

#### **Greece - ESEK**



## Fun fact

Europe has more than 3,500 Energy Communities. A kindergarten in Karditsa, Greece has met its heating requirements by utilizing biofuel produced locally by ESEK.

### Why is it important?

According to an EU-wide survey in 2019, 6.9% of the EU population was unable to afford to heat their home sufficiently. We can combat this in our local environments by utilizing different waste and transition to a clean and renewable energy.

### Remember @

Energy communities organise collective and citizen-driven energy actions that help pave the way for a transition to renewable energy while putting citizens at the forefront. They may provide direct benefits to citizens by increasing energy efficiency, lowering their electricity expenses, and creating local jobs, while also contributing to the reduction of waste.

# **Energy Community of Karditsa (ESEK)**

ESEK is an energy cooperative operating in the region of Thessaly that processes the area's biomass and converts it into a commercial form of biofuel, such as pellets. The area is full of coffee shops, which supply ESEK with coffee grounds for conversion into pellets.

https://www.esek.gr/en/archiki-english/

## How does it work?

Energy Communities organise citizen-driven energy actions to promote a clean energy transition while putting citizens first. They make biofuels and pellets from local forest wastes, agricultural residues, urban tree prunings, etc. These biofuels are distributed at a discount to community members for heating and cooling purposes, thus creating a localized and sustainable energy solution for many low-income households. In 2022, in a remarkable expansion of their biomass supply chain Energy Community of Karditsa started using residual coffee grounds. ESEK has placed a container for coffee residues in the center of Karditsa, where coffee retailers can dispose of any leftover coffee beans or residue. With appropriate processing, these coffee grounds can be transformed into 100% natural, high-quality pellets. This innovative approach offers an exciting opportunity for a region that generates over 600 tons of residual coffee per year, as estimated by ESEK.

## How can you participate?

If you would like to introduce the idea to an energy community in your area, here are some simple steps you can follow. First contact your local energy community and make sure they can utilize the coffee beans. Then, choose a visible location that is easily accessible and located in a busy area. Next, seek permission from the person who owns the chosen location to set up an appropriate bin. Once you have the green light, set up a container in cooperation with the energy community, where people and coffee store owners can discard their coffee residues. Make sure to display informative posters on how these biofuels can heat up your home in an efficient and inexpensive way. Lastly, spread the word to promote the initiative among your family, friends, and on social media platforms. By following these steps, you can actively reduce agricultural and coffee waste and create a community that is energy independent.





#### **Greece – Just Go Zero Tilos**





#### **Fun fact**

Since May 2022, The Greek Island of Tilos has shut down its landfill, removed all communal bins from the streets and became the first zero waste island worldwide. The recovery rate of materials from waste is already topping 85%.

#### Why is it important?

The EU has set a common target for landfilling. reducing waste, increasing recycling. By 2025, 55% of municipal waste and 65% of packaging waste must be recycled or reused. This will help reduce greenhouse gas and other emissions generated by the extraction and processing of virgin resources. In addition, it will reduce dependence and increase EU strategic autonomy for several essential materials, securing EU's economy.

### Remember 🖓

This model of public-private partnership not only benefits the environment, but also shapes the mindset of people towards the transition to a green future, where there are no waste and everything is utilized. It creates a new paradigm that can be implemented by other communities.

## **Just Go Zero Tilos**

It is an innovative project that embraces the principles of circular economy that runs on the Greek island of Tilos. Its mission revolves around the change of culture and mindset moving towards a zerowaste world, where nothing is in excess, and everything is useful.

https://www.justgozero.com/tilos/

### How does it work?

The Just Go Zero Tilos program is a fully circular waste management system that begins with door-to-door collection and recovers all island waste streams. Instead of public trashcans, sorting at the source and door-to-door pickup strive to compost, Through community mobilisation and recycle, and reuse. municipality cooperation, the programme handles all island garbage, greatly decreasing its impact on Tilos' unique natural ecosystem. ALL Tilos households have specialized garbage collection equipment and daily door-to-door collection of sorted rubbish. In addition, a unique digital platform tracks the amount of recyclable, non-recyclable, and organic waste collected from each residence, encouraging residents to recycle. Instead of recycling, biowaste is turned into fertilizer at the Centre for Circular Innovation, where waste is transported for sorting and processing. Other garbage is recycled or converted to electricity.

## How can you participate?

If you like the idea and wish to turn your local community into a zero-waste one here are some suggestions. You can prepare a presentation using Tilos as an example and bring the idea to your municipality, thus inspire them to reduce waste and create a zero-waste community. Moreover, you can come into contact with Polygreen and get informed on their practices or even collaborate with them in zero waste project for your city/town and bring a positive change. Another suggestion would be to start at your home with your family and friends and inspire them to become a zero-waste household, by sorting the waste and making sure that nothing ends up in the landfill.





### **Greece - Garments Recycling**



#### **Fun fact**

85% of the garments we buy are discarded. The average European discards 15 kg of clothing each year, and it is worth noting that a pair of jeans requires 8 litres of water to manufacture.

### Why is it important?

Recycling clothing and textiles reduces waste volumes in landfills and other disposal sites. In addition, huge amounts of energy are saved by not producing new fabrics in factories, and land is preserved because fewer fibrous plants are cultivated, and fewer livestock is raised for their wool or leather.

## Remember 🗭

Recycling clothing plays a key role in the reduction of toxic dyes, heavy metals and chemicals that enter the soil and groundwater due to the processing of raw materials and the shaping of the fabric.

# Clothing and Shoe Recycling

An initiative that operates in all of Greece's municipalities and allows residents to recycle unwanted clothing, thereby contributing to proper waste management and serving as a means of social sharing.

https://www.recycom.gr/%CF%80%CE%BB%CE%B7%CF%81%CE%BF%CF%86%CE%BF%CF%81%CE%AF%CE%B5%CF%82/

## How does it work?

The municipalities in Greece in collaboration with private companies have installed special bins around the cities and try to motivate the locals to discard their old clothes and shoes in them. On the bins there are instructions on the way the clothing and the shoes should be disposed of. They are then sorted, and those in better condition are offered to those in need with the always-valuable assistance of the community and municipal authorities, while the older ones are sent to recycling facilities.

Recycled clothing and footwear are used to create cleaning rags for industrial facilities, insulation materials for automobiles, mattress and furniture stuffing, and cotton and wool fiber. They are also used to produce recycled fabric. This reduces the amount of waste that ends up in landfills and fosters a mindset of sharing and reusing rather than continuously purchasing new items.

## How can you participate?

You can easily contribute to that end by sorting your clothes and footwear and disposing the ones you no longer use in one of the designated bins. If your city/town does not offer clothing recycling bins, then you can bring the idea to the municipality and inspire them to take up the initiative. Last but not least, you can install your own bin in your neighborhood and start your own recycling and sharing campaign with the local families, thus raising awareness on the importance of the 9 Rs.