European Commission

Clean energy for EU islands

STATE-OF-PLAY INVENTORY OF LEGISLATION AND REGULATION

FOR CLEAN ENERGY ON EUROPEAN ISLANDS

Factsheet: Finland

Finland has 75,818 islands with an area over 0.5 ha. This includes both inland islands (on lakes) and marine islands (on the Baltic sea). Among those, 430 islands are inhabited during the year and have no permanent road connection to the mainland. Many of the Finnish islands are very small: only 76 have an area of more than 10 km^2. Of the total population of Finland, 1 % lives on the islands. This corresponds to 35,947 people.
Most Finnish islands are governed by local and regional authorities on the mainland, although some islands are also their own municipality. The Åland Islands are an exception, as they have a special autonomous status defined by the Finnish constitution. The region has its own climate and energy strategy and is entitled to decide on matters that concern domestic issues, some taxes, health care, social welfare, education, roads, labour, etc.

Clean energy national targets

The Integrated National Energy and Climate Plan for Finland for the period 2021-2030 aims to increase its RES-E consumption from the current 41% to 53% by 2030. In the heating sector, the share of RES will rise from 54% to 61%. In the transport sector, the target for biofuels in the fuel mix from 20 % in 2020 to 30 % in 2030.

Supported RES technologies

Finland supports onshore wind for electricity production and geothermal and aerothermal energy for heating. Finland supports the use of biofuels for transport and also has a support program for the electrification of transport, including charging infrastructure.
Support schemes:

- Technology-neutral investment support for large RES projects (investment cost > € 500,000) for new technologies, including R&D for the electricity, heating and transport sector.
- Heat bonus allocated to CHP plants that operate using biogas and wood fuel.
- Financial support for farmers for RES based heating for agricultural use.
- Financial support for replacement of fossil fuel/oil-based heating/boilers in public and residential buildings.
- Support for purchase of EVs for end user and retailers.
- Subsidy for purchase and installation of charging infrastructure in residential buildings, for private charging infrastructure for companies and public charging infrastructure (normal and high-power charging).

Electricity and heating grids

The Finnish electricity grid provides non-discriminatory access for renewable energy sources. There are 77 local distribution system operators. For small installations (up to 20kW) the grid access is simplified (onshore, geothermal and aerothermal). The country has a smart meter penetration rate of 97.3%. The electricity supplier switching rates for household customers in 2018 was 11.1%.
District heating is operated by local district heat operators that cover one area or municipality. There are no specific laws regulating the heating and cooling grids in Finland. The grid

connection is a bilateral agreement between the heating generator operator and the district heating operator.

RES projects authorization process

Construction permit and approval for RES projects is decided at the municipal level. However, all onshore turbines exceeding 50m in height require approval from the Finnish Defense Forces. Furthermore, the environmental permit must be acquired at the regional level.

Supported energy efficiency measures

Energy efficiency measures (buildings, industry, public buildings) are voluntary, where the public sector acts as a role model for the rest of the sectors. Finnish municipalities can join in an agreement to implement and set targets for energy efficiency implementations.

Supporting policies

Finland has not adopted many obligations (implementation or training) for installers, but rather makes RES and EE measures (buildings, industry, public buildings) and project implementation voluntary, while using the public sector as an exemplary role model.

Self-consumption and community energy

The Finnish legislation is only starting to recognize different forms of community energy ownership, including energy sharing and prosumers. Details of means of energy exchange among prosumers are not yet regulated.

Island specific policies

There are no island specific policies for clean energy development on Finish islands. However, as mentioned above, the Åland Islands have a special status and have developed their own energy and climate strategy towards 2030. Most national support schemes do not apply to Åland (unless stated otherwise in the inventory). The Government of Åland nevertheless provides financial support for renewable energy and energy efficiency, including for photovoltaic solar panels, small wind turbines, electric car chargers and energy management systems.

Sources

- Number of islands: Ministry of Employment and the Economy, Islands Committee (Link)
- Island population: Ministry of Agriculture and Forestry, Saaristo- ja vesistöaluepolitiikat Euroopassa -selvitys (Link)
- National Population: Eurostat 2019 (Link)