

Paving the way for Sustainable Energy in Europe

ENNEREG Good Practice in [e.g.] Energy Efficient Products

Unit of potable water Cyclades, Greece





Summary

Most of the islands in Cyclades region have drinking water shortage. In Syros, local people were used to purchase plastic bottles of drinking water to cover their needs until local authority inspired the idea of the desalination of sea water and its distribution through slot machines. The project was very successful!

Aims and Objectives of this Sustainable Energy Action

The aim of the project is to ensure drinkable water for the inhabitants avoiding the costs of the purchase of plastic bottles and the one of the transfer of water with boats. This transfer costs about $8-10 \text{ } \text{€/m}^3$.

Besides, the project aims to the protection of the environment as it avoids the plastic bottles which would end at the landfill of the island and would needs 500 years for decomposition, the energy they need to be produced and the CO_2 emitted during the transfer with the boats.

Results and Impacts

In 1 year, citizens have received water that corresponds to:

- 1.107 liters of water,
- 13,28 tones of oil,
- 22,14 tones of CO₂
- 365.720 Euro

The Annual operating cost is 18 kEuro
The Annual income is 300 kEuro

It reserves more than 150.000 plastic bottles of 1.5 lt per year.

The bottled water in the islands is 1000 times more energy consuming than tab water due to the transportation and the construction of the bottle.





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Technical and Financial Implementation

As the drinking water distribution network was very old, the water from desalination units is leaded to the Final Unit. There the water is purified and becomes drinkable. The slot machine includes the system for leaning water. One, by inserting 20 cents, receives 10 liters of potable water, by inserting 40 cents he is receiving 40 liters. Now, there is only slot machine but as it is considered so successful, the mayor is thinking about installing 2 more machines in 2 other areas of the island.

In 1 year, citizens of the island have received water that corresponds to 246.000 plastic bottles. The production of 246.000 less plastic bottles corresponds to 22,14 tones CO₂ emissions savings.

The Partners and Stakeholders

The vice Governor Mr. G. Makryonitis, mayor of Poseidonia at that time inspired the initial idea, the Regional council and private companies.

Lessons Learnt

This initiative is so successful that municipal workers have to deplete the Unit from coins, twice a week. People come from all over the island to get water.

How this Action could be Replicated

The island of Amorgos has been interested to replicate the project as also Anafi and Chalki island which belong to the twinning region of Dodecanese.



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Find out more about this and other Sustainable Energy Actions, online at: www.regions202020.eu/gp

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Further Information

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Other contact organizations: Region of South Aegean, DAFNI

- Network of Aegean Islands for Sustainability





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