



# Clean energy for EU islands

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

## Factsheet: Greece



Greece has more than 6,000 islands, of which 227 are inhabited. Greek islands are both electrically interconnected and non-interconnected to the mainland. The non-interconnected islands consist of 29 autonomous systems. Crete is one of the most populous islands in the Mediterranean (8,336 km<sup>2</sup> - 634,930 inhabitants). Besides Crete there are around 25 medium-sized islands (100-1,000km<sup>2</sup>) and a large number of small islands (below 100 km<sup>2</sup>). Greece is currently carrying out interconnection plans, notably for Crete and several islands of the Cyclades. Of the total population of Greece, 15% lives on the islands. This corresponds to 1,650,000 people.

The country is split into 7 regions, of which 2 cover only islands, specifically region of Crete and region of Aegean while another 4 include some islands and part of mainland such as Attica, Macedonia and Thrace, Thessaly and Central Greece and Peloponnese, Western Greece and Ionian. The regions plan and implement policies. Public authorities on islands are managed in the same way as other administrative entities in Greece. There are no special cases, apart from a reduced VAT on some islands.

### Clean energy national targets

The Integrated National Energy and Climate Plan for Greece for the period 2021-2030 aims to increase the overall share of renewable energy sources (RES) in its gross final energy consumption to 35% by 2030. In the electricity sector, the share of renewables will rise to at least 60% by 2030. In the heating and cooling sector RES share in gross final energy consumption will rise to 42.5% by 2030 (30.6% in 2020) and RES share in final consumption for transport will rise from 6.6% in 2020 to 19% in 2030.

### Supported RES technologies

One of the most crucial distinctions with regard to RES in Greece is between mainland grid and interconnected islands and non-interconnected islands. This differentiation is crucial as it affects the type and level of support, for which RES plants are eligible. RES projects in Greece on non-interconnected islands can benefit from a Feed-in Tariff, regardless of the capacity (size) of the project, whereas on interconnected islands there is a maximum threshold of 400kw. In addition, RES on interconnected islands that participate in the electricity market may benefit from a Feed-In Premium tariff, while bigger PV (>500kW) and onshore wind plants (> 3MW) can take part in tenders. There is also a subsidy for RES plants on non-interconnected islands employing two or more RES technologies.

In terms of both installed capacity and electricity production, Greece supports solar PV, onshore wind power and hydro power, with a focus on hybrid plants (plants that use two or more RES technologies) for non-interconnected islands. In the heating and cooling sector, solar thermal, biomass, aerothermal, geothermal and combined heat and power (CHP) plants are incentivized for use for self-consumption. Different support schemes are given for citizens for their own use or building use and different for the private companies or cooperatives. Incentives are not given for district heating or cooling infrastructure on the islands.

When it comes to transport electrification of mobility is supported through subsidies for EV purchase for natural persons, taxis and companies or grants for EV charging infrastructure for natural persons and public bodies. In addition there are biofuel subsidies.

Support schemes:

- Subsidies are offered to small hydro power plants, CHP plants, hybrid plants and other RES only for autonomous production (RES E) as well as for geothermal, aerothermal heat pumps and biomass (pellets), solar thermal technologies, solar water heaters and solar heating (RES H&C).
- Tax relief is offered to small hydro power plants, CHP plants, hybrid plants and other RES only for autonomous production.
- Feed-in tariff - RES plants below 400 kW on interconnected islands and all RES on non-interconnected islands are eligible for a Feed-In Tariff.
- Premium tariff (Feed-In Premium) - RES and CHP plants on interconnected islands participate in the electricity market and may be awarded with a sliding feed-in premium.
- “Virtual net-metering” is available for city/regional councils, schools, universities, farmers, farming associations and Energy Communities.
- Subsidy for purchase of EVs by different categories (natural persons, enterprises, taxi owners) and subsidy for installation of EV chargers for natural persons.
- The production of biofuels is eligible for subsidy or tax relief. A biofuel quota scheme is in place. However, it is not applicable to islands (both interconnected and non-interconnected).

### Electricity grid

In the electricity network, RES are prioritized with regard to the use of grid and there are curtailment provisions for interconnected wind power plants. IPTO (TSO) and HEDNO (DSO) are primarily the responsible authorities for the grid procedure. There is only one local distribution system. The country has a smart meter penetration rate of 2.6%. The electricity supplier switching rates for household customers in 2018 was 4.5%.

### RES projects authorization process

Greece uses tenders and auctions for large projects and application/approval process for smaller projects.

### Supported energy efficiency measures

Energy efficiency measures are promoted/supported for refurbishment of buildings for citizens, for replacement of public lighting for public authorities and for improvement of energy efficiency in industry.

### Supporting policies

Greece established Private Vocational Training Centres, which can offer specific seminars for the accreditation of RES installers. Apart from that, universities offer within their curriculum

specific training courses on RES. Public sector authorities are supported by an “Electra Fund” in implementing energy efficiency measures.

### Self-consumption and community energy

Greece introduced the concept of energy communities into its law in 2018. Energy Communities could benefit from special provisions such as participating in the EU projects, owning RES plants and operating virtual net-metering. The Energy Community concept is being redefined in legislation in 2021.

The concept of prosumer is not legally defined. However, the concept of autonomous producer bears many similarities with the notion of prosumer. Practically, only PV autonomous producers could benefit from a net-metering scheme. Moreover, all RES technologies used by autonomous producers for self-consumption can receive subsidies.

### Island specific policies

Beyond what is mentioned above, there are also some special incentive and subsidy schemes in place for islands specifically. For instance, there is currently a national subsidy scheme running (GO ELECTRIC), to promote the e-mobility uptake at a national level. Specifically for the islands, the scheme provides additional incentives i.e., the possibility for a legal entity to purchase up to 6 vehicles (instead of 3 vehicles for the rest of the country) and increased tax benefits (greater reduction of taxable income for legal entities that are participating in the scheme and are based on islands). Another special subsidy scheme for the uptake of e-mobility runs also specifically for the island of Astypalea, with even higher subsidies.

In specific cases, renewable energy projects can benefit from special permits, such as for example the project on the island of Agios Efstratios which runs due to L.4495/2017, art.152. In general, Greece is preparing its Territorial Just Transition Plan for the Greek islands of North Aegean, South Aegean and Crete. A series of actions is foreseen for these islands including energy transition / climate neutrality, circular economy and efficient use of resources, sustainable urban mobility etc. On interconnection projects, the National Energy and Climate Plan provides a timeline for non-interconnected islands.

### Sources

- Number of islands: Greek National Tourism Organisation ([Link](#))
- Island population: Hellenic Statistical Authority ([Link](#))
- National Population: Eurostat 2019 ([Link](#))