



The aerial photo is used with friendly permission of MT-Energie Italia

The biogas plant in Bondeno (Italy)

- Planning
- Construction
- Start-up
- Operation
- Service



← The innovative mixing and recirculation shaft is a multi-functional component. Its primary advantage is that the air recirculation device does not need to be pumped into the pre-mixer. As a result, pumping time can be significantly reduced and energy costs as well as maintenance cost may be cut.

→ The 2 MW_{el} plant built by EnviTec Biogas Italy offers state of the art technology.



Fact sheet

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

Bondeno / Italy

4 MW_{el}
10/2010

Biomass of agricultural origin (corn, sorghum, triticale)
Bioenergy Parks SpA has constructed the largest energy park in Italy converting agricultural biomass into biogas. On a 9-hectare site, four 1 MW_{el} plants with a total installed power of 4 MW_{el} generate energy equivalent to the average consumption of around 15,000 households per year.

The largest biogas park in Italy

Bioenergy Parks was implemented with the collaboration of Italian and German companies, including EnviTec Biogas and MT-Energie for the construction of the biogas plants, CPL for the cogenerators and C.A.P.A. Ferrara for the input material. With the objective of providing clean energy, the investment of 20 million euros creates a powerful social value added to the operations, and gives a strong economic boost to the region's agriculture. Every year, in fact, around 72,000 tonnes of dedicated biomass are used, which originates from around 1,500 hectares of land located in farming areas no more than 20 km away from the facility.

The equipment and services provided by EnviTec includes the implementation of the silage feeding technology, the collection tank for liquid biomass, two fermenters, two storage tanks for the digestate,

a technical room and the innovative mixing and recirculation column. This technology also confirms the competitive advantages of all EnviTec plants, such as mixing outside the fermenter, the ability to block the passage of undesirable objects (stones, pieces of metal or wood) and the high-efficiency shredding.

A further advantage is the use of "EnviTec Feedcontrol", which was awarded "Machine of the Year 2010" at the Agritechnica trade show in Hanover. This control system automatically changes the feed intervals to the fermenters so that the production of biogas remains high and constant, with online monitoring of the biological activity and pressure of the biogas in the fermenters. The first result of this application is that it minimizes the use of the torch, which means minimizing waste of biomass.