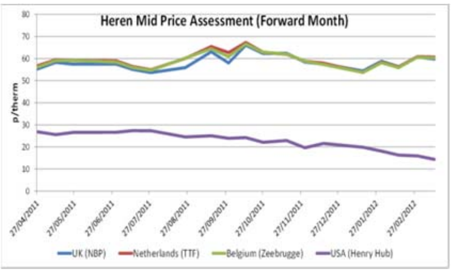
Black Cat Energy Services
News and Analysis

Q1 2012 Issue

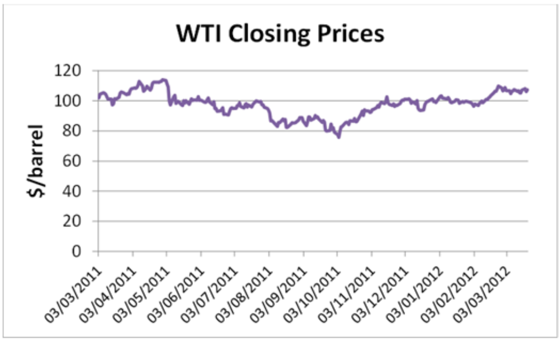
UK: Are we paying too much for our gas?

Over recent weeks, UK newspapers have published stories concerning high UK gas prices and the resulting impact on fuel poverty. These stories have pointed at the UK's increased dependency on natural gas imports; others have contrasted the high price of natural gas in the UK with the low price of gas in the USA, hinting at a lack of competition in the UK. How much of this is true, and if gas prices in the UK are so high how come low price gas from the USA has not come to the UK? This short article looks at the level of UK gas prices and seeks to explain why gas from the USA has not come to the UK.



Since April 2011, wholesale gas prices in the UK, and also Europe, have traded in a range of between 50 to 65 pence per therm. At the same time gas prices in the USA have steadily fallen from 28 to 15 pence per therm.

Gas prices in the USA are weak due to the increasing availability of natural gas resulting from the exploitation of shale gas resources. Gas prices in the UK and across Europe are so much higher because Europe is generally dependent on imports of natural gas, much of which is still purchased under long term contracts. Prices of gas sold under these long term contracts are typically determined by formulae that refer to oil product prices. The price of oil has consistently remained close to $100 per barrel and as a result the price of gas under these long term contracts remains high.



The UK and Europe are connected via a number of gas pipelines, with Europe connected via pipeline to gas sources in North Africa, Russia, and other more distant sources; in addition both Europe and the UK have a number of LNG import terminals, which connect them with the world gas market. Due to this interconnectedness and the reliance in the UK and Europe on imported natural gas, gas commodity prices in the UK have tended towards the price of gas under the European long term gas purchase contracts. In other words the UK has imported oil price related gas prices along with the physical gas needed to meet demand.

Welcome to the latest edition of our newsletter, our update on issues in the oil and gas industry.

If you have any questions about the matters raised in this issue please do not hesitate to contact us.

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What is LNG?

LNG means Liquefied Natural Gas, natural gas super chilled becomes a liquid and can be transported long distances by sea in specially built tankers.

LNG transportation by sea requires a chain of facilities:

1. A liquefaction plant, where natural gas is super chilled and turned into a liquid;
2. A loading plant, where the liquid natural gas is loaded into a LNG tanker;
3. The LNG tanker;
4. A discharge plant, where the LNG tanker can discharge its LNG;
5. A regasification plant, where the LNG is warmed and turned back into natural gas.

LNG tends to be more expensive than pipeline exports, but has the advantage of enabling more distant markets to be reached, and provides the exporter flexibility in choice of markets.

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Over 25 years oil and gas experience

Background in commercial negotiations & economic evaluation

Worked extensively in the UK, Europe and North Africa on upstream, midstream and downstream gas development projects

USA Gas Exports

But we have not answered why gas from the USA has not flowed to Europe to take advantage of the higher European gas price. The reason why gas has not flowed from the USA to Europe is that the USA doesn't have any export facilities capable of transporting the gas to Europe. Although the technology exists to liquefy natural gas in the USA and then ship it to the UK, there are no existing facilities to do this.

Before the exploitation of gas shale reserves the USA expected to import natural gas to meet demand; to this end a number of LNG import facilities were built, only to be made redundant by the realisation that the USA is sitting on top of huge gas shale reserves. Owners of these redundant LNG import facilities are currently planning to convert them into gas export facilities. However, companies may not be permitted to export surplus natural gas from the USA. The answer to the question "are low gas prices good for the USA?" depends on whether you are a producer or consumer; both sides are busy mobilising their media teams, and with the USA gearing up for Presidential elections there is no shortage of politicians willing to opine on the merits / evils of gas exports.

Oil Price Influences

High UK / European Gas Prices

1. High Oil Prices
   a. China and India continue to grow energy requirement
   b. Political instability in oil producing regions (Iran/Iraq)
   c. World economy recovers, with resulting increased demand for energy
2. Europe fails to exploit its own shale gas resources
3. Increased demand for gas in order to meet near term carbon emission commitments
4. Low competition between sources of imported gas
5. Exports of natural gas from USA not permitted

Low UK / European Gas Prices

1. Low Oil Prices
   a. China and India energy requirement falters
   b. Iraqi oil production takes off, and west come to accommodation with Iran
   c. World economy remains sluggish, low demand
2. Europe exploits its own shale gas reserves
3. Non fossil fuel sources of energy reduces demand for gas
4. Sources of imported gas compete for market share
5. USA gas producing lobby wins the export argument

How does the UK Gas market work?

Natural gas is produced from reservoirs located in the North and Irish seas & landing at terminals on the coast. Gas is also imported from Norway, Netherlands and Belgium through pipelines (Belgium is a transit country the gas comes from other places) and as LNG via ship from a range of countries. Gas is also traded as a commodity, trading takes place before the gas is produced or imported to the UK. It is common for the physical gas produced or imported to be priced by prices established in the trading market. The trading market is volatile; prices fluctuating due to demand. To manage both price volatility and provide sources of supply at times of high demand, gas can be stored: in huge tanks in the form of LNG, in large underground caverns, and in specially converted gas fields, where gas is injected at times of low demand / price and produced back at times of high demand / price.

What we do

Black Cat Energy Services has

Engaged in
- Algeria, Denmark, Egypt, Ghana, Indonesia, Kurdistan, Libya, Netherlands, Nigeria, Pakistan, Russia, and UK

Projects involving
- bid rounds, contract audits, country studies, data rooms, field commercialisation & supply / demand analysis

Negotiated and advised regarding
- allocation agreements
- farm-in/out agreements
- gas sales agreements
- joint operating agreements
- lifting/balancing agreements
- transportation and processing agreements
- unitisation agreements
- vicinity working / crossing agreements

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