

St. Martin, Upper Austria

Biogas Plant Grossfurtner

This biogas plant in the village of St. Martin is directly integrated into the largest abattoir of Austria. The company Großfurtner slaughters 550,000 pigs and 50,000 cattle per year. It is the first biogas plant worldwide which exclusively uses slaughterhouse waste as substrate for biogas production. All in all 10,000 tons of blood, rumen content, colon content and grease separation material is used to produce 3.6 Mio. kWh electricity and 3.6 Mio. kWh heat per year.

The aim of the project was the improvement of the economic and ecological performance of this abattoir. Two cost intensive areas in the company are the energy costs (natural gas, electricity) and the disposal costs for the slaughterhouse waste. By using the slaughterhouse waste as substrate for biogas production Großfurtner can reduce the disposal costs and can cover approximately 33% of their electricity demand and 75% of their heat demand with renewable energies.

Technology at a glance

- Biogas production: 5,000 m³/day
- Methane content: 67% – 69%
- Installed power: 525 kWel, 525 kWth
- Digesters: 1x600 m³, 2 x1,000 m³
- Substrate/year: 2,000 m³ blood, 1,000 t rumen content, 3,000 t colon content, 4,000 t grease separation material
- Input waste/substrate: 170 – 230 t/week
- Pre-treatment: continuous pasteurisation
- Operating hours: 8,400 h/ year



Information on financing

Year of realisation: 2003

Investment costs: € 1.8 million (first stage in 2003)

Feed-in tariff electricity: 11 cent/kWh

Tariff for heat sale: covering for own heat demand

Disposal costs: 5 – 50 €/ton slaughterhouse waste

More information

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