



SPAIN

Biovec

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The farm of Agronsella S.A. in Undués de Lerda (Zaragoza, Spain) has built a biogas plant, designed for the production of thermal energy for self-consumption in the heating system of the farm. The biogas plant is fed by the own pig slurry produced in the farm.

A short description of the process

The pig slurry is digested in a complete mix digester, with temperature control. The slurry is concentrated prior to its use in the biogas plant, so that the heat consumption for the process is minimized. The digested material is mixed with the non concentrated material.

The biogas produced is burned in a boiler, with the objective to substitute the fuel currently used for the heating of the farm. The digestate is stored in the farm until its use in the field as fertilizer.

150 000 m³ of biogas are generated annually, corresponding to 900 000 kWh/year and saving 90 000 litres of fuel.

The biogas plant is designed for the production of thermal energy for self-consumption

Key data:

Start of operation:	2013
Manufacturer:	Biovec
Type of plant:	Manure and slurry based with mixer in pre-treatment tank.
Location:	Undués de Lerda (Zaragoza). Spain
Amount of gas produced (m ³ per year):	150.000
Amount of biomass treated (tonnes per year):	2000
Investment costs (EUR):	220.000
Payback period (years):	4

Feedstock

Pig slurry (tonnes per year):	2000
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Production data

Available area for the output of the biogas fertilizer (hectares):	350,500
.....	is the regulatory demand meaning that there is a lack of 150 hectares.
Electric power of the gas engine (kW):	170 kW (thermal only)
Generated thermal energy:	900.000 kWh/year
Utilization of heat:	Self-consumption, used for heating system of the farm

Technical plant description

Size of reception facility (m ³):	55
Size of fermentor (m ³):	670
Size of end storage tanks (m ³):	580
Boiler (kWh):	170

The project BioEnergy Farm II wants to inform farmers about the benefits of micro scale digestion and give farmers a view on the feasibility of this technology for their business.

Are you curious about the feasibility of micro scale digestion on your farm?

From September 2015 we offer personal guidance at home! Our biogas experts have software tools to calculate the feasibility of micro scale digestion on your farm. Contact us!



www.BioEnergyFarm.eu



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remigio.berruto@unito.it | franco.parola@coldiretti.it



Co-funded by the Intelligent Energy Europe
Programme of the European Union