

The energy security challenge: A global conversation

Summary

Energy security has become a key issue not only for governments but also for businesses and consumers.

Governments face the challenge of making long-term decisions and investments in a time of great uncertainty that is only exacerbated by the financial crisis. For businesses, any disruption to the power supply can be hugely damaging—one need only look at the blackout of 2003 that brought chaos to several states of the US for a very real example of the potential risks. Consumers are also increasingly aware of what energy security means to them, in terms of what they spend on their fuel bills and how much it costs them to fill up at the gas station.

Three breakfast meetings were organised to discuss these issues with a group of influential thinkers and prominent business figures. These “rolling” events took place around the world on one day with the results of the Kuala Lumpur debate fed back to the panel in London via a video link, and the conclusions of the London conference relayed to participants in the subsequent New York debate. This brought continuity to the discussion and ensured that a wide range of views from around the world were heard.

The discussions centred on four main topics.

- Physical security: how vulnerable are local supplies to interruptions? Do we have adequate diversity, back-up, storage and emergency planning?
- Commercial security: is there enough of an incentive to develop new supplies, new power plants and new storage? Is the regulatory framework clear and stable enough?
- What difference does climate change make? Are emissions reductions and security improvements compatible?
- What difference does the credit crunch make? Will energy security fall off the radar?

How vulnerable are we?

Ensuring the security of our energy supplies is paramount and although the methods to achieve this were debated by delegates at the three forums, it is an issue of global concern. As one London participant put it: “Without electricity I have no business.”

In London, there was a general consensus that the best response would be to obtain energy from as many different sources as possible, and to build a reasonable amount of redundancy and storage capacity into the energy grid. No energy source, after all, was without its flaws. One participant pointed out that the worst energy-related catastrophe in history was caused by the collapse of a dam, proving that even hydropower had its drawbacks.

Not surprisingly, how to guarantee energy security was also a hot issue at the New York meeting. One delegate said that there was a need to draw a distinction between the notion of energy independence—the idea that the US can supply a much greater proportion of its own energy needs—and that of energy security. There will always be security issues even if the US achieved energy independence. Moreover, energy security is highly interconnected with issues of national security, and therefore geopolitical threats needs to be addressed. Agreeing with participants in Kuala Lumpur and

London, several people attending the New York meeting said that diversifying energy sources would lessen risk.

There was also a call in the New York meeting for a greater debate within the US on how affordability of energy should be balanced with other concerns. One delegate said that, ultimately, Americans care more about cheap prices at the petrol pumps than anything else—but cheap prices are not necessarily compatible with a green or politically acceptable agenda.

International co-operation

Although there is concern in Malaysia about the lack of co-ordination nationally, delegates in Kuala Lumpur also felt that more could be done globally.

Within ASEAN (the Association of South-East Asian Nations), international co-ordination on energy security is sorely lacking: for example, Malaysia conducts joint exploration activities with Vietnam, but nobody knows who is providing the security.

Delegates said that there are also tensions between buyers and suppliers. Following the oil embargo in the 1970s, ASEAN was jolted into collective action. However, although non-suppliers like the Philippines and Singapore wanted security of supply, countries like Indonesia wanted security of demand: “Will you promise to buy when we have oversupply?”

It was also felt that more leadership from the UN was needed and that developing countries must have a greater say in multilateral organisations like the International Energy Agency.

The topic of biofuels was raised. Delegates heard how developed markets and their shifting policies on the issue are having a detrimental effect on countries such as Malaysia. While the palm oil industry has been hurt by the collapse in prices, it has not helped that markets such as the EU was one moment embracing biofuels, the next having second thoughts.

In New York, the forum looked at how the US could work with countries such as Pakistan, Afghanistan and Russia. Are there ways to work with them as partners instead of adversaries? Afghanistan and Pakistan want a regional gas grid, but there needs to be diplomacy to make it possible. Bring Russia in as an ally and use a multinational approach to these problems, a delegate suggested.

The climate change question

Kicking off the climate change debate in Kuala Lumpur, delegates said that the government finds it easy to delay discussions about renewables and climate change because “environmental impacts are not felt in the short term”.

It is worth noting that one participant repeatedly discredited the link between greenhouse gasses and global warming: “In ten years' time, we may be talking about global cooling,” was his feeling.

Participants believed that what is needed is more government and private-sector funding into renewables research in universities. Developed countries should also share their green technology with developing countries.

Fuel subsidies have a negative impact on the environment and on the development of alternative sources of energy, delegates said. When the Malaysian government cut subsidies earlier this year, people started using fuel more judiciously and this latest move by the government to reduce pump prices was not welcomed by those at the forum.

It was also noted that it will be a long time before Malaysia can think about switching from coal power to relying in any significant way on renewables. Instead, the country is much more likely to embrace technology like carbon capture and storage (CCS).

London took up the issue of CCS and it was felt that governments had not yet provided the certainty that such expensive technology would be profitable, and businesses are not willing to take on the risk of developing the technology themselves. Yet without CCS, several participants argued, it would be impossible to slow climate change, so governments and business need to come to an agreement on who will bear the costs of developing CCS quickly.

The majority of participants in London agreed that slowing climate change and reducing dependence on imported fuels could sometimes go hand-in-hand. Distributed generation in the form of small-scale renewables can reduce pressure on the grid and the atmosphere, for example. But the two goals are not always compatible. In particular, the increasing recourse to coal in places like China, India and the US was thought to be a problem.

The promises of President-elect Barack Obama on green issues offer a ray of hope, delegates in New York felt. He has made energy and the environment one of his top priorities and is putting together a strong team to work on policy. What is less certain, however, is whether Congress will share his priorities.

The Obama administration will need to focus on job creation, efficiency, renewables, stimulus plans and investment in grids, a delegate said. The US should also co-operate globally with the likes of China, India and Brazil on climate initiatives.

Cap-and-trade solutions were also discussed. The US has to set a price for carbon, a delegate argued. New York delegates debated how welcome these schemes are in corporate America. A participant said that it is hard to get companies to focus on the issues as they do not see the immediate risk of climate change. They added that businesses are eager to learn about cap-and-trade but are not ready to make the investment.

A delegate pointed out that there had been disappointment in the EU that cap-and-trade has done little to bringing about a reduction in carbon emissions. The US, however, has been successful with the likes of a nitrous oxide cap because there has been the political will.

It was also felt that the US government needs to look globally to find issues that resonate at home. One participant pointed to what had been achieved in Germany, a country with comparatively little sun, with the government providing incentives for both consumers and industry to utilise solar energy. Citizens should be offered tax breaks to use wind and solar power solutions, a delegate said.

In the UK, several participants from the private sector complained that the management of Britain's grid stifled the signal they were trying to send to power providers about their desire for greener energy. Others noted that the regulatory system did not provide enough certainty to generators to invest in projects with a long lead time and payback period, including new nuclear and coal-fired power plants. Most agreed that the current framework did not sufficiently encourage energy efficiency or spare capacity.

Major impact of credit crunch

The global consensus seemed to be that as the financial crisis deepens, the will to develop green projects lessens.

Delegates in Kuala Lumpur felt that the investment climate is turning sour on alternative energy research and development. In addition, a drop in oil prices means there is less of an incentive to look for alternative energy sources.

This sentiment was echoed in London and in New York. When energy prices are low, people do less to conserve what they have. If the energy we have now is cheap, why worry, is the populist view.

A delegate in New York remarked that a recession actually offers us opportunities, and we should be using the human capital no longer going to Wall Street to focus on innovation and start-up companies.

The credit crisis means that it will take political courage for Mr Obama to make tough decisions on energy efficiency and climate change. For example, one delegate argued that instead of bailing out the auto industry, the US government should focus its efforts on ensuring all vehicles used in the public sector meet the highest green standards.

Volatility in oil prices is also creating great uncertainty. Although falling oil prices do little to make people conserve energy, the record prices seen in the summer were damaging both to consumers, who in effect saw their incomes diminish, and to producers, who sparked a process of demand destruction still under way today. It was hoped that politicians in both consuming and producing nations could reach some understanding about ideal price levels, so that markets would have a better sense of when intervention was coming and so smooth out the price cycle—although a few free-market voices objected.

Conclusions

The world's population is growing, and the demand for energy rising, particularly among developing countries as they become more industrialised and citizens seek a better quality of life. This makes the issue of energy security more pressing than ever.

A major concern across all three forums was the lack of cohesion in tackling the issues. Participants wanted to see more joined-up thinking between the public and the private sectors, and better co-ordination internationally. Countries should be assisting each other on this very global issue, particularly in sharing their knowledge on green technology.

No type of energy is without risks and participants believed more should be done to ensure that countries have as broad a spread as possible. It only takes one chink in the supply to have devastating social and economic consequences. More diversity should include greener energy solutions.

Although the current economic climate means there is less will to invest in alternative energy sources, we should use the downturn to our advantage to plan for the future.

Participants also wanted to see more done at the consumer level. They need very real incentives to change their behaviours, whether that is in using fuel more responsibly or using innovative technology to improve energy efficiency in their daily lives.

The message that came across from the three forums was clear: more needs to be done to guarantee our supply of power, in the short term and for generations to come.