

## Best practice example

### Biogas plants



## CVO Sevadec - Calais, France Biogas Plant

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 outcoming 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 2 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: 1440 kW

Digester type and volume (m<sup>3</sup>): dry digestion ;  
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  
(t/year): 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

Operating hours: ?



### Information on financing

Year of realisation: 2005

total investment costs: € 21 million

feed-in tariff electricity: ?

tariff for heat sale: ?

#### Information

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