



Equatorial Guinea

Africa

Ease of doing Solar classification



Potential

Electricity Consumption
in kWh/capita (2020)

805.4

Average PVout in kWh/kWp/day
(2020)

3.7

Cumulative Solar Capacity in MW
(2021)

0.1

Getting Electricity Score (2020)

54.3

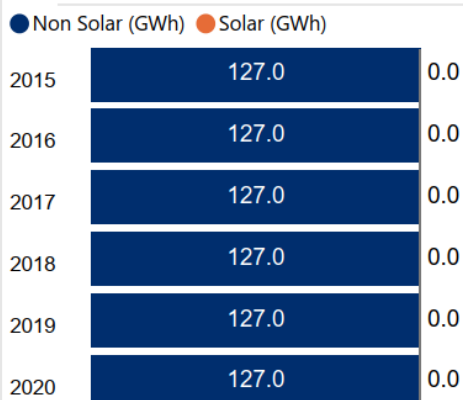
NDC Target by 2030 in %
(base year 2019)

35.0

Human Development Index (2021)

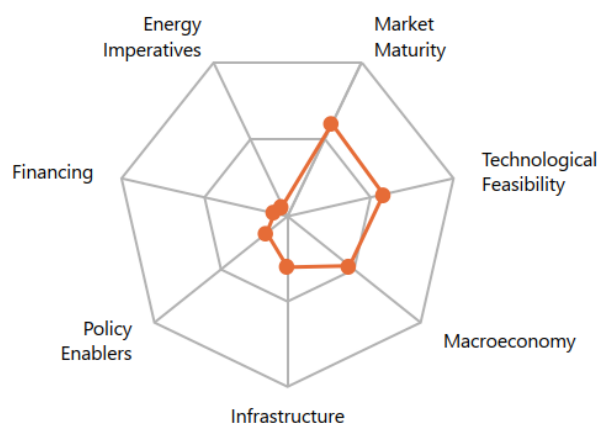
0.6

Renewable Energy Generation by Source

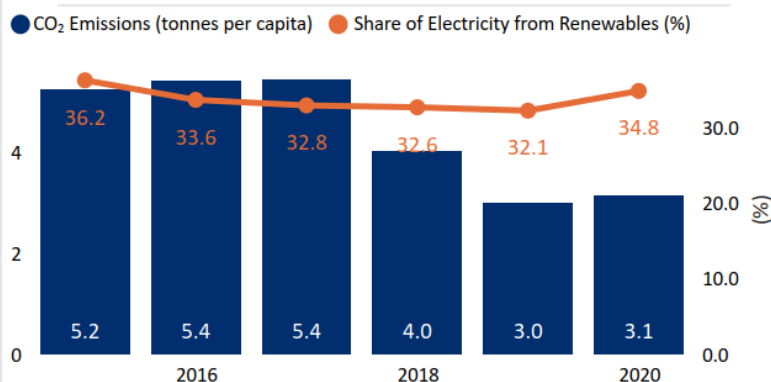


Non Solar RE includes Wind and Hydro;

Performance against 7 Drivers



CO₂ Emissions vs Electricity share from Renewables



Fiscal Incentives & Public Financing for Renewables (2020)

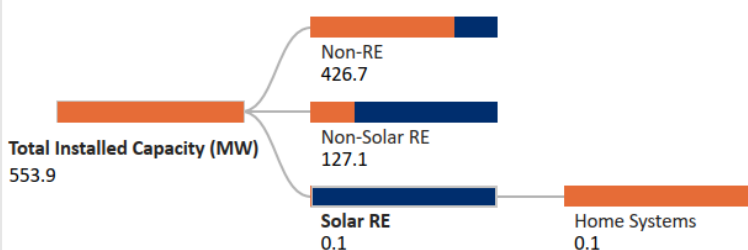
Investment or production tax credits?

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?

No

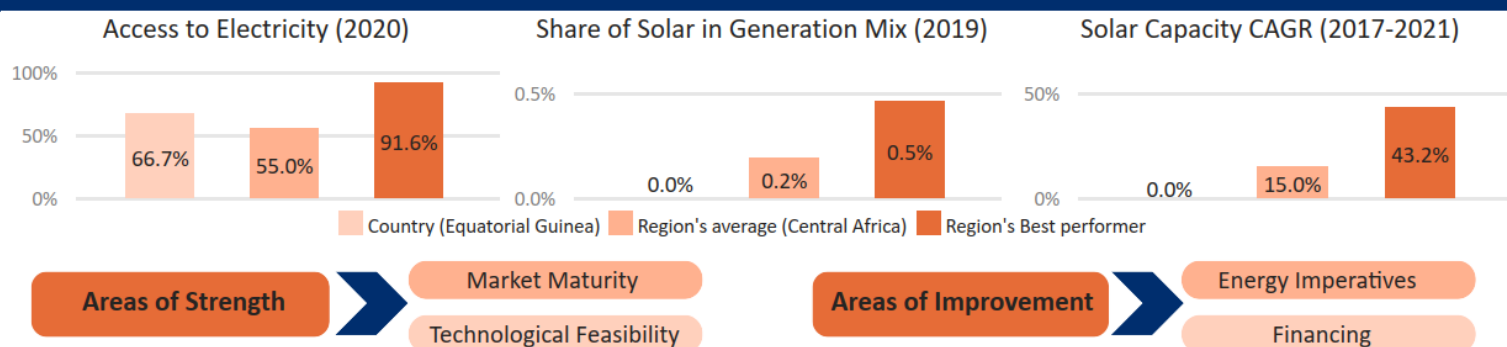
Renewable Energy Certificates?

No

Renewable Purchase Obligation?

No

Country's regional performance and characteristics



Key Insights

Drivers

Insights



Macro-economy

- Equatorial Guinea is an upper middle-income country ¹ with GDP per capita (PPP) of USD 16,080 in 2021. ²
- GDP (Real) declined at an annual rate of 3.5% in 2021, however, it is estimated to increase by 6.1% in 2022. ³
- Inflation rate in the country declined to 2.1% in 2021 from 4.8% levels in 2020. ⁴
- The budget deficit in the country reduced to 1% of GDP in 2021 from 1.7% levels in 2020. ⁴



Policy enablers

- The National Investment Plan REDD+ 2020 proposes a green economy model that aims to protect the forest and contribute to sustainable development in the country. ⁴
- Ministry of Mines, Industry and Energy (MMIE) is responsible for framing policies related to generation, transmission, and distribution of electricity. ⁵
- Equatorial Guinea has developed plans to ensure national resource management compatible with economic development. ⁶



Technological Feasibility

- Equatorial Guinea receives moderate levels of solar irradiation of 4.3 kWh/m²/day and specific yield of 3.7 kWh/kWp/day indicating a moderate technical feasibility for solar in the country. ⁷
- Equatorial Guinea has installed a self-sufficient solar microgrid system with 5 MW solar modules for a reliable power supply in the country. ⁸



Market Maturity

- As of 2020, 66.7% population in Equatorial Guinea had access to electricity. ⁹
- Electricity Energy Regulatory Agency is the energy regulator in the country. ¹⁰
- The Electricity sector is managed by Electricity Company of Equatorial Guinea (SEGESA) having several subsidiaries- SEGESA Generation, SEGESA Transmission and SEGESA Commercial. ¹⁰
- On a regional level, the country is a member of the Central Africa Power Pool. ¹⁰



Infrastructure

- SEGESA operates the country's two electricity transmission networks, which comprise approximately 80 miles of high voltage lines. ⁵
- The project 'Sustainable Energy for All' focuses on increasing reliability in power supply in regions where hydropower technologies will be located and increasing availability where the grid cannot be extended. ⁵



Financing

- In Equatorial Guinea, the World Bank has shown keen interest in providing financial support across agriculture, law, health, mining, and energy. ¹¹
- In Equatorial Guinea, the UNDP has shown keen interest in promoting small-scale hydropower in Bioko and other clean energy solutions for remote islands. ⁵



Energy Imperatives

- The total installed capacity in the country stood at 553.8 MW as of 2019. ¹²
- In 2020, the per capita electricity consumption stood at 0.81 MWh which is significantly lower in comparison to the global average of 3.31 MWh. ¹³
- The price of electricity in the country was 17 US Cents/kWh as of 2019. ¹⁴