



Selective Collection Of The Organic Waste In Tourist Areas



Project
funded by the
EUROPEAN UNION



The SCOW Project & Main results and objectives achieved

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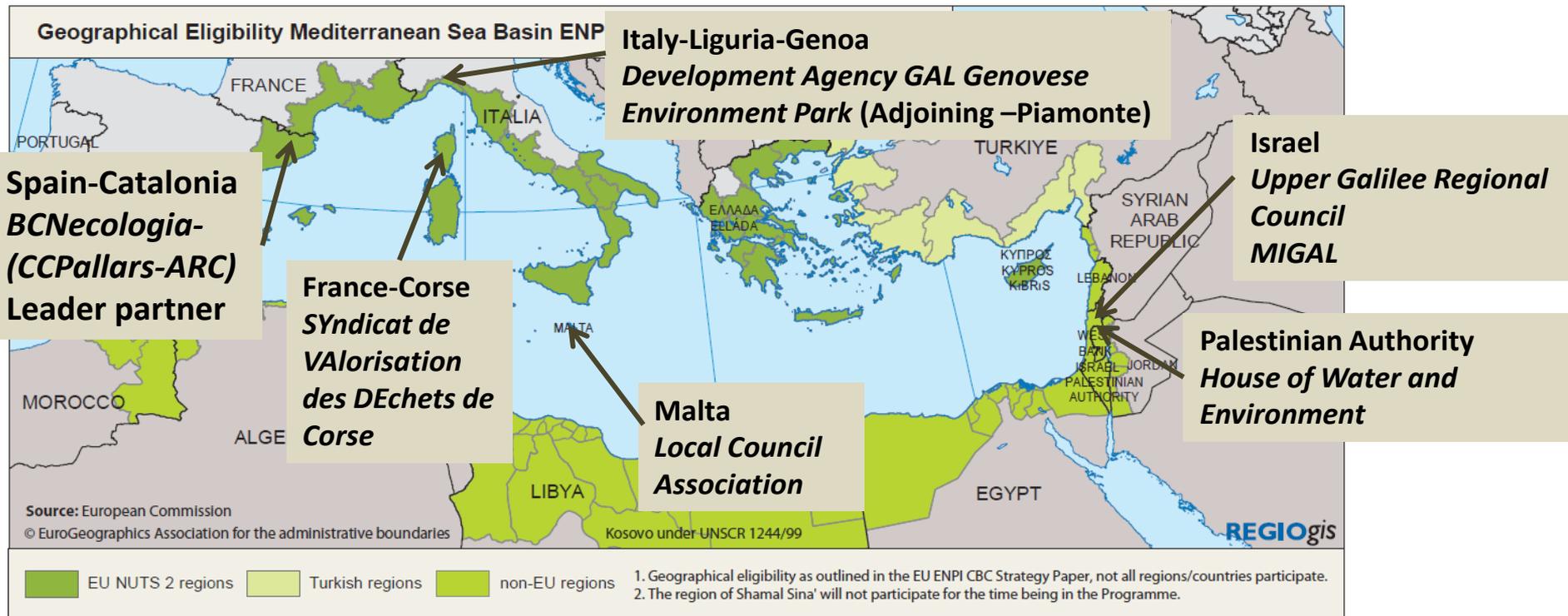


SCOW- Selective collection of organic waste in tourist areas and valorisation in small-scale composting plants

- **ENPI CBC MED PROGRAMME**
- **I-A/2.2/231 – SCOW**
- **Type of project:** Strategic project –first call.
Topic: waste
- **Financing:** total budget of 4,97 million; 4,47 million Euro (90%) financed by the EU. 50% of the budget used by Partner Countries (non EU).
- **Duration:** January 2013-December 2015 (3 years).



Partnership



**8 partner from 6 different countries.
6 EU Mediterranean Countries and
2 Mediterranean Partner Countries.**



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Main objectives

•ACTING AT THE FIRST STAGES OF THE MANAGEMENT CHAIN

•CLOSING THE CYCLE OF BIOWASTE

•LOW COST-LOW TECH-HIGH QUALITY MANAGEMENT MODELS

•DEPLOYING ACTIONS IN TOURISTIC AREAS WITH AGRICULTURAL ACTIVITY

Biowaste management as a problem in Med Area, UE and other countries highlight it as a priority

Main actions

•HIGH QUALITY BIOWASTE SEPARATED AT SOURCE

•EFFECTIVE AND PERSONALISED COLLECTION SYSTEMS

•DESCENTRALISED SMALL-SCALE COMPOSTING FACILITIES

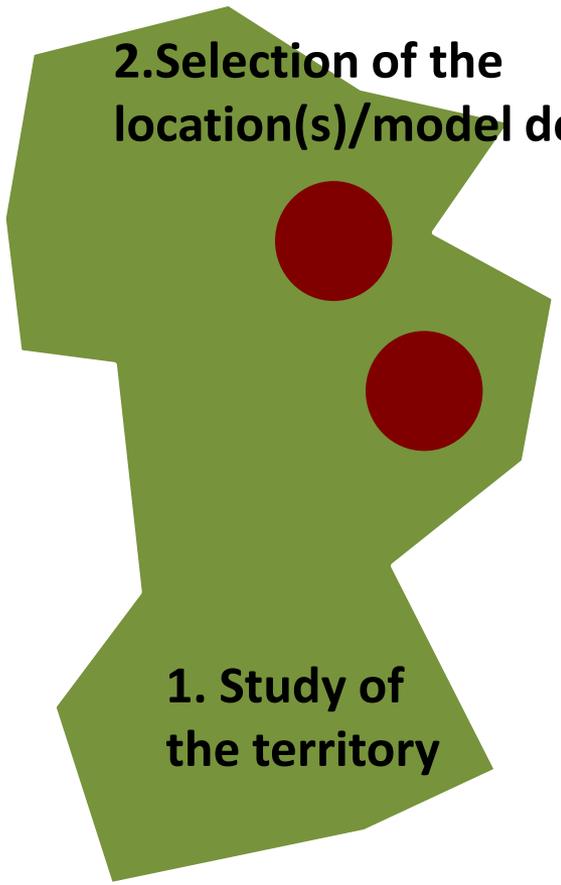
•APPLICATION TO SOIL OF QUALITY COMPOST

• AWARENESS, TRAINING AND NOW-HOW TRANSFER



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SCOW in 6 steps



3. Engagement of stakeholders (local events, campaigns)



4. Composting plants building

5. Biowaste collection introduction



6. Model operation and Monitoring

community-based model

high quality collected waste (DtD)

high quality compost



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Collection systems:

- Singular/large producers
- Singular/large producers+ households
- Ensure <5 impurities
- Promotion of Door-to-Door systems+ compostable bag



Treatment systems:

14 small-scale composting facilities:

- Open:** turning piles/heaps or static vented silos
- Close:** Electromechanical composters of different tech.+ complemented with modular composters



Different plant types and tons/year:

- Budget (200.000€ EU Part.; 7-600.000€ Non-EU)
- Availability of other funding sources out of the project
- Conditions and constrains of the zone (laws, geography, producers dispersion, etc.)



Biowaste management models implemented

PP biowaste management models

Country	Collection system	Treatment system	Expected quantity of biowaste treated (bulking mat. excluded) (t/y)	Annual quantity of compost expected (t/y)
Spain - Catalonia	Door to door	1 aerated static silos plant	750	112
Italy - Liguria	Door to door / direct delivery	3 electro-mechanical composters + 183 community composters + 150 modules for agroturism centers	375	75
Malta	Door to door	1 electro-mechanical composter	120	30
Palestine - West Bank	Door to door + containers	2 open turned windrows plants	750 + 1000 and 90 + 700 other sources	1000 + 400
Israel - Upper Galilee	Door to door + containers	6 electro-mechanical composters own model	1200	600
France - Corsica	Door to door / direct delivery	1 electro-mechanical composters + 600 composting modules for economic activities	245	75



Project Indicators

**Reaching the objectives
initially set**



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Number of model implemented
14 (14 for 2016)



Quality of the biowaste
<10% of impurities

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Tons of Biowaste collected/treated
1,300(8,185 in 2016)



Tons of Compost produced
69 (2,292 in 2016)

Different periods of operation of the facilities during 2015 depending on the time of starting



Catalonia



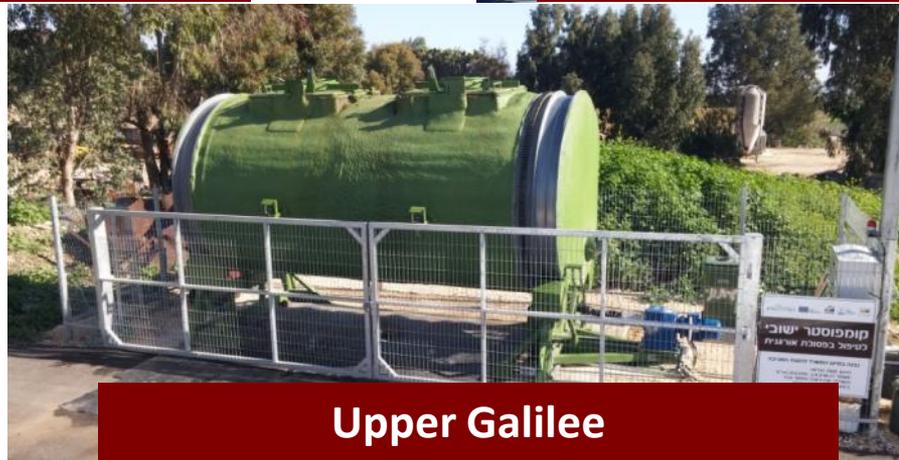
Palestine



Genoa



Corsica



Upper Galilee





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Municipalities

50



Citizens

17,719

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Large/singular producers

601



Farmers

61



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Training sessions

94



Communication activities

82

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Trained mentors

53



People informed

29,269

OTHER INDICATORS



Stakeholders involved

18,369



Number of agreements

90



Jobs generated

29

Project Capitalisation

First time to manage biowaste in some areas, this is a important advance. This project will be seen as an example for the reproduction of biowaste management model in other areas.

This project has influenced in fostering the starting of biowaste management and compost regulations in partners countries. Governments have taken into consideration the results of the project.

Project Sustainability

■ Very good reception of the project by authorities and final beneficiaries/High and wide impact.

■ Without this funding and tech assistance, advances in waste management would have taken more time to be developed in the areas (specially for non-EU partners).

■ The agreements with the local or regional authorities as well as with the biowaste producers will ensure the sustainability of the project.

■ The new biowaste management policies that are appearing in partners countries will also reinforce the sustainability of the project.

Weak points

Calendar constrains:

- Reception of the 2nd pre-financing (March 2015) to be able to start with investments (facilities and equipment).
- Time required to launch and award the tenders, time for construction or acquiring/delivery the equipment.
- A lot of time devoted to administrative procedures (budget changes, interim report, contingency, etc.), bottlenecks when overlapping two procedures.

Relationship with final beneficiaries-local authorities: slow rhythms of Local entities for decision making and implementing actions (like biowaste collection).



Project Outputs

**Spreading the SCOW
model and fostering its
reproduction**



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Best practices Database

It includes **14 records with detailed technical and economical information** about collection and specially treatment systems using different decentralized composting models with good results and functioning.

<http://www.biowaste-scow.eu/Best-Practice-Database>



Home » Results & Resources » Best Practice Database » List of database

List of database

Berriz (Vizcaya, Pais Vasco, Spain)	Initial experience of a composting mini-facility to treat the household biowaste. Collected biowaste is transported in an electric truck to the composting site, placed in a public park with gardens and sport fields. The composters are modular to be able to increase the treatment capacity gradually.	Download (985.8 kb)
Berriz - technical datasheet		Download (1.4 Mb)
Ballinasloe compost facility	Pollboy landfill, county Galway, Ireland	Download (190.3 kb)
Pollboy Landfi II (County Galway, Ireland)	The facility was built to comply with the EU and Irish directives to divert organic waste from landfilling. The approach for Ballinasloe involves targeting all organics from households with a source separated collection and composting system.	Download (1.1 Mb)
Boadella i les Escaules (Girona, Catalonia, Spain)	Composting facility in a tourist town in the Pyrenees. Collection and transport of urban waste was very expensive because of the long routes by mountain roads. This small facility allows to treat the biowaste generated in households and tourist establishments in town. The garbage truck only has to collect and transport the non-organic fractions.	Download (1.1 Mb)
Boadella - technical datasheet		Download (308.2 kb)

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Training protocols,
communication
materials and infopacks

<http://www.biowaste-scow.eu/Quantified-outputs-WP2>

<http://www.biowaste-scow.eu/Project-Reports>

WP2 - SCOW Communication Plan - Quantified outputs

30 November, 2014

Related Documents:

Communication Plan SCOW, Communication materials for the SCOW project campaign

- SCOW Communication Plan
- Communication materials for the SCOW project campaign
- The SCOW campaign materials are available for you
- Communication plan
- Launching Conference (Barcelona month 6)
- Newsletters (every six months)(6)
- Local awareness event (1 per plant, except PP4 that will unify some of these events)(8)
- Final project Local Events & press conferences (1 per plant, except PP4 that will unify some of these events)(8)
- Final Project Conference at Mediterranean level (Palestine, month 36)
- Final Conference publication
- SCOW campaign- edition of 3 typologies of stakeholders infopacks (bin stickers, information posters and leaflets, etc, according to the target: citizens, hotels & catering industry, and other business producers of organic waste)articles in relevant specialized journals or magazines related to low-tech organic waste treatment (3)
- Press releases (PPs building composting plans will issue a press release at the beginning and at the end of the project)(12)



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Handbook for small scale composting facility management

Easy-to-use handbook addressed to staff in charge of the composting plants, aimed at providing with information, indications and recommendations to operate in a proper way small scale composting facilities as well as to facilitate the management of any incidence.

<http://www.biowaste-scow.eu/Handbook-of-facility-management>

6 Mixing the bulking and biowaste at small scale

If the facility was designed for using dynamic system (open or closed) the mixing of the different materials will take place from the first moments of the fermentation stage. It is clearly important that the work protocol of the facility includes the using of the dynamic system for turning and mixing from the very beginning of the process. Some examples of using of a turning machine to build the windrow (figure 5 and 6).



Figure 5.- Example of how to form a composting windrow. 1- A first layer of the bulking material is sprayed on the ground; 2- View of the bottom layer of bulking material; 3- A layer of the main organic waste (manure, biowaste,...) is disposed over the first layer of bulking. The number of shovelfuls should be counted to adjust the mixing proportion of bulking and organic waste; 4- View of the organic waste disposed over the layer of bulking; 5- Next another layer of bulking material is disposed to adjust the proportion of two parts of bulking for each part of organic waste that is used in this case; 6- Aspect of the windrow when all the materials has been provided; 7- When finished is necessary to homogenize the mixture of materials. In this case a self-propelled turner is used; 8- After this first turning the windrow is homogenous and has a good porosity for the developing of the composting process.

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Handbook for small scale composting facility management

Handbook for small scale composting facility management



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Manifesto for proper food waste management in the Mediterranean Basin/ Policy recommendations

The document outlines the **best strategies, measures and activities to develop an efficient and proper management of food waste in the Mediterranean Basin.**

You are kindly invited to join the Manifesto initiative via:

<http://www.biowaste-scow.eu/Manifesto-for-food-waste-managment>

The screenshot displays the SCOW project website. At the top, there are logos for the European Union, ENPI CBC MED Programme, and ENPI CBCMED. A navigation menu includes 'About | Plan & Activities | Get involved! | News & Events | Results & Resources | Compost Network | Members'. A banner image shows composting with the text: 'The earlier the waste is sorted, the greater the separation potential and the greater the value of recyclable components.' Below this is a 'Get involved!' link leading to the 'Manifesto for food waste management in the Mediterranean Basin' page. On the left, a sidebar lists 'Target Groups and Final Beneficiaries', 'Regulation at Different Countries', 'Local activities & workshops', and 'How to Get Involved'. The main content area features a 'sign up on the manifest:' form with fields for 'Name of the signatory', 'Name of the entity', 'E-mail', and 'Address', and a 'SEND' button. Below the form is a 'Newsletter sign up' section with 'NAME' and 'EMAIL' fields and a 'SUBMIT' button. The right side of the page shows the title 'Manifesto for proper food waste management in the Mediterranean Basin' and a small image of a compost bin. At the bottom, there is a disclaimer: 'The provided personal data will have the proper treatment by BCNecologia according to Llei Orgànica 15/1999, de Protecció de Dades de Caràcter Personal. You have the right to access, modify, cancel and oppose to their use through written procedure addressed to SCOW project, BCNecologia, C/Escar 1, 3 08039 Barcelona, or sending an email to nohales@bcnecologia.net.'



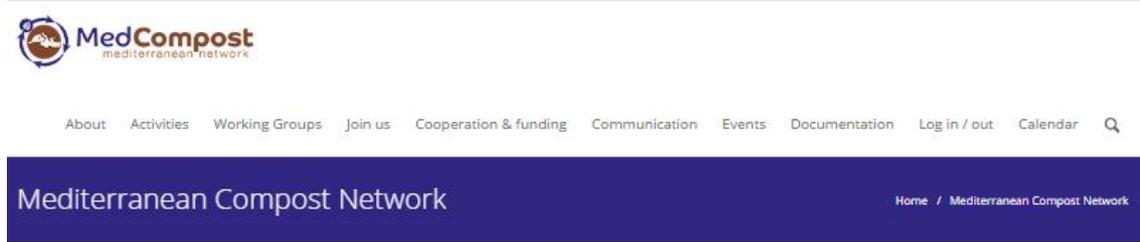
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Mediterranean Compost Network

Network of entities involved in biowaste management and treatment in the MED area promoting initiatives aimed at high quality biowaste management and fostering means of communication and interaction among target entities.

WWW.MEDCOMPOST.NET

Provide with continuity to the MCN, find sources of financing/supporters >>new ENI calls



Network of entities involved in biowaste management and treatment in the MED Area promoting initiatives aimed at



Join the group of members of the MCN Join the group of sponsors of the MCN



Find out the upcoming events and training sessions. The information and presentations about the past events are

Other Outputs

- **Guidelines defining the SCOW model and monitoring**
- **Handbook for compost marketing**
- **Final Vademecum**

Find all this info on the SCOW website <http://www.biowaste-scow.eu/>

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valorisation in small-scale composting plants

*Thank you very much
for your attention*

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BCN
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**ENVIRONMENT
PARK**

For additional information on the project please visit
SCOW website:

<http://www.biowaste-scow.eu/>