European Commission

Clean energy for EU islands

STATE-OF-PLAY INVENTORY OF LEGISLATION AND REGULATION

FOR CLEAN ENERGY ON EUROPEAN ISLANDS

Factsheet: Portugal

Portugal has a number of islands with an important divergence in size, population, and distance to the mainland. Metropolitan Portugal consists of 27 islands and 8 islets along the Portuguese coast, most of which are very small (<10 km^2). The archipelago of the Azores (2 346 km^2) consists of 9 inhabited islands. Madeira (801 km^2) consists of 2 inhabited islands. Both are located in the Atlantic Ocean and are part of the EU's outermost regions. 5% of the total country population (497 100 people) lives on the islands.
Islands along the coast do not have an autonomous position but are treated as regular municipalities/administrative units. All of the small islands do not have their own local authority and depend on local authorities on the mainland. The Azores and Madeira have an autonomous island status mentioned in the constitution. Both regions have legislative powers.

Clean energy national targets

The National Energy and Climate Plan for Portugal for the period 2021-2030 sets a national RES target of 80% in the production of electricity and 49% in the production of energy for heating and cooling by 2030. In the transport sector, the country envisages renewables to hold a share of 20% of the final consumption by 2030 and a reduction of 40% in greenhouse gas emissions.

Supported RES technologies

Portugal supports a wide range of technologies for electricity generation, heating, cooling and transport through different schemes. In terms of electricity production, the country supports on- and offshore wind, solar, geothermal energy, biogas, biomass and hydro-power technologies. For the Heating & Cooling sector, the focus is on solar thermal, geothermal, biomass and biogas. In the transport sector, Portugal focuses mostly on electric vehicles and biofuels.
Support schemes:

- Subsidy scheme for encouraging the introduction, or improvement, of sustainable, energy-efficient features in buildings.
- Feed-in Tariff designed to support investments in renewable technologies for energy generation.
- Tenders, especially for the solar sector.
- Tax exemption for biofuels used for energy purposes other than transportation.
- Subsidy for the implementation, or improvement, of sustainable features in buildings.
- Tax exemption for biofuels to be employed for energy purposes (e.g., heating and cooling).
- Subsidies for the acquisition of low-carbon e-vehicles, both nationwide and regional.
- Reduction of taxes for vehicles with hybrid engines.
- Certificate of guarantee of origin issued for consumers to be aware of the amount of renewable energy included in their final energy consumption.
- Financial incentive for the acquisition of a charging station for electric vehicles.

Electricity grid

Plant operators are entitled to grid access, after assessment of their compliance with regulations, by distribution operators, which must grant priority to the connection of power plants that produce electricity from renewable resources – with the exception of the electricity produced by > 30 MW hydroelectric plants. In 2020, eleven DSOs were operating in mainland Portugal. E-REDES is the only DSO for high- and medium-voltage distribution systems. It also operates the low-voltage distribution systems for 278 of Portugal's 308 municipalities, accounting for 99.5% of consumers connected at low voltage. Ten other small-scale DSOs operate the remaining 30 low-voltage networks that supply 0.5% of consumers connected at low voltage. One main DSO operates on the Azores and one main DSO operates on Madeira, and do not have to be legally unbundled. The country has a smart meter penetration rate of 48.3%. The electricity supplier switching rates for household customers in 2018 was 15.9%.

RES projects authorization process

A construction permit is to be issued by the city council of the region in which the project will be built, or sometimes by the Regional Coordination and Development Commission for fire-stricken areas, national agricultural reserves and other areas deemed as sensitive, or protected, by law. Small scale and self-consumption projects benefit from a fast-track production licensing procedure.

Supported energy efficiency measures

Portugal has a specific programme for monitoring and disseminating best practices in energy efficiency for the public administration.

Supporting policies

Public institutions offer courses on renewable energies, focused mainly on hydric sources, but also on PV, solar thermal, wind and biogas.

Self-consumption and community energy

In 2019, Portugal started developing further its legal framework on energy communities and prosumers, granting these actors more decision-making power and flexibility in regard to consuming and generating their own electricity and participating in the Portuguese/Iberian energy market.

Island specific policies

Island regions can have recourse to specific support systems. For example, the incentive System for the Production of Energy from Renewable Resources in the Azores Autonomous Region foresees that the amount of the subsidies to be given for projects on production and storage of electricity from renewable resources can cover 25% percent of the eligible costs, up to a maximum of EUR 4 000 per establishment. Projects located in the islands of Faial and Pico are eligible to receive an additional 5-percent increase in the percentage of covered costs, but with no alteration of the maximum fixed amount.

Another example is the incentive for the Acquisition of E-Vehicles in the Azores Autonomous Region which foresees a 10% incentive on the sale price and for the islands of Corvo, Flores, Graciosa or São Jorge, this incentive can be increased. A new auction mechanism is about to be launched for the Madeira island where there is reference price obtained via the calculation of the LCOE per technology and the winner of the auction is the participant that offers the smallest bid in €/MWh.

Currently there are no specific permitting rules for islands. However, the Madeira region is developing a specific set of regional legislation to define the license procedure for renewable generation and generation under public concession.

There is a specific grid code for Madeira, prepared and approved 2019, with more strict requirements regarding the technical specifications to be fulfilled by electric generators when connecting to the grid. In this case, since it is much more difficult to operate island grids than mainland networks, the requirements need to be more demanding to allow for a safe operation of the island grid with large penetration of renewable generation.