

## SDG Goal 7 Affordable and clean energy

**SDG Target 7.b** By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support

**SDG Indicator 7.b.1** Installed renewable energy-generating capacity in developing and developed countries (in watts per capita)

**Time series** Installed renewable energy-generating capacity

### 1. General information on the time series

- Date of national metadata: 10 June 2024
- National data: <http://sdg-indicators.de/7-b-1/>
- Definition: The time series measures the installed renewable energy-generating capacity per capita.
- Disaggregation: Not available.

### 2. Comparability with the UN metadata

- Date of UN metadata: March 2024
- UN metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-07-0b-01.pdf>
- The time series is compliant with the UN metadata.

### 3. Data description

- The data for the installed renewable energy-generating comes from the International Renewable Energy Agency (IRENA). It represents the maximum net generating capacity of power plants and other installations that use renewable energy sources to produce electricity.

The data reflects the capacity installed and connected at the end of the calendar year. Electricity generation (GWh) is the gross electricity produced by electricity plants, combined heat and power plants (CHP) and distributed generators measured at the output terminals of generation. It includes on-grid and off-grid generation, and it also includes the electricity self-consumed in energy industries; not only the electricity fed into the grid (net electricity production).

The population data comes from the intercensal population updates, the basis of which is the last census conducted in 2011. The population data is rolled forward using statistical results on natural population change (births, deaths) and migrations. For 2010 to 2013, data for the current updating of population figures is based on the 1987 census (Federal Republic of Germany) and the population register as of 3 October 1990 (German Democratic Republic).

### 4. Access to data source

- Installed renewable electricity capacity:  
[https://pxweb.irena.org/pxweb/en/IRENASTAT/IRENASTAT\\_Power%20Capacity%20and%20Generation/Country\\_ELECSTAT\\_2024\\_H1.px/](https://pxweb.irena.org/pxweb/en/IRENASTAT/IRENASTAT_Power%20Capacity%20and%20Generation/Country_ELECSTAT_2024_H1.px/)
- Population: reference date – GENESIS online 12411-0006:  
<https://www-genesis.destatis.de/genesis//online?operation=table&code=12411-0006&bypass=true&language=en>

## 5. Metadata on source data

- Not available.

## 6. Timeliness and frequency

- Timeliness: Not available.
- Frequency: Annual

## 7. Calculation method

- Unit of measurement: Watts per capita
- Calculation:

$$\text{Installed renewable energy-} \\ \text{generating capacity per capita} = \frac{\text{Installed renewable energy-} \\ \text{generating capacity [W]}}{\text{Population [number]}}$$