

#### Gabon

**Africa** 

Ease of doing Solar classification



# Influencer

Electricity Consumption in kWh/capita (2020)

1325.4

Getting Electricity Score (2020)

49.8

Average PVout in kWh/kWp (2020)

3.6

NDC Target by 2030 in GgCO₂e (base year 2005)

3322.0

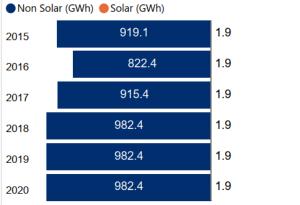
Cumulative Solar Capacity in MW (2021)

1.4

Human Development Index (2021)

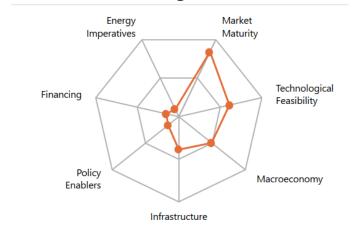
0.7

## Renewable Energy Generation by Source

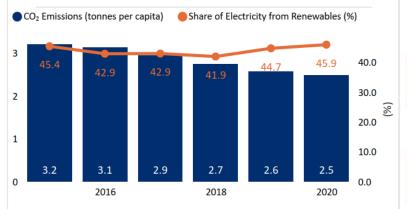


Non Solar RE includes Wind and Hydro;

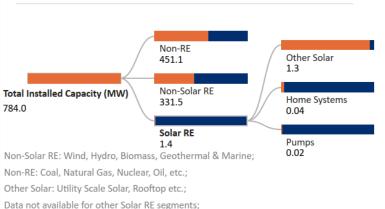
### Performance against 7 Drivers



CO<sub>2</sub> Emissions vs Electricity share from Renewables



Installed Capacity by Source (2019)



Fiscal Incentives & Public Financing for Renewables (2020)

Investment or production tax credits?

No

Public investment, loans, grants, capital subsidies or rebates?

No

### Support for Renewables (2020)

Feed-in-Tariffs for renewable energy supply to the grid?

No

Renewable Energy Certificates?

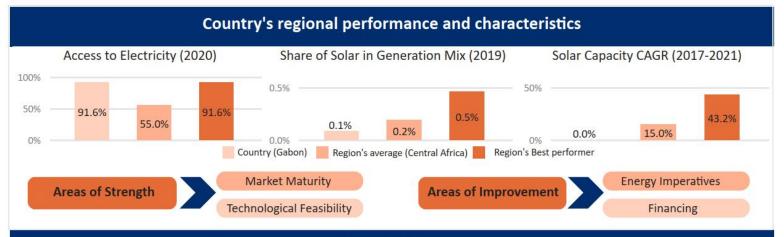
No

Net metering/Gross metering policies and regulations?

Vo

Renewable Purchase Obligation?

No



#### **Key Insights**

Drivers Insights



- •Gabon is an upper middle-income country with GDP per capita (PPP) of USD 15,176 in 2021. 1,2
- •GDP (Real) grew at an annual rate of 0.9% in 2021 and is estimated to increase by 2.7% in 2022. 3
- •Total public debt in the country increased to 74.7% of GDP in 2021 from 77.4% levels in 2020. 4
- •Inflation rate in the country declined to 1.1% in 2021 from 1.3% levels in 2020. <sup>4</sup>



- Gabon aims to monetize its carbon credits that are estimated at USD 5 Bn in 2021. 4
- Gabon's Energy Policy aims to reduce its dependence on fossil fuels for electricity generation by promoting RE in the country.
- The PSGE (Emerging Gabon Strategic Plan) focuses on the green growth and aims to transform the country into an emerging economy by 2025. <sup>6</sup>



Feasibility

- Gabon receives high levels of solar irradiation of 4.5 kWh/m<sup>2</sup>/day and specific yield of 3.6 kWh/kWp/day indicating a strong technical feasibility for solar in the country.7
- The Gabonese Minister of Energy has plans to construct a 120 MWp solar power plant at Ayémé Plaine equipped with a 15-hour BESS. 8
- In 2022, the Ministry of Energy had set out a plan to electrify off-grid households across the country through solar home systems. 9



- 91.6% population in Gabon had access to electricity as of 2020. 10
- Ministry of Mines, Petroleum and Hydrocarbons and Ministry of Energy and Hydraulic Resources is responsible for providing electricity services in the Gabonese Republic. <sup>11</sup>
- Water and Energy Sector Regulatory Agency is the energy regulator in the country.
- The Société d'Electricité et d'Eaux du Gabon (SEEG) is the sole generator, transmitter, and distributor of electric energy.



- The electricity produced in the country is transported at various voltage levels (Libreville 255 kV and 90 kV; Franceville 63 kV and Bongolo 63 kV) to various sub-stations across the nation. <sup>12</sup>
- The sub-transmission network consists of 30 kV, 20 kV and 5.5 kV medium voltage levels.



- In 2021, the AfDB approved €39 Mn for the construction of the Kinguélé Aval hydroelectric project in Gabon.
- The AfDB approved €57.5 Mn to the Coder Hydropower Project for the design, construction, and operation of two runof-river hydro projects in Ngounie Province and North Gabon. <sup>14</sup>
- In Gabon, the World Bank has shown keen interest in providing support through financing of more than 20 projects in a variety of sectors. <sup>15</sup>



- ullet The total installed capacity in the country stood at 784 MW in 2019.  $^{16}$
- $\bullet$  In 2020, the per capita electricity consumption stood at 1.32 MWh which is lower in comparison to the global average of 3.31 MWh.  $^{17}$
- •The price of electricity in the country was 18.9 US Cents/kWh as of 2019. 18