



The biogas plant in Vliermaal (Belgium)

Planning

Construction

Start-up

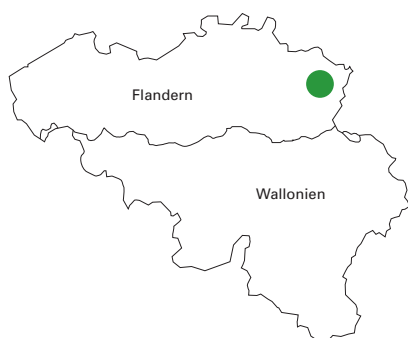
Operation

Service



← The Wauters family at the corn storage.

→ Silos placed at the side of the building for the storage of liquid input materials.



Location:
Capacity:
In operation since:
Input materials:
Features:

Fact sheet

Vliermaal / Belgium

1.063 kW_{el}

12/2008

Manure, maize, OBAs

Biogas plant at a pig farm with internal reception of production materials

The biogas plant in Vliermaal (Belgium)

An advanced biogas project of EnviTec Biogas in Belgium. At the Wauters family premises, EnviTec Biogas realised a project to implement a biogas plant of 1063 kW in the period from January 2008 to February 2009. The plant includes the construction of two fermenters of 2,200 m³. As well as the construction of the silo, EnviTec planned and carried out the project to turnkey completion. The biogas technology for the biogas plant has been integrated in the technical building. Some of the components are a corn silo of 80 m³, screw conveyor, a vertical mixer with a capacity of 40 m³ and a mixing tank with a capacity of 8 m³. Three silos have been constructed directly next to the building to receive liquid substrates.

The input for the biogas installation consists of dung, OBAs (Organic Biological Waste) and corn as well as other inputs. The corn is added by means of screw conveyor to the mixing tank from

one of the silos with a slide bottom, and the dung is pumped from the cellar into the mixing tank. The mixing tanks have been made in such a way that other products can also be added in the future (for instance glycerine).

The solid OBAs are added through the vertical mixer to the mixing tanks. In the mixing tanks the biomass is mixed and then pumped to one of the three fermenters (2,200 m³). This is fully controlled automatically from a central control. The biogas produced then passes to the cogenerator (1 x 1063 kW_{el}) where the gas is burned and electricity and heat are produced. The electricity is sold to the public electricity grid and the heat is partially used for the fermenting process and partly to thicken fermented dung. The fermented biomass flows to a PE tank with a capacity of 12.5 m³, from where it is pumped to a storage device provided by the customer.