



# Clean energy for EU islands

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

## Factsheet: Italy



Italy has 450 islands with a high diversity in size, population, and distance to the mainland. 10.9 % of Italian population (6,500,922 people) lives on the islands. Largest Italian islands and the most populated Italian islands in the Mediterranean, Sicily and Sardinia, have regional governments as defined by the Italian constitution. Smaller islands are governed by the overarching region. In many cases these smaller islands consist of their own municipality.

### Clean energy national targets

The Integrated National Energy and Climate Plan for Italy for the period 2021-2030 sets the target for renewables at 30% in gross final consumption of energy in 2030. In the electricity sector, renewable energy generation is projected to reach almost 55% in 2030 (compared to 34.1% in 2017). For heating and cooling a share of 33.9% was set for renewables. In the transport sector, Italy aims to reach 22% by 2030.

### Supported RES technologies

Italy supports a wide range of technologies for electricity generation, including onshore and offshore wind, PV, biomass, biogas, geothermal and hydro-power. For renewable energy systems, several types of support mechanisms exist, depending on the technology, size and use of the installation. For instance, wind and solar energy technologies are promoted through tax deductions.

For heating and cooling main renewable energy technologies supported include aerothermal, geothermal, solar thermal and biomass.

In the transport sector, Italy supports use of biofuels and electric vehicles through a subsidy on the purchase of electric vehicles.

Support schemes:

- Auction and Registry (FER1 Decree) - The incentives provided in the FER 1 decree are accessible through two types of auctioning systems: auctions for large plants and registers for medium-sized plants for onshore wind, PV, hydropower and biogas.
- Feed-in tariff (Ritiro dedicato): Electricity generated from renewable energy sources (onshore wind, PV, geothermal, biogas and hydro-power) fed into the grid can be sold on the free market or to the GSE on a guaranteed minimum price.
- Net-Metering (scambio sul posto): A scheme that allows prosumers to feed their excess (not used) electricity into the grid, and get compensated for it. It supports onshore wind, PV, geothermal, biogas, biomass and hydro technologies.
- Tax regulation mechanisms (Reduction in value-added tax): renewable energy generation (wind onshore, wind offshore and PV) is promoted through VAT tax deductions.
- Subsidy (Conto termico) - Installing heat pumps, biomass and solar thermal installations for heating purposes is supported through subsidies aimed at the redevelopment of buildings.

- Tax regulation mechanism (Superbonus) - Promotes greater efficiency and the renewable energy sources (aerothermal, geothermal and solar thermal) for heating and cooling, by providing a 110% tax deduction of the expenditure.
- Support of RES-H infrastructure addresses municipalities, as they must include RES technologies in district heating and cooling networks in their development plans.
- RES-H building obligations - All new buildings and buildings undergoing major refurbishment must integrate installations generating heating or cooling from renewable energy sources.
- Subsidy (eco bonus) - Vehicle buyers receive incentives if they purchase environmentally friendly vehicles, including electric vehicles.
- Subsidy (decreto biometano) - Producers of advanced biofuels receive a subsidy which can be increased through expansion investments.
- Biofuel quota (obbligo di immisione) - This scheme defines the share of biofuels that suppliers need to include in their fuel supply to the transport sector.

### Electricity and heating grids

The Italian electricity grid provides non-discriminatory access for renewable energy sources and grid operators are obliged to give priority dispatch. There are 128 local distribution system operators. The country has a smart meter penetration rate of 98.5%. The electricity supplier switching rates for household customers in 2018 was 9.1%.

In Italy, district heating networks are managed at local level. A national framework legislation provides an obligation for all municipalities above 50,000 inhabitants to establish development plans for district heating networks with the aim of increasing usage of the energy produced also from renewable energy sources.

### RES projects authorization process

Local authorities implement legislation following state guidelines. The type and scope of the authorisation depends on the plant's size and location. Ground-mounted PV and onshore wind projects in Italy mostly undergo the Single Authorisation, the Single Regional Authorisation or the Single Environmental Permitting procedures. For small-scale rooftop PV systems, a Communication Procedure is mainly applied while the Single National Model for the Construction, Connection and Operation of Small Photovoltaic Systems is applied for the approval of small rooftop PV systems below 50 KW. There are no specific permitting rules for islands.

### Supported energy efficiency measures

A National Energy Efficiency Fund incentivises investments to implement energy efficiency measures on production plants, production processes and buildings. A tax regulation mechanism promotes greater efficiency and use of renewable energy sources for heating and

cooling, by providing a 110% tax deduction of the expenditure, along with additional PV installations and electric vehicle charging stations.

### Supporting policies

Italy offers training and certification programmes for installers of renewable energy installations in the housing and buildings sector, in particular for electricity, heating, and construction. Public authorities fulfil their exemplary role by adhering to the obligation that new buildings and buildings under refurbishment must consider integrating RES as well as the obligation that at least 50% of vehicles acquired by public administrations should be electric, hybrid or hydrogen powered.

### Self-consumption and community energy

The Italian law defined renewable energy communities and energy sharing prosumers, through collective self-consumption. Similar rules apply to both as in the energy production should not constitute as commercial and/or main industrial activity and should aim at satisfying the energy demand of its nearby members.

Prosumer is defined as an end-user who produces renewable electricity for its own consumption at a private site located within defined boundaries and can store or sell self-produced renewable electricity.

### Island specific policies

Italy supports the production of electricity and thermal energy from renewable sources on non-interconnected islands via a specific support system. Electricity production plants with a power of no less than 0.5 kW connected to the island's electricity grid and powered by locally available renewable sources can receive a feed in tariff for the share of electricity produced and fed into the grid and a feed in premium for the portion of electricity produced and instantly consumed on site. Subsidies are available for the installation of systems with thermal solar panels to cover the consumption of hot water or for solar cooling and the installation of heat pumps dedicated only to the production of domestic hot water.

Regarding transport, the ministry of environment runs island specific programs such as for example a 15 million program for energy efficiency in transport covering electric vehicles, bike sharing, electric/hydrogen buses, etc.

Regarding energy efficiency, the ministry of environment runs specific energy efficiency programs for public buildings on small islands.

On several small non-interconnected islands, Distribution System Operators also produce and sell energy and they are thus not unbundled.



## Sources

- Number of islands: **Missing source**
- Island population: Istituto Nazionale di Statistica ([Link](#))
- National Population: Istituto Nazionale di Statistica ([Link](#))