

## Biogas Plant MONTARGULL



Location:	Montargull, Spain
Construction Period:	2007
Input:	Pig manure, fats, sludge of slaughterhouse
Fermenter:	Concrete tank, 2,080 m <sup>3</sup>
Co-generator:	Gas engine, 364 kW
Special Features:	Gas holder above first and secondary digester, mesophilic operation, heat recovery
Costs:	820,000 €

This agricultural biogas plant in Catalonia, Eastern Spain is operated by Antonio Cairol. All the input substrates are pumpable e.g. sludges, fats and manure, and are stored in a reception tank prior to processing. The primary digester is equipped with three side-mounted agitators and the secondary digester with one. Gas holder roofs cover the primary and secondary digesters. The substrate is pumped from the reception tank into the primary digester. After primary digestion, the digestate is displaced through an overflow pipe to the secondary digester. From the secondary digester the digestate is pumped to a digestate lagoon where it is stored before it is spread on land as fertilizer. The outdoor temperature in Eastern Spain can reach 45° C in summertime. Therefore the biogas has to be cooled in a gas chiller before entering the co-generator.

The start-up occurred at April 2008. The owner receives a payment for the electricity generated and exported to the national grid in accordance with the Spanish Renewable Energy Sources Act.

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Responsibility of Krieg & Fischer Ingenieure GmbH:  
Preplanning, Detailed plans, Technical Preparation,  
Supervision of Construction, Start-up