



Grenada

Latin America & Caribbean

Ease of doing Solar classification



Influencer

Electricity Consumption
in kWh/capita (2020)

1777.5

Average PVout in kWh/kWp/day
(2020)

4.5

Cumulative Solar Capacity in MW
(2021)

3.6

Getting Electricity Score (2020)

73.4

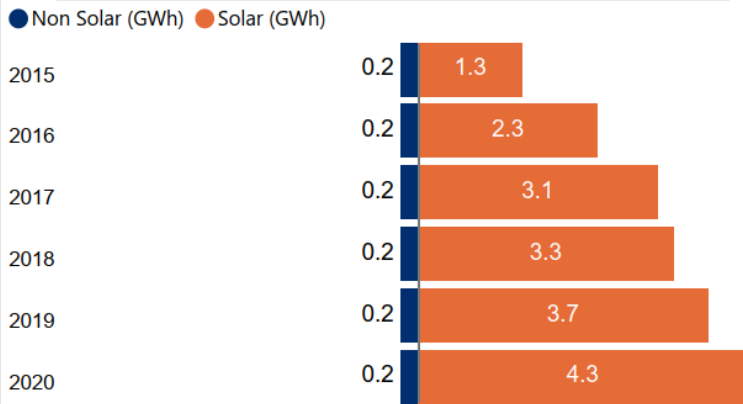
NDC Target by 2030 in %
(base year 2010)

40.0

Human Development Index (2021)

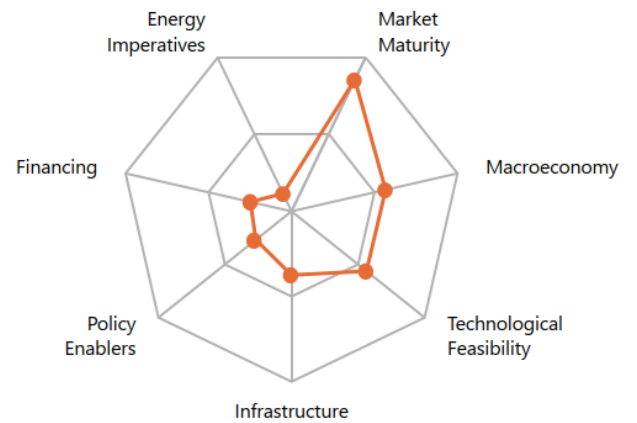
0.8

Renewable Energy Generation by Source

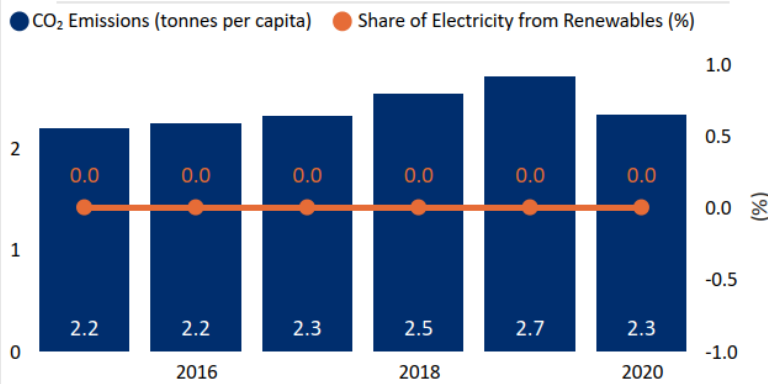


Non Solar RE includes Wind and Hydro;

Performance against 7 Drivers



CO₂ Emissions vs Electricity share from Renewables

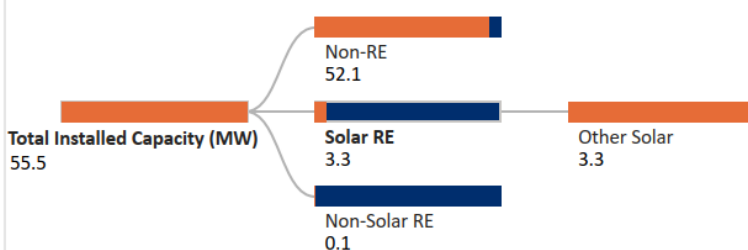


Fiscal Incentives & Public Financing for Renewables (2020)

Investment or production tax credits?
No

Public investment, loans, grants, capital subsidies or rebates?
No

Installed Capacity by Source (2019)



Non-Solar RE: Wind, Hydro, Biomass, Geothermal & Marine;
Non-RE: Coal, Natural Gas, Nuclear, Oil, etc.;
Other Solar: Utility Scale Solar, Rooftop etc.;
Data not available for other Solar RE segments;

Support for Renewables (2020)

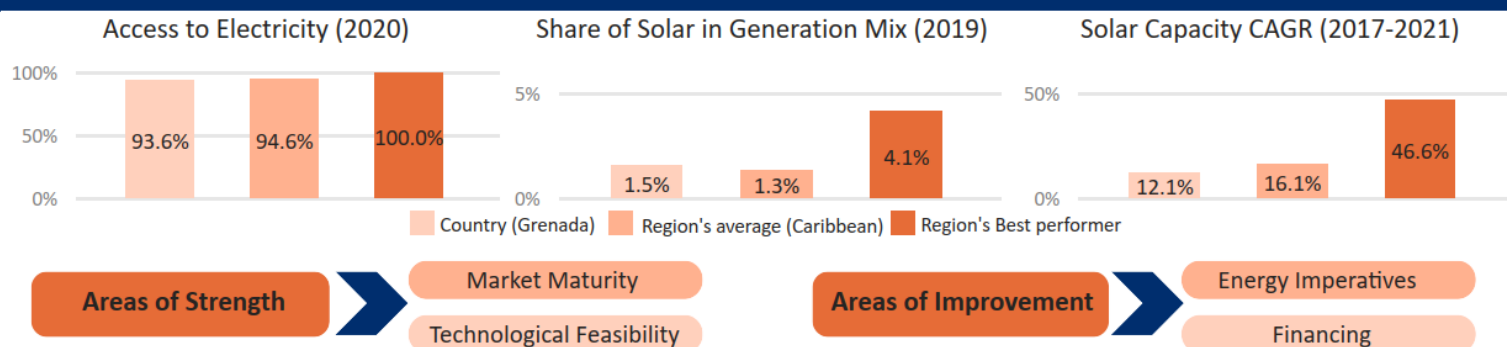
Feed-in-Tariffs for renewable energy supply to the grid?
No

Net metering/Gross metering policies and regulations?
Yes

Renewable Energy Certificates?
No

Renewable Purchase Obligation?
No

Country's regional performance and characteristics



Key Insights

Drivers

Insights



Macro-economy

- Grenada is an upper middle-income country with a GDP per capita (PPP) of USD 15,038 in 2021.^{1,2}
- Due to COVID-19 Pandemic, the GDP (Real) had contracted by 13.8% in 2020. However, in 2021 it has bounced back growing at a rate of 5.6%.¹
- The inflation rate (CPI) of the country has increased to 1.2% in 2021 from -0.7% levels in 2020.¹
- The general government gross debt to GDP has reached 70.3% in 2021 from 71.4% levels in 2020.¹



Policy enablers

- To promote the development of RE in the country several incentives like tax reductions/exemptions, availability of interconnection standards and net metering are already implemented in the country.⁸
- The "Grenada Vision 2030" has set a target to achieve 100% RE for both the electricity and transport sectors by 2030.⁹



Technological Feasibility

- Grenada receives high levels of solar irradiation (GHI) of 4.9 kWh/m²/day and specific yield 4.5 kWh/kWp/day indicating a strong technical feasibility for solar in the country.³
- The country is highly dependent on imported fossil fuels for generation of electricity, making it vulnerable to fluctuating oil prices.⁴



Market Maturity

- As of 2020, 93.6% of the population in Grenada had access to electricity.²
- The Public Utilities Regulatory Commission is the designated agency that regulates the energy sector in the country.⁶
- Grenada Electricity Services Limited (GRENLEC) is the agency responsible for the generation, transmission, and distribution of electricity in the country.⁷



Infrastructure

- In 2021, the network losses stood at 6.61% indicating an efficient power infrastructure in the country.⁷
- The GRENLEC has been taking necessary steps to improve infrastructure and enhance customer experience through development of mobile application and multi-layered Geographical Information System (GIS).⁷



Financing

- The World Bank in May 2022 has sanctioned USD 25 Mn for Grenada's First Recovery and Resilience Programmatic Development Policy Credit that will help promote a greener and climate-resilient economy, improving sustainability, and greater accountability of fiscal management.¹⁰
- The government has created a dedicated fund to provide loans for solar PV under Nationally Appropriate Mitigation Action (NAMA) project.¹¹



Energy Imperatives

- In 2020, Grenada's per capita electricity consumption stood at 1.78 MWh which is relatively lower in comparison to the global average of 3.31 MWh.⁴
- The total installed capacity of Solar PV witnessed a CAGR of 12.1% reaching 3.6 MW in 2021 from 2.3 MW in 2017.⁵
- The peak demand for electricity in the country in 2021 stood at 1.78 TWh remaining similar to 2020 levels.⁴
- In 2021, the total installed capacity in the country stood at 0.06 GW with a major share coming from oil.⁴