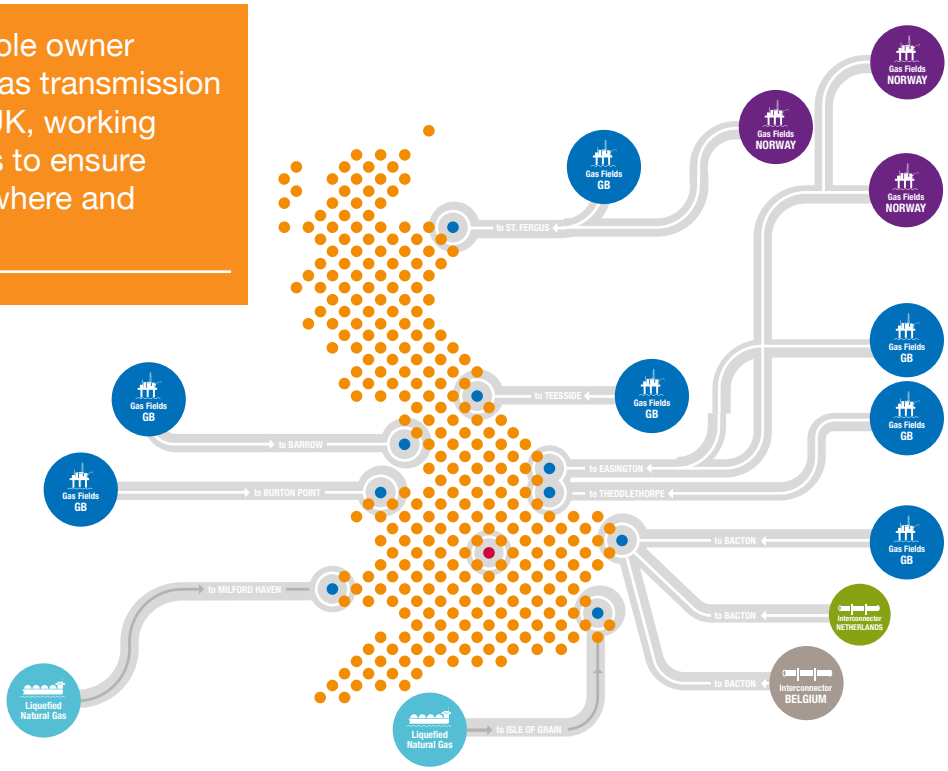
nationalgrid

National Grid factsheet

Managing the gas network

National Grid is the sole owner and operator of the gas transmission infrastructure in the UK, working with other companies to ensure that gas is available where and when it's needed.



SOURCES OF GAS INTO GREAT BRITAIN TODAY

● = Gas National Control Centre

Virtually all gas in the UK passes through National Grid's National Transmission System (NTS) on its way to consumers.

The role of the System Operator is to ensure the safe and efficient operation of the National Transmission System, by maintaining pressure and gas quality across the network. In addition, while shippers have primary responsibility to balance their individual portfolio on a daily basis, National Grid acts as the residual balancer.

More than 40 per cent of the UK's gas supply comes from the North Sea. Elsewhere, shipments of liquefied natural gas (LNG) are received at three import terminals, while Norwegian and continental gas is also imported through a series of interconnectors and pipelines. The diagram shows the diverse range of supply sources into the UK. Over the last five winters we've typically seen flows ranging from 240 – 340 million cubic metres (mcm) per day. The highest flow has been 464mcm, the lowest 160mcm.

The UK gas market has always provided secure supplies. It is likely to remain resilient based on forecasts provided by our customers and stakeholders in all but the most extreme circumstances. However in the event that forecast demand exceeds expected supply the following notices will be issued to the market.

- **Margins Notice:**
This is a high-level message to all those who use the National Transmission System. It explains that there could be a mismatch between supply and demand during the next Gas Day, a period of time running from 5am to 5pm (these times will be effective from 1 October 2015).

- **Gas Deficit Warning (GDW):**
National Grid issues this in advance of or during the Gas Day when a significant mismatch is forecast in the National Transmission System. It's designed to alert everyone that the system is out of balance, either because more gas is needed to meet demand or because supplies have been interrupted.

Managing the gas network

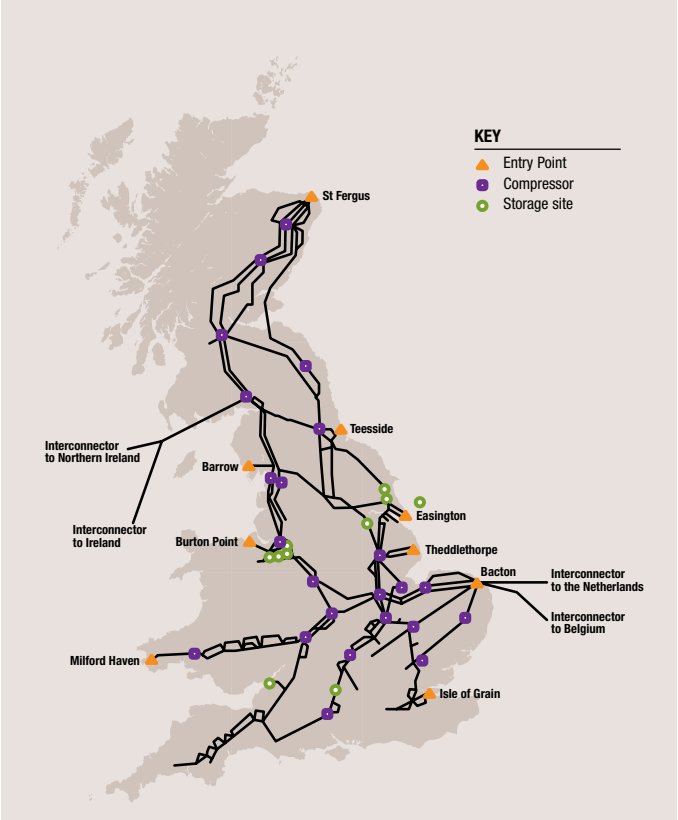
Gas storage

There are three different types of gas storage sites:

- **Long Range:**
There is one long range storage site on the NTS: Rough, situated off the Yorkshire coast. Rough is owned by Centrica and mainly puts gas into storage (a process called 'injection') in the summer and takes gas out of storage ('withdrawal') in the winter. When the long-term storage at Rough is completely full, it takes around three months to empty because the gas can only be withdrawn at a certain rate.

- **Medium Range:**
These commercially-operated sites have shorter injection/withdrawal times so can react more quickly, injecting when demand or prices are lower and withdrawing when they are higher. A site like this may deliver gas into the system one morning and, depending on price and conditions, refill in the afternoon.

- **Short Range:**
The only short-range storage site on the NTS is at Avonmouth near Bristol. This onshore site stores liquefied natural gas that's been condensed from the NTS and not delivered by ship. When needed, the liquid gas is re-vaporised and delivered to the NTS. Such sites can respond quickly but only have limited stock. (Operational activities at Avonmouth facility will cease on 30th April 2016 as per the outcome of the stakeholder consultation.)



The map above illustrates the locations of all NTS storage sites in the UK.

For more information on National Grid's gas transmission system call the press office on **01926 656536** or visit **www.nationalgrid.com/uk/Gas.**