

## Algeria

**Africa** 

Ease of doing Solar classification



## Influencer

Electricity Consumption in kWh/capita (2020)

1659.3

Getting Electricity Score (2020)

72.1

Average PVout in kWh/kWp/day (2020)

4.9

NDC Target by 2030 in %

7.0 to 22.0

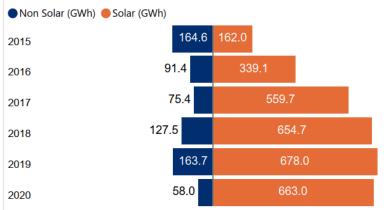
Cumulative Solar Capacity in MW (2021)

423.0

Human Development Index (2021)

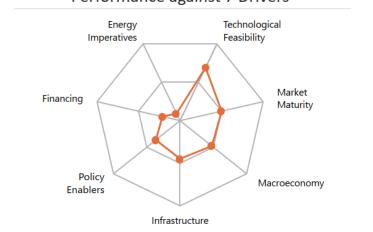
0.7

### Renewable Energy Generation by Source

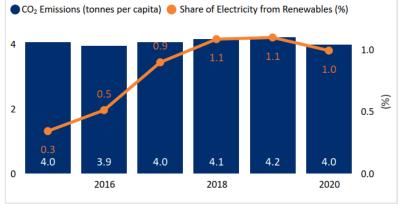


Non Solar RE includes Wind and Hydro;

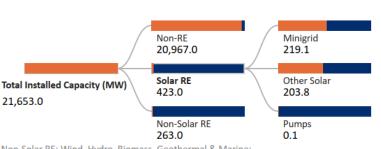
### Performance against 7 Drivers



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



## Installed Capacity by Source (2019)



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;

# International Finance received for Clean Energy (Million US Dollars)



### Support for Renewables (2020)

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

Yes

Renewable Energy Certificates?

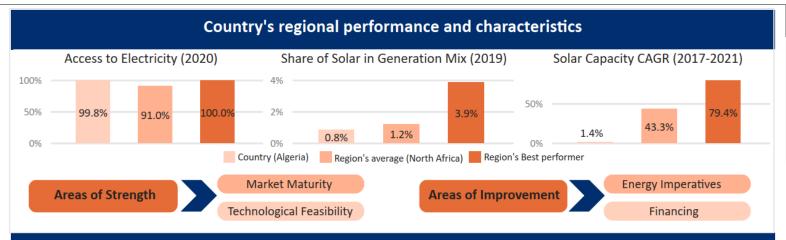
No

Net metering/Gross metering policies and regulations?

No

Renewable Purchase Obligation?

No



#### **Key Insights**

Drivers Insights



- Algeria is a lower middle-income country<sup>1</sup> having GDP per capita (PPP) of USD 12,128 in 2021<sup>2</sup> with oil and gas sector as the dominant contributor to the economy.<sup>4</sup>
- GDP (Real) is estimated to decline by 2.4% in 2022. The GDP grew at an annual rate of 4% in 2021<sup>3</sup> with total public debt estimated at 59.2% of GDP in 2021.<sup>5</sup>
- Inflation rate in the country increased to 7.2% in 2021 from earlier levels of 2.4% in 2020.<sup>6</sup>



- Ministry of Energy Transition and Renewable Energies (METRE) is the nodal ministry that is responsible for developing and implementing the energy transition plan.<sup>5</sup>
- The country aims to achieve 15,000 MW of electricity generation capacity through RE resources by 2035 with an aim to reduce its GHG emissions to 7% by 2030.<sup>5</sup>
- The Algerian government constituted the National Fund for Energy Efficiency and for Renewable Energies and Cogeneration (NFEEREC) to finance RE projects.<sup>8</sup>



- Algeria receives very high levels of solar irradiation of 5.9 kWh/m²/day and specific yield of 4.9 kWh/kWp/day indicating a strong technical feasibility for solar in the country.<sup>10</sup>
- Algeria has an energy transition plan which calls for 25 GW of generation from green and blue hydrogen by 2030.<sup>12</sup>
- Algeria's Minister for Industry has launched a new national automotive strategy, which calls for domestic manufacturing of EVs both full-electrics (BEVs) and plug-in hybrids (PHEVs).<sup>11</sup>



- 99.8% population in Algeria is having access to electricity since 2020. 13
- SONELGAZ, the National Society for Electricity and Gas, is the authority responsible for distribution of electricity and natural gas in the country.<sup>14</sup>
- Algerian Electricity and Gas Regulation Commission (CREG) is the designated energy regulator in the country.<sup>14</sup>



- $\bullet$  The length of the electricity transmission network to be built over the period 2021-2030 is estimated to be 64,204 km. This includes 15,628 km at 400 kV, 25,516 km at 220 kV and 22,442 km at 60 kV for handling a capacity of 98,540 MVA. <sup>15</sup>
- The length of the electricity distribution network to be built over the period 2021-2030 is estimated to be 101,960 kms. Besides this, it is envisaged to build 38,864 sub-stations to supply 4.4 Mn additional customers.<sup>15</sup>
- In the Boukherana industrial zone the algerian company milltech has a factory capable of supplying 100 MW of solar panels per year. 16



- The AfDB, through its Sustainable Energy Fund for Africa (SEFA), is providing technical assistance to promote the development of a transparent and competitive solar energy sector to enhance private sector investment.<sup>17</sup>
- The AfDB and Algeria have signed a loan agreement for a €900-Mn to support the country's industrial and energy competitiveness.<sup>19</sup>
- In Algeria, the World Bank has shown keen interest in providing technical assistance and analytical services in renewable energies and the investment climate. 18



- The total installed capacity of solar PV witnessed a CAGR of 1.4% between 2017-2021 reaching 423 MW in 2021 from 400 MW levels in 2017.<sup>20</sup>
- In 2020, the per capita electricity consumption stood at 1.6 MWh<sup>21</sup> which is significantly lower in comparison to the global average of 3.31 MWh.<sup>22</sup>
- The peak demand for electricity in the country declined to 73 TWh in 2020 from 76 TWh levels in 2019.<sup>23</sup>
- The price of electricity in the country was 2.20 US Cents/kWh as of 2019.<sup>24</sup>