



It is easy to identify the changes in the UK's energy profile over the last several years that have prompted intensified, and sometimes heated, debate on the issue of the nation's energy security. First, there is no more 'coal-from-Newcastle,' as cheaper imports into the UK are available from countries as far away as Australia and South Africa. Second, the UK is the largest producer of oil and natural gas in the EU. However, after years of being a net exporter of both fuels, the UK became a net importer of natural gas in 2004. Government estimates also predict that the country will become a net importer of oil in the near-to-mid-term future. Third, as far back as 2006, then Secretary of State for Energy Malcolm Wicks warned that the UK was on a course to lose 30% of its generating capacity from coal and nuclear over the next 15 years as these plants close down. It is no wonder then why energy and security of energy supply, understood largely as electric power in the UK, has risen to the top of the agenda across political, economic, energy and national defense agendas.

In February 2010, a group of leading UK businesses including Arup, Foster + Partners, Scottish and Southern Energy, Solarcentury, Stagecoach Group and Virgin, which constitute the UK Industry Task Force on Peak Oil & Energy Security (ITPOES), released their second report titled "The Oil Crunch - a wake-up call for the UK economy." An important objective of the report is to lay the foundation for informed discussions by the new government, to be formed by June 2010, on oil and the nation's energy security.

The ITPOES report is broad in scope but focuses on several issue areas that, if corrections are made, can have a positive impact on UK energy security. Among these issue areas are: transport and mobility, the impact of oil in the agricultural sector on food and food prices (and incidentally on water usage and clean water availability), and the changing nature of power generation and distribution. Their report's recommendations support a number of policy responses that will reduce the demand for oil in an attempt to bring demand into equilibrium with the physical rate at which oil can be extracted (as opposed to predicting a terminal decline in oil availability itself). The ITPOES report is pessimistic on this last point, given the long lead time it will take to move off an oil economy.

Prior to this, in March 2008 the UK Prime Minister presented to the Parliament, "[The National Security Strategy of the United Kingdom](#)." With a slightly different remit (global versus local), the national security strategy states that, "The most effective way to reduce the potential security consequences of issues such as climate change and rising energy demand is to take the tough decisions now to tackle them, both as global issues in their own right and their implications for global security." The report

goes on further to state that, "The distinction between 'domestic' and 'foreign' policy is unhelpful in a world where globalization can exacerbate domestic security challenges." Such an observation is vastly important, as it directly links a coordinated domestic policy response to the changing global nature of energy markets and the demand for resources and power.

To the credit of both the ITPOES and the Brown government, it is significant that dialogue is taking place within both the public and private sectors concerning the evolution in thinking about energy that is presently underway. It is time, however, to do more. The 'more' in this case considers that (1) energy security has moved far beyond an exclusive resource issue, and (2) the need to reiterate again and again that what happens globally impacts locally. The convergence of these trends and the inclusive nature of energy security itself (combining both domestic and foreign policy considerations) is precisely what the United Kingdom today faces as a nation.

### **The Global Security Context**

The United Kingdom's energy-security interests are interwoven within the larger global construct of what kind of resources are produced, how power is generated from these resources, and how these resources are moved around the world. Due to the shifting fortunes of maturing production from domestic British oil fields, for example, Britain's largest oil company, British Petroleum (BP), has over the last decade moved aggressively into international markets. Domestic production of oil has been diversified through the sale of former BP assets to a large number of smaller players, but the overall picture is of a company becoming more, and not less, internationally active. This in turn has increased its exposure to the gyrations and instabilities that threaten global stability, which in turn impacts on the price of oil, the security of international supply chains, and ultimately resource availability. Another example of international linkage between UK companies and the world at large is that of Britain's BG Group. BG is presently involved in developing US shale gas, dubbed 'the quiet revolution' by BG Group's Nigel Shaw. And finally, British Energy—the UK's largest electricity provider—is partly owned by France's EDF as yet another example of the energy ties that bind within the EU.

Energy interdependence is a stable characteristic of Britain's energy and power structure. It is a reality that must be continually monitored and addressed in national security terms. It is also one that requires ongoing dialogue between all stakeholders, active diplomacy internationally and economic astuteness at home. To be sure, with or without Britain, the competition for natural resources around the world will continue to accelerate, driven in large part by the emerging economies of India and China. For Britain, the objective is to manage competition in such a way that it avoids conflict between competitors; British policy should support new constructs for consensus building between nations. British policy should openly acknowledge that these same nations will seek to maximize their own national self-interest in the energy sphere, and concurrently the policy should seek common resolution to common problems among

otherwise competitive parties. This may prove of value in establishing a structure for improved governance and transparency where resources and transactions are concerned, as recently suggested by David G. Victor at the University of California, San Diego; in establishing other mechanisms that build consensus between energy producers and consumers on critical issues such as international investment in upstream production for fossil fuels; or in ensuring market access and reducing resource nationalism where new and emerging 'green' technologies are concerned. Involving the BRIC (Brazil, Russia, India and China) countries in such dialogue is fundamental to progress and success in problem resolution.

Perhaps even more important, British policy should seek to drive consensus forward in Britain itself for the purpose of achieving its energy, environmental and national security objectives. Whereas the term 'bipartisanship' is often ascribed as a political bridging activity between political parties in the US, there are considerable differences in terms of how the British Prime Minister is elected and that of the US President that have discouraged 'bipartisanship' in the UK. Britain's PM is selected by the ruling party, whereas the US President is directly elected by the electorate. Therefore, perhaps outside official Westminster, but altogether among members of Parliament, a mechanism should be created to drive forward consensus on an issue of such national importance as energy security.

To be sure, UK energy policy is heavily impacted and influenced by its membership in the EU. It is often mentioned, and correctly stated, that by-and-large 80% of EU member states' national policies are now determined in Brussels. While energy generation has largely remained a domain of national sovereignty, environmental legislation, and in particular GHG emissions, have been greatly impacted by EU directives. A voice here needs to be raised, and intelligent arguments put forward, on the security implications of energy and environmental legislation coming out of Brussels and arriving on Britain's shores.

The UK also belongs to a large number of other important international organizations involved in the energy sector. Most importantly, this includes the International Energy Agency, the OECD's energy arm. The IEA itself has its own set of challenges, and chief among them is the fact that it doesn't count as members the world's largest producer countries, including Saudi Arabia and Russia, and excludes as members the emerging energy consuming giants China and India.

Finally, as a founding member of NATO, the UK could benefit from energy provisions which may be included in NATO's ongoing review of its strategic concept, due for release later this year. American Secretary of State Hilary Clinton has often referenced the importance of energy security to the security of alliance members, as she did in a speech to NATO representatives in Washington in February. "Energy security is a particularly pressing priority," she said.

"Countries vulnerable to energy cutoff face not only economic consequences but strategic risks as well." Last month, Rob de Wijk, a member of the Atlantic Council of the United States' Strategic Advisory Group, wrote with respect to this review process that, "As NATO considers its future strategic posture, it must take into account three dramatic new security challenges that will impact the interests of its members. First, it must account for the impact of rising poles in the international system. Second, it must prepare for the security impact of the competition among world powers for scarce resources. Third, NATO must consider how climate change will impact international security and Alliance interests. These three principal challenges in this emerging strategic environment require that NATO reconsider its role and mission, in particular the meaning of Articles 4 and 5 of the Washington Treaty, military transformation and partnerships—most importantly the NATO–Russia relationship." One doesn't have to fully agree with de Wijk's list of new NATO security challenges, but one cannot dismiss the emerging importance that energy security (e.g. resource conflicts, emerging instabilities, strategic competition for energy resources) has found on the Transatlantic agenda. It appears prominently in the US Quadrennial Defense Review, the National Security Concept of the United Kingdom, and in the National Security Concept of the Russian Federation. Groups focused on global security and international affairs can choose not to address this issue, but doing so will not make it go away.

### Think Global But Act Local

As an island nation, it should come as no surprise that much of British energy policy on the one hand reflects global energy policy dilemmas—including growing dependence on Russian gas imports across Europe and the global effects of climate change—while on the other hand it advances local policy solutions to these challenges. However, the priorities identified by UK policy makers have been criticized by some as more globally determined than nationally inspired. Among the highest priorities of UK energy policy are the following:

- a reduction of UK carbon emissions by 60% by 2050
- a focus on the importance of energy efficiency
- the large scale introduction of 'green' carbon neutral technologies for new power development

These policy priorities largely reflect the EU's 20-20-20 program in which it calls for a 20% reduction in carbon emissions, a 20% improvement in energy efficiency, and 20% of power to be produced from renewable resources and technologies.

In contrast, in December 2009 a report by the Economic Policy Centre (EPC) in London entitled, "[Securing Our Energy Future: Why and How It Must Be Done](#)," challenges these priorities and

criticizes them—at best by characterizing them as pandering to outside (EU interests), and at worst by characterizing them as misdirected and misinformed. The EPC policy paper recommends the following by prioritizing:

- Energy Security—without certain access to energy, there can be no economic activity.
- Energy Affordability—unless the price of access is low enough, economic activity will be limited.
- Environmentally Clean Energy—making the procurement of energy clean primarily at the point of generation, and, secondly, at the point of consumption, to the general benefit of the human environment.

Intensified negotiation between UK policy makers and the expert public that take these issues to heart could be a pathway to a clearer understanding and appreciation of energy security as a priority.

### Driving Dialogue

To be sure, a concerted effort needs to be made to bring together the three groups referenced above that have already a pronounced interest and dedication to the issue of UK energy security: the British government and civil service, the ITPOES, and economists at the Economic Policy Centre. This is but one example among many others. While these three groups may not hold identical priorities as to what needs to be done and in what order, they ostensibly could agree on the fact that a more coherent process on energy security in the UK is required. By-in to this process would be based on the following principles:

- Securing the UK's energy future requires a hybrid of input from all sectors.
- Power generating capacity in the UK must seriously consider contributions from all sectors.
- Energy security requires diversity of fuels in the transport sector.
- Environmentally clean energy is the preferred path forward. It must be seriously pursued, yet concurrently balanced with the national security interests of the state and its people.
- UK energy security, whether in power or resource acquisition, is interdependent with others around the world. Dialogue can better facilitate an understanding of these interdependencies and can contribute to consensus building on key issues of importance to both energy producers and consumers.

### Going Forward: Transport Diversification, Shale Gas & Cyber-Terrorism for Starters

Perhaps the best approach towards moving the energy dialogue in the UK forward is to advance the notion that national defense begins at home. And in the UK, as elsewhere, there is

no greater sector susceptible to fuel price volatility than in the transport sector. According to the ITPOES report, in 2008 a full 50% of overall oil consumption in the UK was due to road and air transport consumption. While there is no short-term solution to replacing oil in these transport modalities, there are long term public policy options, already advocated and advanced globally, that can ease the oil burden in these transport sectors. This is not an anti-oil argument. Diversifying fuel transport options in air- and road-based transport is a step towards enhancing UK national security. The reality is that oil has a monopoly over the transport sector, and the UK is dependent on oil imports from near and far for maintaining this function so critical to human and industrial activity.

A second area that holds promise for enhancing the UK's energy security relates to recent advancements in shale gas exploration and development. Shale gas production has been a hotbed of activity in the US, and attention is now turning to the UK. UK producer IGas Energy has announced plans to develop a domestic shale resource extending across 300,000 acres in northwest England. While much work has to be accomplished with respect to the regulatory framework governing shale gas and assessing the environmental impact of its capture, this in principle could add to the UK's domestic gas availability at a time when North Sea production is declining. Depending on delivered cost, it could also help ease growing dependency on imports of natural gas and reduce the geopolitical exposure this causes.

A third area that could coalesce the IT and energy industries together writ large and add a greater degree of protection to critical infrastructure in the UK would be a concerted focus on the ongoing struggle against cyber-terrorism. This is the new battlefield in this the early part of the 21st century. In June 2009 the Cabinet Office of the Prime Minister released a study on the Cyber Security Strategy in the United Kingdom, but much more needs to be done, and more value added, to engender ongoing discussions about how to protect the UK's homeland in this critical domain.

The issues mentioned above provide at a minimum a departure point for discussion between UK stakeholders in the field of energy and security. Winston Churchill is quoted as saying, "The responsibility of greatness is responsibility." The United Kingdom will respond.

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