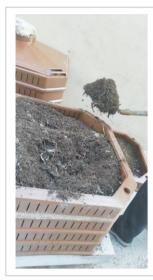
Municipality of Katerini

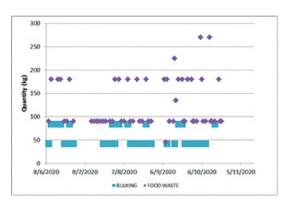
Two Autonomous Composting Units (ACUs) have been installed, one in Prosilio Community (a small residential community) and one in the General Hospital of Katerini





The temperatures developed during the pilot application of composting are in the range of optimum temperature values for the longest substrate residence time in ACU.

From the temperature data of the pilot application of composting of bio-waste it is estimated that the required condition of 60°C is achieved for at least 7 days during the thermophilic phase of the process (in the first part of ACU) for the ACUs of the General Hospital and Prosilio.



Food Waste and bulking added to ACU (Prosilio)

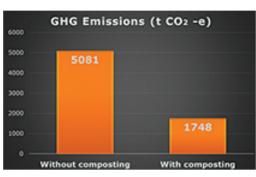
Municipality of Probistip

In Probishtip Municipality there are 2 ACU's, one in the center of the town and one in Kalnishte settlement. Moreover, there are bins with chips for the households and RFID reader.

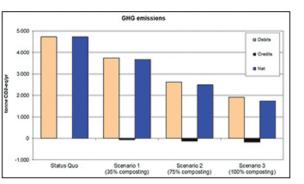


But, all project results wouldn't be so valuable if the main goal was not reached - changing the habits of the local population and increasing their knowledge about recycling processes and their significance in the environmental protection.

In the next diagram the emissions of the greenhouse gas without composting and with composting is depicted:



The next diagram shows three scenarios starting with the 0 point or status quo and modeling if with composting 35%, 75% or 100% from the organic waste:



Municipality of Yermasoyia

The Municipality of Yermasoyia has successfully proceeded with the installation of four ACUs in two pilot areas, one ACU in a Hotel (pilot 1) and three ACUs in three parks (pilot 2).



Following the installation process, a pilot operation of up to 6 months was implemented. For the pilot area 1, the total amount of organic waste disposed of during the pilot period of three months was ~6,510 kg. In addition, the total amount of final compost (kg) produced for the pilot period was ~3,750 kg. For the Pilot Area 2, the amount of organic waste disposed of and the amount of compost produced was:



510-Diamesou	511-Kykladon	512-Thermopilon	Total (kg)
240	1,000	144	1,384

Based on the environmental evaluation of the pilot operation, it has been concluded that composting practices, can help with: stabilization of landfill waste, reduction of the quantity of solid organic waste being disposed of, reduction of toxic and greenhouse gases released during the decomposition process and encouragement of the reuse of the final product in agriculture and gardening. The compost produced by the ACUs can act as a soil conditioner enhancing soil fertility.

Project Coordinator



Municipality of Katerini, Greece
Address: Dimarcheiou Sq., 60133 Katerini, Greece
E-mail: grammateia@katerini.gr

Tel.: +302351350510 Fax: +302351036380 URL: www.katerini.gr

Project Partners



Municipality of Probistip, North Macedonia



Municipality of Yermasoyia, Cyprus



Hellenic Mediterranean University - Educational and Research Committee, Greece



University "Goce Delcev", North Macedonia

What we learned from BIOWASTE?

Complete systems have been developed and implemented in 3 municipalities, which enable:

- identification of the waste producer and measurement of the amount of waste;

- generating data (routes, quantities, generating locations), which are necessary for more economical and efficient waste management at all levels.

- opportunity to encourage the selection of biodegradable waste by reducing costs.

Implementation of composting and "Pay As You Throw" systems is crucial, especially in the beginning of regional waste management schemes. Waste management is a shared responsibility. Everyone who creates waste is responsible for the way they treat it! With the scheme of sorting at the place of creation and of composting of biodegradable waste, we not only help the environment, but also help ourselves financially, as in this way money savings will be achieved.

But what is more important is that the project has met great public acceptance!



BIOWASTE

"Utilising Pay As You Throw Systems and Autonomous Composting Units for Biowastes Management in Touristic Areas"

Municipality of Katerini

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Utilising Pay As You Throw Systems and Autonomous Composting Units for Biowastes Management in Touristic Areas





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