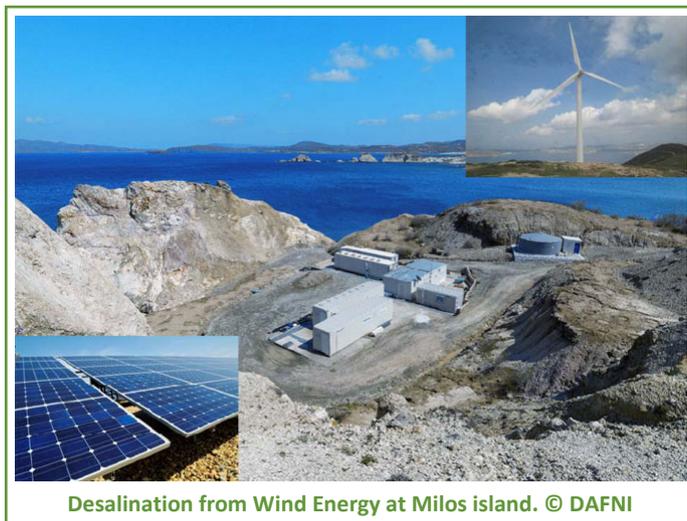


Becoming a Sustainable Region

10 municipalities from the Cyclades Islands region have joined the Covenant of Mayors initiative and have submitted Sustainable Energy Action Plans (SEAPs). 15 islands from the region have joined the Pact of Islands initiative.



The region comprises of a group of approximately 220 islands. 24 of the 220 islands are inhabited. The region consists of 19 municipalities.

During the last forty years, Cyclades have become one of the most famous tourist destinations in Greece. Apart from tourism, Cyclades economic activities include traditional agriculture and fishery, mining and ship construction. One of the major characteristics of the region is the geographical isolation and also the land split which causes severe communication and access obstacles.

The wind and geothermal potential of the region is very high but there are restrictions in large scale wind installations (electrical network infrastructure, land use planning).

Solar irradiation is also very high (horizontal from 1900 kWh/m² up to minimum 1600 kWh/m²).

Population increases 5-8 % annually and there is up to 700% population rise during summer. This difference, caused by the seasonal population, results in higher demand of electrical load which can be 10 times more during summer. The demand in electricity also increases due to the development of the tourist sector.

In most of the islands, electricity is produced by conventional oil stations with high maintenance costs. The planned interconnection in many islands will also decrease the cost of energy consumed.

Many islands lack of water resources. Desalination from RES is a sustainable solution for the area.

Energy in Cyclades Region, Greece

One island, out of the 24, is connected to the grid of the mainland. However, the planned interconnection project which is under realisation aims at connecting 3 other islands in the 1st phase and 3 other islands during the 2nd phase. All the other islands have Local Autonomous Power Plants. In the autonomous islands systems, RES penetration is confined in 30% due to instability of the system and the lack of storage.



ENNEREG - Regions paving the way for a Sustainable Energy Europe is a European Project supported by the **Intelligent Energy - Europe programme**. The project aims to establish and inspire EU Regions to take up the challenges of fulfilling the EU 20-20-20 climate and energy targets by producing regional **Sustainable Energy Action Plans (SEAPs)** and initiating **Sustainable Energy Projects (SEPs)**.

The experience gained by the **12 ENNEREG Pioneer Regions** is being shared with other regions throughout Europe via one-to-one twinning activities, events and the **Regions 202020 Network**.

Find out more at www.regions202020.eu

The total energy consumption in 2008 was 1,767,470 MWh. The electricity production from Wind power was 25,336 MWh and from Photovoltaic was 70 MWh.

Electricity consumption (in MWh) year 2008

Total consumption	651.401
Domestic use	244.150
Commercial use	312.799
Industrial use	39.641
Agriculture use	10.487
Public authorities	36.356
Street lighting	7.967

Sustainable Energy Action in Cyclades, Greece

The region of Cyclades has a strong representation in the Network of Sustainable Aegean Islands. At regional level, its aim is to support the islands to implement their sustainable energy action plans, realize innovative sustainable energy projects within their territories and assist them to meet their CO₂ emissions reduction targets. In this framework, the region organises regional public information and awareness events for the support of the Covenant of Mayors and the Pact of Islands initiatives.

At European level, its aim is to take part in the networks that are being formulated, support the coordinated promotional activities that are in line with the targets of the region and contribute to the development of a tighter co-operation among European regions.

The Baseline emission inventory that was developed in 2011 showed that the Sustainable Energy Action PLAN will have to focus on transport, buildings and tertiary sector.

Facts and Figures



Size: 3,572 sq km

Inhabitants: 112.615

Location: South Aegean Sea, Greece

Stakeholders: Region of South Aegean, Mayors, Local technical chamber of engineers, Chambers of commerce, The public power corporation – representatives of the local stations, Municipal development companies, University of the Aegean, Associations of agricultural cooperatives, Professional associations of mechanical engineers, architects, tourist sector, hotel owners, Local trade unions, Banks, Investors, Ecologists.



Geothermal water at Milos island. © CRES

Twinning and Replication

The replication event in Syros Island, in June 2011, triggered the participation of the twin region Dodecanese. Stakeholders from the Dodecanese region have been included to the ENNEREG network. News and projects of the twin Region of Dodecanese are uploaded on the Region of Cyclades website. The vice Governor of South Aegean has proposed to the Council to replicate sustainable projects and, also, intends to develop new projects such as Energy schools, Green islands etc. in both regions.

Find out more about ENNEREG’s activities in **Cyclades, Greece** on the Regions 202020 website at: www.regions202020.eu/cyclades

or contact the ENNEREG partner for Cyclades:

CRES - Centre for Renewable Energy Sources and Energy Saving

19th Km Marathonos Av. Pikermi, Greece 19009

Tel: +30 210 6603332 Fax: +30 210 6603302

