

## CVO Sevadec - Calais, France

### Biogas Plant Description

The centralised biogas plant in Calais was built in 2005 to reduce the amount of household organic waste going to landfill. Fermentation takes place in one digester of a volume of 3100 m<sup>3</sup>. The digester uses the VALORGA process, working in thermophile mode (55 °C) with 25-30% dry matter content ("dry digestion"). The outgoing digestate is dehydrated in two drying tunnels for 20h at 17 500 Nm<sup>3</sup>/h airflow. The biogas is collected in the upper part of the digester for drying and filtering. The biogas is then compressed in two compressors and a double-envelope tarpaulin allows for stocking the gas at 25 mbar. A booster allows for raising the pressure to 100 mbar. Surplus and substandard quality gas is torched. The gas mainly feeds two generators (installed electrical power of 940 kW and 500kW respectively) and the electricity produced is sold to the public grid.

### Technology at a glance

Biogas production: 3 171 024 Nm<sup>3</sup>/a  
 Installed power: 1 440 kW  
 Digester type: dry digestion  
 Digester volume (m<sup>3</sup>): 3100 m<sup>3</sup> (15m x 18m)  
 Type of waste used: food oils, green clippings, other residential waste  
 Amount of waste/raw material used as substrate:  
 26 994 t/a of which 1478 t/a food oils,  
 2323 t/a other residential waste,  
 22 194 t/a fermentable waste and green clippings



### Information on financing

Year of realisation:	2005
total investment costs:	€ 21 million
feed-in tariff electricity:	not available
tariff for heat sale:	not available

### More information

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### Plant operator

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