



The EnviThan gas upgrading plant in Ipsden, Oxfordshire (Great Britain)

Planning

Implementation

Commissioning

Operation

Service



← SEPURAN® Green membrane modules

→ Exterior view



Icknield Gas Ltd., Great Britain

Location:

Ipsden, Oxfordshire (GB)

Capacity:

38,000 MWh/a

In operation since:

December 2014

Input materials:

Pig slurry, agricultural by-products, energy crops

Features:

Production of 370 Sm³ biomethane, 360 kW_{el} CHP, supply of biomethane to 2,150 households, use of fermentation residues as fertilisers

38 million kilowatt hours per year

Icknield Gas Ltd. is the first biogas plant in Great Britain with a gas processing facility from EnviTec Biogas AG. Since the end of 2014, the 370 cubic metre plant, along with a 360 kW_{el} combined heat and power plant in Ipsden, Oxfordshire, is feeding into the existing network of the Southern Gas Networks. The delivery pressure of the EnviThan plant is thereby sufficiently high; an additional compression is thus not required. The CHP is used for parasitic demands with the balance being fed into the grid.

The biogas plant is operated using a combination of corn silage, pig slurry, grain and whole-plant silage. This way, around 10,000 tonnes of pig slurry can be used annually, preventing the need to spread raw slurry onto local fields.

Using the EnviThan biogas upgrading, Icknield Gas Ltd. supplies an annual energy volume of approximately 35 million kilowatt hours (kWh) of biomethane.

A British home consumes an average of about 16,500 kWh of gas per year – with the new plant, the customer can supply gas to about 2,150 households. Furthermore, the subsequent use of the fermentation residue as fertiliser will lead to a reduction in the use of chemical fertilisers in the neighbouring agricultural area.