

Biogasanlage BUCHLOE



Location:	Buchloe, Bavaria, Germany
Construction Period:	2006
Input:	Maissilage, GPS, Grassilage
Fermenter:	Glass coated steel tank, 4.610 m ³
Co-generator:	2 x 526 kW _{el} gas engines
Special Features:	Gas holder above storage tank, pure energy crop digestion without addition of manure, thermophilic operation, full heat recovery

The biogas plant Buchloe is owned by the company "Futtertrocknung Kaufbeuren e. G". 51 farmers deliver corn silage, grass silage and whole plant silage as input to the biogas plant. The silage is temporarily stored in a silage bunker with walking floor before it is fed to the digester with a piston pump. The digester is a high upright tank equipped with a top-mounted mixer to agitate the digester content. An external heat exchanger is used to maintain the thermophilic temperature inside the digester. After digestion the digestate is stored in two covered storage tanks with a volume of 3,380 m³ each. To allow both on-site and off-site supervision and control of the whole process the biogas plant is equipped with a fully automatic control system.

Two gas engines convert the produced biogas into heat and power. All surplus heat, including heat recovered by the exhaust gas heat exchangers, is used throughout the year to produce hot water (105 °C) that is sent to a nearby slaughter house, where it is available with 90 °C at the heat exchanger. All electric power is fed into the power grid and is remunerated according to Renewable Energy Sources Act.

Responsibilities of Krieg & Fischer Ingenieure GmbH:

Conception, Pre-planning, Permission, Detailed final construction plans, Tenders, Supervision of Construction, Start-up