# Mind the energy gap

GRAHAM BUCK REVIEWS A NEW WHITE PAPER ON ENERGY RISK MANAGEMENT FOR UK COMPANIES.

A sluggish economy and the opening up of new reserves of shale gas have lowered some of the heat on energy prices, the first easing in the UK's energy demand since 1945.

Nonetheless, energy risk is now regarded by UK companies as a major business risk. While the UK energy generation market may be briefly enjoying a degree of overcapacity, over the longer term the UK faces the biggest capacity gap in Europe. This partly reflects the country's ageing power stations and the drive to decarbonise Britain's generators.

The outlook for the next 10 years has been set out by Volker Beckers, group chief executive of RWE Npower, who last month launched the white paper Energy Risk Management for UK Business, commissioned by the London School of Economics.

"The scale and breadth of the energy challenge is enormous, and far greater than most people recognise," said Beckers. "Although demand has fallen since 2008, the drop is temporary and will recover: we could see a 100% increase by 2050."

The "balanced portfolio" favoured by the government for meeting the UK's energy needs includes much greater use of both renewables and nuclear power. This will be crucial in meeting government targets of a 34% reduction in carbon emissions by 2022 and a cut of at least 80% by 2050. The bill for facilitating this transformation has been pencilled in at £200bn, or between £6,000 and £8,000 for each British household.

Npower's latest Business Energy Index says that UK businesses already rank energy as a greater risk than health and safety, credit or security. "Uncertainty is something we have to live with, so we need to manage it," said Beckers, who added that the white paper offered a guide to energy risks and forecast how they were likely to grow.

LSE's Samuel Fankhauser is author of the white paper. "Energy management over the

next 10 years will be more complicated than in the last 10 or 20 years," he warned. "UK businesses will face higher and more volatile prices coupled with more complex regulation."

The previous two decades were marked by comparative price stability, but between 2003 and 2010 prices doubled. This trend is set to continue, with a strong possibility of temporary shortages between 2015 and 2020 when many coal-fired generators are due to be retired.

The upward pressure on prices will be added to by increasing energy demand from emerging markets, a growing burden of carbon regulation and a resulting "wedge" between upstream and downstream prices, and a £200bn bill for investing in technology that will largely be borne by the consumer.

These pressures could partly be offset if UK economic growth remains subdued, and

**"IT IS ESSENTIAL FOR ENERGY RISK TO BE FIRMLY ESTABLISHED AS A SENIOR MANAGEMENT ISSUE."**

by the new capacity provided by shale gas, which has already helped ease prices in the US back to levels last seen in 2002.

This scenario suggests five top risks for companies' energy management, according to Fankhauser. As well as those related to price (a general upward trend, greater volatility, and new risks from carbon regulation), they must consider reputation risks created by carbon regulation, and increasing regulatory and technological complexity that compares with moves in earlier years to decrease regulation.

"The Carbon Reduction Commitment Energy Efficiency Scheme [CRC] means higher energy costs for "covered" organisations, while performance league tables will add to the reputation risk," Fankhauser explained.

Launched last spring, the CRC was aimed at large public sector organisations and non-energy intensive commercial enterprises. Energy-intensive industries are covered by the EU's Emissions Trading Scheme. According to Npower's director of industrial and commercial markets David Cockshott, who also spoke at the launch of the white paper, many finance directors don't yet properly understand their company's obligations under the CRC, which his group's CRC Assist service attempts to rectify.

However, many of the UK's bigger blue chip companies have been adapting quickly to the new era of uncertainty and higher prices in the energy market.

"Marks & Spencer's energy buyer said 15 years ago that the company's energy supply concerns were price, price and price," said Cockshott. "By 2007, Stuart Rose was setting out Plan A [an eco and ethical programme] with 100 commitments to be accomplished over a period of five years."

For companies yet to formulate a policy, the white paper lists five basic ways to improve energy management:

- assign clear responsibility and targets for energy management, energy consumption and energy efficiency;
- make energy and carbon an issue for senior management through regular reporting;
- take advantage of energy management services and products offered by the market;
- conduct an energy audit to gain a head start on energy efficiency; and
- explore the possibility of, and any available government incentives for, renewable energy production on-site.

Fankhauser stressed it was essential for energy risk to be firmly established as a senior management issue, with carbon management made an essential part of both operational and investment decisions.

"Businesses should ensure they are best placed to manage these risks by developing an integrated strategy with board-level support that brings together the management of energy consumption and procurement," he said. "This will be a big change for many organisations, but it is crucial to do this now so they can take advantage of savings and the reputational benefits of successful regulatory compliance and energy management."

He added that a number of effective energy management products and services were already available, with others in the pipeline. The existing portfolio includes value at risk reporting management tools, help with purchasing strategies, in-depth market reports and facilitation of energy trading. New services likely to be added include integrated carbon and energy management, and carbon benchmarking.

Npower noted that the role of energy suppliers was also steadily evolving and would be transformed in the years ahead: "No longer can they simply supply energy; they now need to help businesses to manage their consumption and procure energy in as cost-effective a way as possible, to ensure their survival."

Another positive note is the advent of "smart grids", made possible by low-cost telecoms, IT and control equipment. The white paper noted that with the technology already available, the only question was how quickly it would be adopted and what would be economically advantageous. As the grid grows "smarter", it will mean "that control will no longer be restricted to the planned operation of the very largest connected suppliers and off-take agreements, but… extends to smaller and smaller scale units".

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To download the white paper, go to www.npower.com/whitepaper

## Controlling rising costs

Energy Risk Management for UK Business, the Npower-commissioned white paper, suggests organisations should consider the following means of controlling rising prices:

- Bring energy use and carbon emissions to the attention of senior management and examine the need for an energy director.
- Develop an energy plan and select an energy procurement strategy which suits the business's appetite for risk and perhaps brings together management of consumption and procurement.
- Improve monitoring of energy use and introduce processes to report changes in use.
- Increase awareness of energy costs in plant and fittings purchasing and in their operation.
- Use more sophisticated tools and records for energy use forecasting, and compile more detailed budgets.
- Consider switching supplier to take advantage of the best services.
- Identify and estimate the cost of operational and asset changes so as to improve energy efficiency and accurately forecast pay-back period.
- Ensure the organisation has the internal resource to manage the risks – or outsource.
- Change energy benchmarks used in contracts to contain price variation clauses linked to energy and carbon prices.