



EnviThan – gas upgrading
with membrane technology

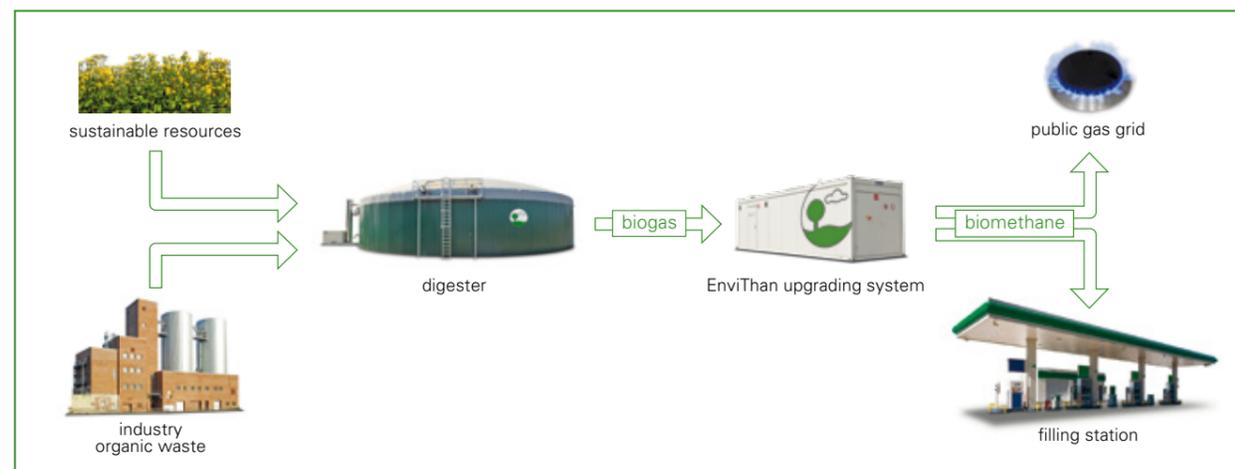
The future of renewable energy sources is biomethane.

About EnviThan

The market for the upgrading of biogas into biomethane is an exciting development. Biomethane has the same characteristics as natural gas with the advantage of being renewable and sustainable. It can be fed into the natural gas network.

As a renewable gas it provides the same degree of flexibility as natural gas and supports the strategic move away from using fossil fuels. The EnviThan upgrading system from EnviTec Biogas UK affords a highly efficient technical solution.

The EnviThan system upgrades biogas with as little as 50% methane content to biomethane with greater than 97% methane. For use as a renewable energy technology EnviThan provides a cost effective, efficient solution with tried and trusted performance, proven over time.



Case Studies

Icknield Farm

Location: Ipsden, Oxfordshire

In operation since: 2014

Input materials: Maize, rye, pig slurry and other organic agricultural wastes

Features:

- > Producing 450 Sm³/h biomethane
- > 360 kW_{el} CHP
- > Supplies gas via the grid to 4700 homes
- > Digestate used as fertiliser

Icknield was the first EnviTec Biogas UK gas to grid plant constructed in the UK. It utilises agricultural input materials to generate renewable energy in the form of biomethane injection to gas grid network as well as electricity via a CHP. It also has the added advantage that fossil derived fertiliser is being displaced by use of the resulting digestate from the AD process.



David Bermingham,
Developer, Icknield Farm

»The reason for selecting EnviTec was their financial strength, experience of gas to grid and ability to deliver a turn-key project.«

Peacehill Farm

Location: Wormit, Fife

In operation since: 2015

Input materials: Rye, beet, poultry muck and other organic agricultural wastes

Features:

- > Producing 550 Sm³/h biomethane
- > 249 kW_{el} CHP
- > Supplies gas via the grid to more than 5000 homes
- > Digestate pasteurised and used as fertiliser

AD was a natural extension for their use of renewable energy on the 1,800 acre farm. Already producing broiler chickens, cereals and vegetables it made sense to create energy from its waste streams. All biomethane produced on site is fed into the natural gas network whilst electricity generated by the CHP is used by the farm itself. Pasteurisation enhances the processing of the digestate enabling greater flexibility for its use as a fertiliser.



Ross Forster,
Managing Director, Peacehill Farm

»I really believe that other farms and businesses can benefit from AD particularly if they have an onsite energy requirement.«



About EnviTec Biogas

- + Europe's strongest partner for biogas and biomethane technology with more than 600 plants worldwide
- + Experience of owning and operating 76 plants with an average efficiency of 97%
- + Strong financial background of the EnviTec group
- + Biological and mechanical service support and maintenance provided by EnviTec Biogas Service UK
- + Main UK offices based in the Midlands offering nationwide support



EnviTec Biogas UK Limited

Unit 3, Rydal Estate
Colton Road, Rugeley
Staffordshire, WS15 3HF
Tel.: +44 1889 584459
Fax: +44 1889 578088

info-uk@envitec-biogas.com
www.envitec-biogas.co.uk

EnviTec Biogas AG

Administration:
Industriering 10 a
D-49393 Lohne
Tel.: +49 4442 8016 8100
Fax: +49 4442 8016 98100

Sales and processing:
Boschstraße 2
D-48369 Saerbeck
Tel.: +49 2574 8888-0
Fax: +49 2574 8888-800

info@envitec-biogas.com
www.envitec-biogas.com