



Clean energy for EU islands

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

Factsheet: Sweden



Sweden has 267 570 islands, 984 of which are inhabited. Swedish islands cover a total area of 12 112 km² (3% of land area). Gotland is the largest island at 2 994 km², Öland comes second at 1 342 km². There are several islands with an area between 50 and 100 km² and a very high number of smaller islands. Of the total population of Sweden, 16% lives on the islands. This corresponds to 1 602 930 people.

Swedish islands are treated the same as municipalities/administrative units on the mainland. Only exception is Gotland island which is a separate region, while the rest of the islands are considered an integral part of Sweden as mainland.

Clean energy national targets

According to the Integrated National Energy and Climate Plan for Sweden for the period 2021-2030, the country does not have a national 2030 target for renewable energy, but it has set a target of reaching 100% renewable electricity production by 2040. For the heating sector, the share of renewable energy(RE) in final energy consumption for heating and cooling will increase slightly from the current level to 69% by 2030. When it comes to transport sector the 2030 target is set to 47.7% of RE in total final consumption.

Supported RES technologies

Sweden provides support schemes for PV and onshore wind energy. The support instruments for heating are, in general, technology-neutral. In the transport sector Sweden supports use of biofuels and RES-fueled vehicles (electric, hydrogen etc.) and their needed charging infrastructure.

Support schemes are:

- Quota system: the single largest and most significant RES support mechanism in Sweden. Energy suppliers are obliged to prove that a certain quota of their electricity production was generated by RES.
- Tax regulation mechanisms: ensure different tax privileges to RES-E.
- Tax reductions for households: The installation of renewable energy devices and the replacement of conventional heating sources with renewable ones may be deducted from tax.
- Energy and carbon dioxide taxes: Energy and carbon dioxide taxes are levied on the supply, import and production of fossil fuels for heating purposes. Renewable energy sources are exempt from these taxes.
- Nitrous oxide tax: The producers of heat are obliged to pay a tax according to their nitrous oxide emissions. Heat producers using renewable energy sources are exempt from this obligation.
- Tax regulation mechanism: Companies supplying, importing and producing fossil fuels are obliged to pay energy and carbon dioxide taxes. Biofuels are exempt from these taxes.

- Biofuel quota: Fuel suppliers are obliged to increase the share of biofuels in diesel- and petrol fuels in order to reduce the greenhouse gas emissions.
- Climate leap: The broad R&D for local and regional climate measures also enables subsidies for RES-T projects.
- Electric bus premium: The government subsidises electric and hybrid buses in order to increase their share in public transport.
- Climate premium: The government subsidises electric and hybrid heavy machinery purchases in order to increase their share.
- Bonus system: The bonus-malus system incentivises legal persons (both private persons and companies) to purchase low-emitting vehicles by subsidising them and offering tax discounts, as well as taxes newly bought high-emitting vehicles more heavily.

Electricity and heating grids

In the electricity networks, grid access is technology-neutral; RES is not given priority. There are 170 local distribution system operators. The country has a smart meter penetration rate of 100%. The electricity supplier switching rates for household customers in 2018 was 11.3%.

The Act on District Heating establishes rules for operation of district heating plants and grids. Companies operating a district heating network are obliged to negotiate terms with the operator of a heating plant. After negotiations the plant can be connected under negotiated or regulated grid connection.

RES projects authorization process

Authorisation procedure is often handled by the regional government, mostly on an application/approval basis.

Supported energy efficiency measures

When it comes to improving energy efficiency, Swedish policies take the form of support for small actors and obligations for larger stakeholders. This support includes: advisory services, financial support for R&D, and the survey of energy efficiency requirements for large companies (250 employees and an annual turnover of over EUR 50 million), industries and energy producers.

Supporting policies

Sweden has a relatively developed framework of RES policies and certification systems (including mandatory trainings) in place. Public authorities are obliged to make purchases and other forms of procurement that are in line with the energy efficiency and low-emissions standards set out by national and EU legislation. Sweden also highlights the importance of regional and local competency-building by offering climate and energy advising.

Self-consumption and community energy

Sweden has not incorporated any supportive legislation for energy communities in its legislation or political system yet. Energy sharing is possible to a limited extent, for collective self-consumption within the same building and with one connection to the grid.

Prosumers are exempted from some fees or are subject to lower rates than larger producers.

Island specific policy

There are no island specific support systems in place at national level. Nor are there island specific permitting procedures or grid policies.

Sources

- Number of islands: Statistics Sweden ([Link](#))
- Island population: Statistics Sweden ([Link](#))
- National Population: Eurostat 2019 ([Link](#))