

WE WORK FOR THE PEOPLE

The objective of **SIRCLES** is to promote the social and labor inclusion of people at risk of social exclusion, providing them with skills and jobs in the sector of **biowaste management**. In Andros (Greece), the project is carried out in the area of Ormos Korthiou, with the composting unit located in the wastewater treatment plant.



During the project, **20 NEETs and Women from Ormos Korthiou at risk of social exclusion** have received training in composting. Afterwards, **all of them were hired to work at the SIRCLES composting unit** in Korthi.

TECHNICAL FEATURES OF THE ANDROS COMPOSTING AREA

- MUNICIPALITY:** Andros (Greece)
- LOCATION:** Ormos Korthiou
- PROMOTERS:** Training and Employment Labor Inclusion, NTUA (PP2) and OE (PP3), Composting Company
- SERVICE HOLDER:** NTUA (PP2), Composting Company and OE (PP3)
- INAUGURATION DATE:** November 30, 2022
- NOMINAL TREATMENT CAPACITY:** 40 tons of biowaste per year
- TECHNOLOGY:** Composting in 24 closed composters (each 1m³)
- MACHINERY:** mixer, sieve, online measurement, on-site lab, compost bagging system
- TOTAL INVESTMENT COMPOSTING PLANT, MACHINERY AND COMPLEMENTARY ACTIONS:** €158.000
- AREA FINANCING:** ENI CBC MED through SIRCLES

FINANCIAL DATA		
TOTAL BUDGET	EU CONTRIBUTION	PROJECT CO-FINANCING
€3.8M	€3.4M	10%
PROJECT DURATION		
FEB 2021 - AUG 2023		

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SUPPORTING CIRCULAR ECONOMY OPPORTUNITIES FOR EMPLOYMENT AND SOCIAL INCLUSION

ANDROS PILOT

Spain | Greece | Palestine | Jordan | Lebanon | Tunisia | Italy



THE SIRCLES PROJECT

The **SIRCLES** project promotes social inclusion and employment opportunities for women at risk of social exclusion and young people not in education, employment, or training through a circular economy model applied to the organic waste sector. SIRCLES is financed by the European programme ENI CBC MED, has a budget of 3.8 million euros, is led by the **Waste Agency of Catalonia** and has as partners in Greece, **National Technical University of Athens (NTUA) (PP2)** and **Organization Earth (OE) (PP3)**.

Partners from 7 Mediterranean countries are working in the project (Spain, Greece, Palestine, Jordan, Lebanon, Tunisia and Italy) and it **has generated more than a 100 jobs**.

With SIRCLES, a **composting unit** has been created in Andros, a facility for the **sustainable circular economy** for biowaste management which can generate jobs in the area.

The team in Andros collects biowaste from hotels, restaurants, cafeterias, bakeries, butcher shops, super markets and citizens with the aim of composting it.





A WORKING DAY AT THE COMPOSTING UNIT

In the early hours, the workers arrive with their uniforms on. The truck leaves to collect the organic waste from the collaborating stakeholders and, upon returning, empties it on the floor of the composting area.

Once there, the colleagues check the collected material in order to remove the inappropriate materials: the quality of the biowaste is essential to produce high quality compost.

The organic waste is weighed and an appropriate amount of bulking material (woody and shredded prunings) is added

to the mixer and watered afterwards in the composter if necessary. Then, it is introduced into the composter.

Composters are thoroughly monitored regularly: checking that there is no leaching, taking temperatures, stirring the composting mixture, controlling its humidity and smell and noting any anomalies.

Finally, the working day ends by cleaning all surfaces, composters and tools with pressurized water. Day-to-day life is not at all boring, there are always things to do.

COLLECTION

The food waste of stakeholders in the territory is collected with a truck three times a week. The collection bins are Locked and the citizens that participate have received proper information on what should be collected in the designated orange bins. This ensures high quality of the collected material.



RECEPTION, SELECTION AND MIXTURE

If inappropriate materials are in the bags, they are manually removed in order to ensure the quality of the organic matter. It is then mixed with the necessary portion of bulking material and introduced into the mixer.

COMPOST

The composting mixture is loaded to the composters. Three composter modules take part of the process. The composting material is moved from the outer containers (1 & 5) to the interior one (3).

Module 1

The organic matter begins to undergo its natural decomposition thanks to microorganisms. The temperature can reach up to 70°C

Module 2

A transfer is made from the composters 1 or 5 to the containers 2 or 4, respectively during this process, as the volume of the organic matter is reduced the quality and needs of the organic matter are checked.

Module 3:

When the volume of composters 2 and 4 and the temperature of the mix has been reduced substantially their contents are both transferred to composter 3.



RETURN TO THE FIELD AND THE STAKEHOLDERS

The compost is used for study actions and social and environmental awareness campaigns. A part is transferred for cultivation, part of the compost is packed and gave to the stakeholders as a reward.



SIEVING

At the end of the maturation phase, the compost is sieved with a square mesh sieve to separate the larger particles. The resulting material is already composted and continues its maturation phase outside. It is finally bagged so that it may be provided to the end users.

