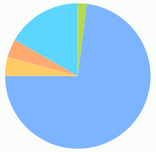
Egypt • Renewable energy

Gross electricity generation from renewable sources by 2019, TWh (%)



- Bioenergy 0.36 (2.0)
- Hydropower 13.12 (73.0)
- Solar PV energy 0.76 (4.2)
- Solar CSP energy 0.73 (4.1)
- Wind energy 3.00 (16.7)

Total: 17.97 (100)

Source: Renewable Energy Statistics 2021 © IRENA

CSP Parabolic type plants over 1 MW, MW:

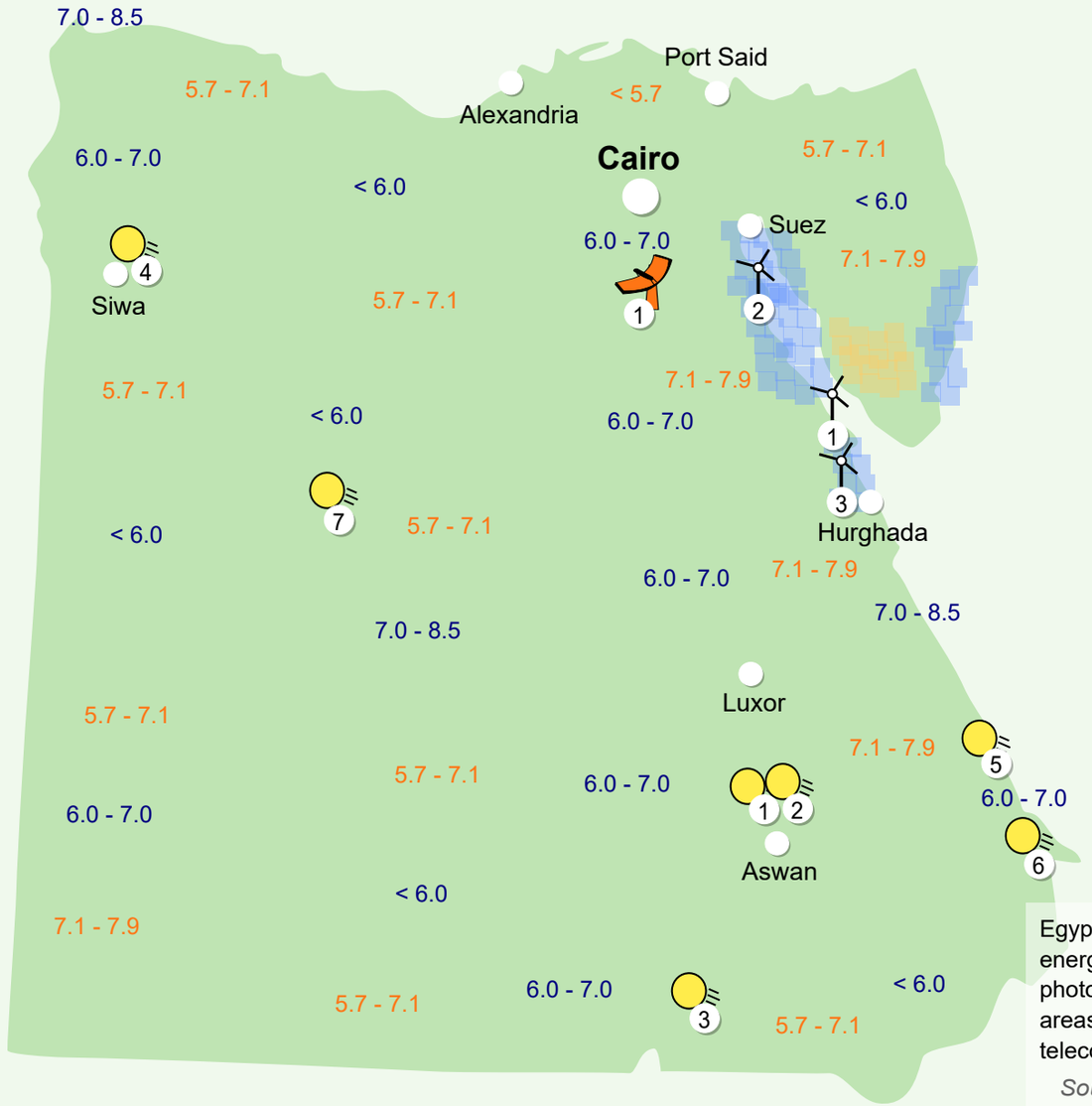
1 ISCC Kuraymat, 20

Wind power plants over 1 MW, MW:

1 Gebel el-Zeit, 580
2 Zafarana, 545
3 Hurghada, 5

Key solar PV power plants over 5 MWe, MWe:

1 Benban Solar Park, 50.0
2 Râ Solar Project, 32.0
3 Toshka, 20.0
4 Siwa, 10.0
5 Marsa Alam, 6.0
6 Shalateen, 5.0
7 Al Farafra, 5.0



Total installed renewable energy power capacity by 2020, MW (%)

- Bioenergy 79.00 (1.3)
- Hydropower 2832.00 (47.4)
- Solar PV energy 1659.20 (27.8)
- Solar CSP energy 21.00 (0.4)
- Wind energy 1380.00 (23.1)

Total: 5971.20 (100)

Source: Renewable Energy Statistics 2021 © IRENA

0.0 kWh/m²/d Direct Normal Irradiation (DNI)

0.0 m/s Wind speed

High activity areas:

The most common solar DNI intensity is over 7.9 kWh/m² per day, distributed on the South Sinai Peninsula.

The most common wind speed is over 8.5 m/s per year at 50 m are distributed on the Sinai Peninsula southeastern and southwestern coastline, and the governorate of Red Sea coastline with the Gulf of Suez.

Source: Energydata.info

Egypt is at a development stage in the building and production of solar energy facilities. At end of 2017, the total capacity of installed photovoltaic systems were about 169.0 MW. They are used in remote areas for pumping water, desalination, rural village electrification, telecomunications, etc.

Sources: Renewable Energy Statistics 2018 © IRENA; Wikipedia.

www.aenert.com