

Nuclear Power: a toxic political issue for the Coalition Government

A briefing for the government from
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“Ministers believe that new nuclear could play a key role in keep the lights on and meeting our climate change targets—but they don’t want to own up to supporting it.

This is understandable given the promise they made not to subsidise nuclear, but it would be deeply irresponsible to skew the whole process of electricity market reform simply to save face.

The Government must be up front about the support it is giving to nuclear and not hide subsidies in a one-size-fits-all design for long-term energy contracts.”

**Tim Yeo MP,
Chair of the Energy and Climate Change Committee**

The Headlines

- 1. The Coalition** - DECC is trying to stick to its TINA (There Is No Alternative) mantra regarding nuclear power, but is struggling to do so. The Liberal Democrats and the Conservatives have managed to patch up a nuclear compromise that is not technically at odds with their manifesto commitments (via a 'no subsidies' pledge), but spells strife when the details of the Electricity Market Reform are published in the Queen's Speech. A number of senior Liberal Democrats remain opposed.
- 2. What is 'policy failure' in nuclear energy policy?** - One thing above all others is paramount in nuclear energy policy: consistent government support over decades. Investors can see this commitment is not in evidence. DECC's attempts to overturn the prevailing free market orthodoxy against the economic viability of nuclear power continues to be a struggle and - simply because it is a struggle - it cannot possibly provide the 'certainty' that private investors will demand.
- 3. The German Example** - Germany has, since the late 1990s, had a long-term consistent policy of growing its renewables sector and phasing out nuclear power. It is now reaping the rewards, and adding renewable capacity at a rate equivalent to one nuclear power plant every year. In the first half of 2011, over 20% of German energy was produced from renewables compared to 3% in the UK. The UK's progress on energy efficiency also lags a long way behind that of Germany.
- 4. Implications for the Coalition Government** - The Lib Dems stand to lose a great deal from the Coalition's current fixation with nuclear power. Sticking with it when all the signals indicate that it can only fail (if not immediately, then in the medium term), will have grave consequences for the Lib Dems at the next General Election.

1. The Coalition

The Coalition Government's proposals for a new nuclear power programme have not, as yet, been included in its current portfolio of "Omni shambles". But for how much longer will that remain the case?

1.1 Party positions during the 2010 General Election Campaign

'[We will]...reject a new generation of nuclear power stations; based on the evidence nuclear is a far more expensive way of reducing carbon emissions than promoting energy conservation and renewable energy.'

Liberal Democrat General Election Manifesto 2010

The Liberal Democrat commitment on nuclear power in their 2010 General Election Manifesto looks clear cut. That is the view that still prevails among Lib Dem members and voters. To those used to studying the runes a little closer, there were signs that a change was under way. In 2005, the Liberal-Democrat manifesto had stated:

'given their long-term problems of cost, pollution and safety, we will not replace existing nuclear power stations as they reach the end of their safe and economic operating lives.'

In the 2010 manifesto 'pollution and safety' were no longer mentioned; opposition to nuclear was based just on one issue - cost. Nuclear power was simply too expensive. Perhaps the authors of the Lib Dem's 2010 manifesto were already thinking of what might be asked of them in any negotiations either with the Labour Party or with the Conservative Party in discussions around a Coalition

Government?

The Labour Party had become enthusiastic converts to nuclear energy by 2010 and made no bones of this in their manifesto, bundling nuclear and renewables together as 'low-carbon' power sources.

'We have taken the decisions to enable a new generation of nuclear power stations...We are planning for around 40 per cent of our electricity to come from low-carbon sources by 2020 - renewables, nuclear and clean fossil fuels.'

The Conservative Party manifesto seemed a little contradictory. On the one hand, they appeared to share Labour's enthusiasm, promising 'we will promote... large-scale low carbon energy production, including nuclear...' but on the other, a few pages later they sounded an apparent note of caution:

'...we will take steps to encourage new low carbon energy production, including... clearing the way for new nuclear power stations - provided they receive no public subsidy'.

By cutting the reference to "pollution and safety" in the Liberal Democrats' 2005 Manifesto, and adding just six new words to the Conservatives' Manifesto in 2010, a harmonization of policy positions was now possible; nuclear power could be acceptable, but only provided that it received no subsidy.

1.2 The Coalition Agreement

Liberal Democrats have long opposed any new nuclear construction. Conservatives, by contrast, are committed to allowing the replacement of existing nuclear power stations provided that they are subject to the normal planning process for major projects

¹ Coalition should be upfront about nuclear subsidy Commons Select Committee notes, 16 May 2011. Accessed 25 April 2012 at:

<http://www.parliament.uk/business/committees/committees-a-z/commons-select/energy-and-climate-change-committee/news/emr-report-findings/>

(under a new National Planning Statement), and also provided that they receive no public subsidy.

Coalition Agreement May 2010

The text of the Coalition Agreement formally acknowledged the Liberal-Democrats history of opposition to nuclear power, and made some minor concessions to it. 'A Liberal Democrat spokesperson' was to be allowed to speak against the National Planning Statement (a crucial part of the new nuclear programme); the issue was not being considered a 'confidence issue' for the government; and Liberal-Democrat MPs were formally permitted to abstain from voting in favour. However, it was clear that none of these concessions would make any practical difference to the progress of the nuclear programme.

And just in case the Liberal Democrats were not already tied down firmly enough, a further stiffener was provided: the Department of Energy and Climate Change, responsible for pushing through any new nuclear build, was going to be offered to the Liberal Democrats, one of only two senior ministries they were to run in the new government. The job of squaring the circle of "nuclear power without subsidies" was going to land on a Liberal-Democrat desk.

1.3 Chris Huhne, Minister for Energy and Climate Change 2010-2012

"Ministers must stop the side-show of new nuclear power stations now. Nuclear is a tried, tested and failed technology, and the Government must stop putting time, effort and subsidies into

*reviving this outdated industry. The nuclear industry's key skill over the past half-century has not been generating electricity, but extracting lashings of taxpayers' money."*²

Chris Huhne, 2007

No one questions Chris Huhne's opposition to nuclear prior to entering government. Where things become less clear is after he became Secretary of State for Energy and Climate Change in 2010. Initially, it appeared that he would stick to the letter of the coalition deal and leave himself in the clear: if nuclear was impossible without subsidy, and if he was not going to give any subsidies, then there would be no nuclear. In May 2010, the Guardian reported him saying that:

*"[it would be] entirely up to the nuclear industry ... because they have to decide whether or not they are able to build nuclear power stations without new public subsidy, and that is the key".*³

But by October 2010, after nearly 6 months at DECC, there was clearly some darker ambiguity creeping in. In a speech to the Royal Society, he began by re-stating the 'no-subsidies' formula, but also made it clear that his personal belief was that nuclear should be part of the generation mix - *"I believe that nuclear electricity can and should play a part in our energy future provided that new nuclear is built without public subsidy"*. Crucially, he added that *"nuclear should still be the cheapest low-carbon source of electricity"*.⁴ Commentators pointed out that if nuclear really is the "cheapest" low carbon source of energy, then subsidies wouldn't be necessary and nuclear plants could be built. Under the headline "Nuclear power is vital to our future, says Huhne", the Daily Mail reported that, *'Energy Secretary Chris Huhne yesterday completed a dramatic personal U-turn and declared: 'We need nuclear.'*⁵

² Nuclear Power Not Needed to Meet Climate Targets - Huhne. <http://www.chrishuhne.org.uk/date/2007/11>, 5 November 2007. Accessed 28 April 2012

³ Lib Dems perform U-turn on nuclear power, The Guardian 13 May 2010, Accessed on 28 April at: <http://www.guardian.co.uk/politics/2010/may/13/lib-dems-nuclear-energy-policy>

⁴ Chris Huhne speech to the Royal Society: Why the future of nuclear power will be different. Department of Energy and Climate Change, accessed on 28 April 2012 at: http://www.decc.gov.uk/en/content/cms/news/ch_sp_royal/ch_sp_royal.aspx

⁵ Nuclear power is vital to our future, says Huhne in energy U-turn. Daily Mail 14 October 2010, accessed on 28 April 2012 at: <http://www.dailymail.co.uk/news/article-2048787/Chris-Huhne-Nuclear-power-vital-future.html#ixzz1tKxXCgLR>

1.4 Ed Davey, Minister for Energy and Climate Change, 2012

“In addition to posing safety and environmental risks, nuclear power will only be possible with vast taxpayer subsidies or a rigged market. It is an issue that crops up in my postbag time and again. People don’t want nuclear, but they don’t know what the alternatives are. Now they do, and the alternatives are cleaner, safer, greener and better for the environment and the taxpayer.”

Ed Davey, launching the Liberal-Democrats’ ‘Say no to nuclear’ campaign 2006

“There have been understandable concerns given the expensive mistakes made in the past which the taxpayer is still paying for. But the Coalition agreement is crystal clear - new nuclear can go ahead so long as it’s without subsidy.”

Ed Davey, Minister for Energy and Climate Change, February 2012

Ed Davey was the architect of the previous, anti-nuclear, Liberal-Democrat policy. However, he too is sticking to the Coalition formula that, so long as there is no subsidy, there is no contradiction

in supporting nuclear new build. As with Huhne, this is more or less the only position he can take, given his previous stance. Pressed on this topic by the Commons magazine House, Davey responded to the question ‘is he a full convert [to nuclear], or just a reluctant supporter?’ by saying,

“It’s more than a reluctant acceptance. Nuclear has always been an issue of contention within our party [but] I think the balance of opinion has changed in recent times. I’m not trying to suggest that all Liberal Democrats are happy with nuclear power, they’re not. My personal criticism of nuclear power, the point I really worry about and still do, is the cost. I’ve always been worried about... making sure that new nuclear is cost-effective. Everything I’ve seen suggests it can be, and therefore it must be part of our strategy going forward.”⁶

DECC has decided that nuclear is going ahead, come what may, and has found the financial justifications that permit its ministers to claim that this is possible without subsidy. The real test of this strategy will come after the Queen’s Speech on the 9 May 2012, when the details of the price guarantees to nuclear will be revealed and the viability of not describing these as subsidies can be better calculated. In particular, we will have a better idea of the extent to which Liberal-Democrats opposed to nuclear power will accept the policies outlined in the EMR.

The anti-nuclear Liberal-Democrats

Where does this leave Liberal Democrats opposed to the use of nuclear power? Unlike the U-turn on University fees, the nuclear issue is not a dramatic one-off Parliamentary vote. It is a long grind, requiring new planning laws, new and complex pricing mechanisms, and at least the acquiescence of the Treasury to all of the cost implications. Each of these

⁶ Ed Davey: Out of the Shadows. The House Magazine 16th March 2012. Accessed on 28 April 2012 at: http://www.politicshome.com/uk/article/49016/ed_davey_out_of_the_shadows.html

aspects has the potential for delaying any theoretical agreement on how best to proceed.

Moreover, the scale of the strains within the Liberal Democrat party are now much clearer than in 2010, and the possibility of a serious split seems correspondingly larger. Several senior Liberal Democrats remain profoundly anti-nuclear. Deputy Leader Simon Hughes (the Liberal Democrat Shadow Minister for Energy until May 2010 but apparently not offered the job when the Coalition Government was formed) has spoken out publicly against nuclear power saying, “it fails every test”⁷. Meanwhile, Fiona Hall MEP (and leader of the Lib-Dem group in the European Parliament) said in April 2012 that:

“a public subsidy to help build new nuclear power stations in the UK would go completely against the Coalition Government Agreement and prolong “the most expensive failure of post-war British policy-making”, as Chris Huhne only recently called Britain’s nuclear energy policy”.⁸

The key point of Fiona Hall’s attack is that if she (and other) anti-nuclear Liberal-Democrats can claim that the Coalition agreement is being broken by DECC and Ed Davey, then they will be free to speak against the EMR and to vote against it too, without breaching that agreement.

After the Fukushima disaster, 19 Lib Dem MPs - one third of the Parliamentary party - signed a Commons motion warning that events in Fukushima ‘underline the extreme dangers inherent in nuclear power’, and calling for it to be abandoned. Signatories included former leader Charles Kennedy and party president Tim Farron.

Liberal Democrat MP Martin Horwood accused ministers of pushing through

secret subsidies for the nuclear industry - in breach of the Coalition agreement. He said: ‘There are going to be some pretty frank discussions about nuclear. There is growing unhappiness at the level of subsidies creeping in for the nuclear industry - they are being given millions of pounds for no change in behaviour whatsoever.’⁹

Martin Horwood has conducted a parliamentary campaign against nuclear, founded on scepticism about the credibility of the ‘no subsidy’ rule. In April, he asked Energy Minister Charles Hendry whether the EMR had been given the green light by the EU Commission and received the answer: “we are engaging closely with the European Commission to ensure the electricity market reform proposals are consistent with the appropriate rules”. This was widely interpreted to mean that no such green light has yet been received. This raises the nightmare prospect that detailed Parliamentary consideration of the EMR will begin before it is known whether or not the measures outlined in the EMR will be legal under EU rules.

⁷ Simon Hughes: No future for nuclear power in the UK. BBC Question Time, 18 March 2011. Accessed on 24 April 2012 at: http://news.bbc.co.uk/1/hi/programmes/question_time/9428908.stm

⁸ Subsidies for nuclear energy go against Coalition agreement AND economic common sense. Lib Dem Voice, 18 April 2012. Accessed on 24 April 2012 at: <http://www.libdemvoice.org/28132-28132.html>

⁹ UK needs new nuclear plants says Huhne as he completes U-turn on power stations. The Daily Mail, 30 June 2011. Accessed on 28 April 2012 at: <http://www.dailymail.co.uk/news/article-2009658/Chris-Huhne-says-UK-needs-new-nuclear-plants-completes-U-turn-power-stations.html#ixzz1tM07dHzH>

2. What is 'Policy Failure' in nuclear energy policy?

In most government departments, it is just about possible to make up policy on the hoof and get away with it by announcing a constant barrage of 'initiatives'. In the context of a civil nuclear power programme, however, 'policy uncertainty' is almost synonymous with 'policy failure'.

The construction of a civil nuclear power programme requires long-term planning and commitment. And 'long term' means decades, since just the planning and construction of a nuclear plant takes around 15 years whilst its operating lifetime will be at least a further 40 years, and decommissioning can take many years after that. Because of this, a recurrent problem for advocates of nuclear power in the UK is the absence of any long-term government energy plan of any sort over the past 30 years and the fact that this makes government promises of long-term action in this policy area look unreliable.

At the end of 2008, the Labour government of Gordon Brown admitted the inadequacy of relying entirely on free market forces, and created the Department for Energy and Climate Change (DECC).

Right from the start, however, the problem for DECC has been how to create a culture of long-term, government-determined policy in an arena where policy has, for 30 years, been left to short-term decisions made by private investors in the hope of early profits. This is a challenge made all the more complex when the ideology underlying the old policy (pro-free market, anti-state) is still dominant in most other parts of government, both at the political level and in the civil service.

The present policy of nuclear new build in the UK is a compromise between, on the one hand, demands for a long-term energy policy which credibly meets

future demand for energy and targets on greenhouse gas emissions but, on the other, government 'non-intervention' - hence the 'no subsidies' mantra. If DECC could persuade private utilities to build ten new nuclear plants, then they might have a working long-term policy which will hit the multiple competing targets they are faced with. Their problem is that no one will build nuclear without substantial subsidies, leaving DECC seeking ways of sweetening the deal without anyone calling foul on the 'no subsidies' rule.

This is not just a question of keeping a few anti-nuclear Liberal Democrats or Conservative backbenchers happy; if there are subsidies, they have to somehow avoid EU States Aid rules. Perhaps as importantly, the Treasury will have to approve them, and, as the most junior Ministry in Whitehall, DECC does not carry much clout there. This weakness will be important as the UK enters an era of almost unprecedented fiscal retrenchment: DECC is simply not in a position to win a battle with Treasury - and investors know that.

Uncertainty has therefore been there from the beginning, and investor confidence (after a brief flurry of excitement that saw the big three consortia enter the field in 2008-9) has slowly ebbed away. This was symbolised most clearly by the 2011 decision by SSE to pull out of the PowerGen consortium, followed in March 2012 by E.ON UK and RWE npower pulling out of the Horizon consortium - a move described by Tim Yeo, the Chair of the Energy and Climate Change Select Committee as a 'hammer blow' for UK's nuclear industry.

²⁰ Nuclear Power: the Energy Balance; van Leeuwen, J. & Smith, P., August 2005. Accessed on 14 April 2012 at: <http://www.stormsmith.nl/>

²¹ Sovacool, B.K., "Valuing the greenhouse gas emissions from nuclear power: A critical survey." *Energy Policy* 36 (2008): 2950-2963.

²² Secure Energy? Civil Nuclear Power, Security and Global Warming. James Kemp Frank Barnaby Oxford Research Group 2007

²³ Energy from Uranium. Storm van Leeuwen, J.W., Oxford: Oxford Research Group, 2006

²⁴ Review of Solutions to Global Warming, Air Pollution, and Energy Security. Stanford University, Mark Jacobson, Professor of Civil & Environmental Engineering 2008

3. The German Example

For a contrast with the UK's attempt to sort out a national energy strategy via the market decisions of private investors, the German example shows what can be achieved with political determination and leadership. The catalyst was the electoral power of the German Green Party which entered national government as long ago as 1998, as junior partners in coalition with the left of centre SPD. The Greens were faced with some uncomfortable compromises, but they were able to trade them for a whole-hearted decision to invest in renewables at the national level and to begin the process of designing a post-nuclear energy system.

It seems to have worked. In the second half of 2011, 20.8 per cent of total energy used in Germany was produced from renewables, a figure up from 18.3 per cent in 2010.¹⁰ The European average for renewables use is 12 per cent, while the UK is managing just 3 per cent.¹¹ Britain is committed to producing 15 per cent of its energy from renewable sources by 2020 - but campaigners say that the government currently has no prospect of achieving that target.

Moreover, Germany has also provided us with a case study in what happens when an economy loses its 'low carbon' nuclear component. Germany started to close down its nuclear fleet in 2010 and yet its emissions have fallen two years in a row¹² whilst its economy grew by over 3 per cent both years.¹³ The President of Germany's federal environment agency, Jochen Flasbarth, said, "The trend is a hopeful sign for the third [EU ETS] trading period (2013-20), and shows the margin for a possible adjustment of the European climate goals... at the same time, the nuclear phase-out started in March 2011 has had no obvious adverse effects on the CO2 emissions in Germany".¹⁴ Barclays Capital attributed the fall to - among other things -

'two years of heavy investment in renewables'. Keith Barnham at Imperial College has shown that Germany has already installed more wind power than the entire UK nuclear capacity, and every year it installs the wind equivalent of one new nuclear reactor.

German progress on energy efficiency also leaves the UK in the dust. We know from analysis on energy efficiency across EU states that where the UK has shown a gradual improvement of 15% between 1990 and 2008, over a similar time period (1991 to 2008)¹⁵ Germany achieved 26%. Analysis of this data shows that German policy in this area is characterized by:

*financial measures are dominant in Germany, especially in the residential sector. But they also play an important role in the industrial and tertiary sector. In industry, there is a clear focus on cooperative measures like voluntary agreements...*¹⁶

While some of DECC's 2050 Pathways, providing scenarios for meeting the 2050 greenhouse gas emission target, acknowledge the importance of reducing energy demand, others anticipate an increase of 10% on 2007 levels.¹⁷ Few people believe there is any serious strategy in DECC for reducing total energy consumption over the next 30 years.

¹⁰ Crossing the 20 Percent Mark; Green Energy Use Jumps in Germany. Spiegel International 30 August 2011. Accessed on 24 April 2012 at: <http://www.spiegel.de/international/topic/energy/08/30/2011>

¹¹ Missed renewable energy targets will cost UK dear, warns study The Guardian 21 April 2012. Accessed on 24 April at: <http://www.guardian.co.uk/environment/2012/apr/21/missed-renewable-energy-targets-uk>

¹² Preliminary 2011 EU ETS data show decrease. Argus Media 02 Apr 2012 18:05 GMT. Accessed on 17 April 2012 at: <http://www.argusmedia.com/pages/NewsBody.aspx?id=792338&menu=yes>

¹³ Germany's GDP Growth Slowed to 3.0% In 2011, Contracted In Q4. Business Insider January 11, 2012. Accessed on 18 April 2012 at: http://articles.businessinsider.com/2012-01-11/markets/30614311_1_germany-s-gdp-stock-markets-germany-s-dax

¹⁴ Preliminary 2011 EU ETS data show decrease. Argus Media 02 Apr 2012 18:05 GMT. Accessed on 17 April 2012 at: <http://www.argusmedia.com/pages/NewsBody.aspx?id=792338&menu=yes>

¹⁵ Energy efficiency profile: UK, Odyssee, Intelligent Energy Europe, Final Project, Monitoring of Energy Demand Trends and Energy efficiency in the EU ODYSSEE-MJRE (EU-27). Grant agreement N° EIE-07-297. Accessed online 28 April 2012 at: http://www.odyssee-indicators.org/publications/country_profiles.php

¹⁶ Energy Efficiency Policies and Measures in Germany Monitoring of Energy Efficiency in EU 27, Norway and Croatia (ODYSSEE-MJRE), September 2009. Accessed online on 28 April 2012 at: http://www.odyssee-indicators.org/publications/PDF/germany_nr.pdf

¹⁷ 2050 Pathways Analysis, HMG (July 2010). Accessed online on 28 April 2012 at: <http://www.decc.gov.uk/assets/decc/What%20we%20do/A%20low%20carbon%20UK/2050/216-2050-pathways-analysis-report.pdf>

4. Implications for the Coalition Government

There has as yet been little focus on the huge risks for the Lib Dems as the Coalition Government's nuclear policy unravels.

First, their current position is clearly at odds with the historical opposition to nuclear power that has been part and parcel of the Lib Dems' energy policies from wayback.

Second, there are many party members who remain steadfastly opposed to nuclear power, and who are deeply unhappy about the compromise deal they had to do to secure broader agreement over the Coalition.

Third, their relative acquiescence in this compromise is dependent on the Lib Dem's new-found enthusiasm for nuclear not damaging their commitments on energy efficiency, renewables, decentralised energy, and the low-carbon economy in general.

As we have made clear throughout our six Briefings, there is no way the Coalition Government can square this particular circle, because of:

1. Growing hostility to Coalition Government plans amongst investors.
2. Near-total dependence on EDF, whose financial prospects will be very significantly affected by the outcome of the French Presidential Election.
3. A commitment to there being "no public subsidy", even though EDF has made it clear it will not proceed without long-term, generous price guarantees that could not possibly be described as anything other than subsidy.
4. The strong likelihood that any such price guarantees will be in breach of EU rules on State Aid.
5. The astonishing incompetence of Areva (EDF's principal partner in the new programme) in managing to get anything built on time and on budget.

The almost inevitable consequence of these difficulties is that the Coalition Government's nuclear programme will fail, resulting either in no reactors being built at all, or commencement of one new reactor at Hinkley Point (as the 21st Century equivalent of the one reactor built under the erstwhile Tory Government at Sizewell B), but no further development from then on.

The absolutely inevitable consequence of such a failure is that the Government will have wasted unconscionable amounts of money, time and political will on a policy that cannot possibly deliver what it wants to achieve.

Every other aspect of its overall energy policy will suffer as a direct result of the opportunity costs involved in this forlorn nuclear excursion; investment in energy efficiency and renewables will be particularly badly hit.

Come the next General Election, in 2015, the Government will have little, if anything to show for this ill-judged strategy.

Any lingering pretensions that the Lib Dems may still have, at that time, in terms of presenting the Coalition Government as "The Greenest Government Ever", will sound preposterous. An already bad picture for the Lib Dems will become catastrophic, as they lose this one last reason to reassure voters that their involvement in the Coalition Government was a price worth paying to secure some of the things that Lib Dem members and voters really care about. The electoral consequences will be significant.

Why Nuclear Power makes No Sense for the UK

A series of briefings for the government

1. **Subsidising the Nuclear Industry (25 March)**
2. **Investing in Nuclear: Current Concerns (4 April)**
3. **The New Nuclear Industry (17 April)**
4. **Nuclear Power: Wider Economic Considerations (20 April)**
5. **Why Nuclear Power is Not the Answer the Climate Change or Energy Security (27 April)**
6. **Nuclear Power: A Toxic Issue for the Coalition Government (2nd May)**

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