

Renewable Energy Speech – Thursday 22nd June 2006

Ladies and Gentlemen,

I am delighted to be here today. Energy is now at the very top of the political agenda and renewables have an ever more important role to play in our public policy.

If politicians are to meet their responsibilities, we must address a number of significant challenges and uncertainties in the field of energy.

That is why when, last November, Tony Blair announced an Energy Review, (even though it was yet another one) we welcomed it, and undertook to conduct a thorough review of our own alongside the Government's. That is exactly what we have been doing over the last four months

It isn't really an energy review - it is a review into the generation of electricity.

The key challenges have not changed from those set out by the Government in the 2003 White Paper – they are tackling climate change, ensuring security of supply and working for competitive markets that will lead to affordability of energy for homes and businesses

But these challenges are now more urgent.

Over the next twenty years about a third of our electricity generating capacity is due to be retired, including all nuclear power stations except for Sizewell B.

The energy gap that this will leave is very real. Although I strongly believe that new technology can be harnessed to reduce demand I also believe that there will still be an energy gap which will need to be filled by new generating capability.

Although the UK's energy efficiency has improved, due to industrial changes and to the increase in the efficiency of buildings and appliances, absolute demand for energy has continued to rise.

The Government are planning to build 200,000 new homes a year by 2016.

Concern has already been raised about the ability of water companies to cope with all of these extra homes.

And the impact on total energy use of extra homes is greater than the impact on water use.

But we must all start from one fundamental premise. It is that climate change desperately matters.

I agree with the view of the Government's chief Scientific Advisor when he says

“There is no bigger problem than climate change. The threat is quite simple. It's a threat to our civilisation.”

Global temperatures are rising, the arctic ice sheets are thinning and we are all experiencing greater extremes of weather. Here in London we are told that the Thames barrier was designed to be used every six years, but now has to be raised six times a year

Doing nothing about climate change just isn't a credible option.

The Government have talked a lot about their commitment to reducing emissions, but the truth is that Britain's carbon emissions have risen in five out of the last seven years. Indeed they are higher now than when Labour came to power in 1997.

So if we are to reduce our carbon emissions we must develop cleaner, greener ways of generating electricity and using energy.

It is vital that the energy review addresses these pressing issues: how are we going to ensure that investment is made to replace our ageing power stations and that emissions are reduced.

This is why I am so concerned that the Prime Minister has undermined his own review by his obsession with taking on his own party on the question of nuclear power. We have seen announcement after announcement about the Prime Minister's personal commitment to nuclear power, but none of this adds up to a coherent policy.

Earlier this month he announced the formation of a Franco- British Nuclear forum. In response I asked a number of Parliamentary questions about what the forum would actually do. The questions were in the most general terms, but the Minister has replied telling me that he is unable to answer them yet. If they can't tell me what the forum will do, nearly two weeks after it was announced, it begs the question if it will ever do anything at all.

When it comes to electricity generation it must mean a big push towards renewables.

Despite significant growth over recent years, renewables currently contribute only around 4 per cent to the electricity mix, with hydroelectric and on-shore wind providing most of that renewable capacity.

There are a number of problems faces by renewable energy sources. Wind power is intermittent by its nature - on average they may work only about a third of the time - and photovolatics are dependent on the intensity of daylight; however consumers expect electricity to be available when they want to flick a switch.

But I believe that this is a very exciting time. Renewables have shown themselves able to provide more than just a token contribution to our energy needs and I believe that we are at the start of a revolution in new technology which will make a massive difference to the significance of renewable generation. There are a number of technologies that are on the brink of major advances. Technologies that just a few years ago were prohibitively expensive are now economically viable.

The United Kingdom has over 7,700 miles of coastline, and it should be well placed to take advantage of tidal and wave energy because it has some of the highest tides in the world. And tidal power has the advantage of being predictable, which some renewable technologies, such as wind do not. Thus making it more reliable for large scale connection to the grid.

Photovoltaic cells are currently one of the most expensive forms of electricity generation per mega-watt, but costs are falling and the technology is improving.

The most widely used current form of solar energy is to supplement existing energy demands for the heating of hot water in a domestic context. But in time we could see photovoltaics used in industry and becoming a fundamental part of newly built homes.

Geothermal too is a potentially attractive option. Passing water through bore holes can reduce home energy bills by up to 75 per cent.

The more you look at it, the more you can see that generating power locally offers huge scope for reducing emissions, reducing the cost of producing electricity and making the best use of renewable technologies. The development of micro-generation and combined heat and power technology, may in just a few years equip many thousands of homes to sell their excess electricity back to the grid.

Wind power too is important; although it has its detractors. Bernard Ingham famously described it as 'all spin and no substance'. The visual impact, together with the noise of some turbines has made people unhappy to have wind farms near to their house and we have seen that there is real tension between the desire to preserve the nature of our upland landscape and the need to put turbines on the windiest sites.

Wind technology is developing, however. They are increasingly efficient, so fewer are needed, which reduces the visual impact. I recently visited a wind farm near Kettering where the blades move much more slowly than those in older wind farms, dramatically reducing the noise.

The slower the revolution of windmills; the greater the revolution in windmills!

The development of offshore wind farms offers the potential for a massive increase in the number of turbines supplying the UK, with fewer environmental problems than onshore sites – though with a greater number of technological problems.

We should be pushing for the development and use of every renewable method available. One recent innovation is the Pelamis Wave Energy Converter, a mechanical 'sea snake' that generates electricity from wave power through a series of large articulated tubes, which move up and down with the swell of the sea. Despite being invented in Britain, it is being developed on a commercial scale by the Portuguese Government, which is intent on establishing itself as a world leader in marine energy. We need to look at our policy to see how we can put Britain at the forefront of renewable creation and production.

Renewables too face a challenge of their own. They need to show that they can generate electricity on an industrial scale and with high levels of reliability. I am a believer in renewables and am sure that this will happen. But we need to make it happen sooner.

And government can help renewables to develop faster. One of the barriers to greater investment is uncertainty caused by policy changes. The Government are not delivering the certainty we need. Since 2000 we have seen nine changes to government funding for the photovoltaic sector alone.

Investors want to know, with as much certainty as possible, that they are working in a stable investment climate. Then they can make plans and invest with greater confidence. I believe that giving investors a long term setting in which they can make rational investment decisions is more important than any specific government incentives for any sector.

We have made a commitment that the nuclear sector will not get any special price or output guarantees under a Conservative government.

A central aim of our energy review will be to develop long term policy frameworks to encourage investment in renewable technology.

At present we do not have the right framework of incentives. The current framework gives enough support to make onshore wind profitable, but not enough for other technologies on which the development of a viable and significant renewables sector depends.

We need to move beyond demonstration projects and prototypes – and our energy review is looking at ways to incentivise the development of the whole range of technologies which could make a significant impact to the generating mix.

Because renewables are critical to our energy goals.

We know that by not producing the emissions that cause the greenhouse effect they are important for our climate change targets.

And renewables are important for energy security too. Projections suggest that we could be up to 80 per cent reliant on imported gas by 2050, with much of this gas coming from Russia.

Every extra mega-watt generated by solar or tidal reduces our need for imported fossil fuels and thus improves our energy security.

I am passionate about reducing emissions and ensuring secure energy supplies for the future. But I think it is important to remember that while we should be aiming for Britain to be a world leader in reducing greenhouse gas emissions, it is also true that as a nation we are only responsible for two per cent of the world's emissions.

America remains the single largest emitter of carbon, but as in a number of areas it is being caught rapidly by China. They are building dozens of new coal fired power stations and the fact is that by 2020 China will have more cars than the United States.

So the technological developments that we can promote in the field of renewables could be exported to help reduce fossil fuel dependence and thus carbon emissions across the world.

Exporting these technologies could be a great opportunity for our economy too, but at the moment Britain is being left behind.

In the wind sector it is German companies, not UK ones, which are generating over a half of the turnover of the global wind industry and it is American companies who are leading the way in the development of affordable renewable technologies.

The one point I want to leave you with today is that Conservatives are serious about reducing emissions.

And we mean it.

We will be publishing the findings of our Energy Review next month and then people will be able to see just how serious we are.

But I can say today that renewables feature prominently in those findings. We will put the right framework in place to ensure that Britain can become a world leader in renewable energy technology. And then we will be looking to you to deliver world beating designs and ideas. Together we can improve the energy outlook for Britain and the world. It's a worthy mission, and one we must win.

Thank you