

WE WORK FOR THE PERSONS

The objective of **SIRCLES** is to promote the social and labour insertion of people at risk of social exclusion, providing them with skills and jobs in the organic waste management sector. In Jordan, the project is carried out in the composting area built in Aqaba by EDAMA Association for Energy, Water and Environment with European funds ENI CBC MED.



MUSAB

"Composting is a joyful and sought-after practice that I'm thankful to have learned, eagerly sharing it with everyone around."



ASMAA

"I'm proud I started my first job in composting as it has been an interesting experience, making me incorporate it into my daily life."



REEM

"I'm thrilled to start my first experience and training in the first composting project in Aqaba, looking forward to continuing my work in this field."

During the project, **38 NEETs and Women at risk of social exclusion** around Aqaba city have received training in composting. Afterwards, **8 of them have been hired to work at the SIRCLES composting area** in Aqaba. With the on-site technical expert and project officer, it adds up to 10 new jobs.

TECHNICAL FEATURES OF AQABA'S COMPOSTING AREA

MUNICIPALITY: Aqaba (Jordan)

LOCATION: Alkhadraa

PROMOTERS: EDAMA Association for Energy, Water and Environment

SERVICE HOLDER: EDAMA Association for Energy, Water and Environment

INAUGURATION DATE: January 31, 2023

NOMINAL TREATMENT CAPACITY: 50 tons of biowaste per month

TECHNOLOGY: 10 Modular composter and 13 open windrows

MACHINERY: Truck, scale, bio-shredder, screener, bobcat

TOTAL INVESTMENT COMPOSTING PLANT, MACHINERY AND COMPLEMENTARY ACTIONS: €77,326.04

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 | | |

www.enicbmed.eu/projects/sircles @SirclesProject



SUPPORTING CIRCULAR ECONOMY OPPORTUNITIES FOR EMPLOYMENT AND SOCIAL INCLUSION

AQABA COMPOSTING AREA

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



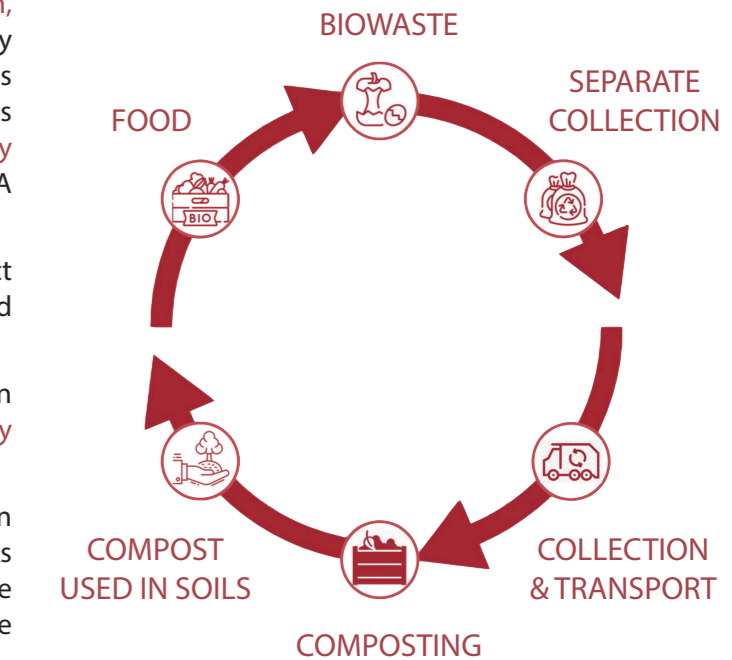
THE SIRCLES PROJECT

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 Jordan, EDAMA association for energy, water and environment.

7 Mediterranean countries are working in the project (Spain, Greece, Palestine, Jordan, Lebanon, Tunisia and Italy) and it will generate at least 110 new jobs.

With SIRCLES, a composting area has been created in Aqaba, a facility for the self-sustainable circular economy which can generate work in the surrounding area.

EDAMA's partner truck, collects biowaste from hotels in the area with the aim of composting it. The initiative seeks to be reproducible and will also be useful to generate knowledge applicable to future policies in the area of the circular economy.





Every morning, the workers arrive wearing their uniforms, signaling the start of another day. EDAMA's partner's truck, Urbeser, sets off to collect organic waste from the cooperating hotels each day. Upon its return, the waste is unloaded onto the composting area floor.

Once there, our colleagues diligently inspect the collected material, meticulously removing any inappropriate items. They then compile a daily report for each hotel, providing detailed information on the quantity and quality of the received bio-waste.

The organic waste is carefully weighed, and a suitable amount of additional materials, such

as leftover vegetables and shredded pruning's, is incorporated. If needed, water is added to maintain optimal moisture levels. The mixture is then introduced into composting boxes or windrow piles.

Every day, the composters undergo a thorough examination. This involves checking for any signs of leachate, monitoring temperatures, ensuring proper mixing of the waste, controlling humidity levels, and evaluating any unusual odors or anomalies that may arise.

As the day draws to a close, all surfaces, composters, and tools are meticulously cleaned using pressurized water.

COLLECTION

The truck from URBESER Company arrives at 10:00 am each day, carrying an average of 500 kg of food waste collected from the hotels in Aqaba. This waste is carefully packed and sealed in specialized green bags.



RECEPTION, SELECTON AND MIXTURE

Appropriate proportions of organic waste, including leftover vegetables and shredded pruning's, are carefully weighed, and combined.

Moisture levels are then adjusted and the resulting mixture is then placed into composting boxes or windrow piles.

COMPOST

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

Module 1

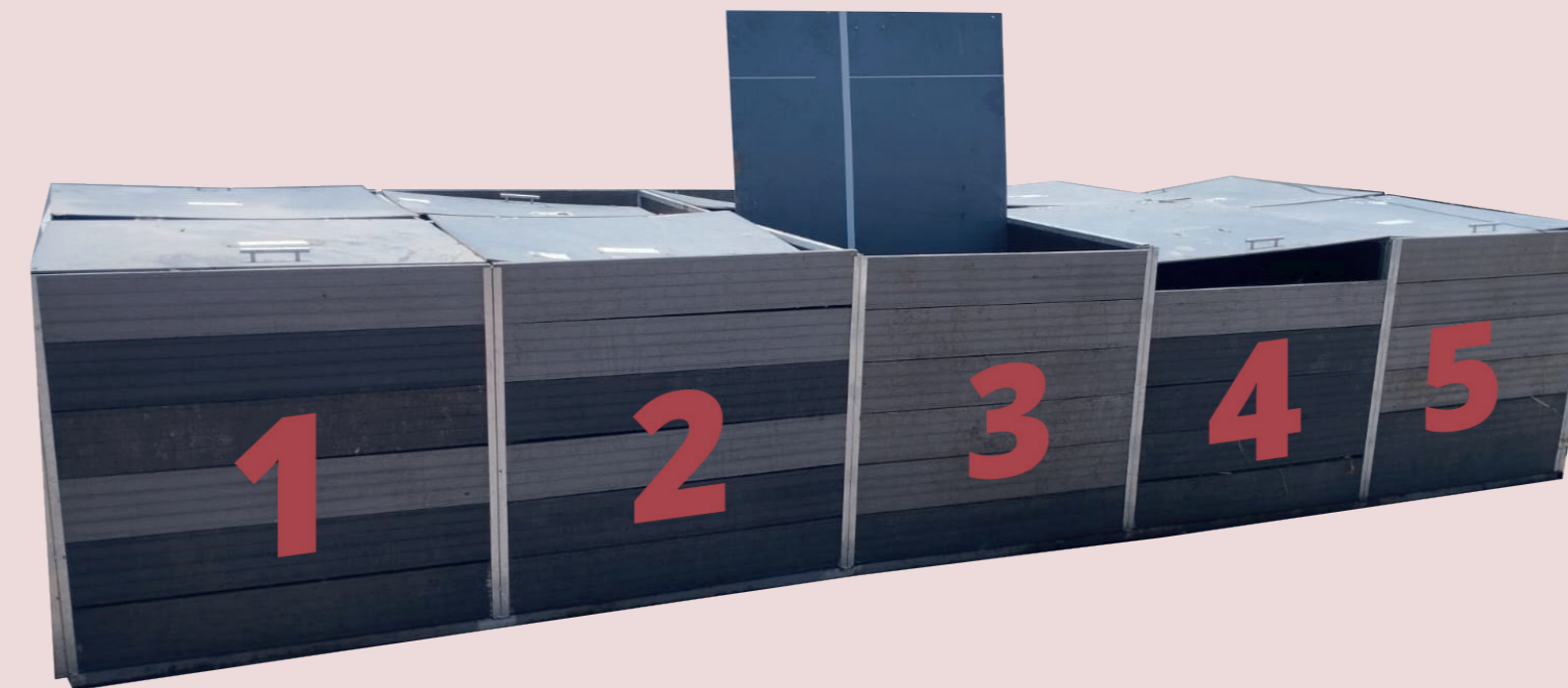
The organic matter begins to undergo its natural decomposition process thanks to its containing microorganisms. The temperature can reach 80°C.

Module 2

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

Module 3

When composters 2 and 4 reach a good state of maturation, the matter may have decreased by up to 50% in volume. Both are transferred to composter 3.



SCREENING & PACKING

Once the compost reaches maturity, it undergoes a transformative process, turning into a rich, dark brown material with an ideal structure. At this stage, it is directed to an automatic screener, where it is carefully sifted and packaged, preparing it to go the market.



REPORTING

A daily report is diligently prepared and forwarded to the technical expert, providing them with comprehensive information about the ongoing operations. Additionally, a separate daily report detailing the quality and quantity of the food waste collected is sent to each hotel, ensuring transparency and keeping them informed about their waste management contributions.

