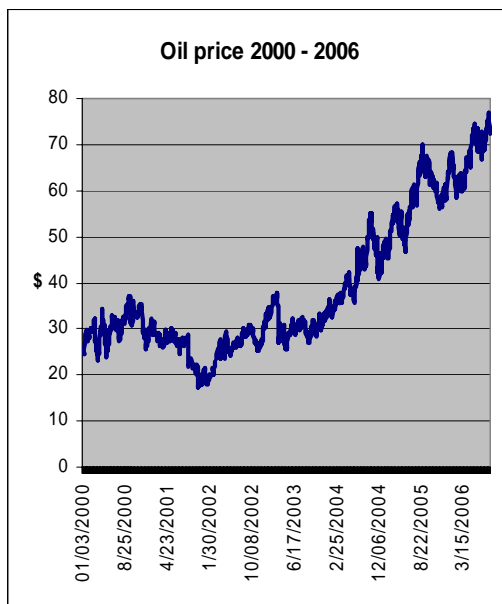


## Keeping the home fires burning? The *Energy Plan for Europe* and Britain's energy security

Energy has rarely been out of the news this year: the British Government's energy review, the G8 summit, conflict in the Middle-East and soaring oil prices have received generous media coverage. Energy security has always mattered, but recent developments (ranging from geopolitical challenges, not least an increasingly assertive Russia, through to unforeseen natural disasters such as Hurricane Katrina) have forced governments to prioritise these matters with some sense of urgency.

The most commonly cited measure of rising energy prices is the oil price - which has indeed nearly quadrupled since the start of 2002. However, the real focus of current discussion, and concern for Britain and Europe's future energy security, is the international gas market.

### The origins of the *Energy Plan for Europe*



The Russian-Ukrainian gas crisis in January of this year had severe repercussions in Europe. With Russia having shut off the direct supply to Ukraine, the Ukrainians siphoned off EU gas from transit pipelines through their country and caused an immediate supply shortage in several EU states. Within a day Hungary was reporting a loss of 40% of their Russian supply, Austria and Slovakia were down by 33%, France between 25% and 30% and Poland by 14%. Ignoring the acrimony that has followed and the cold-war rhetoric that has been spouted by both sides, one thing became patently clear: Europe was highly dependent upon Russia for its gas supply and that supply could not be necessarily relied upon. The UK cannot afford to hide behind its traditional self-sufficiency in

gas: in 2004, it became a net importer of natural gas for the first time.

Natural gas remains the most important source energy for both the EU and the UK, and this dependency is set to increase over the next twenty years as a result of previous EU initiatives such as the Large Combustion Plant Directive. The impending closure of many existing conventional power plants, and the decommissioning of older nuclear plants, means that gas powered plants are favoured to fill the void until longer term solutions are found. EU electricity production from gas generation is set to double by 2030. In the UK alone, National

Grid Transco (NGT) is predicting a demand increase of 2.2% per annum up to a 24% increase by 2014.

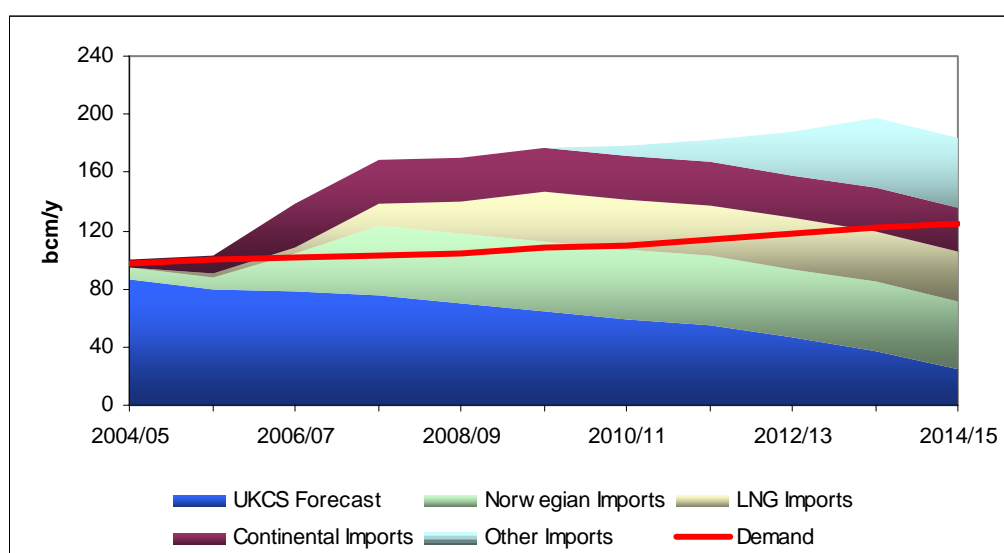
In response to this situation, the EU Commission in March released a Green Paper entitled 'A European Strategy for Sustainable, Competitive and Secure Energy'. This paper went in front of the European Council meeting later that month and won unanimous backing from EU leaders. The outcome was a mandate for the creation of the 'Energy Plan for Europe' (EPE), a common European energy strategy covering areas including market liberalisation, diversification of supply, interconnection between EU states, environmental commitments and plans for technological innovation. The Commission will now produce a detailed Strategic Energy Review at the end of the year, which will in turn lead to a programme of EU legislation.

*The concern of this article is that the right policy for other member states may not be right for Britain - given Britain's near-unique position within EU-25 nations in terms of energy supply and market liberalisation. It is worth examining the proposals and different situation of Britain relative to the EU in terms of reserves, import, storage (including energy transit), market and relations with Russia.*

## UK gas security outlook

### (i) Reserves

The first thing that separates the United Kingdom from the majority of European countries is that the UK still has significant domestic production of gas. Although the United Kingdom Continental Shelf (UKCS) is in decline, the DTI is optimistic about initiatives designed to slow this rate of deterioration both by opening up difficult regions such as the fields west of the Shetland Isles and by using initiatives such as the 'Fallow' initiative to resell licenses for abandoned fields in order to maximise gas output. The chart below, taken from the NGT ten-year statement on gas supply, illustrates the projected survivability of UKCS reserves.



While the projected decline is rapid, as can be seen, the upside projection (including possible reserves) still provides 20bcm (billion cubic metres) of gas per year in 2030. However, these supplies, which can be relied upon, do provide a firm baseline for energy supply to build upon. As can also be seen, up until 2012, domestic production will provide around 50% of demand. The shortfall, or 'supply

gap' will be made up by imports from three main sources, for which the infrastructure is already being planned or under construction. These are Norway, continental sources (through interconnector pipelines to Belgium and the Netherlands) and Liquid Natural Gas (LNG) exporting countries, in particular Qatar, Algeria and Malaysia.

#### (ii) Import diversity and Storage

The UK's imports of gas come from a wider variety of sources than those of most other member states do. Britain already operates gas pipelines to Norway, as well as to the EU, to which it has a bi-directional interconnector. The interconnector is currently used primarily for gas export, but that can also be used for import if necessary. Within the next few years several more import sources are due to come onstream, including the Langaed and Statfjord Late Life pipelines to Norway, an extension to the Zebrugge Interconnector and a second interconnection to Balgzand in Holland to increase the UK's connectivity with the EU, as well as three separate LNG re-gasification terminals in west Wales and Kent. These sources guarantee flexibility in import sources if a blockage or crisis was to occur in one of the inlets. As well as flexibility in import sources, the UK is also building extensive storage depots, sufficient for over 6 bcm of gas, to provide additional flexibility in times of tightness or peak demand.

#### (iii) The UK's relative lack of dependence on Russia

Whilst the EU has also attempted to diversify its energy supply sources, the reality is one of dominance of a few exporters, predominantly Russia. Even with future diversification, reliance upon Russia is set to grow. The UK will certainly be importing Russian gas in the future, but is likely to be less dependent on this source.

Indeed, the EU takes increasing dependence on Russia as one of the basic premises of the EPE. Francois Lamoureux, European Commission director general of energy and transport, has said that "We do not have a choice. We import large volumes of gas and oil from Russia. The EU does not have many alternatives at present."

In its *World Energy Outlook to 2030* paper the European Commission argues that for the EU as a whole the share of imported gas will go up from 53 to 80% by 2030. It forecasts that the share of EU needs provided by Russia and the CIS will nearly double from 32% to 56% of total demand, while the share from within the EU will halve from 60 to 29%. Gazprom itself predicts a 38% rise in exports to the EU by 2020 and now has three major new pipeline projects to EU markets under construction as a consequence.

## The EU's plan for energy security

### (i) Interconnection and 'solidarity'

One problem identified by the EU is the poor state of interconnection between EU nations- the Barcelona European Council of 2002 set a level of 10% for electricity interconnection which has not been achieved.

The Energy Plan for Europe aims to promote greater interconnection through measures including a common European grid code, Commission action in enforcing 'structural unbundling'<sup>1</sup> and greater investment in the necessary infrastructure.

However, the plan also attempts to establish a linkage between interconnection and vague "solidarity mechanisms". One concrete step currently being proposed is to establish a "European Supply Observatory" which would be likely to turn into an EU energy agency over time. Given that it is not clear what the end goal of the "solidarity mechanisms" is to be, clearly this idea should be resisted - indeed, such concerns were one of the reasons previously opposed giving the EU competence in energy during the European Convention in 2003).

For example, such network obligations might mean that Britain (given its good connections) would end up acting as a transit state for energy imports to the EU, on account of the more advanced import capacity and the presence of the two interconnectors outlined above. This would reduce the flexibility of supply currently enjoyed by the UK, and raise prices. Firstly, the interconnectors (which could account for up to 40bcm of gas imports) would be used more extensively for export, consequently reducing British domestic supply. In addition, demand would obviously be higher as a result of an increased order book from the EU. This would put more strain upon British storage infrastructure. Demand for gas is seasonal, peaking during winter periods: if Britain is to adopt the role of "gateway to Europe", it is likely that the flexibility of its supply infrastructure would be put under the most strain at these times.

### (ii) Market Liberalisation

The Energy Plan for Europe aims to complete the internal market in energy, both in terms of infrastructure, as described above, and in terms of enforcing the liberalising measures set down in the Second Electricity and Gas Directives<sup>2</sup>. These directives attempted to open markets up to competition through common tariffs, harmonised regulation and enforced structural unbundling. However, with the exception of the Nordic countries, for whom gas is not a major fuel source, only the UK has fully implemented these directives. An EU Commission report on progress in creating the internal market in energy says :

*"The fact that most Member States have transposed the new Directives only with delay and some not yet at all is particularly damaging."*

The report reveals why current efforts have failed. Inadequate price convergence between states, limited cross-border trading, high corporate concentration (which

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<sup>1</sup> This refers to the policy of 'unbundling' distribution networks from the ownership of gas suppliers- seen by Brussels as a form of monopoly that prevents distribution networks operating within their own competitive market. Unbundling is therefore hoped to boost cross-border interconnection.

<sup>2</sup> 2003/54/EC, 2003/55/EC

reduces competition) and a lack of customer mobility in choosing suppliers are to blame.

The following table shows the market shares of the top three companies in electricity production and gas supply within each individual member state.<sup>3</sup> This shows the differences in levels of corporate concentration between the UK and other EU states. Concentration persists in many states as a consequence of protectionist intervention against cross-border mergers which threaten the privileged position of 'national champions'. Monopolistic practices, such as not unbundling transmission, or making investment unattractive for non-indigenous companies, also continue.

Country	UK	Sweden	Italy	Austria	Denmark	Spain	Poland	Germany	NL	Hungary	Ireland	France	Estonia	Latvia
Elec.	39%	40%	65%	54%	40%	69%	45%	72%	69%	66%	93%	96%	95%	95%
Gas	36%	78%	62%	80%	97%	73%	100%	80%	85%	100%	84%	98%	100%	100%
Average	38%	59%	64%	67%	69%	71%	73%	76%	77%	83%	89%	97%	98%	98%

A recent report by Global Insight for Centrica concluded that the lack of market liberalisation within continental Europe has ensured that gas prices continue to be linked to the price of oil rather than being indicative of supply and demand. They estimate the total cost of this to the UK end user for 2006 was \$10bn, half of the total value of the gas supply bill.

Whilst it is obviously in the interest of UK industry and consumers for these problems to cease, and for European nations to implement the internal energy market, which is one of the prime motivators for supporters of the EPE, there is no guarantee that enforcing directives into a common policy will succeed in achieving this. The Second Electricity and Gas Directives have existed since 2003, but the statistics above show how poorly implemented they really are.

Statistics on the numbers of cases filed by the Commission against countries for failure to implement internal market reforms (across all sectors) are telling: 166 against Italy, 114 against Spain and 107 against France.<sup>4</sup> Judging from these figures, there is no indication of improvement on the horizon or of countries altering their national positions to fit EU Directives. With this in mind, it makes little sense to sign up to a common policy in order to achieve market reform when there is so little evidence that other EU nations are likely to really commit to those reforms.

### (iii) Moves towards a common foreign policy on energy

A lot of the focus on the benefits of a common energy policy has been on the ability of the EU to negotiate as a single entity with supplier nations, exerting more influence than individual nation states would otherwise be able to achieve. There is something to this, particularly with reference to Russia, which has a huge export dependency on EU markets.

However once again this is not a benefit that would actually provide much tangible advantage to the UK, given its existing diversified import sources and open market.

<sup>3</sup> EU Commission, *Report on progress in creating the internal gas and electricity market* (15.11.05), Technical Annex

<sup>4</sup> EU Commission, *Internal Market Scorecard No. 15* (July 2006) pg.18

Norway is a reliable supplier and one with whom the UK already conducts successful bilateral relations in terms of energy supply.

LNG countries will export to the most successful bidder as a consequence of a growing global market in export (unlike gas pipelines with one destination, LNG tankers can be diverted to any destination if market forces favour it). Major LNG exporting companies including Qatar Gas, Sonatrach and Petronas have stakes in British terminals in both Milford Haven and the Isle of Grain, which means they also have a stake in their success in the British market.

Britain is in a position to conduct amicable and profitable third-party relations with Russia, based on a framework access to a competitive open market, and only a partial reliance on supply. By contrast, the frosty EU-Russia relationship has shown no signs of abating given the tone of the recent G8 conference. Signing up to a common energy policy through the EU - whose relationship with the world's biggest gas supplier is based on heavy dependence - may in fact be counterproductive to future energy security.

One Russian joke doing the rounds earlier in the year was that the eastward expansion of NATO "is nothing compared to the westward expansion of Gazprom". There is something in this - Gazprom's influence is likely to stretch both north, where it looks likely that Norsk Hydro and Statoil will be named as partners in the Shtokman field in the Berents sea, tightening cooperative relations with Norway, and south, where Gazprom and Algerian state LNG exporter Sonatrach have already signed a 'memorandum of cooperation' in the field of LNG exports. A future attempt to form a Russian-Algerian gas cartel - whilst currently a distant possibility - is not impossible.

## Conclusions

That the EU requires some sort of common policy in the field of energy is not being disputed. Many continental EU states have huge dependence upon gas imports that are set to grow. They suffer from a lack of supply diversification, ineffective storage capacities, poor cross-border transmission (which hinders both imports and competition), and energy markets that have seen only limited liberalisation. These factors restrict competition and keep prices artificially high. These issues are the proper concern of the EU's competition authorities. However, even in terms of market liberalisation, it may not be worth holding our breath: so far there has been little evidence of political will to liberalise, and it is not clear that further legislation will change this.

However, the two real *innovations* of the EU's Energy Plan for Europe have unclear implications and are potentially not in the UK's interests. Firstly, the attempt to create a 'linkage' between the two issues of network integration and subsequent "solidarity obligations" is not necessarily in the UK interest. Secondly, the attempt to form a common foreign policy with regard to energy may not work, given the very different interests of the member states, particularly with regard to dependence of Russian gas.

Real energy security for the UK is likely to come not via the EU energy plan, but from (a) an increase and diversification of connections to global sources (e.g. LNG ports) and an increase in supply from other domestic sources (nuclear and renewables). Although there are some positive elements in the EPE, there are also

substantial problems. In some ways the plan is not even aimed at addressing the real issues. The *Energy Plan for Europe* is not the answer for the UK.

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