

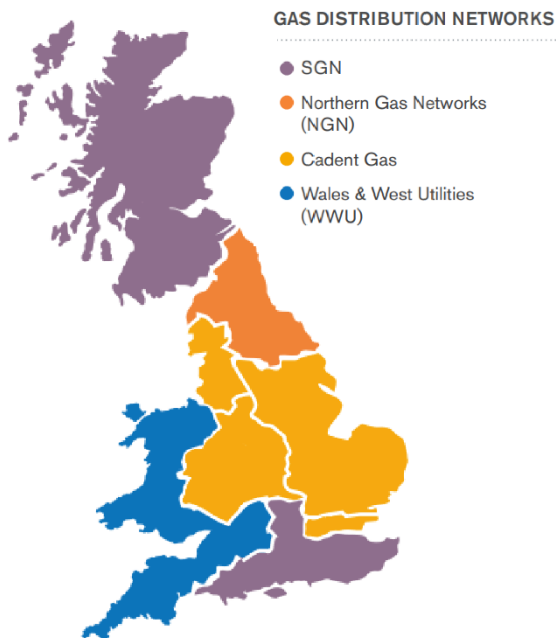
# Utility Jargon Buster - Gas

V1 – JUNE 2019

## Connections

**Gas Distribution Networks (GDN)** - there are four Gas Distribution Network companies, each of which covers a separate geographical region of Great Britain. These networks are owned and managed by the following companies:

- Cadent Gas
- Northern Gas Networks
- SGN
- Wales and West Utilities



**Independent Gas Transporters (IGT)** - these develop, operate and maintain local gas transportation networks. IGT networks are directly connected to the *Gas Distribution Network (GDN)* via a *Connected System Entry Point (CSEP)* or indirectly to the *GDN* via another IGT. It is estimated that the number of consumers connected to IGT networks is around one million.

**Utility Infrastructure Provider (UIP)** - are accredited companies that can build or modify connections to the gas network, but they do not own the network or connections they build. For a UIP to carry out connection works they must be registered with the *Gas Industry Registration Scheme (GIRS)* that is administered by *Lloyd's Register*.

**Connected System Entry Point (CSEP)** – a connection point for a new gas pipe to the existing network.

**Network Code** - this is the strict contract that governs a *shipper's* relationship to National Grid, designed to ensure a level playing field.

**Gas Supplier** - these are companies that sell gas to consumers. Suppliers must have a contract with a *shipper* to arrange to have their gas conveyed to the consumer. Suppliers must obtain a license from *Ofgem* before they supply gas. The big six energy suppliers are British Gas, E.ON, EDF Energy, Npower, Scottish Power and SSE.

**Shipper** - the shipper is the company that arranges to move the gas from where it comes onshore to the consumer. Shippers must have a license from *Ofgem* before they can ship gas.

**Producers** - these are the companies who explore for gas, drill wells and take the gas to coastal delivery facilities.

**Transporter** - This is the company that transports gas from coastal delivery facilities (where gas comes onshore) on behalf of the *shippers*. All gas in the UK is transported by one of the regional *Gas Distribution Networks*.



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- 👉 **Gas Transmission Network** - Britain's gas transmission network, the National Transmission System (NTS), is the *high pressure* gas network which transports gas from the entry terminals to *Gas Distribution Networks*, or directly to power stations and other large industrial users. It is owned and operated by National Grid Gas Plc (NGG).
- 👉 **Pressure Reducing Station (PRS)** - is a large gas governor that reduces gas pressure in a network.
- 👉 **Gas Governor** - also called gas or pressure regulators, these reduce the pressure of gas flowing through a pipeline, meter or appliance.
- 👉 **Low Pressure (LP)** – operating pressures up to 75mbar. Typical pressure from a meter installation is 21mbar.
- 👉 **Medium Pressure (MP)** – operating pressure between 75mbar and 2bar.
- 👉 **Intermediate Pressure (IP)** – operating pressure between 2bar and 7bar.
- 👉 **High Pressure (HP)** – operating pressure between 7bar and 16bar. These mains are owned and operated by the local GDN.
- 👉 **National High Pressure (NHP)** – operating pressure between 16bar and 100bar. These mains are owned and operated by National Grid Gas.
- 👉 **mbar** – is a metric unit of pressure (millibar). 1000 mbar is equal to 1bar
- 👉 **bar** - is a metric unit of pressure.
- 👉 **Compressed Natural Gas (CNG)** – is a natural gas that is cheaper, greener and more efficient to the traditional alternatives (petrol & diesel).








- 👉 **Liquefied Natural Gas (LNG)** – is a non-toxic liquid that is formed from natural gas when cooled to -162°C.
- 👉 **Liquefied Petroleum Gas (LPG)** – is a hydrocarbon gas in liquid form. Its two main forms are propane and butane.
- 👉 **Renewable Natural Gas (RNG)** – is a biogas which is primarily methane-based. It is created from organic waste breaking down.

## Metering

- 👉 **Meter Point Reference Number (MPRN)** - is the number given to uniquely identify every point on the network where a meter could be or is connected.
- 👉 **Meter Asset Manager (MAM)** – the key responsibility for gas meter provision is with the MAM. This is the company that a *gas supplier* or *gas transporter* contracts to provide metering services to customers and is responsible for the meter at all stages of its life from cradle to grave.
- 👉 **After Diversity Maximum Demand (ADMD)** - the combined maximum demand for one or multiple customers when a diversity factor has been applied.
- 👉 **Annual Quantity (AQ or AAQ)** - the annual quantity of gas consumed measured in kilowatt hours (kWh).
- 👉 **Kilowatt Hour (kWh)** – is a unit of energy. 1kWh is equal to 3.6 megajoules.
- 👉 **Megawatt Hour (MWh)** – is a unit of energy. 1 megawatt is equal to one million watts.
- 👉 **Therms** - This is a unit measure for gas. One therm is equal to 29.3071kWh.



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-  **Calorific Value (CV)** - the calorific value is a measurement of the amount of energy contained in the gas. CV is usually quoted in megajoules per cubic meter (MJ/m<sup>3</sup>). Gas delivered to your premises will have a CV of between 37.5 MJ/m<sup>3</sup> and 43.0 MJ/m<sup>3</sup>. This is continually measured by National Grid for each Local Distribution Zone and passed to your *gas supplier daily*.
-  **Correction Factor** - the correction factor is used to take account of the temperature and atmospheric conditions at a site. It is generally of the order of 1.02264.
-  **Load Profile** - Most consumers use more gas in the cold winter months than the warmer summer months. If you are on a variable rate contract, in the absence of meter reads, your *supplier* will bill you on the standard profile, as a percentage of your *Annual Quantity*. See example below:
-  **Lloyd's Register** – Operates the *Gas Industry Registration Scheme (GIRS)* which allows companies to become *Utility Infrastructure Providers (UIP)* (<http://www.lr.org/en/>)
-  **Gas Industry Registration Scheme (GIRS)** – is the *Lloyd's* accreditation scheme for the installation and design of gas networks. (<https://www.lr.org/en-gb/utilities/girs/>)
-  **Energy Networks Association (ENA)** – The industry body of UK gas and electricity transmission and distribution licence holders (<http://www.energynetworks.org/>)
-  **Institution of Gas Engineers and Managers (IGEM)** – An engineering institution licensed to assess gas engineers and technicians (<http://www.igem.org.uk/>)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
% Used	13.8	13.6	12.2	9.8	7.1	4.2	2.4	2.4	4.2	7.3	10.3	12.7

## Other

-  **BEIS** - this is the Department of Business, Energy and Industry Strategy. This government department brings together responsibilities for business, industrial strategy, science, innovation, energy and climate change. ([www.gov.uk/department-for-business-energy-and-industrial-strategy](http://www.gov.uk/department-for-business-energy-and-industrial-strategy))
-  **Office of Gas and Electricity Markets (Ofgem)** – regulates the gas and electricity industries in Great Britain. Ofgem is governed by a market authority and its powers are provided for by Acts of Parliament. Everything that Ofgem does is designed to promote and protect the interests of gas and electricity customers. (<https://www.ofgem.gov.uk/>)