



The biogas plant in Volta Mantovana (Italy)

Planning

Construction

Start-up

Operation

Service



← The residual heat is used in the residential buildings.

→ The fermenter separation guarantees a constant amount of dry matter.



Fact sheet

Location:

Volta Mantovana / Italy

Capacity:

999 kW_{el}

In operation since:

07/2009

Input materials:

Liquid and solid manure, maize silage, cereal silage

Features:

Maximum performance in electricity production and use of residual thermal energy to heat the farmhouse buildings. 100% redundant intake and mixing. Cutting-edge organic management technology

The biogas plant in Volta Mantovana (Italy)

The plant owned by the management company Volta Energia Società Agricola s.r.l. was EnviTec's first in Italy. It became operational in July 2009. The plant, which uses cutting-edge technology, consists of two digesters with a total net volume of 5,120 cubic metres. It is powered by the slurry from around 250 heads of cattle, contributing up to 3,500 tonnes of slurry a year, and by the energy crops from around 300 hectares of agricultural land.

The company has invested in an innovative EnviTec plant using cutting-edge technology to achieve maximum performance in electricity generation. It has a dual organic digester configura-

tion with dual, interchangeable biomass feed and mixing technology. The plant also has a fermentation substrate separation stage, which allows the separated liquid parts to be recycled into the two digesters, and a solid fraction to be recovered for use in agriculture.

The cogeneration plant has a rated electrical capacity of 999 kW_{el} and 645 kW thermal output. It feeds around 8 million kWh a year into the public electricity grid. The residual heat is used to heat the farmhouse buildings, thus saving on heating costs. In the start-up phase alone, the plant has achieved an outstanding 95% performance rate.