OPINION

Energy Policy

Dr Bob Spink MP

Energy policy is a hot topic. On one hand, there is concern over the threats to energy security posed by our growing reliance on gas imported from politically unstable parts of the world. On the other, science is painting an ever-bleaker picture of the likely consequences of CO_2-fuelled global climate change.

Add to these the fast rising cost of energy to industry and the consumer, particularly to less well off people who are forced to pay an unsustainable proportion of their income on essential energy, and it is easy to see why many believe the problem is fast becoming a crisis.

Against this background, the Government's wholesale review of energy policy seems eminently sensible. However, the challenges addressed in the current Energy Review are the same as those of the 2003 Energy White Paper, only infused with a greater sense of urgency. The truncated time allowed for the review has also fuelled accusations that the Government launched the review with a clear idea of what it wanted the outcome to be. After all, it wouldn't be the first time that the Government has dressed up a process of ratification as a consultation.

The Prime Minister now confirms these suspicions by strongly indicating that the review must herald a new cycle of investment in nuclear power. It is clearly unhelpful of the PM to undermine the review by pre-judging its conclusions. But that said, he is right that nuclear has to form a key plank of the UK's energy policy. Without new nuclear build, it is inconceivable that we will be able to meet our CO_2 emissions targets and safeguard our security of supply. In any case, many of the old objections to nuclear power have been eroded by safety and efficiency improvements with new reactor technology. Although it is true that safe, flexible and politically acceptable solutions need to be found for radioactive waste management, modern reactors would produce far less waste than our current fleet.

Investment in nuclear fission needs to be accompanied by investment in new technologies. Nuclear fusion, for example, could revolutionise energy production by providing a clean, safe and sustainable means of generating energy. It is uncertain when or if fusion will deliver on its promises, but the prize on offer is too significant to be ignored and, now that the site of ITER has finally been decided, the UK needs to work with its international partners to get the project off the ground.

CCS is another exciting technology. It involves the capture of CO_2 produced during industrial processes and its long term storage, possibly by injection into underground reservoirs, thus preventing the CO_2 from entering the atmosphere. It is argued that CCS technology will divert attention from developing renewable sources of energy and encourage continued dependence on fossil fuels. Clearly the ability to harness solar and tidal power on a large scale would be invaluable and the Government must continue to invest in such research. Also promoting energy efficiency and conservation are vital first steps, not afterthoughts. But we need to accept that we are not yet ready to wean ourselves off fossil fuels and, that being the case, CCS could be a crucial bridging technology.

It is worth noting as well that the first UK fossil fuel plant fitted with CCS could be generating low-carbon electricity by the end of the decade, with a single plant giving reductions in CO_2 emissions of the same scale as all the current UK onshore wind farms put together. The Government should move quickly to amend regulations and promote and invest in large scale demonstration CCS projects.

The House of Commons Science and Technology Committee, of which I am a Member, published a report on carbon capture and storage technology (CCS) in February this year. We concluded that not only could CCS play a key role in the UK's energy portfolio in years to come, it could also provide a much needed tool for curbing the massive growth in CO_2 emissions expected from new coal-fired plant in India and China. This is crucial to our planet since the growth in emissions from China alone over the next twenty years is forecast to match that in the entire industrialised world. CCS could also help to safeguard security of supply by allowing the UK to continue using a greater diversity of fuels sourced from a variety of countries, and cost would be mitigated by enhanced oil recovery from reservoirs.

Setting aside for a moment the health of the planet and UK economic opportunity from selling CCS technology, we are a relatively industrialised nation and have a clear moral duty to show leadership to developing economies.

The Government urgently needs to put in place a market-based and technology neutral framework focused on reducing CO_2 emissions in order to pull through the development of innovative solutions to meet the UK's energy needs. The Energy Review provides the perfect opportunity for the Government to achieve this as part of the long-term strategic vision that has been seriously lacking from its energy policy thus far.