statistical Office.



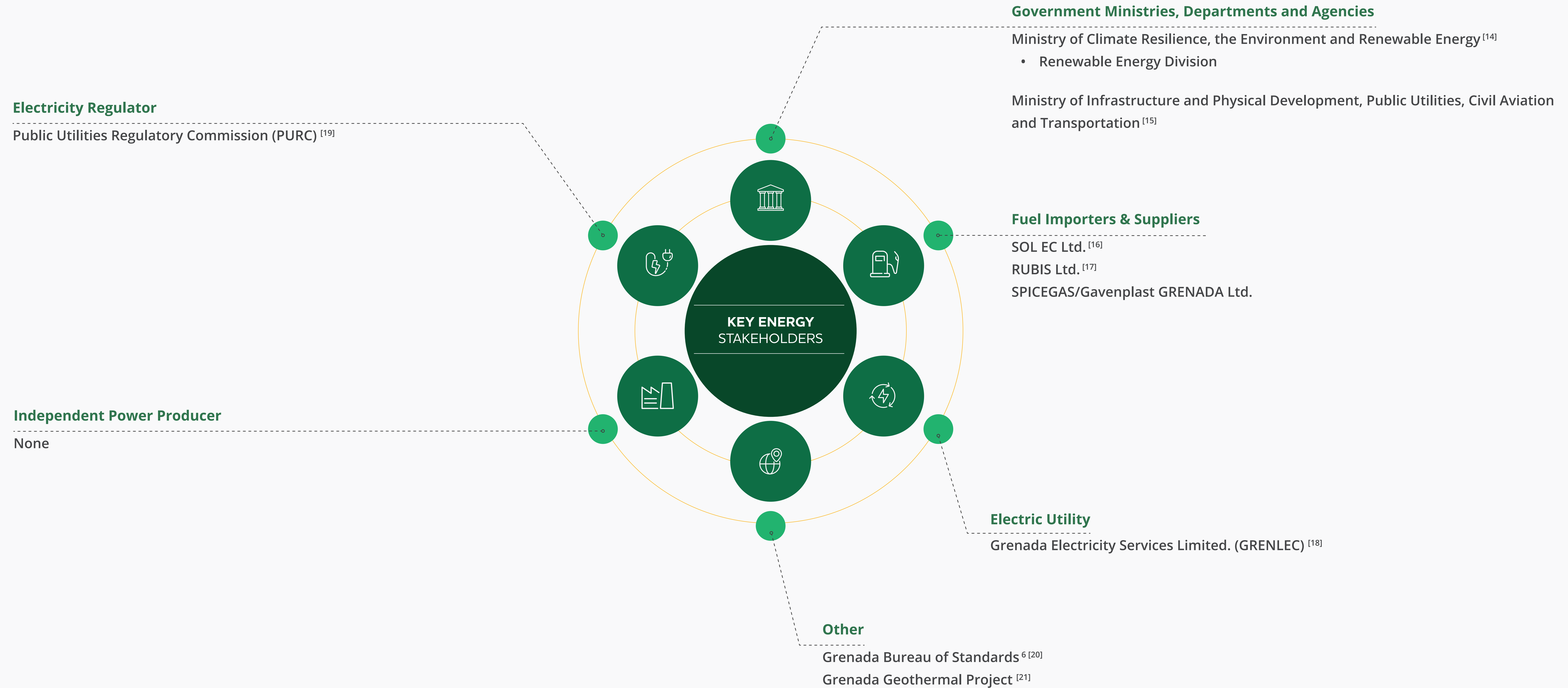
ENERGY SECTOR PERFORMANCE [11][13]

RENEWABLE ENERGY GENERATION AGAINST TARGETS





KEY ENERGY STAKEHOLDERS



6. A body incorporated under the Ministry of Foreign Affairs, Trade & Export Development



POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK



+ POLICIES RELEVANT TO THE ENERGY SECTOR

The National Energy Policy of Grenada [5] ●

2011

Using fossil fuels efficiently, whilst transitioning to renewables, even if hydrocarbons are found in the country's maritime territory. The energy policy is based on eight core principles; (i) ensuring energy security, (ii) achieving energy independence, (iii) maximising energy efficiency, (iv) promoting energy conservation, (v) pursuing environmental sustainability through "green energy", (vi) guaranteeing sustainable resource exploitation, (vii) minimising energy costs and (viii) energy solidarity.

Vision 2030 Grenada ¹⁰ [6] ●

2012

Proposes the establishment of a 100% renewable energy target for both the electricity and transport sectors for 2030. The policy focuses on utility scale geothermal generation, wind and waste-to-energy and distributed solar.

National Climate Change Policy 2017-2021 [7] ●

2017

This policy builds on the foundation laid by the National Climate Change Strategy and Action Plan, 2007 – 2011, and is focused on setting the foundation for an organized long-term response to climate change.

National Climate Change Adaptation Plan 2017-2021 [8] ●

The Plan will guide the stakeholders in Grenada in understanding relevant vulnerabilities and risks from climate change and outline appropriate responses.

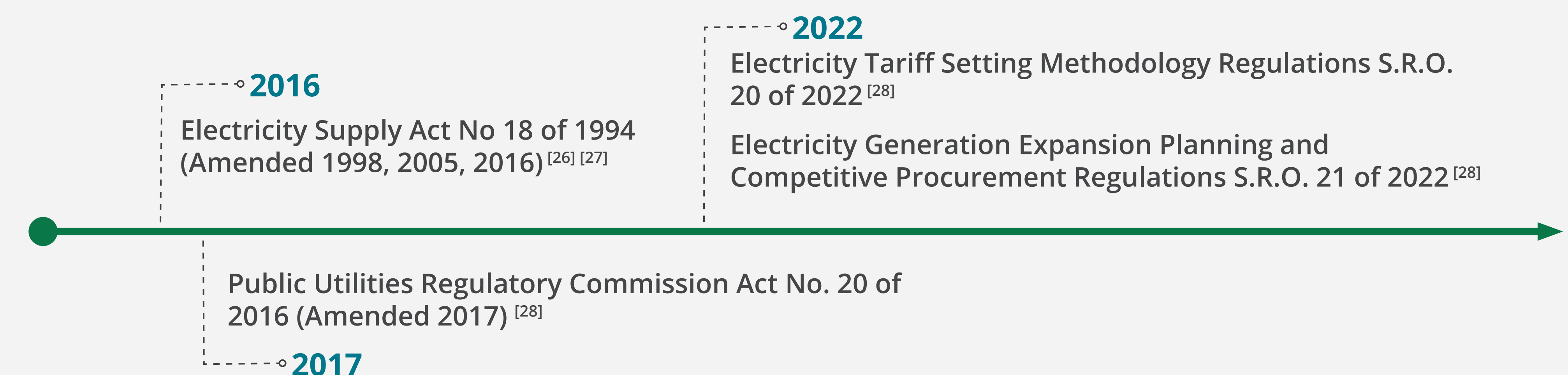
National Sustainable Development plan 2020-2035 [29] ●

2019

The Plan outlines strategic actions to establish feed-in tariffs, develop and offer training in the sector, creation of policies and support systems to create access to energy and make renewable energy technologies affordable to the energy impoverished, and encouraging the use of low-carbon emission technology.

	YEAR
Energy Policy and Energy Action Plan ⁷ [5]: ●	2011
RE Target [6]: ●	2017
EE Target: ●	
Electricity Regulator [22]: ●	2016
Net Billing/Net Metering ⁸ [23]: ●	2021
Interconnection Policy/Standards ⁷ [24][25]: ●	2007
Feed-in-tariff ⁹ : ●	
RE/EE Act: ●	

+ KEY ACHIEVEMENTS: PLR FRAMEWORK TIMELINE FOR ELECTRICITY SUB-SECTOR



● IN FORCE ● NOT ESTABLISHED

7. An update is being prepared.

8. An interim measure was implemented that incorporates a net metering arrangement with 50% banking and 50% net billing

9. Listed as a national strategic action in Grenada's NSDP 2020-2035

10. A copy of this document was not found.



POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK

LEGISLATION RELEVANT TO THE ENERGY SECTOR

1956	Petroleum Act (Amended 1961) [30] ● An Act to make provision for the safe storage and transportation of petroleum, and for connected matters.
1989	Petroleum and Natural Gas Deposits Act (Amended 2007) [31] ● An Act to make provision with respect to petroleum exploration and production, and for matters connected therewith.
2004	Civil Aviation Act No. 12 of 2004 (Amended 2006) [32] ● An Act to make provision respecting the regulation, operation and control of Civil Aviation in Grenada and is applicable to applies to all persons, aeronautical products and other related things in Grenada, to all persons outside Grenada who hold civil aviation documents and to all aircraft registered or operated under the authority of a civil aviation document and passengers and crew members thereon such aircraft when operated outside Grenada.
2005	Petrol Tax Act No. 15 of 2005 (Amended 2006) [33] ● An Act to impose a Petrol Tax which is charged and paid by the importer of petrol to the Comptroller of Customs a tax of three dollars on each gallon of petrol imported into the State for local consumption.

LEGISLATION RELEVANT TO THE FISCAL INCENTIVES

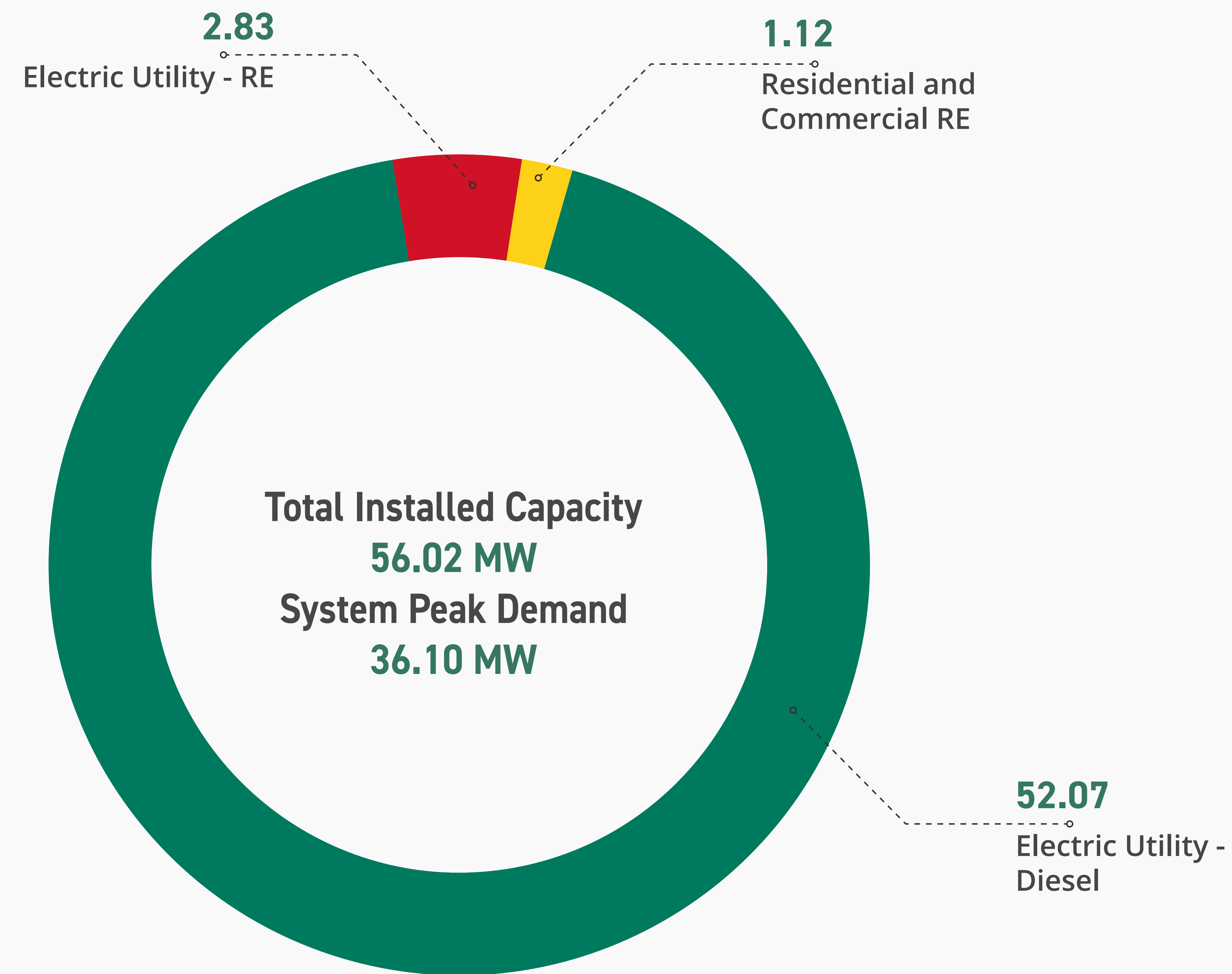
1991	Customs Act [34] ● The Fiscal Incentive Act seeks to streamline the fiscal incentive programme to improve the regulatory functions to allow foreign companies to apply for incentives; to offer new fiscal incentives; to improve access to incentives for MSMEs
1994	Income Tax Act [35] ● The Income Tax Act and its amendments outline the tax benefits to renewable energy companies which included a tax holiday up to 15 years and exemption from income tax payment on profits and dividends during a tax holiday.
2009	Value Added Tax (VAT) Act [36](Amended 2011) ● The Value Added Tax Act and its amendments grants approved entities VAT exemption on capital imports up to the commencement of taxable activities.
2010	Excise Tax Act [37] ● Waiver of the excise tax in keeping with percentage duty exemption on raw materials and vehicles for qualifying investment.

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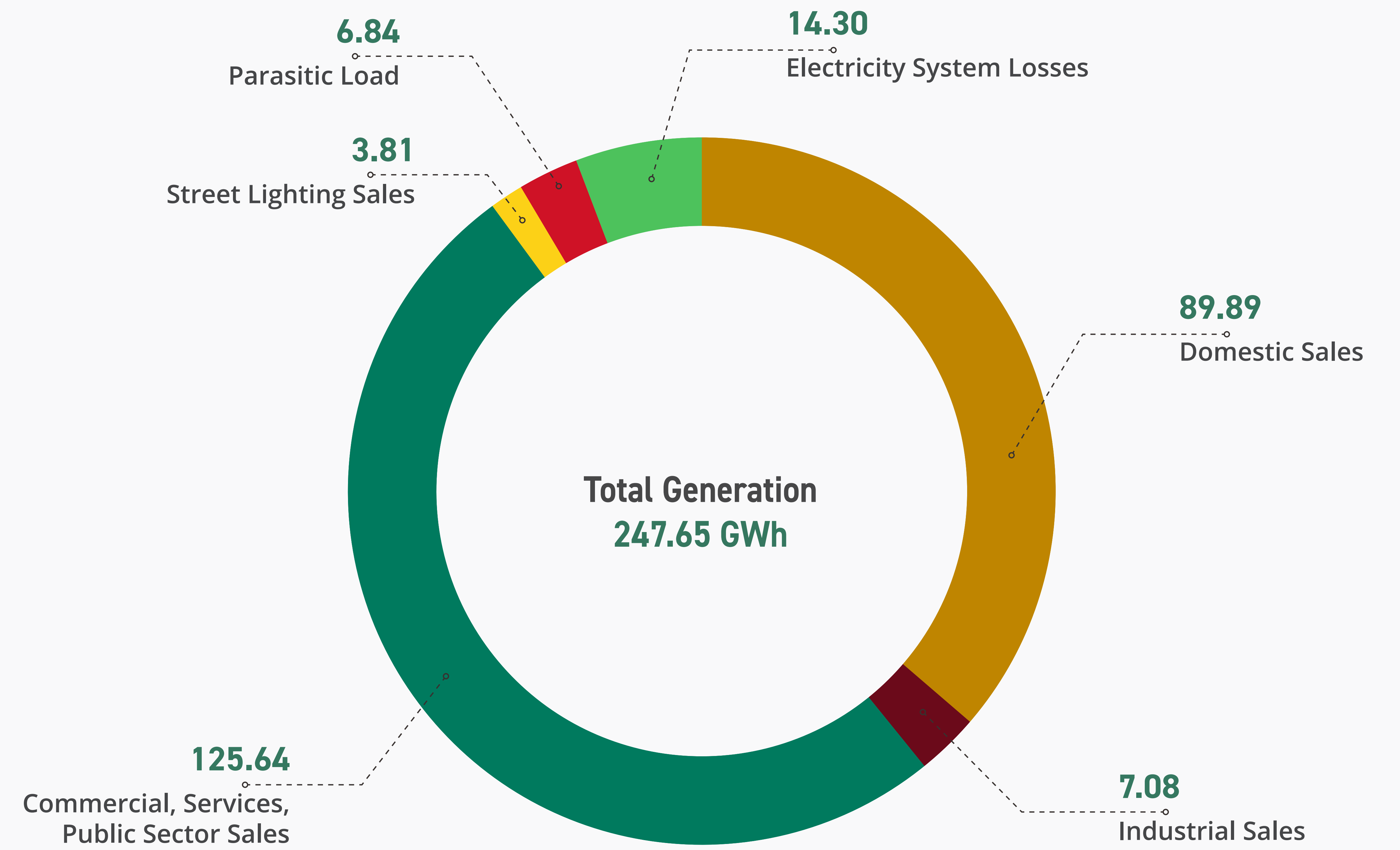


ELECTRICITY & ENERGY EFFICIENCY [13] [38]

+ INSTALLED CAPACITY (MW)

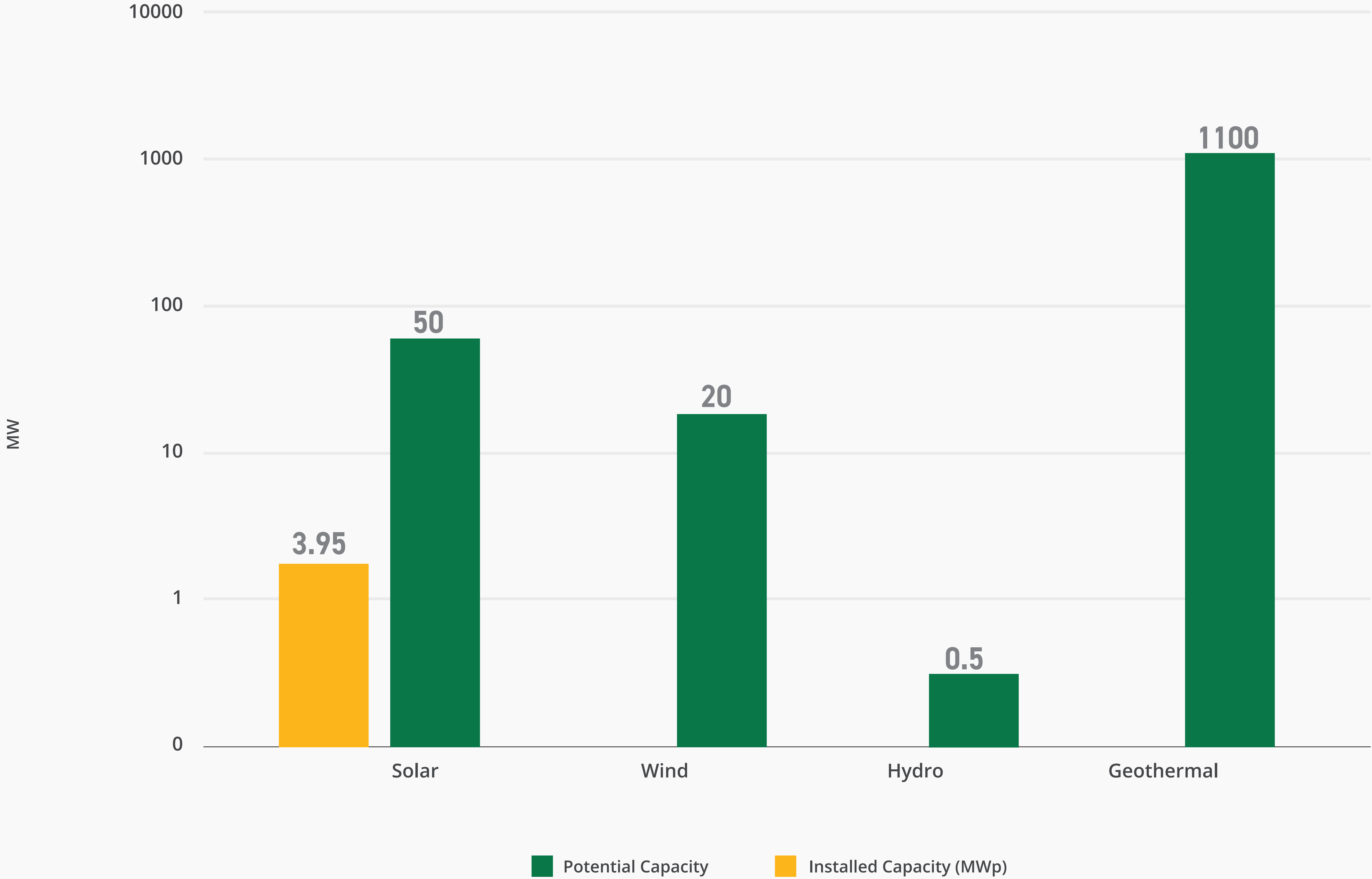


+ ENERGY CONSUMPTION (GWh)





RENEWABLE ENERGY RESOURCES





ELECTRICITY TARIFFS ^{11 12}



Category	Rate (US\$/kWh)
Residential Tariff	\$0.34
Commercial	\$0.35
Industrial/Large Power	\$0.31
Streetlights	\$0.33

11. Tariffs include a non-fuel charge, a fuel charge, the fuel adjustment clause.

12. A fuel charge of US \$0.19 has been included into the tariffs.



PROJECTS IN PIPELINE

+ TRANSPORT PROJECTS

Donor Funding and Technical Assistance Landscape	Donor Organization & Banks	Funding Awards (USD)	Year
Sustainable Road Based Public Transport Plan (One of its goals is to develop a programme to transition into low or no carbon emission buses) ^[40]	Caribbean Development Bank	\$750,000	2022

+ ENERGY EFFICIENCY PROJECTS

There were no Energy Efficiency Projects reported for 2022.

+ RENEWABLE ENERGY PROJECTS

Renewable Energy Source	Resource and Projects Capacity	Development Partner	Total Estimated Cost	Funding Source
Solar Photo-Voltaic	800KWh	United Arab Emirates (UAE)	US\$4.4 M	United Arab Emirates -Caribbean Renewable Energy Fund (UAE-CREF)
Wind Energy	30MW	International organization (but not specified)		
Geothermal	15MW	Caribbean Development Bank (CDB)	US\$142 M	CDB
Wave Energy ^[41]	2MW	Ireland-Based Seabase Group		



TERTIARY PROGRAMMES OFFERED



PROGRAMMES

Name of Education Programme Provider	Name of Programme		Programme Link
	Vocational Certificate	Associate Degree	
T.A. Marryshow Community College (TAMCC)	PV Installation Roofers Fitter CVQ Level II ^[41]		
	Renewable Energy (CVQ Level II, III, IV) ^{13 14 [41]}		
		Environmental Sustainable Practices	https://www.tamcc.edu.gd/index.php/SCE

^{13.} Caribbean Vocational Qualification (CVQ) available under the Environmental Sustainable Practices Programme.

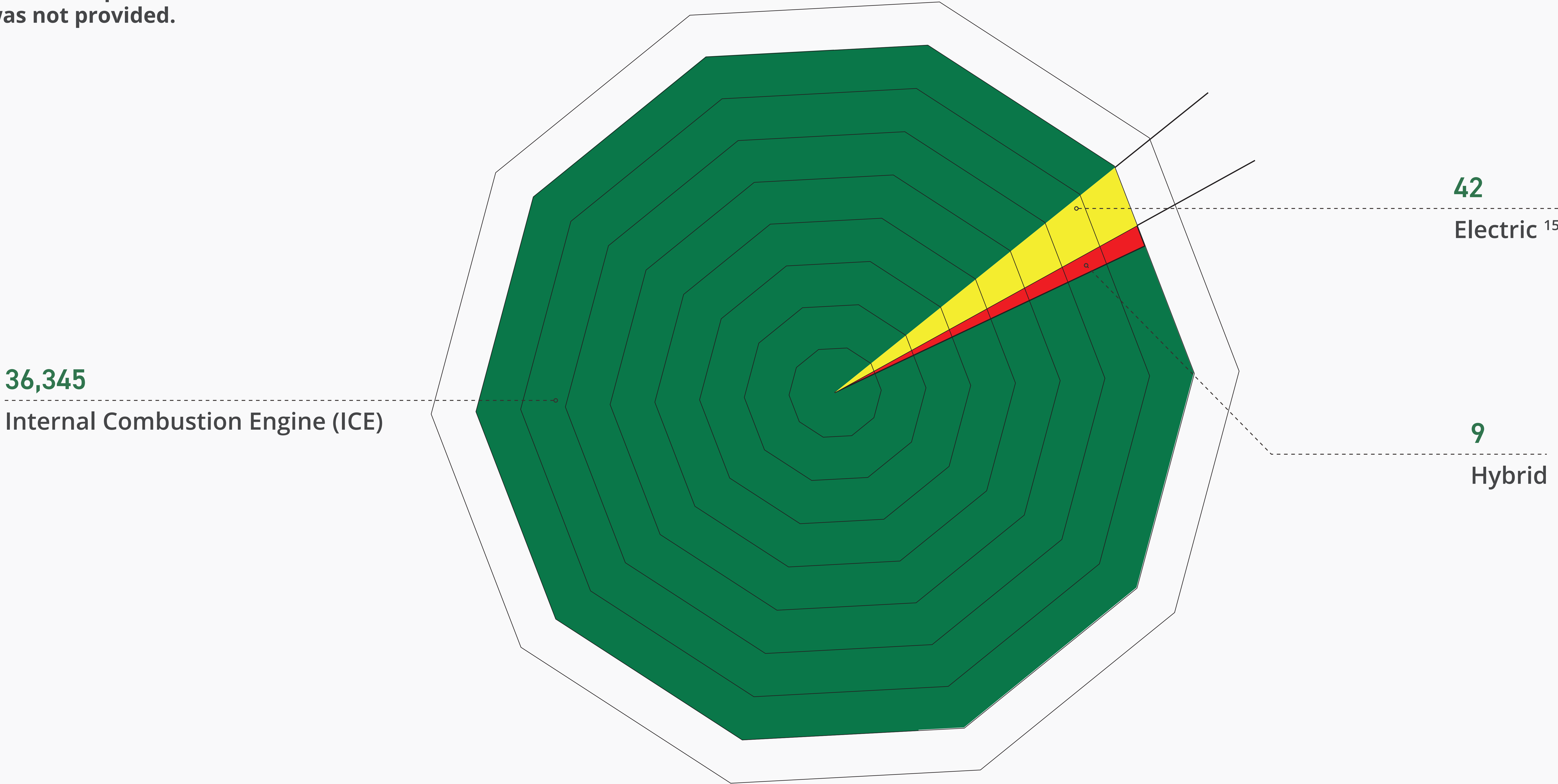
^{14.} Course was not offered in 2022.



TRANSPORTATION SECTOR

VEHICLE TYPES USED IN THE TRANSPORTATION SECTOR

+ 36,400 vehicles were reported for 2022, however a detailed breakdown was not provided.



¹⁵ The EV Count includes cars, SUVs, Motorcycles, Scooters and ATVs.



CLIMATE CHANGE FRAMEWORK

Climate Change Policy	National Climate Change Policy for Grenada, Carriacou and Petite Martinique (2017-2021) ^[7] National Climate Change Adaptation Plan for Grenada Carriacou and Petite Martinique ^[8]
Priority Sectors for NDC ^[9]	<ul style="list-style-type: none"> • Electricity • Transport • Waste • Forestry
National Determined Contributions ^[9]	<p>The Government of Grenada has committed itself at the COP 21 (Paris), with the submission of the Nationally Determined Contributions. The main aims of Grenada's NDC are as follows:</p> <ol style="list-style-type: none"> 1. Reduce carbon dioxide (CO₂) emissions from the power sector by 40% by 2030. 2. Reducing emissions from land transport 20% by 2025 3. Using methane capture technologies for reducing waste management emissions by over 90%. 4. Doubling carbon storage in areas for protected forest by for example, planting indigenous (Faster growing) species.
Emissions Reduction Target ^[9]	Reducing GHG emissions by 40% of the 2010 emissions levels by 2030.
National Communications (NC) to the UNFCCC	<p>Grenada's Initial Communication to the UNFCCC (2000)^[42]</p> <p>Grenada, Carriacou and Petite Martinique: Second National Communication to the United Nations Framework Convention on Climate Change (2017)^[43]</p>

+

 SUMMARY OF GRENADA'S GHG EMISSIONS AND REMOVALS (Gg) FOR 2014^[43]

Categories	Gg			GgCO ₂ e	
	Carbon Dioxide (CO ₂)	Methane (CH ₄)	Nitrous Oxide (N ₂ O)	HFCs	SF ₆
Energy	292.83	0.11	0.0138		
Industrial processes				58.32	
Agriculture, Forestry, and Other Land Use	0	0.50	0.02		
Waste		1.71	0.006		
Total	292.83	2.32	0.0398		



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