

# International energy security

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## Energy security will play an ever growing role in foreign policy

Rapid economic growth in the developing world, particularly India and China, has concentrated the world's attention on energy resources and the potential for conflict over them. In common with other European countries, Britain's energy security faces threats on an international scale and the UK must make some tough choices in the coming years. Technological advances may offer some solutions, but political choices are also necessary.

### WORLD DEMAND FORECAST TO RISE

If no action is taken to halt the growth of fossil fuel use, the International Energy Agency forecasts that world energy consumption will increase by 40% by 2030, with nearly all of that increase coming from non-OECD countries. Fossil fuels will probably remain the dominant source of energy up to 2030. However, production from conventional oil and gas reserves in Europe and America is set to decline. Taken together, these trends imply a move in the centre of gravity of energy supply and demand towards Asia.

### COMPETING FOR MIDDLE EAST AND CASPIAN OIL?

The bulk of the world's oil reserves and much of its gas is located in the Middle East and Caspian region, and there is, unsurprisingly, considerable competition for interests in such areas. China may become the biggest importer of oil and gas around 2025, and it clearly intends to secure energy resources from the region. Chinese reluctance to back

UN sanctions against Iran has been attributed to its interest in Iranian oil reserves. Some Western observers are also concerned about the Shanghai Cooperation Organisation, a regional cooperation body whose members include Russia, China and the gas-rich Central Asian republics. As yet, this organisation has no military role.

Some commentators see the wars in Afghanistan and Iraq as moves in a vast game to secure fossil fuel supplies from the Caspian Sea and Persian Gulf for Western consumers in the face of rapidly growing demand from Asia and declining domestic resources. This reasoning is, of course, controversial.

As Gulf and Caspian resources are taken up by Asian demand, analysts forecast that Europe will increasingly come to depend on Russia and Africa for its fossil fuels.

### PROBLEMS WITH RUSSIAN AND AFRICAN SUPPLIES

Relations between the West and Russia have improved from their recent low point, but they remain fraught with difficulties. The struggle for power in the energy market has been fought out in battles over the route of gas pipelines from Russia to Europe, with Russia perceived as trying to lock European consumers in, and the European Union backing alternative projects that will give European consumers more choice. Long-term supply contracts can also be problematic in a highly volatile market.

African countries have greater reserves of both oil and gas than North America and Western Europe combined. Their closest market is Europe, but instability and insecurity are an obstacle to trade with many African countries.

### TECHNOLOGY TO THE RESCUE?

Rapid technological change, and price increases, can overturn assumptions about the future of the energy market. Improvements in extraction technology have made available huge unconventional reserves of gas, such as shale gas. Large amounts of these unconventional reserves are located in North America and Western Europe, and this offers some relief from competition for Middle Eastern and Caspian reserves. The international gas market has also been revolutionised by the growth of liquefied natural gas, which can be shipped by tanker and therefore freely traded like oil and used as a transport fuel.

Coal produces about twice as much CO<sub>2</sub> as gas per unit of electricity generated, but with carbon capture and storage (CCS) coal-fired generation could meet environmental standards and be a useful diversification, reducing the threats to the UK's energy supplies: coal deposits are far more widely spread than those of gas or oil and a competitive and broadly-based international market has kept prices more stable and supplies reliable. Analysts do not, however, predict a significant revival in UK production.

### WHAT CAN THE UK AND OTHER EUROPEAN NATIONS DO?

- In order to secure supplies from Africa should Europe pursue a more active policy? Could European engagement significantly foster security and improve the reliability of those supplies? Should Europeans invest more aggressively in African production and transport infrastructure?
- How much political capital should Western leaders expend maintaining good relations with Russia? Should the EU develop a more coordinated external energy policy, ending the situation where Russia enters into contracts with individual countries over pipelines and supply?
- The direction of UK energy policy has generally been towards liberalisation. Is it wrong to trust that an open international energy market will always be able to supply British needs?
- Should the UK invest more in gas infrastructure, including storage? Can the development of CCS be accelerated significantly?
- Should UK electricity generation be based on the import of fossil fuels? Or do we need a step change in support for energy efficiency, renewable sources and nuclear power?