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1. Liberal Democrats attempt nuclear policy switch

The Liberal Democrat Party will consider ending its long-standing opposition to nuclear power at its Annual Conference in Glasgow in September as part of a policy motion setting out plans to shift the economy towards a “zero carbon Britain”. (1)

The conference motion recognises that decarbonising the electricity sector is “an immense and pressing challenge” and would require a significant amount of investment to maintain energy security.

In a debate on Green Growth and Green Jobs at the Conference at 10.20am on Sunday 15th September 2013 (2)

The motion includes two options:

Either Option A:

Rejecting the construction of a new generation of nuclear plant.

Or Option B:

Accepting that in future, nuclear power stations could play a limited role in electricity supply, provided concerns about safety, disposal of radioactive waste and cost (including decommissioning) are adequately addressed and without allowing any public subsidy for new build.

The Liberal Democrat Secretary of State for Energy and Climate Change has already nailed his colours to the mast with regard to new reactors. Davey says he had made clear his doubts about nuclear were “because of price”. He says nuclear critics: “...*should worry about climate change. So many environmentalists have changed their views because of the threat of climate change and the fact that nuclear is low-carbon – James Lovelock, Mark Lynas, Professor James Hansen, George Monbiot, Stephen Tindale and the late Bishop Montefiore.*” (3)

But he is clear that he is “*not going to sign any deal with EDF unless it is value for money, is affordable and meets the coalition agreement of no public subsidy. I’ve made my position clear within government and to EDF,*” he says. “*I want value for money for the consumer, I want an affordable price, I want something that is fair for British business. I’m not prepared to sign a deal in order to sign a deal. Nuclear is a mature industry - it’s been around 50 years or more. It’s got to compete with other low-carbon technologies, and if it can’t we won’t sign a deal.*” (4)

This is partly because he thinks Hitachi will step in and build reactors at Oldbury and Wylfa, but he has also admitted that Britain could survive without nuclear power. (5)

Whether or not and how quickly a new reactor programme progresses will depend a lot on Ed Davey’s discretion. If negotiations with EDF fail, the earliest Hitachi could consider starting to build a new reactor would be around 2018, by which time solar energy in particular will be approaching cost parity with coal and gas in large parts of Europe.



Friends of the Earth's review of the evidence for and against new reactors, aided by the Tyndall Centre at Manchester University, concluded that:

"...nuclear power is expensive and will remain so in the future whereas the cost of renewable energy is plummeting and will do so for some time to come. It brings unique risks not faced with other energy technologies, particularly with regards waste. The Government should abandon its fanciful plans for new conventional nuclear power." (6)

It is hard to imagine how it can be argued that concerns about safety, disposal of radioactive waste and cost (including decommissioning) have been adequately addressed or that new reactors are being planned without any public subsidy.

The 2010 Liberal Democrat manifesto promised to *"reject a new generation of nuclear power stations."* (7) In June 2006, in a document called *"Where will Blair hide his nuclear tax bombshell?"* Ed Davey declared nuclear power to be unaffordable and unnecessary. (8)

The Conference motion also allows for:

"Permitting limited shale gas extraction, ensuring that regulations controlling pollution and protecting local environmental quality are strictly enforced, planning decisions remain with local authorities and local communities are fully consulted over extraction and fully compensated for all damage to the local landscape."

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 2. <http://www.libdems.org.uk/siteFiles/resources/Autumn%20Conf%202013/Aut13%20Agenda%20for%20web2.pdf> (See pages 25-26)
 3. Guardian 5th July 2013 <http://www.theguardian.com/politics/2013/jul/05/davey-minister-nuclear-power-hinkley-point>
 4. See also Building 2nd Aug 2013 <http://www.building.co.uk/sustainability/sustainability-issues/interview-ed-davey-energy-secretary/5058198.article>
 5. FT 17th June 2012 <http://www.ft.com/cms/s/0/70f2a90e-b89e-11e1-a2d6-00144feabdc0.html>
 6. Why Friends of the Earth Opposes Plans for New Nuclear Reactors, August 2013 http://www.foe.co.uk/resource/briefings/nuclear_power_friends_of_t.pdf
 7. Independent 26th March 2013 <http://www.independent.co.uk/news/uk/politics/andy-mcsmithsdiary-vicky-pryce-might-have-rung-the-death-knell-for-marital-coercion-8550525.html>
 8. Where will Blair hide his nuclear tax bombshell? By Ed Davey and David Howarth, Liberal Democrats, June 2006 <http://www.nuclearpledge.com/reports/nuclear-tax-bombshell.pdf> See nuClear News No.48 <http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo48.pdf>



2. The Lib Dems and nuclear waste

According to the Liberal Democrats Conference Motion, for nuclear power to have any chance of going ahead under a Liberal Democrat Minister the issue of nuclear waste has to be adequately addressed.

But the decision in March 2013 by Cumbria County Council not proceed to the next stage of the process for selecting a potential site for construction of a deep underground radioactive waste repository has left a large hole in the UK's radioactive waste management policy.

The Government White Paper - 'Meeting the Energy Challenge – a White Paper on Nuclear Power', published in 2008 described nuclear waste policy as follows:

"Our policy is that before development consents for new nuclear power stations are granted, the Government will need to be satisfied that effective arrangements exist or will exist to manage and dispose of the waste they will produce."

Ed Davey says he is confident that a site for the waste can be located democratically. He said: "... we need to be clear we already have huge amounts of waste left over now from the first two generations of nuclear reactors and from the military programme. We have to deal with that whether we build one single new nuclear reactor or not. It has to be dealt with. The waste from new nuclear will take up less volume – that would mean a slightly larger geological waste disposal facility than was needed anyway. Do I think we can achieve that? Yes, I do." (1)

When the government granted consent for Hinkley it dealt with the Cumbria withdrawal in the decision letter by referring to a written ministerial statement given by Ed Davey MP in which he said: '*I am optimistic that a site for the GDF will be found*'.

So, it looks as though we could have Liberal Democrat Party support for new nuclear reactors and a decision to go-ahead with new reactors based solely on Ed Davey's optimism that a site for a nuclear waste dump can be found. Basing Government policy on the Secretary of State's optimism must surely be an abrogation of the 2008 policy.

Davey continues to point out that Allerdale and Copeland District Councils wanted to give the search for a site in West Cumbria the go-ahead, but this was prevented by the County Council. This suggests that there may be moves afoot to tweak the planning system to allow District Authorities to go it alone. In an interview in *The Guardian* he says he is likely to recast the franchise so a go-ahead is needed only from the councils directly affected. (2)

Allerdale and Copeland Green Party spokesperson, Geoff Smith points out that Tory Energy Minister Baroness Verma continues to insist that volunteerism, not geology, is the major factor in choosing a nuclear dump site. No other area of the country has shown any willingness to volunteer. He says "*it is obvious that those of us concerned with the*



immediate blight and the long term (tens of thousands of years) of West Cumbria must be prepared to once again “man the barricades”. (3)

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1. Guardian 5th July 2013 <http://www.theguardian.com/politics/2013/jul/05/davey-minister-nuclear-power-hinkley-point>
 2. Ibid.
 3. Whitehaven News 15th August 2013 <http://www.whitehavennews.co.uk/letters/you-say/council-endorsement-of-nuclear-industry-is-a-conflict-of-interest-1.1077401>



3. European Consultation on Subsidies

At the moment, even if the contractual wrangling about a strike price for Hinkley can be sorted, another potential stumbling block would be whether or not the deal is legal under European Union (EU) State Aid rules. The EU has a swathe of guidelines in place to stop governments unfairly favouring particular industries, so any agreement between the Government and EDF would need to get permission from the European Commission. (1)

Now a draft paper, entitled "*Paper of the Commission Services containing draft guidelines on environmental and energy aid for 2014-2020*", has been leaked to the Press which indicates that the Commission is leaning towards allowing direct state aid for nuclear power. (2) Under EU competition rules, state aid is prohibited and only justified if it supports a common EU interest. The leaked commission guidelines on state aid describe subsidies to nuclear energy as a "common EU objective". Given the divergence of policies on nuclear power in Europe, this definition can only be interpreted as a signal that the commission intends to carve out specific state aid provisions for nuclear power. Reactions to the leak from Germany and Austria's leaders confirm this reading. (3)

The guidelines are expected to be published around the end of September, after the German elections on September 22nd. Following consultation with member states, they would need to be approved by the EU Commissioners meeting as a body, which is not expected until next year.

Energy law expert Chris White of Pinsent Masons said: "*Without wishing to prejudge the final form of any guidelines, the announcement may potentially bring developers and investors a little more confidence that project investment may, in certain cases, be able to benefit from allowable state aid and/or overcome state aid concerns. Particularly around the UK Government's proposed EMR package, as well as other key areas such as nuclear insurance arrangements and potential funded decommissioning/waste arrangements, plus any relevant state guarantees aimed at encouraging investment in infrastructure*". (4)

Opponents of nuclear power, including environmental groups, say government funding for atomic power would be a breach of EU legal principles and would mark a major shift in policy. Under EU law, state aid is designed to address problems the market cannot solve, and must not cause unfair competition. It is in principle reserved for technology in its infancy, such as renewable energy. Nuclear generation began more than half a century ago. (5)

Experience has shown that nuclear power plants cannot be built without subsidies. The Czech nuclear power project Temelin, for instance will be directly dependent on the possibility of direct subsidies. The two-third state-owned utility CEZ is officially in negotiations to find a way for the Czech government to guarantee fixed feed-in tariffs for the new reactors. The model is being copied from the UK. (6)

The Commission has not yet received a formal application from the UK to give state aid approval to its plans. CfDs are expected to be introduced from 2014 and will be governed by the Energy Bill, which is currently before the House of Lords. (7)

Watch out for a European website going online early in September, (www.my-voice) including a petition and a form help you participate in the European consultation on state aid for nuclear.



FoE Austria and Europe are planning a campaign during the consultation period to raise awareness. A new legal analysis on state aid for nuclear will be published in September and in November the phase-out nuclear power in Europe study.

A study for Greens/EFA Group in the European Parliament undertaken by the think tank E3G discusses how the reform of state aid rules could provide an opportunity for the EU to deliver its 2020 strategy effectively. Current deliberations on limiting state aid for renewables and paving the way for nuclear subsidies are not in line with the strategic goals the European Union. The study recommends creating a block exemption for all energy efficiency schemes and making state aid compatible with renewable energy support incentives as part of a clear renewables strategy. (8)

Meanwhile the European Commission (Directorate General for Energy) is currently assessing to what extent the situation of potential victims of a nuclear accident in Europe could be improved, within the limits of EU competence. A consultation exercise is seeking the views of all relevant stakeholders on the need for common rules at EU level on insurance and compensation for nuclear accidents in the EU. The consultation closes on 22nd October 2013. (9)

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1. Carbon Brief 11th July 2013 <http://www.carbonbrief.org/blog/2013/07/european-commission-has-final-say-over-fate-of-uk's-new-nuclear-ambition>
 2. Reuters 14th Aug 2013 <http://uk.reuters.com/article/2013/08/14/uk-eu-nuclear-idUKBRE97D05N20130814>
 3. Letter from Andrea Carta, Greenpeace to the FT 29th July 2013 <http://www.ft.com/cms/s/8fa484fe-f61d-11e2-8388-00144feabdc0.html>
 4. Out Law 16th Aug 2013 <http://www.out-law.com/en/articles/2013/august/eus-review-of-energy-state-aid-rules-could-give-more-confidence-to-nuclear-investors-says-expert/>
 5. Irish Independent 17th August 2013 <http://www.independent.ie/world-news/scene-set-for-nuclear-power-row-as-eu-rules-on-state-aid-due-soon-29506330.html>
 6. Nuclear Monitor, 23rd August 2013. No.766.
 7. Out Law 16th Aug 2013 <http://www.out-law.com/en/articles/2013/august/eus-review-of-energy-state-aid-rules-could-give-more-confidence-to-nuclear-investors-says-expert/>
 8. E3G 7th Aug 2013 <http://www.e3g.org/news/media-room/state-aid-guidelines-new-study-makes-proposals-to-square-guidelines-with-eu>
 9. European Commission (accessed) 14th Aug 2013 http://ec.europa.eu/energy/nuclear/consultations/20130718_powerplants_en.htm



4. Inside the Coalition: The Tories and Energy Policy

A number of Tories now feel that climate change scepticism is not just acceptable but advantageous, according to *The Independent*. There are some rows between the Tories and the Liberal Democrats in government that everybody knows about. But there are other, more important, disputes that rarely make big headlines but have implications that will affect us all. And one of them is going on right now over how best to keep Britain's lights on.

The nub of the problem is straightforward. Britain has to replace the vast majority of its ageing coal, gas and nuclear power stations that provide us with electricity within the next five years. We've known this for a long while – but decision time is imminent. A few years ago the solution appeared to be that we would invest large amounts of money in new renewable technologies (alongside new nuclear power) with a few gas stations that could be turned on during times of increased demand or lack of supply. But today that consensus has fallen apart for three linked reasons: the recession; increased climate scepticism and shale gas. (1)

Chancellor George Osborne argues, albeit behind closed doors, that it is stupid to commit billions of pounds to renewables now when we could soon have a plentiful source of energy under the ground at a fraction of the price – shale gas. By refusing to give any price guarantees for wind energy beyond 2020 or agree to a 2030 decarbonisation target, the Tories will put off a lot of renewable investors from coming to Britain and will effectively strangle the large-scale development of off-shore wind.

So the Tories seem to have gone from attacking the Labour government for failing to decarbonise fast enough, in 2009, to being gas-crazed frack-evangelists? The energy debate has been sacrificed to political expedience. George Osborne thinks we can replicate Thatcher's golden years by making shale gas his North Sea oil, according to *The Guardian*.

Ed Davey is facing a time-consuming “guerrilla war”, driven by Tory party climate sceptics who are determined to undermine his attempts to green Britain's electricity supply, according to *The Independent*. (3) In the latest outbreak of hostilities, sources close to Environment Secretary Owen Paterson briefed journalists that he was being blocked from publishing a joint report with Mr Davey's department which allegedly undermined the case for on-shore wind farms. (4) But sources close to Mr Davey rubbished the allegations, saying that Mr Davey had never even seen the document in question, which was at a very early stage.

This appears to be the latest in a string of aggressive actions by Conservative ministers seeking to water down the Government's green energy policies. A series of key DECC staff, including senior Energy Bill advisors Ravi Gurumurthy and Jonathan Brearley, have left the department in recent months. It is understood that they had become demoralised by interference from the Treasury. Davey also had to fight to ensure that stringent safeguards were put in place for fracking in the face of unbridled enthusiasm for shale gas among some of his Tory colleagues.



The FT, on the other hand, says the blocking of the publication of a serious and detailed study of the impact of wind farms across the UK exposes the tip of an iceberg. At least a dozen major reports on energy policy issues, in many cases commissioned at considerable expense from external consultants are being kept secret because of their inconvenient findings. It is time for a change of culture in Whitehall. Where, for example, is the internal DECC analysis of the Green Deal or the detailed working papers behind the Department's projection that gas and other energy prices will continue to rise in real terms for the foreseeable future? (5)

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1. Independent 5th Aug 2013 <http://www.independent.co.uk/news/uk/politics/row-over-how-britain-can-keep-the-lights-on-rages-between-tories-and-lib-dems-8747363.html>
 2. Guardian 15th Aug 2013 <http://www.theguardian.com/commentisfree/2013/aug/15/tory-labour-energy-policy-winning-votes>
 3. Independent 20th Aug 2013 <http://www.independent.co.uk/news/uk/politics/lib-dems-face-guerrilla-war-with-tories-over-green-power-plan-8777100.html>
 4. Telegraph 19th Aug 2013 <http://www.telegraph.co.uk/earth/energy/windpower/10253462/Ministers-at-war-over-secret-wind-farm-evidence.html>
 5. FT 20th August 2013 <http://blogs.ft.com/nick-butler/2013/08/20/britains-transparency-problem/>



5. FoE's Nuclear Review

Friends of the Earth England Wales and Northern Ireland (FoE [EWNI]) embarked last year on a review of the evidence for and against new reactors in the UK. The review was undertaken because FoE believes the planetary emergency context we are operating in requires a hard-headed approach in assessing and reassessing positions on technologies and practices. (1)

FoE asked the Tyndall Centre at Manchester University to independently review the evidence for and against nuclear power. FoE says the Centre does not have a position for or against new nuclear power, but have expertise in nuclear power, and they are leading academics on climate change, especially carbon budgets. Their review was peer reviewed by academics in favour of nuclear power and against.

The Tyndall Centre concluded that FoE's approach, and the non-nuclear pathway which FoE advocates was credible although challenging. (2) However they recommended that FoE also regularly review the plans it is advocating to take into account technological developments, particularly if higher levels of electricity are needed than modelled due to faster roll out of electric cars and heat pumps than the already very ambitious levels within our energy pathway, or if technologies such as CCS, energy storage or off-shore wind do not develop as expected. FoE will of course do so, but given that the UK is particularly blessed with large amounts of renewable energy it is their current view that the resources are likely to be adequate to fulfil any potential extra electricity demand.

FoE (EWNI's) September 2012 Briefing: "*Why Government plans for new nuclear reactors are far-fetched, economically wrong and potentially risky for the climate*".

http://www.foe.co.uk/resource/briefings/nuclear_power0.pdf has been updated as a result of the review.

The August 2013 Briefing is called "*Why Friends of the Earth opposes plans for new nuclear reactors.*" http://www.foe.co.uk/resource/briefings/nuclear_power_friends_of_t.pdf

The new briefing draws on the Government's 2012 Energy and Emissions Projections which shows the nuclear electricity generated jumping from 58.1TWh in 2013 to 103TWh by 2030. (3)

FoE says expecting this kind of increase in capacity is far-fetched. The only way any nuclear plants will be built is if the government provides huge subsidies - that would go onto consumers' energy bills for decades ahead - and even then it is highly unlikely that more than a few could be constructed on the timetable the government suggests. FoE opposes this long-term subsidy arrangement for a mature technology like nuclear power. Subsidies should be time limited and focused on developing and bringing to market relatively new technologies such as offshore wind.

But the plans are not just far-fetched - they could also put at risk future carbon pollution reduction targets agreed by the Coalition Government under the Climate Change Act 2008. This is because by ploughing ahead with the idea that eight new nuclear plants will be built, and built



on time, the Government may not put enough effort into renewables or energy saving. This could lead to a situation where faster to build unabated gas-fired stations are built instead.

The Tyndall Centre says the higher cost estimates for nuclear power are more plausible than estimates of low costs, stating that “*claims that nuclear power is cheaper than other low carbon options (including CCS and wind) are unlikely to be borne out in reality*”.

The new briefing is able to discuss the fact that the strike price for new nuclear is likely to be around £100/MWh for 30 years. (It may even be 35 years) But it forgets to mention that, although offshore wind will get £155/MWh in 2014-15, falling to £135 in 2018/19, contracts offered to renewable generators are only going to last for 15 years, a reduction compared to the Renewables Obligation where the premium prices last for 20 years.

FoE says operators get a huge public subsidy by having very limited liability in the case of accidents – at present this is €169m but may rise to a maximum of €1.2 bn maximum. This is tiny compared with potential costs - the Fukushima catastrophe cost \$100-250 bn. FoE says if they had to insure themselves the cost of their electricity would rise by at least £40/MWh. In fact the figures given in one study are between £120/MWh and £200/MWh. (4)

FoE says nuclear proponents trumpet the jobs that could be gained through building new nuclear power plants. The Tyndall Centre points out that the proportion of components manufactured in the UK and numbers of skilled workers brought in from outside of the UK are not currently known. As with other technologies where the UK provides a market but does not have established domestic companies providing the majority of services, such as offshore wind, a great deal will depend upon expanding the UK supply chain and building a skills base.

Although the Tyndall Review says climate change does not appear to present a severe risk to the safety of reactors on the UK's coasts, it does say that in the long-term, changes to sea level, erosion rates and storm surges may have implications for site stability, particularly during decommissioning phases. More research in this area is required.

FoE says even with new nuclear power designs there remains a risk, even if it is very small, of a catastrophic accident forcing the evacuation of tens of thousands of people, costing hundreds of billions of pounds and having significant impacts on people's mental well-being. Given there are other ways to produce the energy we need and cut carbon costs Friends of the Earth believes it is a risk not worth taking.

On waste the new FoE briefing adds a new sentence: “*to create more waste through building new nuclear plant is a folly, unless nuclear power is critical to meeting carbon dioxide reduction requirement which [it is] not.*”

After comments by the Tyndall Centre, FoE appears to have downgraded its arguments of nuclear proliferation. The Tyndall Review says it did not consider “*the political legitimacy that civilian nuclear programmes may lend to weapons programmes now or in the future “although with 65 plants under construction across the World, 167 planned and 317 proposed the impact of 8 plants in the UK on legitimacy should not be over-stated.*”

But it will probably be FoE's comments on the health impacts of nuclear power which will prove to be most controversial. The Tyndall Review suggests the health impacts of coal are worse than



nuclear power and states that recent life-cycle research also suggests this is the case for gas, including gas with CCS. Health impacts for renewables are broadly comparable to nuclear, but the review cautions that the life-cycle assessments have not accounted for all the health impacts resulting from nuclear accidents. Although the review mentions the KiKK study on childhood leukaemia around nuclear power station in Germany, it states that reviews of UK nuclear power stations have not found evidence of elevated cancer incidents. It cites the May 2011 COMARE report as evidence of this. Although it was widely reported that COMARE's report as provided evidence that nuclear power plants did not cause childhood cancers, these conclusions were scientifically incorrect. COMARE still found a 22% increase in childhood acute leukaemia, non-Hodgkins lymphoma (NHL), chronic myeloproliferic disease and unspecified leukaemia. This was called a negative finding because it lacked statistical significance. This also was scientifically incorrect. What COMARE should have stated was that a leukaemia increase was found which was not statistically significant, but that this could simply be due to small numbers. (5)

There have been over 60 scientific studies carried out around the world on increased **childhood cancers** near nuclear facilities. Most of these have found cancer increases. The findings of all these studies have been discussed by Fairlie and Körblein who concluded that *"the copious evidence indicating increased leukaemia rates near nuclear facilities, specifically in young children, is quite convincing, at least to independent observers."* (6)

Although FoE has come to the right conclusions, it is the overall tone of this briefing which will upset campaigners. For instance *"nuclear waste management remains an "unresolved issue" in the UK with no safe repository in place. A new build nuclear programme would not add significantly to the quantity of waste but could increase the overall radioactivity of the waste inventory by around 265 per cent."* (7) As several former FoE anti-nuclear campaigners will tell you, the volume of the waste is irrelevant. When we start to use phrases like *"would not add significantly"* we start to lose that sense of moral outrage that we need to oppose a 265% increase in this dangerous waste that we have almost no idea what to do with.

The Tyndall report falls into the usual trap of saying that CoRWM recommended a Geological Disposal Facility without examining all the caveats which the Government has conveniently ignored. Nor does the Tyndall Review discuss the current debate about whether searching for a geologically superior site should be done first before asking communities to volunteer to host a nuclear waste repository.

The Tyndall Review compares FoE's proposed energy pathway to 2030, which has a very small contribution from nuclear power, with that of the Climate Change Committee which expects nuclear power to produce around 175TWh in 2030. It concludes that the FoE scenario is a technically credible alternative.

When N2NP heard that FoE had asked the Tyndall Centre to review its policy on nuclear power we produced out "What's Wrong with Nuclear Power" Briefing. This makes six points which were prompted by five points made on the FoE website.

http://www.no2nuclearpower.org.uk/reports/Whats_wrong_with_building_new_nuclear_reactors.pdf



1. A hard-headed look at nuclear power, Mike Child Blog, 2nd August 2013
http://www.foe.co.uk/news/nuclear_40884.html
2. A Review of Research Relevant to New Build Nuclear Power Plants in the UK, Tyndall Centre, January 2013 http://www.foe.co.uk/resource/briefings/tyndall_evidence.pdf
3. See Annexe E here <https://www.gov.uk/government/publications/2012-energy-and-emissions-projections>
4. See <http://www.energyfair.org.uk/reports#liabilities>
5. COMARE 14th Annual Report on low-level radiation and response to the KIKK report – a critical analysis by Dr Ian Fairlie, NFLA Briefing 16th May 2011
[http://www.nuclearpolicy.info/docs/briefings/A196_\(NB82\)_COMARE_report.pdf](http://www.nuclearpolicy.info/docs/briefings/A196_(NB82)_COMARE_report.pdf) See also NuClear News No.30 <http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo30.pdf>
6. Fairlie I and Körblein A. A Review of epidemiology studies of childhood leukaemia near nuclear facilities: commentary on Laurier et al. Radiat Prot Dosimetry. 2010 Feb;138(2):194-5; author reply 195-7.
7. For the 265% number see <http://corwm.decc.gov.uk/assets/corwm/pre-nov%202007%20doc%20archive/plenary%20papers/2006/25%20-%2026%20january%202006/1531%20-%20inventory%20summary%20information.pdf>



6. Fuel Poverty

Since 2004, fuel prices have risen by over 70% in real terms at a rate faster than energy efficiency programmes can offset. Fuel prices are likely to continue to rise, and there is an inexorable shift from progressive, tax-based policies to regressive ones, whereby levies are applied to household utility bills. In the UK, approximately half the fuel poor live in the worst standard of housing, rated F and G on the energy performance certificate scale. Policies to improve the energy efficiency of the worst housing would enable the Government to fulfil two legal obligations; to the fuel poor under the Warm Homes and Energy conservation Act 2000, and to the mitigation of carbon dioxide emissions under the Climate Change Act 2008. However, Government remains ambiguous on whether the responsibility for energy efficiency improvements lies with the landlord or owner and occupant or tenant. (1)

As a result of rising prices in real terms energy is increasingly unaffordable for households on low incomes. The House of Commons Energy and Climate Change Committee recently concluded that energy efficiency programmes should be the focus of Government's fuel poverty policy in order to tackle the long-term root causes of the problem cost-effectively. It is disappointing that so much of current Government fuel poverty policy centres on short-term help with bills when improving the thermal efficiency of UK housing stock should be the priority. The Committee says England will be the only country in the UK without a tax-funded energy efficiency programme to address fuel poverty following the closure of Warm Front and that resources under ECO will be insufficient given the scale of fuel poverty. (2)

A government strategy on fuel poverty isn't due to be published until the end of this year. Without action, it looks like the situation could worsen. Government consumer body Consumer Futures suggested in evidence to the Energy and Climate Change Committee that 6.2 million, or more than a quarter of the country's households could be in fuel poverty by 2016. Help the Aged pointed to the government's estimate that 125,000 to 250,000 households will be taken out of fuel poverty as a result of ECO. It labelled these figures "very, very disappointing" - comparing them to the estimated figure of 6.2 million households in fuel poverty. (3)

The Department of Energy and Climate Change (DECC) has changed the way it defines fuel poverty – seemingly lifting two million households out of it in the process. But is it an improvement? A close inspection of new DECC figures shows that while the new definition still has significant problems, it helps illustrate how difficult the situation is for millions of the UK's most vulnerable households. The government has already missed its target of eliminating fuel poverty among the poorest households by 2010, and looks unlikely to keep its promise to eradicate it altogether by 2016. The latest figures show that – however it is defined – fuel poverty remains a problem for millions of households, and the government isn't doing enough to prevent it. (4)

Meanwhile, the UK also look set to miss its 20% target for improving energy efficiency by 2020. Latest estimates from the European Commission suggest we will achieve less than half - no more than 9 per cent.



Energy Secretary Edward Davey has been vigorously championing a 40% cut between 1990 and 2030 in CO₂ emissions across the European Union. This should rise to 50%, if an “ambitious global climate deal is struck.” But he argues this doesn’t mean we need new targets renewable or energy efficiency. He says the EU shouldn’t prejudge the balance between increasing efficiency and deploying other low carbon measures to meet the greenhouse gas targets. This would allow the UK to meet its climate change objectives by, for example, building expensive nuclear power stations whilst allowing fuel poverty to get worse.

At present, the European Union has three energy-related targets for 2020. Each is based upon an emblematic 20 per cent reduction. These are to cut carbon dioxide emissions by 20 per cent; to boost the proportion of renewable energy to 20 per cent; and to improve energy efficiency by 20 per cent. These targets may be equal in timescale and objective. But they are not equal in stature. The first two both have the force of Community law behind them, effectively compelling each government to adopt appropriate policies. In contrast, the energy-saving target does not have the same status at all. It is far from compulsory, just an indicative aspiration. Every single objective commentator acknowledges that the cheapest and swiftest way to achieve carbon dioxide reductions is by minimising energy wastage. We have known for 30 years that rational investments aren’t being taken, and won’t be taken, unless market failures are corrected. We aren’t getting the least cost path to saving carbon during this decade. Nor will we in the next, unless there is a specific energy efficiency target. (5)

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1. Fuel Poverty 1991 – 2012, University of Ulster 2013 <http://fuelpoverty.eu/wp-content/uploads/2013/03/Fuel-poverty-anniversary-booklet.pdf>
 2. Energy Prices, Profits and Poverty, House of Commons Energy and Climate Change Committee 16th July 2013 <http://www.publications.parliament.uk/pa/cm201314/cmselect/cmenergy/108/10810.htm>
 3. Carbon Brief 29th July 2013 <http://www.carbonbrief.org/blog/2013/07/fuel-poverty-policy-is-‘frozen’,-says-parliamentary-committee>
 4. Carbon Brief 8th Aug 2013 <http://www.carbonbrief.org/blog/2013/08/how-a-definition-change-lifts-two-million-households-out-of-fuel-poverty>
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7. Small Modular Reactors (SMRs)

Depending on your perspective Small Modular Reactors (SMRs) are either a game-changer in electrical generation, or a failure-in-the-making that will fleece taxpayers for a half-billion dollars. SMRs are much smaller than current reactor designs and so will also cost less — about \$1 billion-2 billion apiece, compared with \$10 billion-\$15 billion for a large plant.

Babcock and Wilcox (B&W) has taken the lead in the development of SMRs with its mPower design. Eighty-five feet tall and 13 feet wide, it incorporates several systems into one unit. The unit is built in a factory, instead of in the field, and then shipped to the site on a truck.

The Tennessee Valley Authority wants to be the first utility to build an SMR plant. Geologic testing is underway at a site on the Clinch River, not far from the Oak Ridge National Laboratory. But already the process is falling behind. TVA was expected to apply for a construction permit last year. But that application has been delayed until 2015 at the earliest. The federal government has pledged more than \$500 million to help develop the technology. B&W has so far received \$79 million for R&D, with the possibility of an additional \$150 million. (1)

A shift to SMRs is unlikely to breathe new life into the increasingly moribund U.S. nuclear power industry, according to the Institute for Energy and Environmental Research (IEER), since SMRs will likely require tens of billions of dollars in federal subsidies or government purchase orders, create new reliability vulnerabilities, as well as serious concerns in relation to both safety and proliferation. (2)

SMR proponents claim that small size will enable mass manufacturing in a factory and shipment to the site as an assembled unit, which will enable considerable savings, but 100 reactors, each costing about \$900 million, including construction costs – a total of \$90 billion – would be required for this to work.

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1. Fox News 30th July 2013 <http://www.foxnews.com/politics/2013/07/30/mini-nuclear-plants-next-frontier-us-power-supply-or-next-solyndra/>
 2. IEER Press Release 8th Aug 2013 <http://ieer.org/resource/nuclear-power/light-water-designs-of-small-modular-reactors-facts-and-analysis/>



8. Local Energy Revolution?

Schools, businesses and communities should be given financial support to install medium-sized renewable energy schemes such as wind turbines and solar panels, according to the House of Commons Energy and Climate Change Committee (1) because of the benefits these projects can bring to communities and the country as a whole. (2)

Generous subsidies exist for the smallest green energy schemes, as well as for the projects on the largest scale. But projects of 10-50 megawatts, equivalent to a small onshore wind farm, fall through a funding gap and do not get any similar state subsidy. The MPs found that the biggest wind farms and solar farms would still provide the largest amount of new renewable energy in the UK. But they concluded that medium-sized schemes could provide a significant proportion of energy. (3)

Joint ventures between renewable energy developers and communities would be beneficial: community groups benefit by accessing expertise and finance from commercial partners, and commercial partners benefit from increased local support. Government should do more to promote this approach and to provide more central guidance. The Committee recommend that the option for a local ownership share in new energy projects should be added to the industry's Community Benefit Protocol.

The Committee is pleased that DECC is planning extend the Feed in Tariff threshold to enable projects of up to 10 MW in size to access this support mechanism, but projects between 10MW and 50MW will not be served by Feed in Tariffs and are unlikely to be able to access Contracts for Difference, which are geared toward much larger-scale developments. There is a risk that these projects will be disadvantaged by the move from the Renewables Obligation to Contracts for Difference. The Government should bring forward an alternative proposal to support projects within the 10-50MW range to incentivise the development of medium-sized projects which cannot access either Contracts for Difference or Feed in Tariffs.

The Committee recommends that Community Energy Scotland is used as a model to provide the expertise and specialist knowledge that communities need to get projects off the ground.

The cross party group also said Government needs to do more to encourage local authorities to identify suitable areas for wind farms or solar arrays. The report comes as solar companies warn that solar panels must go on more schools and other buildings since there are not enough brownfield sites to build solar farms around the UK. (4)

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1. Local Energy, House of Commons Energy and Climate Change Committee, 16th July 2013 <http://www.publications.parliament.uk/pa/cm201314/cmselect/cmenergy/180/180.pdf>
 2. House of Commons 6th Aug 2013 <http://www.parliament.uk/business/committees/committees-a-z/commons-select/energy-and-climate-change-committee/news/local-energy-substantive/>
 3. FT 6th Aug 2013 <http://www.ft.com/cms/s/9cbc25aa-fdef-11e2-8785-00144feabdc0.html>



4. Telegraph 6th Aug 2013 <http://www.telegraph.co.uk/earth/earthnews/10223755/Communities-should-be-paid-for-wind-and-solar-in-their-neighbourhood.html>



9. Sellafield Notes

Speculation that Nuclear Management Partners (NMP), which manages the £22bn nuclear-decommissioning programme at Sellafield on behalf of the NDA, could lose the contract (see nuClear News No. 52) has sparked a row over the future level of funding that West Cumbria might receive from the nuclear industry.

The Whitehaven News says that the NDA is looking closely at the possibility of taking direct control of Sellafield Ltd itself through an “in-house” subsidiary. Well-placed industry sources suggest NDA executives favour the option of the site being operated “in-house”, which would mean Sellafield Ltd continuing to contract work with the private sector to deliver substantial projects. But an NDA spokesman stressed: “At this point there are no preferred options and any speculation as to the views of individual NDA executives is simply that and has no foundation in fact.”

The problem for West Cumbria is that NMP has funded various projects in the area to the tune of £22.5m over the past five years. The NDA has put £50m of funds into the area over the same period. But if the NDA takes Sellafield in house, it is difficult to see that level of funding continuing. One nuclear insider said: “Not for one minute can I see the government spending £4.5 million a year of taxpayers’ money on West Cumbria. And the best thing for taxpayers might not be the best thing for West Cumbria.” (1)

NMP pocketed a £25m dividend last year despite falling behind on 12 of its 14 projects. In 2011 NMP took a £43m dividend. (2) NMP claims to have delivered “good value” and is “optimistic” of retaining the £22bn contract, despite admitting failings. (3)

Two senior Copeland councillors caused a row when they publicly backed NMP to retain the contract to run Sellafield. Council leader Elaine Woodburn and David Moore, the Conservative opposition leader and West Cumbria Stakeholders Group chairman, said NMP should be re-awarded the five-year contract – with the caveat that they must do better for the site and for the community. In response, Phil Greateorex, a Labour borough councillor wrote to all 50 councillors expressing his “astonishment” at the position of the two councillors. He said that their views do not “represent the view of the elected council body,” and points to Couns Woodburn and Moore chairing the Stakeholders Group as “a conflict of interest”. (4)

Councillor Phil Greateorex said diversifying the local economy away from its dependency on Sellafield Ltd is the key to securing a more prosperous future for Copeland communities. “*The reality for Coun Woodburn is that she presides over a financially stricken local authority that is struggling to provide even minimum levels of public services or keep basic public amenities open ... But there is hope for the area. The inevitable plunge of Copeland Council towards a single Cumbria unitary authority, with a leader highly sceptical of an industry that buys community patronage, should bring a glimmer of hope for the future.*” (5)

Meanwhile, a Review conducted by local pressure group CORE (Cumbrians Opposed to a Radioactive Environment), makes a strong case for the use of signs on West Cumbrian beaches to advise the public on the presence of radioactive particles. Whilst the current



absence of signs on local beaches stems from a combination of Health Protection Agency advice that the health risk to beach users posed by radioactive particles is very low and local authority concerns that beach signs would adversely impact on the tourist trade, CORE's Review concludes that HPA's advice – overtaken by recent events and couched in radiological terminology that for the layperson is difficult to comprehend, is no longer valid.

CORE concludes that the failure to use signs advising on the presence of radioactive particles denies the public their basic human right to choose whether or not to subject themselves and their families to the risks of radiation by using the beaches. (6)

CORE's Review can be found here: <http://www.no2nuclearpower.org.uk/news/radioactive-particles-on-cumbrian-beaches/>

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1. Whitehaven News 8th Aug 2013 <http://www.whitehavennews.co.uk/news/fears-over-sellafield-s-future-1.1076066>
 2. Sunday Times 11th August 2013
<http://www.thesundaytimes.co.uk/sto/business/Industry/article1298800.ece> and
<http://www.thesundaytimes.co.uk/sto/business/Companies/article1298586.ece>
 3. Telegraph 11th Aug 2013 <http://www.telegraph.co.uk/finance/newsbysector/energy/10236502/Amec-defends-Sellafield-nuclear-clean-up-record-as-22bn-contract-hangs-in-balance.html>
 4. Whitehaven News 15th Aug 2013 <http://www.whitehavennews.co.uk/news/politicians-have-a-nuclear-fallout-1.1077409>
 5. Whitehaven News 15th Aug 2013 <http://www.whitehavennews.co.uk/letters/you-say/council-endorsement-of-nuclear-industry-is-a-conflict-of-interest-1.1077401>
 6. CORE Press Release 15th Aug 2013
<http://www.corecumbria.co.uk/newsapp/pressreleases/pressmain.asp?StrNewsID=320>



10. The Russians are Coming - Maybe

Russian state nuclear company Rosatom is considering selling reactors in Britain and will decide soon whether to apply for a UK reactor licence. Rosatom is now building more atomic power plants than any other vendor around the globe.

Rosatom will first wait to see whether EDF reaches a deal with the British government on a guaranteed minimum power price for its proposed Hinkley project, and is unlikely to apply before 2015 for a Generic Design Assessment of its reactor. (1)

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1. Reuters 13th Aug 2013 <http://www.reuters.com/article/2013/08/13/nuclear-russia-britain-idUSL6N0GD2DZ20130813>



11. Building an Offshore Wind Manufacturing Base

As we reported last month, failure to set renewable targets for after 2020 whilst at the same time talking up shale gas could result in the UK

"... achieving a 'worst of all worlds' outcome: low volume, high cost, and a low share of manufacturing activity from domestic suppliers." (1)

In other words, we'll get offshore wind projects going ahead of the next few years when the technology is still expensive, but few of the companies will bother setting up a UK manufacturing base unless they know there will be a market for their products post-2020, so we won't get many jobs out of it, and we won't benefit from the reduced costs expected next decade.

While the UK could remain the leader in terms of installed capacity for years to come, fears are mounting that British companies are failing to secure the contracts that will allow them to reap the economic benefits of offshore wind power. The UK has more offshore wind capacity than the rest of the world combined but only employs about 4,000 people locally to support it. A number of developers, including DONG Energy and RWE, admit they face a challenge finding local firms to complete certain specialist tasks when constructing new wind farms and are instead forced to hire specialist engineers from Denmark or the Netherlands. Vince Cable says 70% of offshore wind farms should come from UK supply chain. But can this vision be achieved without 2030 targets? (2)

Now Nick Clegg has unveiled an industrial strategy in the hope of boosting investment in the offshore wind sector. The strategy aims to unlock £7bn of investment in the UK economy by 2020 and create 30,000 jobs across the country. Clegg launched the strategy as he cut the ribbon on the 270MW Lincs offshore wind farm in the Greater Wash, which is owned by Centrica, Dong Energy and Siemens. According to RenewableUK, the opening of Lincs means the UK now operates 10GW of wind power capacity, more than a third of which is located offshore. (3)

The strategy estimates the UK could deliver 8-16GW of offshore wind power by 2020, rising to 18GW by 2030. The new strategy aims to boost inward investment in the UK offshore wind supply chain through a range of initiatives, including a new £20m investment from the Regional Growth Fund that will fund a programme to allow manufacturers to take advantage of the rapidly growing offshore wind market. The service, dubbed GROW: Offshore Wind, will be managed by the Manufacturing Advisory Service and will provide direct support to companies in the offshore wind supply chain. Foreign companies building big offshore wind farms will have to explain how they plan to create more British jobs before applying for subsidies, ministers have decided. (4)

Michael Fallon, the Energy Minister, attended the opening of SSE's Greater Gabbard wind farm, 14 miles off the Suffolk coast a few days later. Just £500 million of the £1.6 billion



spent building this 500MW farm has gone to British companies. So more than 66% of the building work went to foreign companies. (5)

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1. IPPR 4th July 2013 <http://ippr.org/publication/55/11006/pump-up-the-volume-bringing-down-costs-and-increasing-jobs-in-the-offshore-wind-sector>
 2. Business Green 1st Aug 2013 <http://www.businessgreen.com/bg/analysis/2286374/can-the-government-deliver-on-its-offshore-wind-ambition>
 3. Business Green 1st Aug 2013 <http://www.businessgreen.com/bg/news/2286347/nick-clegg-race-is-on-to-lead-the-world-in-clean-green-energy>
 4. FT 1st Aug 2013 <http://www.ft.com/cms/s/fe5e0bb0-fa94-11e2-87b9-00144feabdc0.html>
 5. Times 7th Aug 2013 <http://www.thetimes.co.uk/tto/business/industries/utilities/article3836024.ece>