

2005 Energy Review – Blair Sinks Renewables and Spins Nuclear

In 2003, one aim of the Government's 2003 Energy White Paper was:

"to put ourselves on a path to cut the UK's CO_2 emissions by some 60% by about 2050, with real progress by 2020"

The Government believed that this goal could be achieved by:

"reducing the amount of energy we consume, together with a substantial increase in renewable energy."

The concept of new nuclear power generation was put firmly on the back burner.

So what has happened since 2003 to now make the Government announce a new energy review and reopen the door to new nuclear power stations?

Energy White Paper 2003:

The 2003 Energy White Paper was the culmination of the most comprehensive review of the UK energy sector for over 60 years. It involved 18 months of consultation with Government departments, leading energy experts, diverse industry representatives, civil society and the public. This wide ranging review was meant to determine future energy policy for decades to come, setting us on a pathway towards a sustainable energy future that is capable of meeting the four policy goals of low carbon, competitiveness, alleviating fuel poverty and energy security.

Its conclusion was that the policy goals would be most effectively met through development of the UK's vast renewable energy potential and measures aimed at reducing the profligate wastage that occurs throughout our energy system.

Renewables Undermined:

Since 2003 the Government has failed to deliver the undertakings in the Energy White Paper. As a result the UK's renewable energy industries have been seriously undermined:

- The UK's performance on installing renewable energy sources is very poor in comparison to our European colleagues. We have for example installed a mere 1.3 Gig Watts (GW) of wind power, compared to Spain's 9 GW, and Germany's 17 GW.
- Our Government's main support mechanism for renewable energy, the Renewables Obligation, has encouraged some onshore wind, but not on the scale of Germany and Spain. Additionally it has failed to offer any significant support to less developed renewable generation technologies, particularly smaller scale renewable energy sources.
- The Government provided capital grants for the first round of offshore wind developments but has let the industry down by a) failing to provide support for the

second round, where most capacity was expected and b) failing to alleviate the cost of connection to the National Grid.

- On wave and tidal energy, the Government pledged £50 million for research and development, but so far nothing has been done to encourage these potentially crucial technologies into the market place.
- The Government has also failed to aid development of combined heat and power, cited as a major contributor to the 10% target in the 2003 Energy White Paper. As a result investors are leaving in droves and CHP capacity is stagnant.
- The two principal policy mechanisms for delivering CO₂ reductions from households will deliver much less than expected. The Government has scaled down energy efficiency requirements in the new Building Regulations and the 5MTC saving promised from domestic and business premises is likely to be at least a million tonnes short.
- The current Government support programme for solar energy is to be wound down six years early, despite attracting major private sector investment in solar PV manufacturing. The program spent just £31million of the £150million that was committed in 2002. In the same week that Blair urged China and India to invest more in zero and low carbon technologies, he cut the UK's Low Carbon Buildings Program support for micro-renewables from an average of £11.25 million to £9.5 million per annumⁱ. The UK has a mere 7.8 MW of installed solar PV capacity compared to Germany's 794 MW and the Netherlands 48 MWⁱⁱ.

Catherine Mitchell (Warwick Business School) - a key advisor on the 2003 Energy White Paper – awarded the Government just two out of ten for delivery of the White Papers conclusions.

Nuclear Energy Re-Spun:

Before the ink was dry on the last Energy White Paper, the nuclear industry began an orchestrated campaign to re-open the debateⁱⁱⁱ.

A carefully planned public relations strategy is forcing nuclear power back onto the political agenda. British Energy, the UK's only private nuclear operator, that avoided bankruptcy in 2003 via a multimillion pound Government loan and a public bailout package worth £4bn, have appointed Monsanto's former top UK lobbyist, enlisted the help of a former energy minister and paid £1m to a PR firm^{iv}.

Meanwhile the Nuclear Decommissioning Authority (the Government's new body responsible for clean up and decommissioning of existing nuclear sites) poached the former Head of Communications for Heathrow Airport. He has nine press officers to assist him with his latest PR challenge.

NIREX, the body which identifies UK sites to dump our nuclear waste, has also been busy looking to clean up its image. It now boasts two PR firms contracted to undertake a rebranding exercise.

Not to be outdone, the UK Atomic Energy Authority has also found itself a firm of PR consultants.

From the beginning of this year, all these groups have been working together to exploit the fears of Government and industry over security of the UK's energy supply and carbon reduction targets and positioning nuclear as the brand new solution in the media.

The nuclear industry has thus dressed up the same technology that the last energy review rejected and told us we need it all over again. All the problems of nuclear power remain. The only thing that has changed is the quality of the marketing.

The nuclear lobby has also been joined by industry. In October, the Engineering Employers' Federation's (EEF) Director General Martin Temple urged the Government to back replacement nuclear build. The CBI has equally joined ranks urging Government to have a new energy review which includes a decision within a year on whether to back a new generation of nuclear power stations.

The 2003 Energy White Paper made clear that while the issue of nuclear waste and the inherent inability of nuclear power to compete in a liberalised electricity market without public subsidy remained unresolved, nuclear power would stay in the wilderness. Yet there is nothing to suggest that these problems with nuclear power have been miraculously resolved in the last two years.

Nuclear Energy - the Wrong Answer

The nuclear industry is portraying new nuclear power stations as the solution to climate change and security of energy supply.

In reality, nuclear power will fail to deliver significant CO₂ cuts, be hugely expensive, create a new target for terrorism, is unreliable and a finite source of energy.

- Even if the UK replaced all 23 of its reactors, we would only save 10% of our carbon dioxide emissions^v. This is not good value for money.
- Asides from the huge costs of building new nuclear reactors, there are enormous financial uncertainties relating to liability and waste management. The initial costs of decommissioning the UK's existing reactors is calculated to be £56 billion.
- An expansion of the nuclear industry would further increase risks from terrorism and proliferation of nuclear weapons.
- No new nuclear power station will generate a single watt of electricity before 2018, so it can play no role in solving our immediate energy supply problems.
- Nuclear power is an inherently inflexible source of electricity, incapable of moderating its output in response to demand. As a result, it usually plays the role of 'baseload', essentially providing a constant flow of power that is never turned off. Unless of course it is forced to shut down for safety reasons. Our nuclear reactors are notoriously unreliable, often needing to be turned off at short notice. As a result, they need large amounts of back-up capacity available on stand by at all times. The largest single unit of backup capacity currently held for back-up purposes is for Sizewell B nuclear plant in Suffolk. This adds unnecessary strain to our electricity system that could be avoided by spreading the risk of supply disruption into smaller, more numerous generators that do not cripple the supply network if one individual plant experiences a sudden shut down.

 Nuclear power is not a global solution. The world's 438 nuclear plants contribute just 16% of the world's electricity needs. Emissions from the electricity sector account for around one third of the world's carbon emissions. In order for nuclear to constitute a major part of the solution to climate change, the number of reactors would have to increase 10 fold, to match projected increases in energy demand, and even then would be a long way from achieving the 60–80% world wide reductions necessary. Most critically, given that world supplies of uranium are finite, a new build reactor programme on a global scale would quickly leave us in the same predicament we're currently in with fossil fuels.

Renewable Energy – the Right Answer

The £56 billion of tax payers money being used to fund the clean up of the UK's current nuclear sites (run by the Nuclear Decommissioning Authority), could instead buy 50 GW of installed wind capacity, equivalent to 20% of the UK's electricity needs.

Every penny that is wasted on nuclear is not being spent on the real solution – a rapid uptake on renewable energy and energy efficiency measures both at the local level through decentralisation of the grid system and at the larger scale by realising the potential of technologies such as offshore wind.

The real solution lies in taking an holistic approach to energy, looking at the full cycle of both heat and electricity and bringing to an end the staggering waste that currently occurs where only one fifth of every unit of energy put in to a power station is actually turned into useful energy.

Greenpeace recommends that instead of trying to convince the British public that nuclear has suddenly changed its spots, the Government needs to:

- Stick to the commitments in the 2003 White Paper, and put in place the policy and regulatory framework that will enable renewables and energy efficiency to deliver the deep emissions cuts needed.
- Publish a Decentralised Energy White Paper, setting out all the necessary steps for a coherent and rapid transition to a decentralised system.

ⁱⁱⁱ Tom Burke, "Nuclear Delusion", The Guardian, 2nd March 2005 <u>http://society.guardian.co.uk/environment/story/0,14124,1428025,00.html</u>

^{iv} Jonathan Leake, Dan Box, "The Nuclear Charm Offensive", New Statesman, 23rd May 2005 <u>http://www.newstatesman.com/nssubsfilter.php3?newTemplate=NSArticle_NS&newDisplayURN=200505230004</u>

ⁱ "DTI Commons Statement on the Clear Skies Initiative, Solar PV Funding and the Bew Low Carbon Buildings Programme", 9th November 2005

ⁱⁱ Eurobserv'ER, Photovoltaic Energy Barometer, April 2005, <u>http://www.energies-renouvelables.org/observ-er/stat_baro/erec/baro166.pdf</u>

^v Greenpeace, "Nuclear Power Undermines Solutions to Climate Change", November 2005