



Saint Kitts and Nevis

Latin America & Caribbean

Ease of doing Solar classification



Influencer

Electricity Consumption
in kWh/capita (2020)

3948.0

Average PVout in kWh/
kWp/day (2020)

4.6

Cumulative Solar Capacity in MW
(2021)

2.0

Getting Electricity Score (2020)

70.2

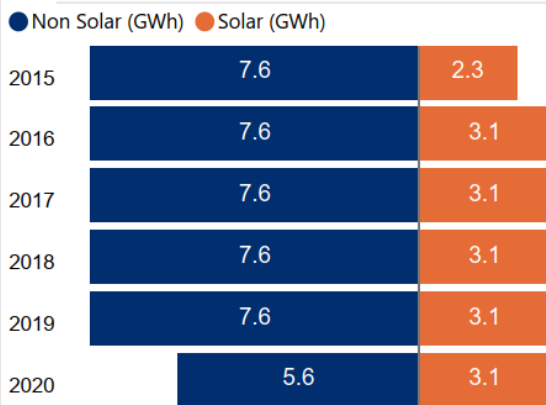
NDC Target by 2030 in %
(base year 2010)

61.0

Human Development Index (2021)

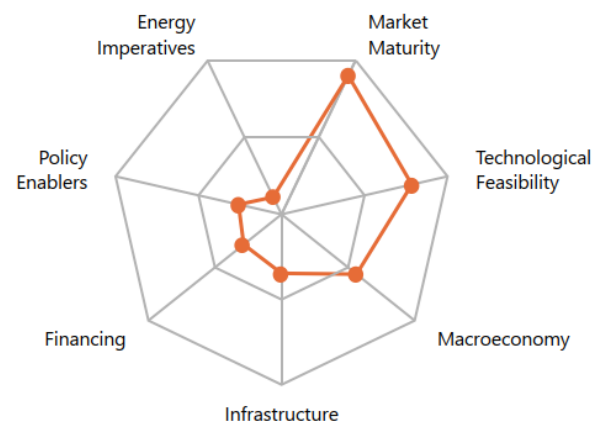
0.8

Renewable Energy Generation by Source

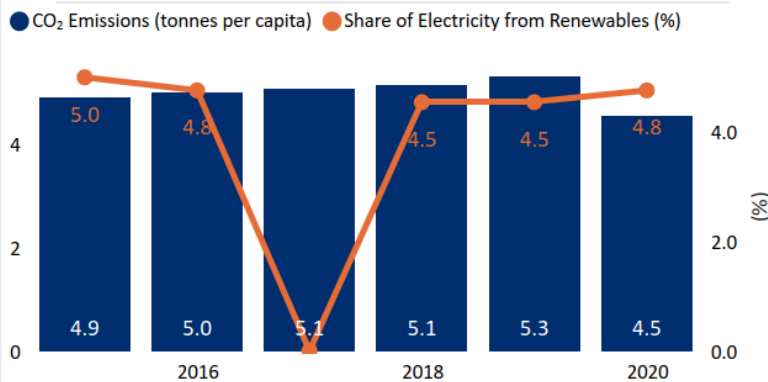


Non Solar RE includes Wind and Hydro;

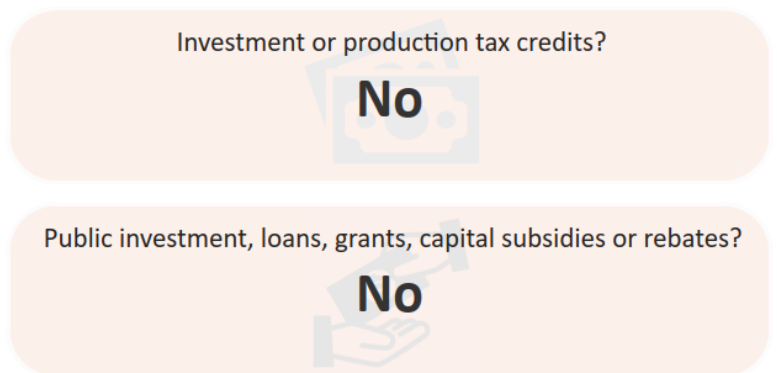
Performance against 7 Drivers



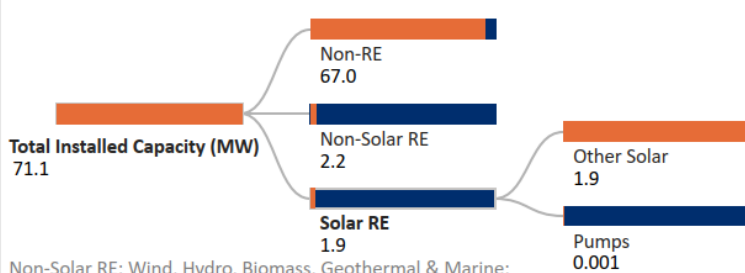
CO₂ Emissions vs Electricity share from Renewables



Fiscal Incentives & Public Financing for Renewables (2020)



Installed Capacity by Source (2019)



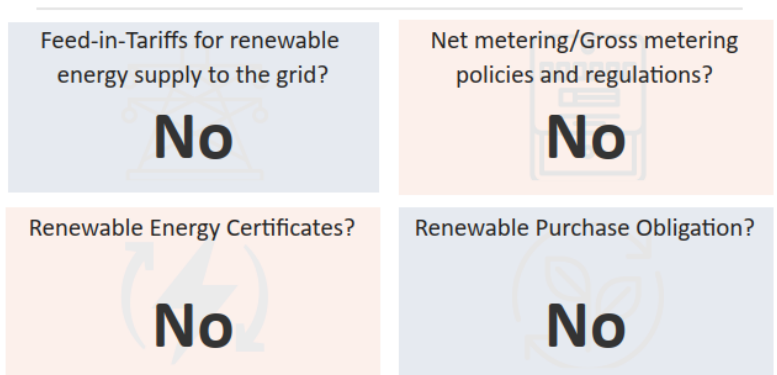
Non-Solar RE: Wind, Hydro, Biomass, Geothermal & Marine;

Non-RE: Coal, Natural Gas, Nuclear, Oil, etc.;

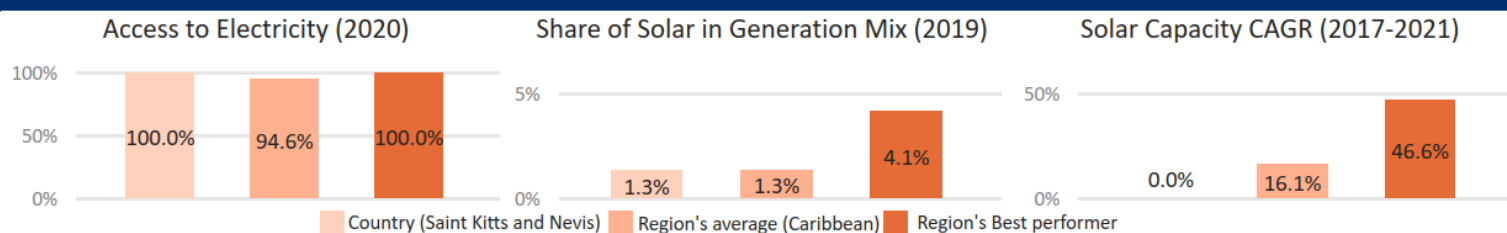
Other Solar: Utility Scale Solar, Rooftop etc.;

Data not available for other Solar RE segments;

Support for Renewables (2020)



Country's regional performance and characteristics



Areas of Strength

Market Maturity
Technological Feasibility

Areas of Improvement

Energy Imperatives
Policy Enablers

Key Insights

Drivers

Insights



Macro-economy

- Saint Kitts and Nevis is a high-income country with a GDP per capita (PPP) of USD 29,097 in 2021.^{1,2}
- In 2021, the GDP (Real) has contracted by 3.6%. However, in 2022, it is expected to bounce back with an annual growth rate of 10.0%.¹
- The inflation rate (CPI) of the country has increased to 0.2% in 2021 from -0.6% levels in 2020.¹
- The general government gross debt to GDP has reached 63.4% in 2021 from 56.8% levels in 2020.¹



Policy enablers

- By 2023, the country aims to achieve a 50% share from renewables in the electricity generation mix.⁶
- To promote the development of RE in the country, the government offers incentives such as tax credits and tax reductions/exemptions on imports of RE related materials in the country.⁶



Technological Feasibility

- Saint Kitts and Nevis receives very high levels of solar irradiation (GHI) of 5.6 kWh/m²/day and specific yield 4.6 kWh/kWp/day indicating very strong technical feasibility for solar in the country.³
- In 2021, only 4.76% of the country's power demand was met through RE sources.⁴



Market Maturity

- 100% of the population in the country had access to electricity as of 2012.⁴
- The Ministry of Public Works, Utilities, Transport and Port oversees the policy formation in the energy sector.⁷
- St. Kitts Electricity Company Limited (SKELEC) and Nevis Electricity Company Limited (NEVELEC), both public utilities, are responsible for the generation, transmission, and distribution of electricity in the country.⁸



Infrastructure

- The transmission and distribution of the country operates on 60 Hz frequency and on voltage levels ranging from 230 V to 11 kV.⁸
- The absence of an interconnected national grid for connecting two islands is a major challenge the country's power sector faces.¹¹



Financing

- In 2019, the government signed the Sector Budget Support Programme worth EUR 5 Mn in partnership with the European Union to facilitate integration of RE in the country.⁹
- Under the Sustainable Energy Facility for the Eastern Caribbean, the Green Climate Fund has provided USD 16.0 Mn financing support in the country.¹⁰



Energy Imperatives

- In 2020, Saint Kitts and Nevis's per capita electricity consumption stood at 3.9 MWh, which is relatively higher in comparison to the global average of 3.31 MWh.⁴
- The peak demand for electricity in the country has remained constant at 0.21 TWh in 2020 and 2021.⁴
- In 2021, the total installed capacity in the country reached 0.07 GW with a significant share coming from oil (94.0%) followed by wind (3.2%) and solar (2.8%).⁴
- In the last 5 years, the total installed capacity of solar PV has remained constant at 1.94 MW.⁵