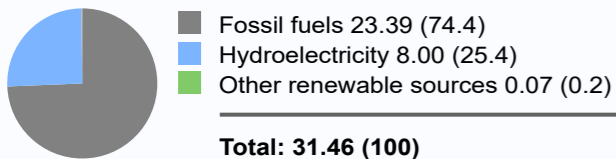


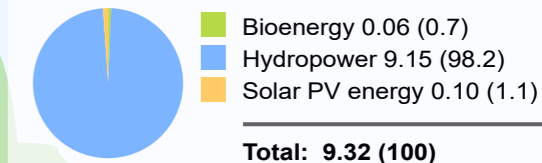
Nigeria • Electricity and Renewable energy

Gross electricity generation 2021, TWh (%):



Source: Based on the U.S. Energy Information Administration data (Sep 2023).

Gross electricity generation from renewable sources by 2021, TWh (%)



Source: Renewable Energy Statistics 2023 © IRENA

- 330 kV line in service
- 132 kV line in service
- National grid 330 kV of other power plants, grid connection points, substations
- National grid 132 kV of other power plants, grid connection points, substations
- Border crossing

Hydro power plants over 100 MW, MW:

- 1 Kainji, 760
- 2 Shiroro, 600
- 3 Jebba, 540
- 4 Zamfara, 100
- 5 Kano, 100*

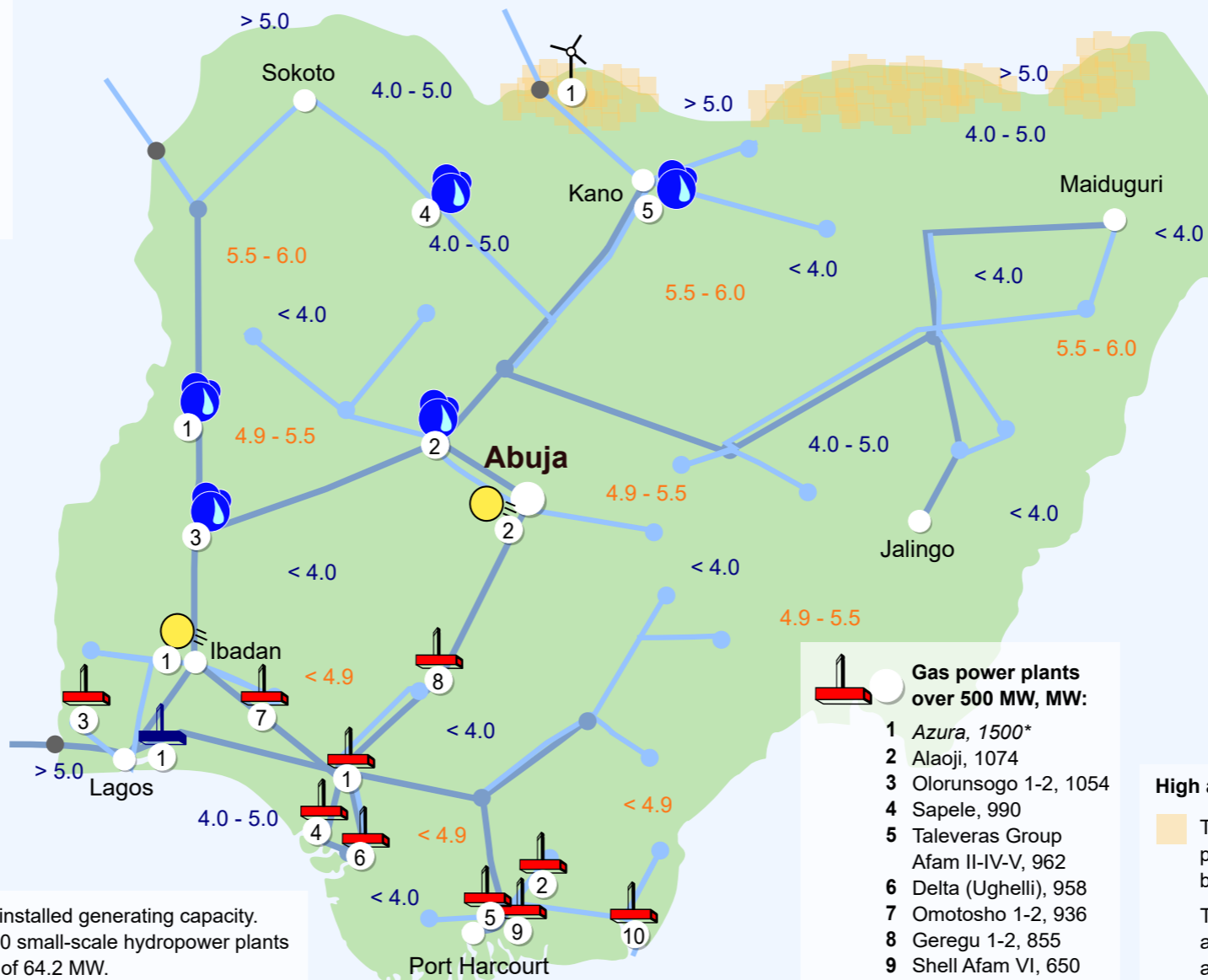
* under construction

Combined power plants over 100 MW, MW:

- 1 Egbin, 1320

In 2019 Nigeria had 12.3 GW of electricity installed generating capacity. As of 2017, Nigeria registered more than 10 small-scale hydropower plants up to 30 MW with a total installed capacity of 64.2 MW.

Sources: U.S. Energy Information Administration (2020); World Small Hydropower Development Report 2019.



Solar PV power plants over 1 MWe, MWe:

- 1 University of Ibadan Solar Project, 10.0
- 2 Usman Dam WTP, 1.2

Wind power plants over 1 MW, MW:

- 1 Katsina, 10

0.0 kWh/m²/d Global Horizontal Irradiation (GHI)

0.0 m/s Wind speed

Gas power plants over 500 MW, MW:

- 1 Azura, 1500*
- 2 Alaoji, 1074
- 3 Olorunsogo 1-2, 1054
- 4 Sapele, 990
- 5 Taleveras Group Afam II-IV-V, 962
- 6 Delta (Ughelli), 958
- 7 Omotosho 1-2, 936
- 8 Geregu 1-2, 855
- 9 Shell Afam VI, 650
- 10 Calabar, 563

* under construction

High activity areas:

The most common solar GHI intensity is over 6.0 kWh/m² per day, distributed in northern part of country, in the borderline with Niger.

The most common wind speed is over 5.0 m/s per year at 50 m are distributed in northern part of the country, along the borderline with Niger, and in southwestern part with Benin.

Source: Energydata.info

