

Clean energy for EU islands

STATE-OF-PLAY INVENTORY OF LEGISLATION AND REGULATION FOR CLEAN ENERGY ON EUROPEAN ISLANDS

Factsheet: Germany

Germany has 43 islands, spread across the Baltic and North Sea. The largest islands are Rugen (926 km²) and Usedom (373 km²). Several other islands are between 20 and 100 km² and many are even smaller than that. 156 000 people live on the German islands, which corresponds to 0.2% of the country's total population.

Islands are integrated in the German public administration. The islands are either considered to be an "Amt" (collection of municipalities), a "Gemeinde" (municipality) or "Stadtteile" (city district).

Clean energy national targets

In the Integrated National Energy and Climate Plan for Germany for the period 2021-2030, the Member State expects to reach a share of 30 % renewable energy in the total energy supply and 65 % in the electricity sector by 2030, a share of 27 % of renewable energies in the heating and cooling sector by the year 2030 and a share of 27 % of renewable energies in the transport sector by 2030.

Supported RES technologies

Germany has a very extensive set of support schemes for renewable energy sources, including a feed-in tariff and market premium, investment subsidies, low interest loans and tax exemptions. Supported technologies include onshore wind energy, offshore wind energy, solar energy, geothermal energy, biogas, hydropower and biomass. Renewable heating and cooling are supported through several subsidies, low interest loans, a tax support scheme and energy consulting for non-residential buildings. Germany is also subsidizing the purchase of electric vehicles and the construction of charging infrastructure for electric vehicles. Support schemes:

- A fixed feed-in tariff for electricity generated from small installations.
- A market premium for operators that do not receive the feed-in tariff and are not required to participate in the tendering procedure.
- A sliding market premium, granted through an auction, in which larger plants are required to participate.
- The Tenant Electricity Surcharge, a subsidy for electricity generated and consumed in the same building.
- Incentives for flexible power generation, including the Flexibility Surcharge and the Flexibility Premium.
- Innovation market premium, a premium tariff for innovative installations.
- Subsidies and low interest loans for different technologies.
- Environmental Innovation Programme, an investment subsidy for large-scale technological pilot programmes.
- Exemption of the Electricity tax.
- Loans and Subsidies for energy efficiency projects and energy-efficient renovation of private buildings.
- Support of district heating.
- RES-H building obligations.

- Grants and loans for electric vehicles and E-Cargo Bikes.
- Tax regulation mechanism through motor vehicle tax exemption.
- Biofuel/Emission reduction quota.
- Support of renewable transport infrastructure, including charging infrastructure for electric vehicles.

Electricity grid

Grid operators are required by law to provide a grid connection to consumers and plant operators. They are entitled to monitor and regulate the feed-in of plants in case of bottlenecks in the grid. Grid operators are obliged to develop the electricity grid such that the transmission of electricity from renewable sources is always ensured. Germany has four transmission system operators and 883 distribution system operators. The electricity supplier switching rates for household customers in 2018 was 10.2 %.

RES projects authorization process

German law foresees different authorisation processes for onshore wind, offshore wind and ground-mounted solar energy. Territorial and regional laws define which sites are eligible. The authorisation is usually done by regional authorities, yet several federal laws must be considered. Citizen initiatives can play a role in the authorization process. Tenders/auctions are organised at a national level.

Supported energy efficiency measures

Germany subsidies energy efficiency renovations for private citizens through a tax subsidy for renovations, energy consulting for non-residential buildings as well as loans for industrial installations.

Supporting policies

The German government supports the deployment of renewable energies and energy efficiency measures through different angles. An extensive Research and Development programme is meant to foster innovation to improve energy efficiencies and to find new ways of energy supply. To ensure safety and durability of installations, norms and technological requirements are defined. Future installers must pursue several years of education before being allowed to practice as installers for renewable installations or as energy auditors.

Self-consumption and community energy

Regulations on Energy communities depend on their legal form. As cooperatives, they are favoured in the tax system. Financial support is granted through the usual schemes in the renewable energy act. In the wind-tendering procedure, cooperatives can benefit from a higher market premium. Prosumers with grid-connected installations receive support through tax benefits and a high feed-in tariff.

Sources

- Number of islands: Source missing
- Island population: Source missing
- National Population: Eurostat 2020 (Link)