



Seychelles

Africa

Ease of doing Solar classification



Achiever

Electricity Consumption
in kWh/capita (2020)

5389.5

Average PVout in kWh/
kWp/day (2020)

4.3

Cumulative Solar Capacity in MW
(2021)

13.4

Getting Electricity Score (2020)

71.3

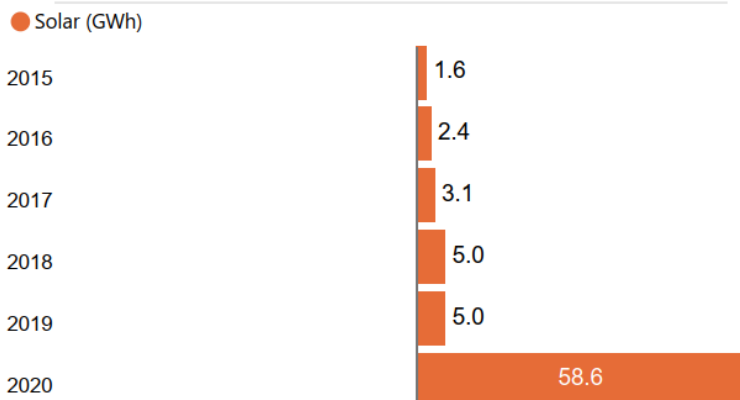
NDC Target by 2030 in %

26.4

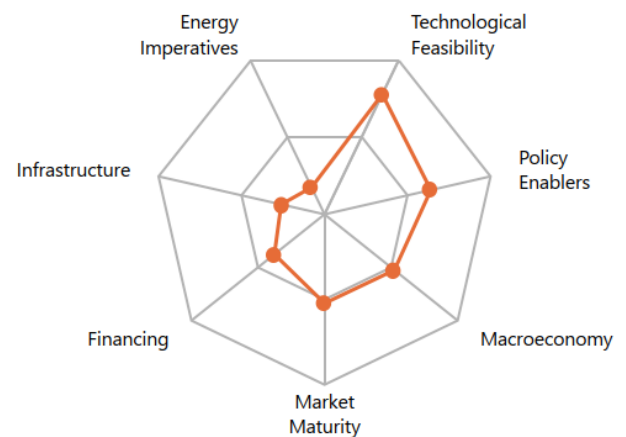
Human Development Index (2021)

0.8

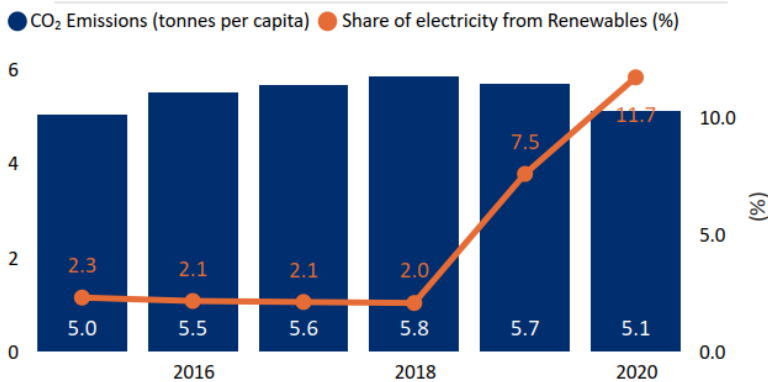
Renewable Energy Generation by Source



Performance against 7 Drivers



CO₂ Emissions vs Electricity share from Renewables

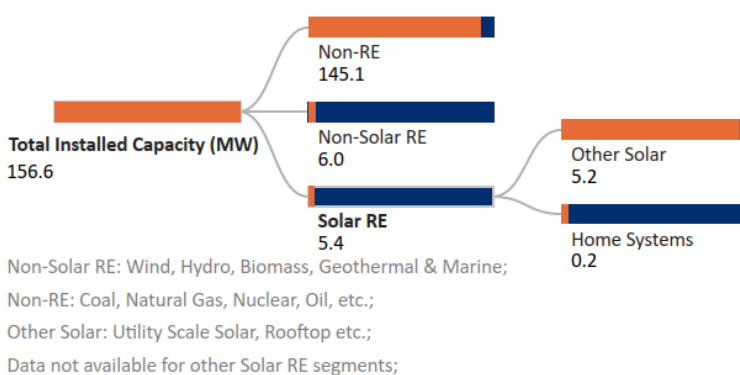


Fiscal Incentives & Public Financing for Renewables (2020)

Investment or production tax credits?
Yes

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

Installed Capacity by Source (2019)



Support for Renewables (2020)

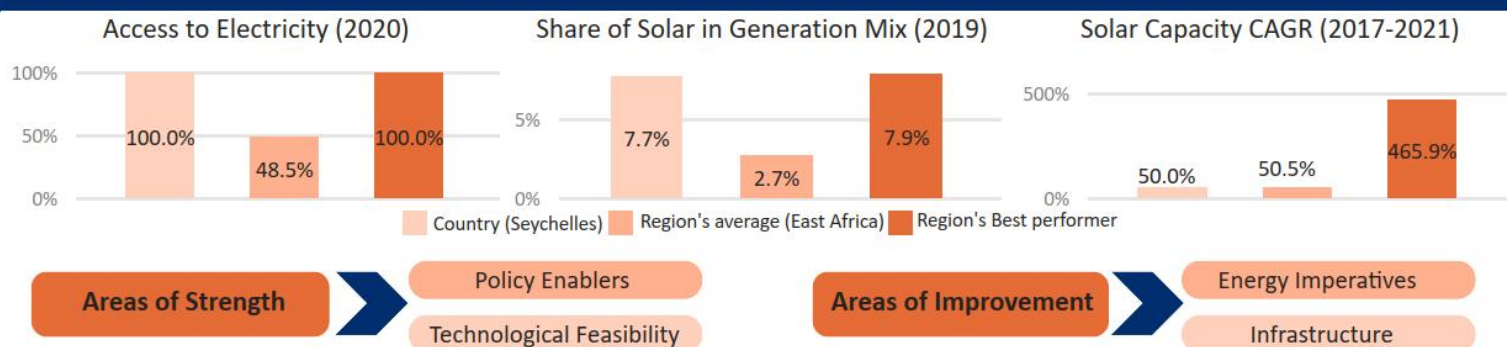
Feed-in-Tariffs for renewable energy supply to the grid?
No

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

- GDP (Real) grew at an annual rate of 8% in 2021 and is estimated to grow by 4.6% in 2022.¹
- The inflation rate in the country increased to 9.7% in 2021 from 1.8% levels in 2020.²
- The fiscal deficit in the country narrowed down to 6.0% of GDP in 2021 from 18.9% levels in 2020.²
- The current account deficit narrowed down to 19.8% in 2021 from 23.1% levels in 2020.²



Policy enablers

- The Ministry of Environment, Energy, and Climate Change is responsible for developing, implementing, and monitoring various policies in the energy sector.³
- Seychelles aims to achieve 15% of RE share in the generation mix by 2030² and to reduce its economy wide GHG emissions to 21.4% by 2025 and 29.0% in 2030.⁴
- In Seychelles, the tariff arrangement is based on a net tariff where the energy produced by a customer offsets the energy consumed leading to a price reduction in the utility bill.⁵
- Seychelles targets to switch 30% of vehicles from fossil fuels to EVs by 2030.²



Technological Feasibility

- Seychelles receives very high levels of solar irradiation of 5.5 kWh/m²/day and a specific yield of 4.3 kWh/kWp/day indicating a strong technical feasibility for solar in the country.⁶
- The UN Environment program is currently active and working on the introduction of zero/low-emissions buses.⁷
- In Seychelles, the installation of a 14 MW grid-scale battery energy storage system (BESS) was supported by UNDP with a budgeted cost of Rs 270 Mn in 2021.⁸



Market Maturity

- 100% population in Seychelles had access to electricity as of 2020.⁹
- Seychelles Energy Commission is the energy regulator responsible for the oversight and planning of energy issues.¹⁰
- The Public Utilities Company (PUC) is the sole generator, transmitter, and distributor of electric energy in Seychelles.¹⁰
- Seychelles is a member of the Southern African Development Community (SADC)¹¹, which aims towards enhancing the seamless flow of intra-regional trade.¹²



Infrastructure

- The existing transmission network comprising of 33 kV overhead transmission line to South Mahe is now saturated and operating beyond its rated capacity during peak hours and will not be able to safely supply the projected electrical demand growth for the coming years.¹³
- PUC is carrying out major works to improve the 33 kV underground electricity distribution network to the South of Mahe.^{13,14}
- The 33 kV underground transmission line to South Mahe Project focuses on improving the reliability and quality of electricity supply in south Mahe, thereby contributing towards the socio-economic development of the country.¹³



Financing

- In 2022, the AfDB approved for providing technical assistance and capacity building for the Ministry of Agriculture, Climate Change and Environment (MACCE) to develop an Integrated Plan (IRP) that will define the long-term vision for the power sector of Seychelles.¹⁵
- In 2021, the AfDB approved a USD 20 Mn flexible loan to finance Seychelles Governance and Economic Reforms Support Program to help drive the nation's macroeconomic stability.¹⁶
- In Seychelles, the World Bank has shown keen interest in supporting projects with a focus on environmental and transportation issues.¹⁷



Energy Imperatives

- In 2020, Seychelles' per capita electricity consumption stood at 5.39 MWh, which is significantly higher in comparison to the global average of 3.31 MWh.²⁰
- The total installed capacity in the country stood at 156.6 MW in 2019.¹⁸
- The total installed capacity of solar PV witnessed a CAGR of 50.0% between 2017-2021 reaching 13.39 MW in 2021 from 2.64 MW levels in 2017.¹⁹