

GRENADA

ENERGY REPORT CARD (ERC) FOR 2021



INTRODUCTION

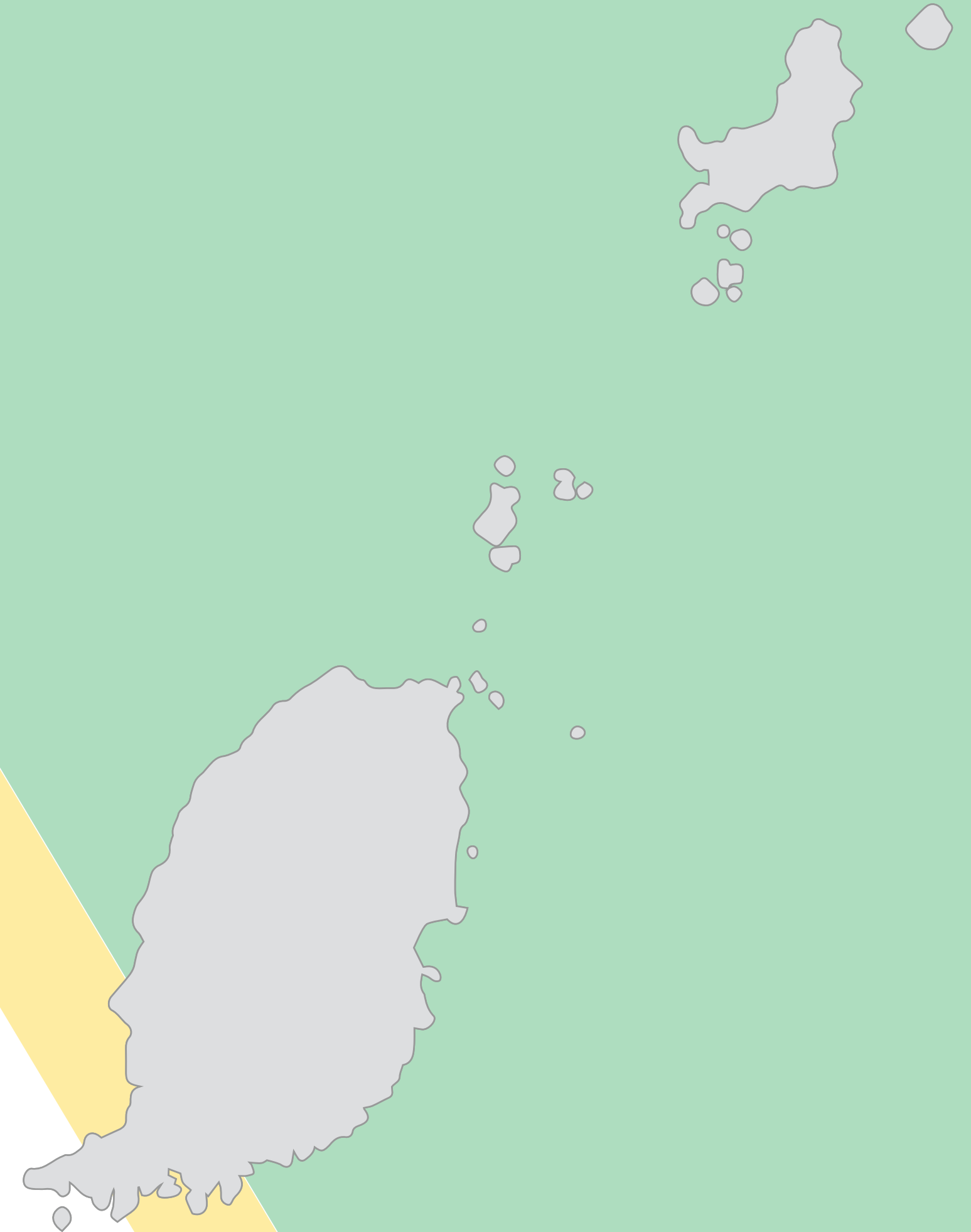
This document presents Grenada's Energy Report Card (ERC) for 2021.

The ERC provides an overview of the energy sector performance in Grenada. 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.



National Sustainable Development Plan 2020-2035 [4]

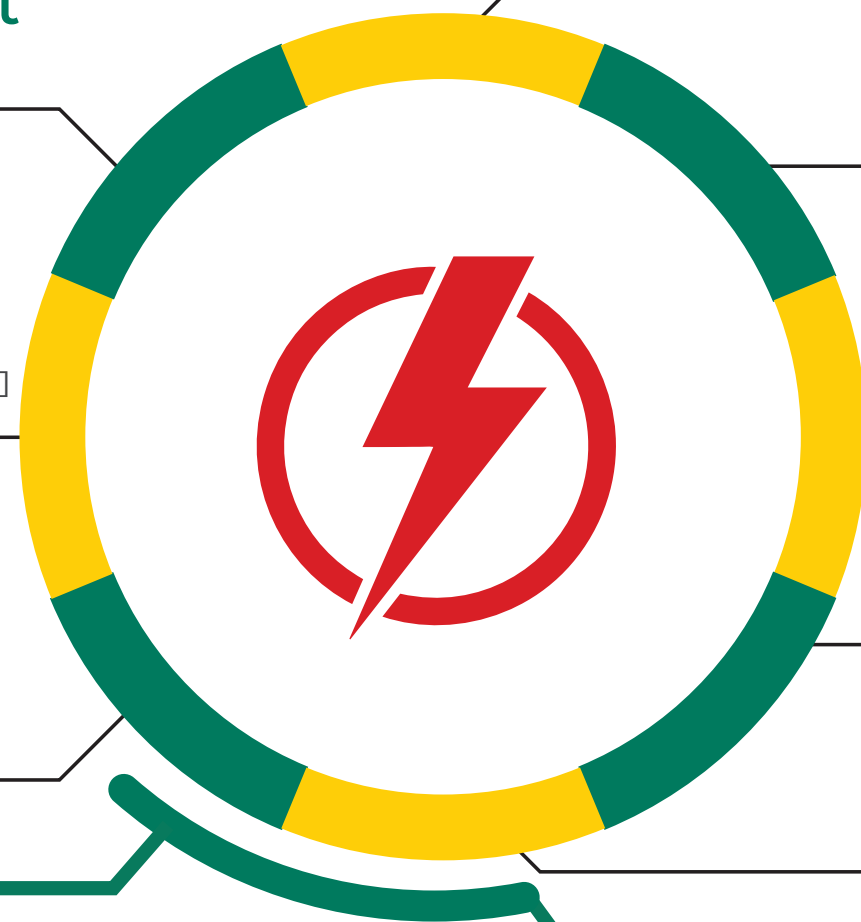
National Development Plan/
Overall Country Development Strategy

The National Energy Policy of Grenada
2011: A Low Carbon Development Strategy
For Grenada, Carriacou and Petite Martinique¹ [5]

National Energy Policy

None

Renewable Energy (RE) Policy



113,135^[1]
POPULATION (CENSUS/PROJECTION)

\$7,732.40^[1]
GDP (USD) PER CAPITA

70.60%^[1]
Debt as % of GDP

0.795^[3]
Human Development Index

100% by 2030^[6]
RE Target

National Determined Contributions (NDC)

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%.

Doubling carbon storage in areas for protected forest by for example, planting indigenous (Faster growing) species. [11]

ENERGY PERFORMANCE STANDARDS/APPLIANCE LABELLING^[7]

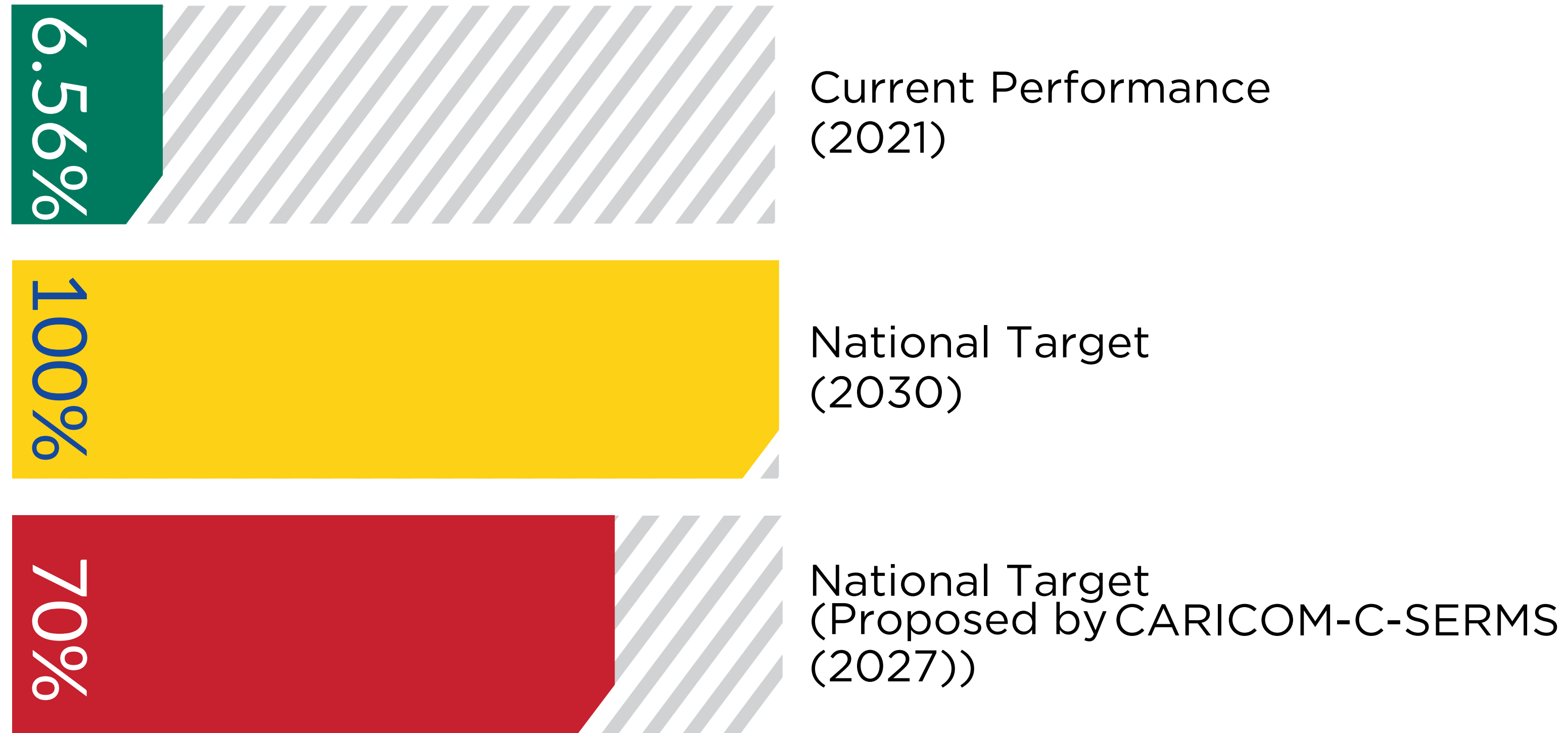
- GDS 1: Pt. 8: 2001 – Specification for the Labelling of Domestic Electrical Appliances
- GDS 1 PART 10, 2021: Energy Labelling – Refrigerating Appliances Requirements (modified)

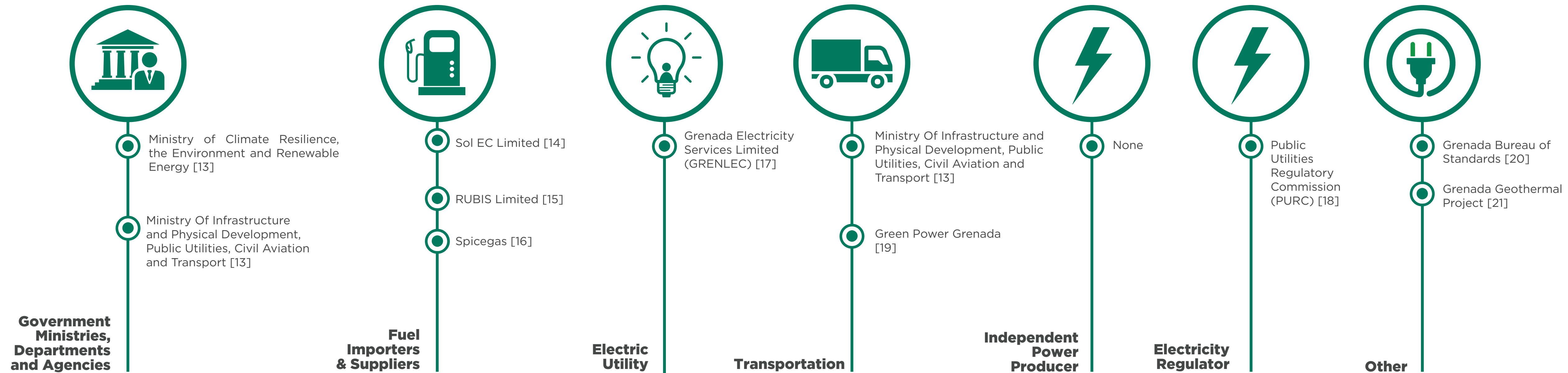
ENERGY SECTOR SUMMARY

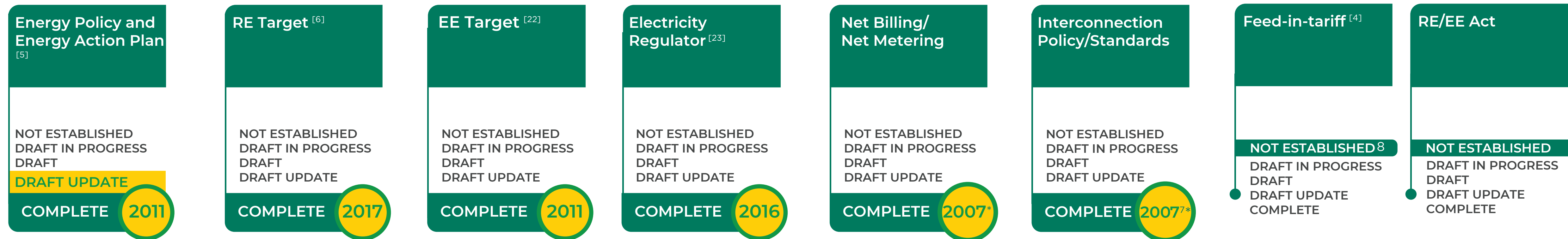
| | | |
|---|--|---|
|  | No. of Persons Employed in Energy Sector | 266 ² |
|  | Total Installed Conventional Capacity (MW) | 54.48 ^[8] |
|  | Total Installed RE (MWp) | 3.65 ³ [9] |
|  | Electricity System Losses (%) | 6.63% ^[9] |
|  | Energy Use (kWh) Per Capita | 1,828.55 ^{[1][9]} |
|  | Fuel and Oil Imports as % of GDP | 5.82% ⁴ [1] |
|  | Oil Imports as % of GDP | 0.20% ⁵ [1] |
|  | Electric Vehicle Stock | 48 ^[10] |
|  | Climate Change Policy | National Climate Change Policy for Grenada, Carriacou and Petite Martinique (2017-2021) |
|  | Total Oil Import (BOE) per day | 1,689.43 ^[8] |
|  | Total Oil Export (BOE) per day | Not Applicable |
|  | Energy Intensity (BTU/\$) | 3,494 ^[8] |
|  | National Repository for Energy Data | The Energy Division ⁶ [8] |

1. The National Energy Policy was reviewed in 2022.
2. [15] [16] [15] [8] [35]
3. The total installed RE was provided in MWp.
4. Vehicle Oil and Fuel
5. Vehicle Oil
6. 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.

Performance Against Targets








Policies and Legislation Relevant to the Energy




KEY ACHIEVEMENTS

PLR Framework Timeline For Electricity Sector

- 2016** Electricity Supply Act No 18 of 1994 (Amended 1998, 2005, 2016)^[24]
- 2017** Public Utilities Regulatory Commission Act No. 20 of 2016 (Amended 2017)^[23]



POLICIES AND LEGISLATION RELEVANT TO THE TRANSPORTATION SECTOR




LEGISLATION

Civil Aviation Act No. 12 of 2004 (Amended 2006)^[26]

Petroleum Act SRO 50 of 1961^[27]

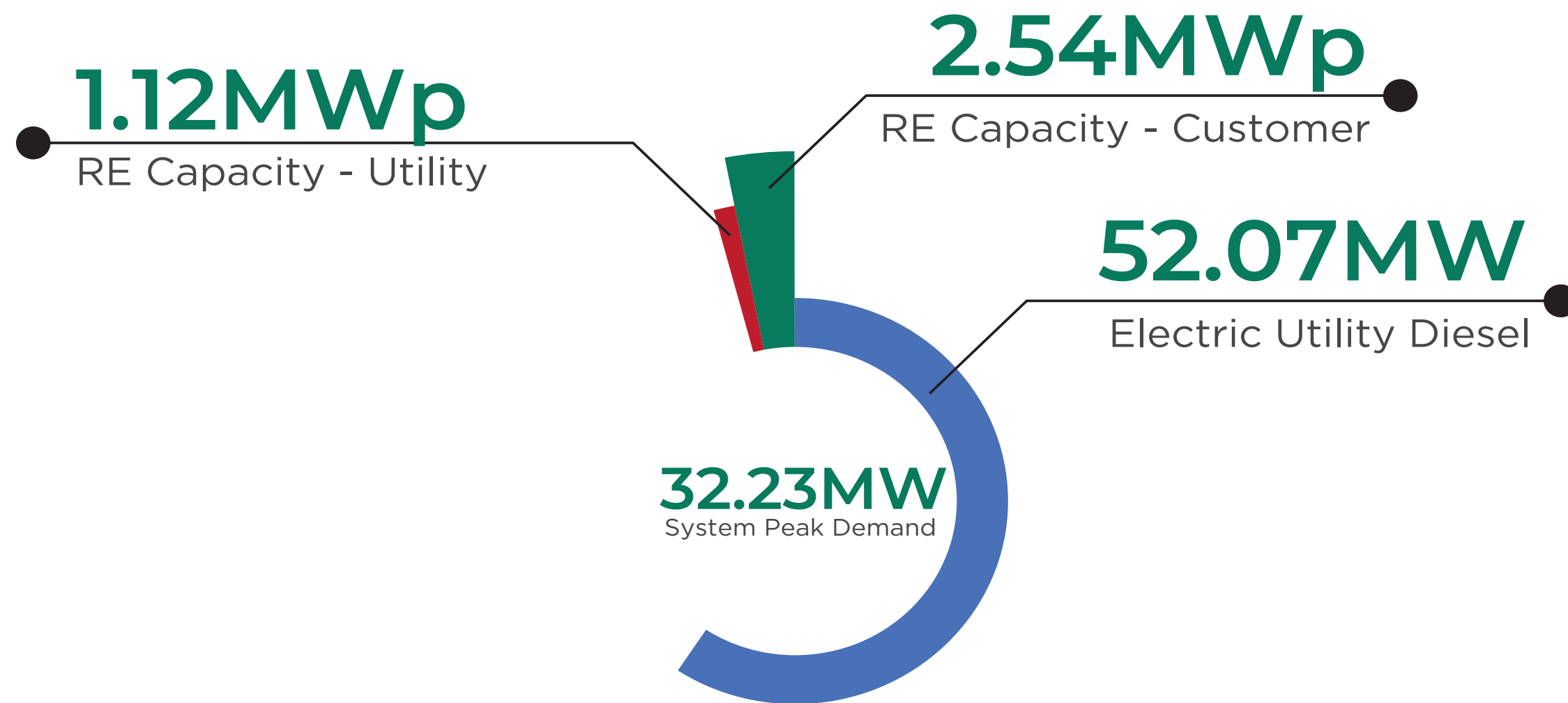
Petrol Tax Act No. 15 of 2005 (Amended 2006)^[28]



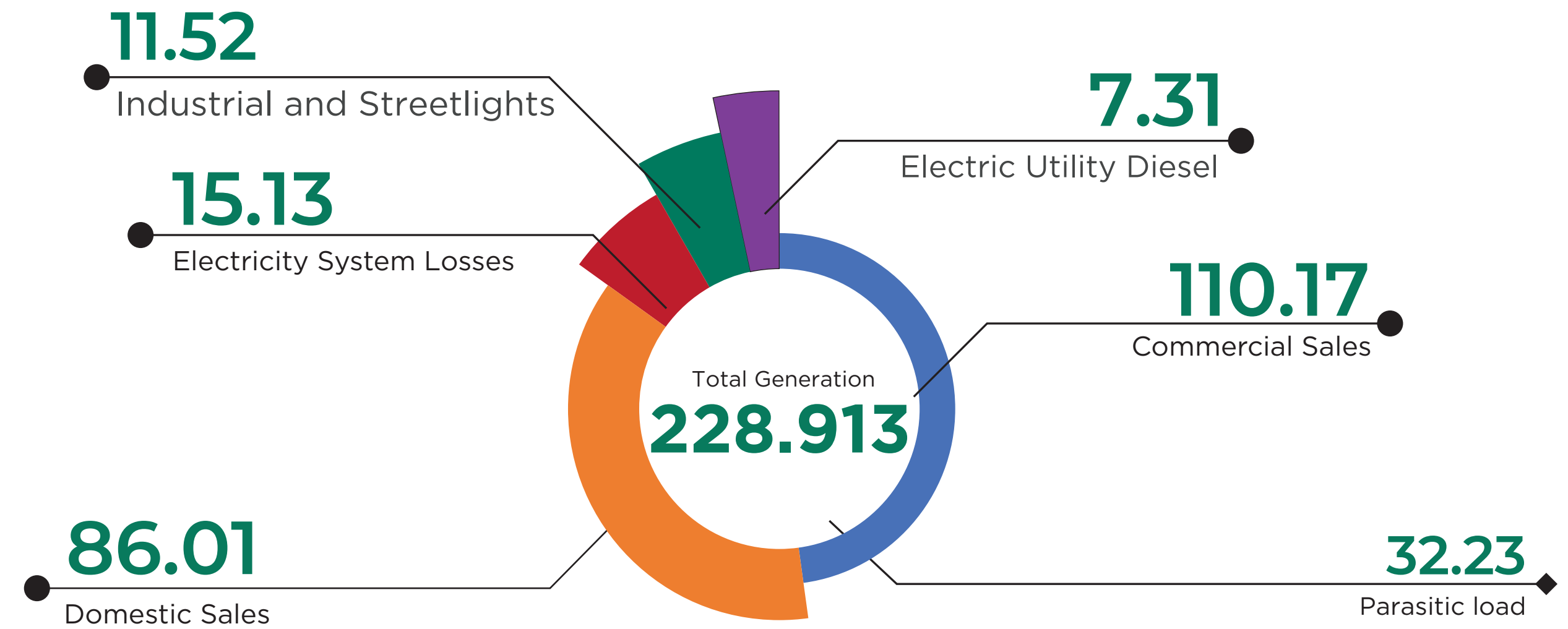
POLICY

None

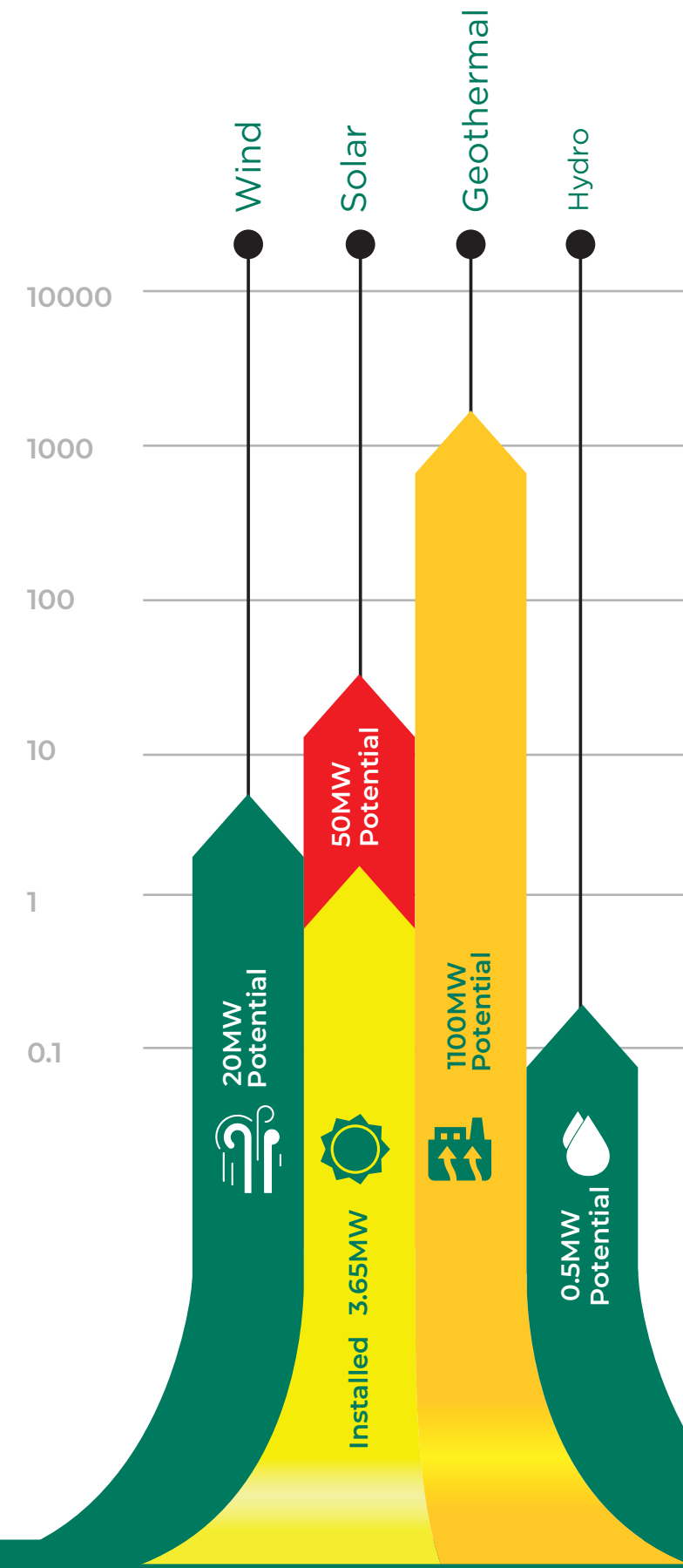
Installed Capacity



Energy Consumption (GWh)



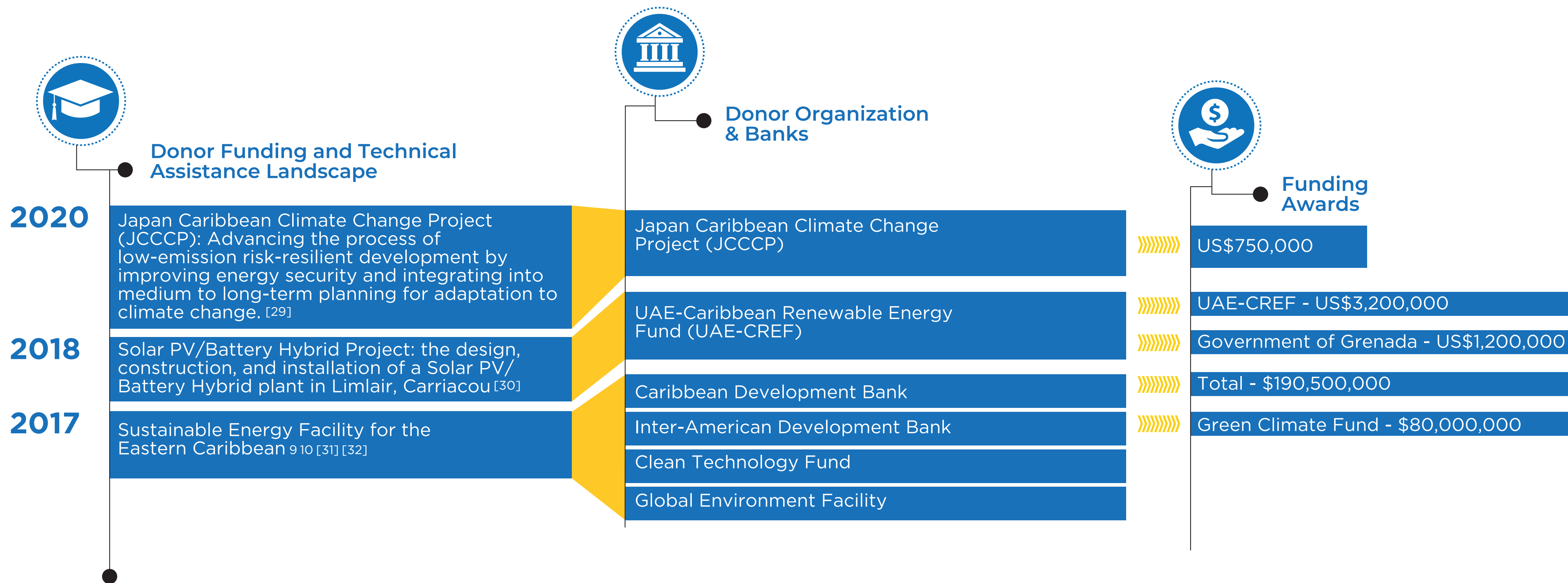
Renewable Energy Resources



Electricity Tariffs [8]




| Category | Rate (US\$/kWh) |
|-------------------|-----------------|
| Residential | 0.37 |
| Commercial | 0.38 |
| Industrial/ Large | 0.35 |
| Streetlights | 0.36 |

Technical Assistance Projects

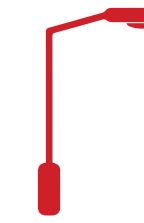


9. Inter-American Development Bank (IDB) and the CDB jointly created the Sustainable Energy Facility.
 10. The countries involved in this project are Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines.

Renewable Energy Projects

|  SOLAR PHOTO-VOLTAIC |  WIND |  GEOTHERMAL |
|---|--|--|
| OWNERSHIP GRENLEC Customer Renewable Energy Interconnection Programme [33] | OWNERSHIP Fort Frederick Demonstration Project | OWNERSHIP Geothermal Development Project |
| CAPACITY 1.2MW | CAPACITY 1MW | CAPACITY 15MW |
| DEVELOPMENT PARTNER Not Available | DEVELOPMENT PARTNER Not Available | DEVELOPMENT PARTNER Jacobs |
| COST (USD) Not Available | COST (USD) Not Available | COST (USD) Not Available |
| FUNDING SOURCE Not Available | FUNDING SOURCE Not Available | FUNDING SOURCE Government of New Zealand Government of Japan |

Energy Efficiency Projects



ENERGY EFFICIENCY

STREET LIGHTING^[8]

| | |
|--|---------------|
| Old/Existing Infrastructure (Number/Size) | 8,824 |
| Consumption (kW) Ask if estimated or measured | 4,495,734 |
| Annual Costs (USD) | Not Available |
| Energy Audits (Yes/No) | Not Available |
| Energy Efficiency Legislation or Regulations | Not Available |
| Energy Service Companies (Yes/No) | No |
| Change in Old/Existing Infrastructure Expected in Upcoming Calendar Year (Number/Size) | Not Available |
| Expected Change in Technology | Not Available |
| Relative Difference in Operating Consumption/Costs | Not Available |

Grenada Solar Energy Technical Research Institute (GSETRI)¹¹

Caribbean vocational Qualification
(CVQ) in PV Installation Roofers
Fitter level II



No. of Persons
Graduated

37

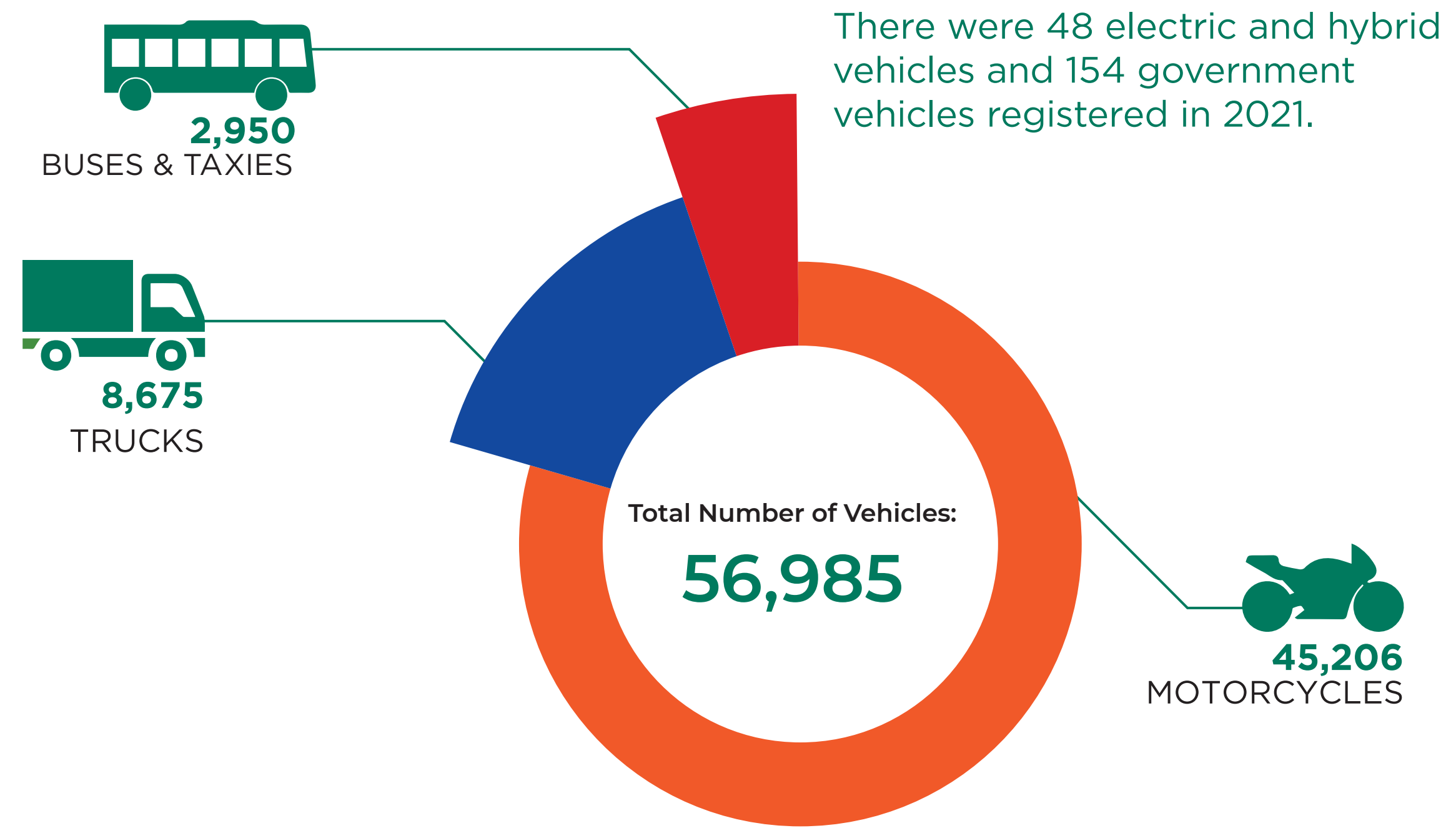


11. Renewable Energy CVQ Programme is to begin in August 2022

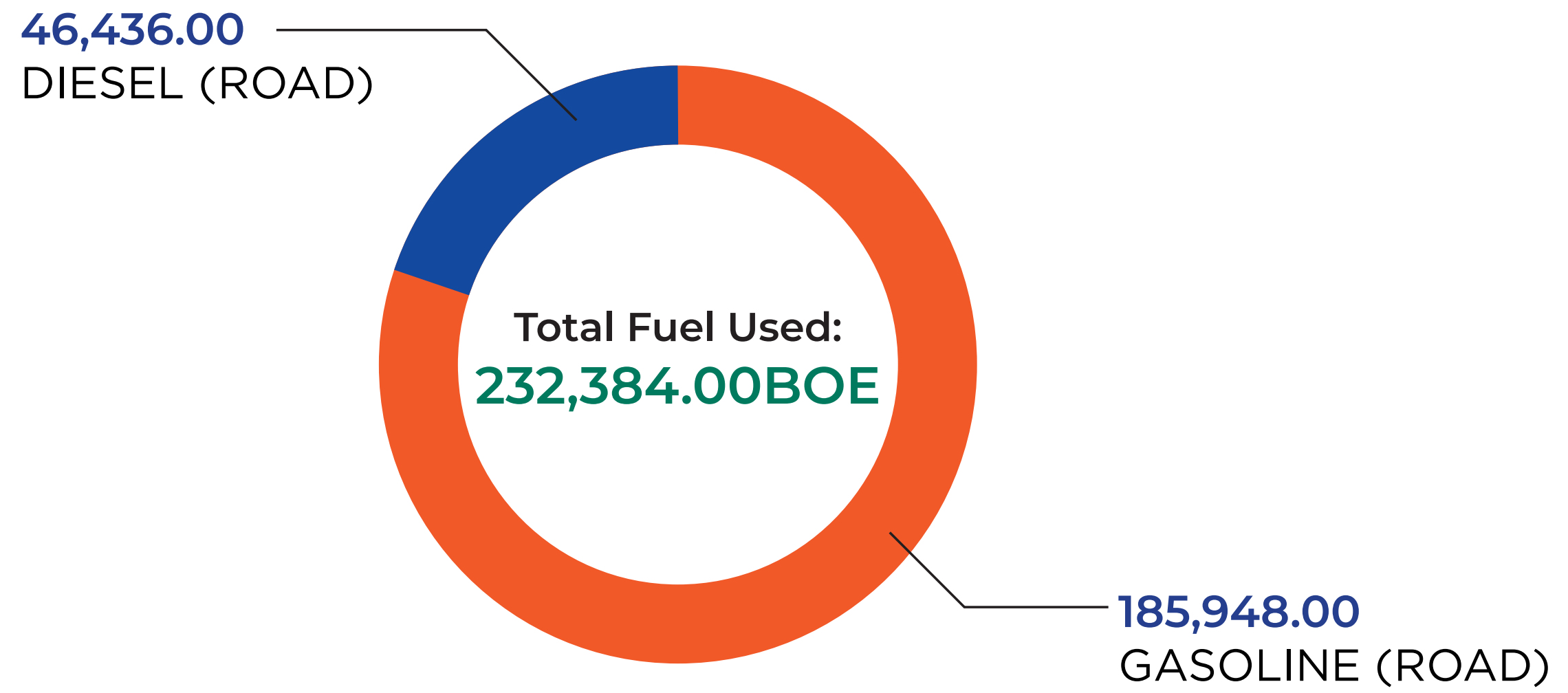


WORKFORCE
The 517 persons employed in the energy sector were not separated by gender.

Registered Vehicles



Fuel Type Used for Transportation (BOE)



Climate Change Policy

National Climate Change Adaptation Plan for Grenada, Carriacou and Petite Martinique (2017-2021) [36]

National Determined Contributions [11]

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:

- 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.

Emissions Reduction Target [11]

Reducing GHG emissions by 40% of the 2010 emissions levels by 2030.

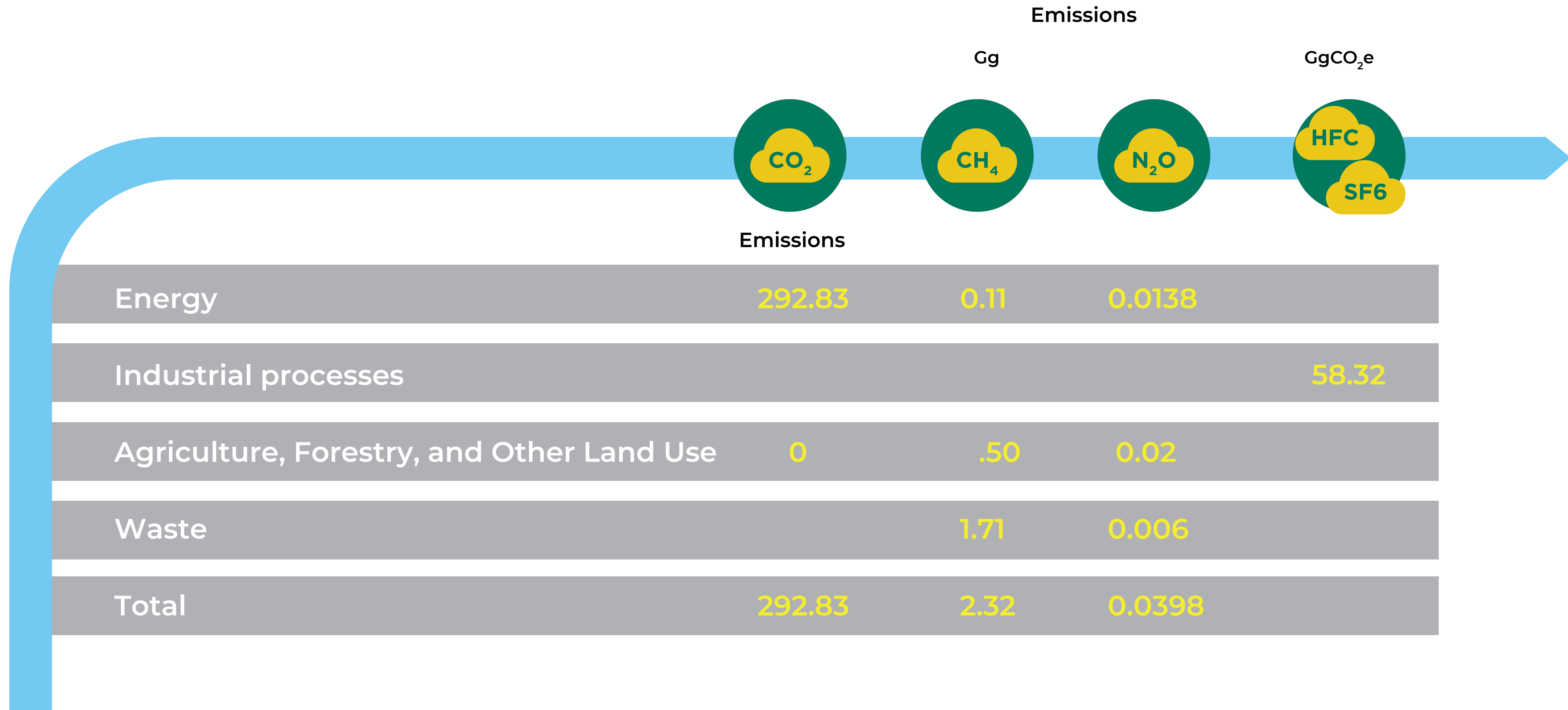
Priority Sectors for NDC [12]

Electricity
Transport
Waste
Forestry

National Communications (NC) to the UNFCCC

Grenada's Initial Communication to the UNFCCC [37]
Grenada, Carriacou and Petite Martinique: Second National Communication to the United Nations Framework Convention on Climate Change (2017) [38]

Summary of Grenada's GHG Emissions and Removals (Gg) for 2014 ^[39]



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- [16] G. M. S. I. Pereze, Interviewee, Energy Stakeholder Data. [Interview]. 29 June 2022.
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