



Haiti

Latin America & Caribbean

Ease of doing Solar classification



Progressive

Electricity Consumption in kWh/capita (2020)

82.4

Average PVout in kWh/kWp/day (2020)

4.7

Cumulative Solar Capacity in MW (2021)

2.6

Getting Electricity Score (2020)

57.2

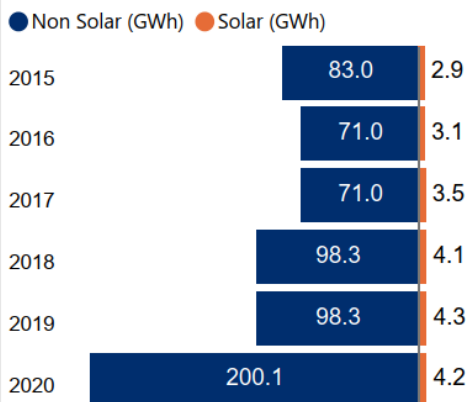
NDC Target by 2030 in % (base year 2000)

32.0

Human Development Index (2021)

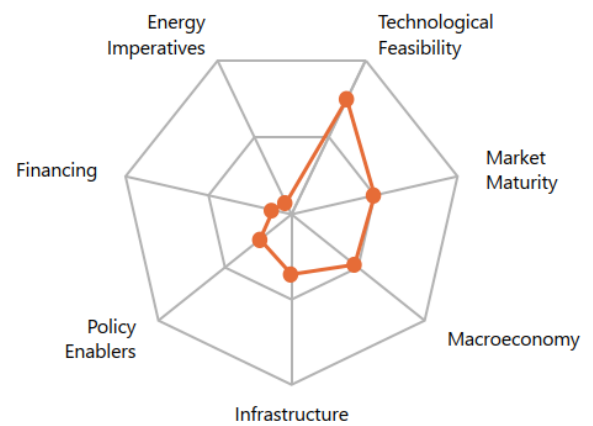
0.5

Renewable Energy Generation by Source

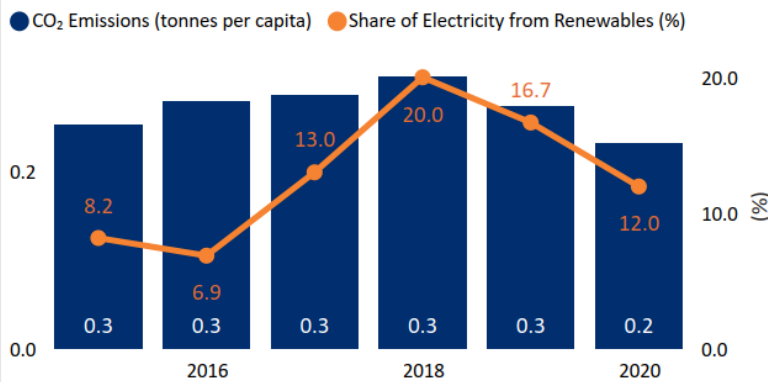


Non Solar RE includes Wind and Hydro;

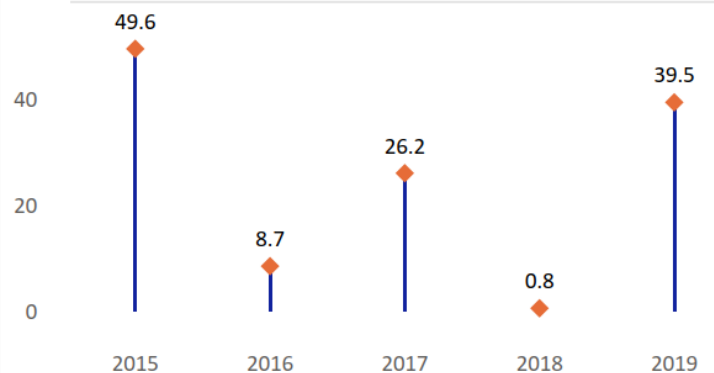
Performance against 7 Drivers



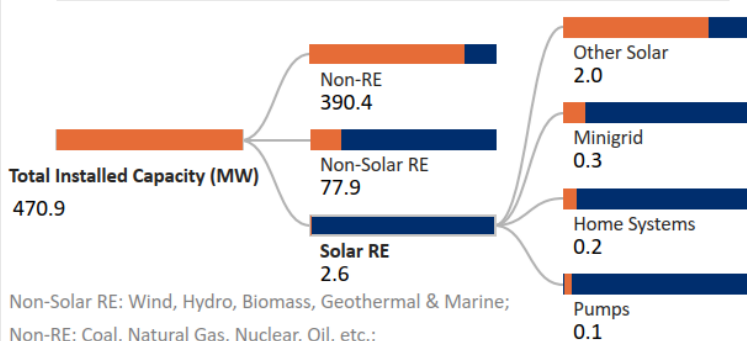
CO₂ Emissions vs Electricity share from Renewables



International Finance received for Clean Energy (Million US Dollars)



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?

No

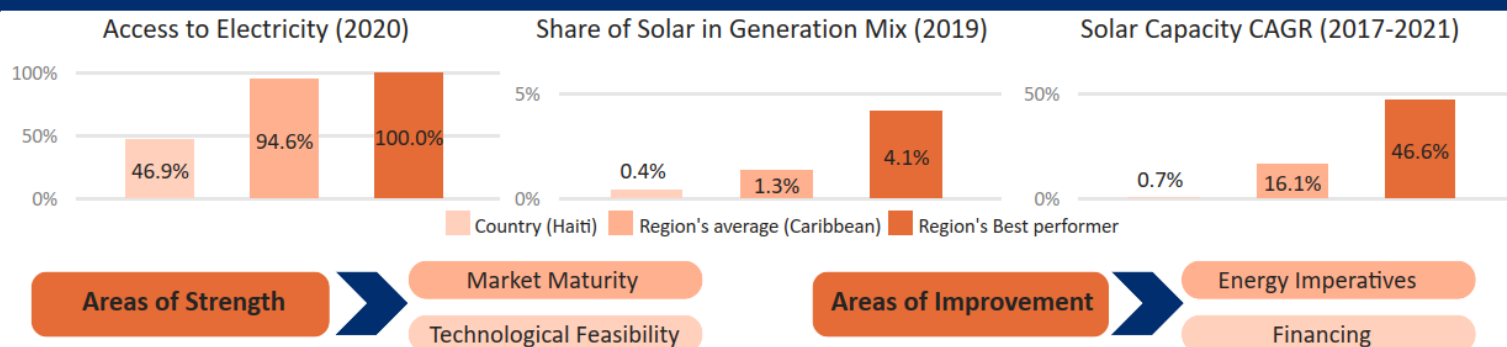
Renewable Energy Certificates?

No

Renewable Purchase Obligation?

No

Country's regional performance and characteristics



Key Insights

Drivers

Insights



Macro-economy

- Haiti is a lower-middle income country with a GDP per capita (PPP) of USD 3,153 in 2021.^{1, 2}
- Due to COVID-19 Pandemic, the GDP (Real) declined by 3.3% in 2020. However, in 2021 it has slightly improved recording a rate of -1.8%.³
- The inflation rate (CPI) of Haiti has decreased to 15.9% in 2021 from 22.9% levels in 2020.⁴
- The general government gross debt to GDP has increased to 24.2% in 2021 from 21.3% levels in 2020.⁵



Policy enablers

- Haiti has set a target to achieve 47% of the electricity generation from RE sources by 2030.⁶
- Haiti has an unconditional target of installing an additional 37.5 MW of hydro by 2030.⁶
- Haiti has feed-in tariff and net-metering policy in place to promote electricity generation through RE.⁶



Technological Feasibility

- Haiti receives very high levels of solar irradiation (GHI) of 5.5 kWh/m²/day and a specific yield 4.7 kWh/kWp/day indicating a very strong technical feasibility for solar in the country.⁷
- Haiti's largest solar plant of 12 MW, funded by the IDB and USAID, is planned to be commissioned by 2023.⁸



Market Maturity

- 46.9% of the population in Haiti had access to electricity as of 2020.⁹
- The National Authority for the Regulation of the Energy Sector (ANARSE) ensures the promotion and development of the energy sector by regulating generation, transmission, and distribution of electricity.¹⁰



Infrastructure

- In 2017, Haiti planned to augment its National Transmission Network by constructing 1,079 kms of high voltage power lines with extension of 12 sub-stations and a National Energy Control Centre.¹²
- Haiti has also planned to upgrade 1,920 kms of MV/LV lines and construction of 1,350 kms of MV/LV lines of their electricity distribution network.¹²



Financing

- In 2020, Taiwan extended a loan of USD 150 Mn to Haiti to repair and upgrade the metropolitan grids with USD 20 Mn set aside for rural electrification projects.¹¹
- In 2020, The World Bank extended an additional loan of USD 6.9 Mn for the Renewable Energy for All Project. This financing is aimed at scaling RE to improve accessibility of electricity for all.¹³
- The Green Climate Fund (GCF) has funded the government of Haiti with an amount of USD 13.9 Mn to support mitigating climate challenges and scaling smart solar energy access and microgrids.¹⁴



Energy Imperatives

- In 2020, the per capita electricity consumption stood at 0.082 MWh in Haiti which is significantly lower in comparison to the global average of 3.31 MWh.¹⁵
- The total installed capacity of Solar PV witnessed a CAGR of 0.7% reaching 2.6 MW in 2021 from 2.5 MW levels in 2017.¹⁶
- The peak demand for electricity in the country stood at 0.91 TWh remaining similar in 2021 and 2020.¹⁷
- In 2021, the total installed capacity in the country stood at 469.37 MW with major share coming from fossil fuel (86.17%) followed by hydro (13.83%).^{17, 18}