



New IGEM technical standards for biomethane injection and biogas distribution

IGEM/TD/16 Biomethane injection and IGEM/TD/17 Steel and PE (polyethylene) pipelines for biogas distribution are set for publication during mid-2014.

Production, conveyance and utilisation of biogases and biomethane are growing industries in the UK, partly because of significant environmental benefits.

Biogas is the raw gas produced by the anaerobic digestion of organic materials on landfill sites and from agricultural and human wastes.

After cleaning and upgrading to a specification equivalent to pipeline quality natural gas, it is termed biomethane.

IGEM/TD/16 Biomethane injection is the result of an increasing demand for guidance on the injection of biomethane into the gas distribution network.

It will include requirements for design, construction, installation, inspection, testing, operation maintenance and decommissioning of future biomethane network entry facilities (BNEFs).

It will also cover additional steps which may be required before biomethane can be admitted into the network, including:

- Enrichment with Liquefied Petroleum Gas (LPG)
- Pressure control
- Flow management
- Metering
- Gas analysis
- Odorant injection
- Telemetry

The Didcot biomethane to grid project, funded by Scotia Gas Networks (SGN), established the viability of this technology.

In November 2012, the UK's first commercial biomethane to grid plant opened in Poundbury, Dorset (also SGN), and several other projects are underway.

IGEM/TD/17 Steel and polyethylene (PE) pipelines for biogas distribution will be for use in conjunction with existing standard *IGEM/TD/3 Steel and PE pipelines for gas distribution*.

There is an increasing demand for guidance on the installation of biogas pipelines. This technical standard will deal primarily with safety concerns relating to biogas composition.

It will cover the predominantly underground network of pipes that convey biogas from biogas production plants to a suitable point for use in the industrial and commercial sector or upgrading to biomethane.

It covers pipelines distributing biogas of a maximum operating pressure (MOP) not exceeding 2bar and at a temperature from 0°C to 40°C inclusive for PE and -40°C to 100°C inclusive for stainless steel.

Once *IGEM/TD/16* and *IGEM/TD/17* have been published, IGEM members and the wider industry will be notified that the standards are available to purchase in hard copy and as part of online standards access packages.

IGEM would like to thank panel *TD/16 & TD/17* co-chairs Neil Jackson, of National Grid, and IGEM's Peter Hardy, as well as all panel members for their contributions in setting standards for this highly innovative and growing sector. ■

In the meantime to register your interest or for any questions relating to the contents of these forthcoming standards, please email technical@igem.org.uk or call 0844 375 4436.