

“Extension of the existing methanisation plant”

/ Mallorca



Description of the good practice

Lately Consell de Mallorca has concentrated its efforts on policies that encourage the development of organic waste collection and treatment.

In 2018, 25.350 tonnes/year of organic waste were collected. This organic waste together with 14.040 tonnes of sewage sludge were treated last year at the methanisation plant.

This methanisation plant is intended for the production of biogas from the fermentation of the organic waste obtained from the municipal selective collection.

The transformation of organic material in the presence of humidity and in environments without oxygen causes this material to degrade and gas to be produced, mainly methane gas (which is used as fuel to generate electricity). The resulting matter (digested) is directed to composting plants. And non reused sewage is addressed to a wastewater treatment unit for subsequent use.

Moreover, the methanisation plant has a pre-treatment area where paper, glass, film and bulky waste are separated if found at a pre-selection cabin. Organic waste is also cleaned of metals (mainly aluminium) through a Foucault separator and a magnetic separator.

Once organic waste is introduced into the digester and by the action of bacteria with a lack of air and at a certain temperature, it suffers a biological process in which biogas is produced.

The biogas produced is used as a fuel in a cogeneration engine module for electrical production used both for plant consumption and for export to the power grid.

Therefore, because of the increase of organic waste selectively collected foreseen for the following years, an extension of the methanisation plant is already been built and will probably be operative in July 2019. With this extension the capacity of the plant will grow up to 63.000 tonnes/year.

This extension will add treatment capacity to the whole Majorcan public waste management system together with the 4 existing composting plants and the existing solar drying facility.

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Results

Higher amount of organic waste treated.

Type of waste

Organic waste.

Location

Island of Mallorca.

Volume treated

63.000 tn/year.

Further information

[/www.tirme.com/uk/methanization_02f9s.html](http://www.tirme.com/uk/methanization_02f9s.html)