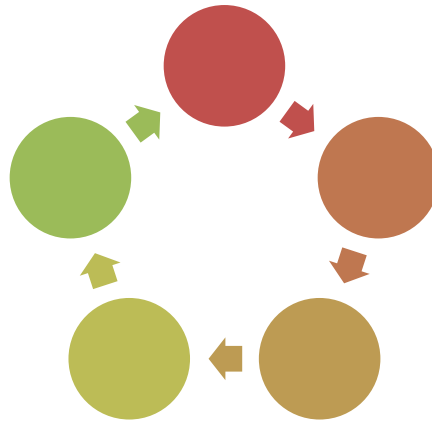


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Circular Economy

Cycladic Islands in Transition

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“Looking beyond the current take-make-dispose extractive industrial model, a circular economy aims to redefine growth, focusing on positive society-wide benefits. It entails gradually decoupling economic activity from the consumption of finite resources, and designing waste out of the system. Underpinned by a transition to renewable energy sources, the circular model builds economic, natural, and social capital. It is based on three principles:

- ✓ *Design out waste and pollution*
- ✓ *Keep products and materials in use*
- ✓ *Regenerate natural systems”*

Ellen MacArthur Foundation (n.d)

The need for sustainable investment pushes the whole world towards the search for new sources of entrepreneurship and innovation. Especially in Greece, this offers the opportunity to overcome the recent crisis, the high youth unemployment rate and to promote alternatives for its economy that is largely based on tourism and agriculture. Circular Economy is an opportunity for Greece to develop a more sustainable labour market, continue to be a competitive actor on the international arena and invest in future industries. Moreover, in regards to pollution and waste management, a step towards Circular Economy would allow Greece to get rid of the EU’s environmental fines for the numerous illegal open landfills. This change is not only visible in the urban regions, but it is also starting at border regions.

In recent years a particular geographical place in Greece, has demonstrated its potential on the Circular Economy with great success. The Cyclades, an island complex in the Aegean Sea, have many examples about the practices of Circular Economy. Some of these are worth mentioning!

Paros Island

Paros has an integrated and sustainable management system for various types of waste and its direct placement in landfills without requiring pretreatment. This system allows for several environmental, economic and social benefits, such as reducing the volume of organic waste, re-using raw materials and processing products. In addition, bio-waste in the rural areas of the island will be reduced, which usually makes up the biggest bulk of national waste. On Paros this is done by cultivating materials for compote (i.e. composting). The compost, whose majority comes from amateur crops, i.e. from small-scale farmers and families, in Greece, will be available for sale and, in turn, promote the creation of new job positions.



The words of the Mayor of Paros, Markos Kovaïou, were encouraging: "We are planning the future to protect the environment. Today we are one step closer to implementing two critical projects on our island" (Koinignomi, 2018).

Andros Island

Due to the high touristic traffic on the island in the summer months and the long distances of the settlements from waste management facilities, the need for the effective use of spaces and mechanisms of specific waste streams has been created.

Andros has been actively involved in the organization of environmental waste (composting, recycling, waste transportation in specially designed areas) of various materials (plastics, tins, tetra pak, etc). Some of them are solid, horticultural, municipal and electrical waste. Organic waste bins are also being installed in focus areas (hotels, bars, restaurants) where there is mass accumulation of waste; but action does not stop there. The municipality of Andros proceeds to raise awareness and informs the island's residents on ways to improve the situation and to strengthen their environmental consciousness. This change was implemented through the publication and distribution of informative material on domestic composting (techniques - process - materials and special bins). Another measure of information is to actively encourage Circular Economy movements via the municipality, by discounting the municipal fees of those using domestic compost bins. Citizens will also be able to deposit recyclable materials, such as clothing and electrical appliances, for reuse and, depending on the amount of recyclables and waste that people carry, will receive a discount card with social and cultural benefits from the municipality.

Syros Island

A typical example of actions of Circular Economy is the organization of the capital of the Cyclades, the island Syros. Syros is known for the recycling of solid and alternative wastes, such as glass, plastic, metal, edible oils, lamps, etc., in cooperation with the Hellenic Recovery Recycling Corporation (HERRCO) and the offer of individuals. Thus, Syros is leading the way in package recycling and re-use action with the help of churches and voluntary organizations on the island. Similarly, for example the re-using second hand books in schools are highly encouraged. Great interest concerns the action of recycling edible oil (frying oil) on the island, as its collection can present imaginative prospects for its re-use nationwide.

Syros, with the help and management of its own resources, as well as the European Union, has implemented a viable system of Circular Economy, which many municipalities can draw inspiration from, because besides being effective, it also reduces the cost and quantity of waste and acts as a means of alleviating for the environmental crisis that Greece is going through.



Noteworthy is the management of seawater from the island through biological purification and desalination: "Since the beginning of the 2000s, a state-of-the-art Biological Cleaning has been started with high quality construction and functional specifications, costing € 2.7 million. Biological Cleaning includes complete treatment of liquid and biological sludge, with significant innovations and that the most modern is present in the European space at Biological Stations today. The entire unit is controlled by an advanced computer with the minimum of staff. All debris is deodorized, so that the Unit does not create almost any nuisance in the area" (Devae, n.d.). These practices are essential to the health and well-being of the island's citizens, as bad odors and pollution of the atmosphere and water were created by urban and industrial waste water. "The port of Ermoupolis and together the whole city 'breathed'" (ff).

It is therefore obvious that, Syros is a typical model to be imitated not only for the management of waste on Greek islands but also throughout Greece, as environmental culture and mentality is a natural characteristic of the citizens and this came from the briefing of the municipality such as:

- Information through the website and social media of the island
- Newsletters and brochures
- School activities
- Line of communication with citizens and local press releases
- Competitions – workshops
- Municipal events
- Information stands

More information

Multiple example of Circular Economy are also found in Kythnos, Kea and Tinos through the program "Transforming the coastal fishery in North Cyclades" (including Andros and Syros) to balance the coastal fishery, to improve the market and fishermen. Finally, the implementation of the "SEA CHANGE" program in Sikinos need mentioning, which aims at raising awareness and information on the use of less plastics and the distribution and use of biodegradable straws.



References

- Andros Portal (2016). Local Waste Management Plan of Andros: The aim is to manage most of the waste at the level of the Municipality. Recovered from: <http://www.androsportal.gr/topiko-schedio-diachirisis-apovlition-androu-stochos-i-diachirisi-tou-megaliterou-merous-ton-aporrimmaton-se-epipedo-tou-dimou/>
- Cyclades24.gr(2018). "SEA CHANGE" Program: Actions in Sikinos, the first plastic straw free Municipality of Greece!. Recovered from: <https://cyclades24.gr/2018/05/programma-sea-change-draseis-sikino/>
- Devae - Municipal Water Supply Company of Syros Ermoupolis (n.d.). Biological Cleaning. Recovered from: <http://www.deyae.gr/permalink/3011.html>
- Ellenmacarthurfoundation (n.d.). The Concept of a Circular Economy. Recovered from: <https://www.ellenmacarthurfoundation.org/circular-economy/concept>
- Koinignomi (2018). Financing of Waste Management Projects. Recovered from: <https://www.koinignomi.gr/news/politiki/politiki-kyklades/2018/01/25/egkrisi-hrimatodotisis-ton-meleton.html>
- Syros-Ermoupolis (2016). Local Design of Urban Solid Waste Management. Recovered from: http://www.syros-ermoupolis.gr/attachments/article/1850/%CE%A4%CE%9F%CE%A0%CE%99%CE%9A%CE%9F%20%CE%A3%CE%A7%CE%95%CE%94%CE%99%CE%9F%20%CE%94%CE%A1%CE%91%CE%A3%CE%97%CE%A3_%CE%A3%CE%A5%CE%A1%CE%9F%CE%A5.pdf
- OliveOilNews (2018). Offer olive trees in Serifos. Recovered From: <https://www.oliveoilnews.gr/prosfora-eleodentron-stin-serifo/>





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