



**NuClear News No.9  
August 2009**

1. Nuclear Finance
2. Myth of intermittency debunked
3. New nukes: new subsidies?
4. Finland – the recriminations start.
5. Long live the local energy revolution
6. Scotland could be 100% renewable in twenty years
7. Nukes vs Wind
8. Nuclear Irrelevant
9. Eon jumps the gun
10. Another democracy bypass
11. Deeply, seriously mad.
12. Pointless nukes

**1. Nuclear Finance**

Dr Mark Cooper of Vermont Law School says three recent developments have provided new evidence to support his concerns about the cost of nuclear power. (1) US utility, Exelon, has cited “economic woes” as a major factor in postponing plans to build two reactors in Texas; The Ontario Government has announced the suspension of bidding for two replacement reactors citing excessive costs and uncertainties involving the ownership status of the sole Canadian bidder; and Moody’s Investor Services said it is considering “*taking a more negative view for those issuers seeking to build new nuclear power plants*”. (2)

The UK Government, which says it will ‘make sure that the full costs of new nuclear waste are paid by the market’, (3) has indicated the ‘fair share’ for waste ‘disposal’ will be calculated as the proportion of space nuclear operators’ radioactive waste takes up in any repository. Nuclear Economist Ian Jackson calculated last year that foreign utilities with Sellafield reprocessing contracts are paying about £201,000/m<sup>3</sup> for the ‘disposal’ of intermediate-level waste. It would be hard to justify charging British utilities a lower price and would risk accusations of illegal state aid. The problem is that if UK utilities are forced to pay the full commercial price it would cost around £820 million per reactor - 41% of each reactor’s expected £2 billion capital cost - far too expensive, killing the prospects of any new reactors. (4) In other words, new reactors will not be built unless the government fixes the market. (5)

In a recent talk at Sellafield Jackson detailed how the Government intends to set the fixed unit price for spent fuel disposal in 2010 – at least 30 years before a deep repository could possibly be opened. He says the commercial price for nuclear waste disposal for each new reactor would be around £1bn to £1.4bn. But this would not be payable for 100 years. The utility would make fixed pay-as-you-go payments into a pension-type fund. Assuming a 1% rate of return the utility would pay £16m per year over the reactors 40 year life, but after 100 years this would have accrued £795m in interest. This means only around 3 – 4% is added to the cost of electricity. So the availability of the required funds in 100 years time will depend on the performance of the stock market over the next century – which is almost totally unpredictable. Up to 83% of the cash required is expected to come from interest payments. (6)

(1) See NuClear News No.8 <http://www.no2nuclearpower.org.uk/nuclearnews/NuClearNewsNo8>.

pdf

Report: 100 new reactors would result in up to \$4 trillion in excess costs for US taxpayers and ratepayers. Vermont Law School Press Release 18th June 2009 <http://www.vermontlaw.edu/Documents/061909-cooperRelease.pdf>

(2) Earth Times 13th July 2009

<http://www.earthtimes.org/articles/show/cooper-escalating-nuclear-reactor-costs,889802.shtml>

(3) Nuclear Engineering International 24th July 2009

<http://www.neimagazine.com/story.asp?sectionCode=76&storyCode=2046213>

(4) Jackson, I. Buried Costs, Nuclear Engineering International, March 27, 2008.

<http://www.neimagazine.com/story.asp?storyCode=2049209>

(5) Taxpayers facing nuclear missile, Greenpeace website, March 27, 2008

<http://www.greenpeace.org.uk/media/press-releases/taxpayers-facing-nuclear-missile>

(6) The Economics of New Nuclear Build at Sellafield. Presentation by Ian Jackson.

Slide Share 7th July 2009 <http://www.slideshare.net/jacksonconsult/new-nuclear-reactor-build-at-sellafield>

## 2. Myth of intermittency debunked.

A new report (1) by energy consultant David Milborrow for a coalition of green groups, including WWF, Friends of the Earth, Greenpeace and the RSPB, has concluded that the National Grid can cope with a huge increase in wind capacity across the UK without any compromise in reliability, nor a large increase in “conventional” backup power plants.

Milborrow argues that the National Grid is already designed to manage variable inputs from wind farms and will be able to cope even as the amount of wind capacity increases to around 40% of the UK’s energy mix. It also states that far from reducing grid reliability an increase in wind capacity will improve grid resilience, noting that *“thermal plant breakdowns generally pose more of a threat to the stability of electricity networks than the relatively benign variations in the output of wind plant.”* (2)

The costs associated with wind variability are far lower than widely anticipated. Even with wind providing 20% of the UK’s electricity, bills would rise by just 2%. These costs could be lowered further as a result of improved wind forecasting, the rollout of smart grid demand management technologies, and the development of new interconnectors to mainland Europe.

The British Wind Energy Association said the report resonated with two other reports published in June – one by the National Grid and the other by consultants, Poyry. It described the report as *“the final nail in the coffin of the myth of intermittency”*. (3)

Poyry said the UK can massively expand wind power by 2030 without suffering power cuts or a melt-down of the National Grid. The cost of electricity would then be determined not by consumer demand, but by how hard the wind is blowing. When it is windy power will be so cheap that other forms of generation will be unable to compete, the report says. The study was done for National Grid, Centrica and others. The researchers reviewed 2.5 million hourly weather reports on wind speeds all around the UK. A study by the National Grid itself stated that a move towards wind power would not necessitate widespread investment in expensive back-up power plants fuelled by gas or coal. (4)

(1) Managing Variability, by David Milborrow, Summary of Key Findings, Greenpeace, FoE, RSPB, WWF, July 2009. <http://www.greenpeace.org.uk/files/pdfs/climate/wind-power-managing-variability-ngo-summary.pdf>

(2) Business Green 9th July 2009

<http://www.businessgreen.com/business-green/news/2245754/reports-debunk-wind-energy>

(3) Myth of Intermittency debunked by major report, BWEA Press Release 8th July 2009

[http://www.bwea.com/media/news/articles/myth\\_of\\_intermittency.html](http://www.bwea.com/media/news/articles/myth_of_intermittency.html)

(4) Harrabin, R. Wind can revolutionise UK Power, BBC 1st July 2009, <http://news.bbc.co.uk/1/hi/sci/tech/8127177.stm>

## 3. New nukes – new subsidies?

EDF Energy will scale down plans to build a new generation of nuclear reactors in the UK unless the government fixes the price of carbon. EDF’s business case to build four new reactors depends on a

carbon tax or minimum carbon price being introduced. Two years ago carbon prices fell to as little as €0.10 (£0.08) a tonne. Experts say that a far higher price - at least €60 (£51.40) a tonne - is necessary to make nuclear power generation economic.

Any increase in the carbon price would probably have to be done by revising the EU Emissions Trading Scheme (ETS) which would be a slow process. Alternatively unilateral adoption of a carbon tax by the UK might be a possibility, but would mean British businesses being penalised in order to keep Areva in business for the French. So carbon trading is unlikely in the near to medium term to make very much difference to energy investment patterns because the price is too low and too volatile.

The ETS covers 50% of the UK and EU's carbon emissions, mainly in the energy, cement, steel, glass and manufacturing sectors. Companies in these sectors are allocated allowances for the carbon they emit, with the total number shrinking over time, theoretically forcing companies to buy additional permits to pollute if they do not cut their emissions. A large proportion of the UK's promised cut of 34% by 2020 will come via British companies in the ETS.

The ETS price for a tonne of CO<sub>2</sub> in July was €14. To make it economical for generators to switch from coal to less-polluting gas for electricity production requires a price of around €25, while carbon capture and storage technology needs a price of €40-€50 a tonne to be worth investing in. Guy Turner, director of analysts New Carbon Finance, said the current relatively low carbon price simply meant the emissions cuts required by the existing ETS cap were being made less expensively than expected. *"There is some surplus in the system. But the set targets are being achieved – albeit by a mechanism not predicted: the recession."* (2)

A report by Sandbag – the climate change campaign which focusses on emissions trading policy – identifies two major flaws in the ETS: Firstly there are too many permits and a lack of ambition: the system only expects a 6% cut between 2008 and 2012, rather than the 3% per year indicated as necessary by climate scientists. Secondly the system has no way of dealing with recession.(3) As a consequence the scheme could allow companies to stand still for the next seven years.

A report by Mark Lazarowicz MP, the Prime Minister's special representative on carbon trading, examines the role of cap and trade internationally and concludes that global carbon trading could reduce emissions reduction costs by up to 70%. These efficiencies could potentially allow the world to reduce global emissions by an additional 40-50% at the same cost and provide substantial financial flows to the developing world to support the move to a low carbon economy with sustainable growth. (4) Lazarowicz says wealthy countries have so far only committed themselves to cuts in carbon emissions of around 7-9% from 1990 levels by 2020, but the UN says we need cuts of 25-40%. (5)

Doug Parr at Greenpeace speaking about the Lazarowicz report said: *"Emissions trading can have a part to play in cutting carbon emissions, but as the small print in this report admits, it is only a part of the solution. Companies and businesses would welcome more direction for what we need in the UK to move to a low carbon, sustainable economy. We should not let the hype about Carbon trading get in the way."*

Clearly carbon trading should be designed to help make sure we are achieving carbon savings in the most cost effective way. Artificially fixing the price of carbon to suit the nuclear industry is not the way to achieve that.

(1) Observer 5th July 2009 <http://www.guardian.co.uk/business/2009/jul/05/edf-nuclear-power-energy>

(2) Guardian 20th July 2009 <http://www.guardian.co.uk/business/2009/jul/20/carbon-emissions-trading-system-sandbag>

(3) ETS S.O.S. Sandbag, July 2009

[http://sandbag.org.uk/files/sandbag.org.uk/Sandbag\\_ETTS\\_SOS\\_Report\\_0.pdf](http://sandbag.org.uk/files/sandbag.org.uk/Sandbag_ETTS_SOS_Report_0.pdf)

(4) Lazarowicz, M. Global Carbon Trading: A framework for reducing emissions. DECC, July 2009. [http://www.decc.gov.uk/Media/viewfile.aspx?FilePath=What we do\Global climate change and energy\Tackling Climate Change\Emissions Trading\Lazarowicz report\1\\_20090720094330\\_e\\_@\\_GlobalCarbonTradingframeworkforreducingemissions.pdf&filetype=4](http://www.decc.gov.uk/Media/viewfile.aspx?FilePath=What%20we%20do%20Global%20climate%20change%20and%20energy%20Tackling%20Climate%20Change%20Emissions%20Trading%20Lazarowicz%20report%201_20090720094330_e_@_GlobalCarbonTradingframeworkforreducingemissions.pdf&filetype=4)

(5) BBC 20th July 2009 <http://news.bbc.co.uk/2/hi/science/nature/8160099.stm>

#### 4. Finland – the recriminations start

The recriminations over who is to blame for the world's largest prototype reactor being massively over budget and over schedule have begun. Areva is now engaged in a very public and childish game of he-said-she-said with the reactor's owners, Finnish utility TVO and nuclear safety agency, STUK. (1)

STUK said Areva started planning after winning the contract, which was of course too late. Areva, on the other hand argues that STUK are never satisfied when it comes to meeting safety regulations, and TVO was slow delivering Areva-Siemens' documents to STUK for the validation needed before moving from one building task to another.

TVO is trying to claim back \$3.3bn (2.4bn euros) from Areva for the soaring costs, not least to cover having to buy-in electricity to plug the gap until the plant is finished. On the other side Areva is claiming \$1.4bn (1bn euros) from the Finns. "If Greenpeace had said at the start that after four years of construction it's going to be three and a half years late and 60% over budget everybody would have laughed at them," says Steve Thomas, Professor of Energy Policy at Greenwich University in the UK who has been monitoring the project. (2)

(1) Nuclear Reactions 2nd July 2009 <http://weblog.greenpeace.org/nuclear-reaction/finland/>

(2) BBC 8th July 2009 <http://news.bbc.co.uk/1/hi/world/europe/8138869.stm>

#### 5. Long live the local energy revolution

The Government has outlined plans (1) for an energy revolution to reduce greenhouse emissions by 34% by 2020, setting the UK on track for an 80% cut by 2050 - switching away from fossil fuels to renewable and nuclear energy. (2) 30% of UK electricity will be supplied by renewable sources with a further 10% coming from nuclear power and coal with carbon capture and storage. E.ON called it a framework to enable energy companies to build 12 new nuclear power stations, 4 new coal-fired power stations with carbon capture and 26GW of offshore wind. (3)

The Government was criticised for not aiming to meet the Climate Change Committee's recommended 42% cut in emissions rather than scraping by with 34%. (4) But it was perhaps its distinct the lack of ambition on microgeneration, where the Government came in for most criticism, and its failure to appreciate the role which could be played by local authorities.

A central component of the Low Carbon Transition Plan is the Government's commitment under a European Union agreement to supply 15% of Britain's energy (not just electricity) from renewable sources – up from just over 2% currently. This leap will mean that by 2020 about 30% of electricity will come from renewables (117 TWh - up from 5.5% today), mostly wind, but including only 2% from small-scale sources. (5) 12% of heat demand (72 TWh) and 10% of transport demand (49 TWh) will also be provided by renewables. (6)

Greater energy efficiency will cut emissions from homes by 29% by 2020. Smart meters will be rolled out to every home by 2020. The obligation on energy suppliers to help households save energy will be extended. From 2016 all new homes will have to be zero-carbon and rental properties may have to have Energy Performance Certificates. The Plan also confirmed the Government's intention to launch a feed-in tariff, which it rebranded as the "clean energy cashback scheme". A 'Pay as you Save' scheme is mentioned which would remove the upfront cost barrier for many homeowners, but few details are given. Other measures include extending the Renewable Obligation and introducing a Renewable Heat Incentive.

Local authorities called for an increased role in providing the energy efficiency strategy. The Local Government Association (LGA) for England and Wales said there are too many different schemes aimed at cutting household emissions. These should be merged into a single £7 billion fund to allow councils to embark on a more cost-effective programme. Councils want to build on the example of Kirklees Council which has offered to insulate every house in its area for free. If a similar council led scheme was expanded across the country, it would save £2 billion on current plans to put basic insulation into every home. (7)

The Plan says the Government will explore how to unlock greater action by local authorities in identifying the best potential for low carbon community scale solutions in their areas. Chair of the



Nuclear Free Local Authorities, Dundee Councillor George Regan said “*Local Authorities have a crucial role to play in the local energy revolution and are keen to get on with implementing it. Yet in 2003 we were promised a step change in energy efficiency by the UK Government – and we are still waiting. We cannot afford to wait another six years while the Government ‘facilitates new nuclear reactors’ and tries to work out how to unlock greater action by local authorities.*” (8)

According to *Building Magazine*, the plans for onsite renewables will release less than one-third of the industry’s potential capacity. Despite introducing the feed-in tariff the Government only expects small-scale renewables to supply 2% of electricity by 2020. Research by the Energy Saving Trust shows that microgeneration could provide around 30-40% by 2050, (9) so we ought to be expecting a much larger contribution in 2020.

The feed-in tariff will pay consumers between 31p and 36p per kWh to produce electricity with solar PV or wind turbines and feed it into the grid. The Renewable Energy Association (REA) said small-scale renewable energy could supply up to 7% of electricity supplies if consumers were paid 72p. (10) The government claims the scheme will give investment returns of between 5% and 8%. But Solar Century says the return is more like 4% on photovoltaics – leaving a long payback time and hardly providing an incentive for households or businesses to invest. If confirmed later this year this will do little to boost demand for non-domestic solar PV. (11) Jeremy Leggett says the proposed tariffs are insufficient to deliver the kind of rapid growth experienced by the solar energy sector under similar feed-in tariff schemes across Europe. Solar Century says it will continue to focus its expansion plans on the continent. European Photovoltaic Industry Association expects that PV will provide 12% of all electricity by 2020 – compared with the 2% the UK Government expects all microgeneration to provide. (12)

The UK PV industry estimate that solar photovoltaics could provide up to 140 TWh of electricity using south facing roofs and facades (compared with the 7.8 TWh the Government expects microgeneration to provide by 2020). (13)

The range of illustrative figures for feed-in tariffs (FITs), vary by the type of technology. The Guardian estimates that payments to rooftop PV are too low to generate much new investment, but payments for rural wind are good enough to make decent returns. If the figures survive unchanged through the consultation process, we should see thousands of small wind turbines in windy British fields. (14) A study by the Energy Saving Trust estimated that around 450,000 UK householders would benefit from installing a small turbine, and together these could generate around 3.5 TWh of electricity – around 0.9% of UK electricity supply or 3.1% of domestic energy demand. (15)

The heating industry expressed concern the Government is not moving fast enough on some issues such as renewable biogas and the Renewable Heat Incentive. A report by National Grid showed the huge potential for green gas injection into the gas grid which could supply nearly half of domestic users. There is no technical reason to delay introducing a tariff for green gas. Worcester Bosch accused the Government of being too focused on electricity while heating policy seemed to be “fixated” on biomass. (16) The Solar Trade Association (STA) attacked the Renewable Energy Strategy’s claims that solar heat may deliver less of a contribution to the UK’s renewable heat than was envisaged in last year’s consultation on the strategy. In particular, the STA claimed the basis for the modelling of the UK’s future supply of renewable heat, and the part that solar thermal can play in this, is a report that has been “totally discredited” by the solar thermal industry. The STA said “*not only do we have to wait until 2011 until we have a renewable heat incentive in place to drive the uptake of this technology, but also the huge potential of solar technology is being undermined by questionable research and poor advice.*” (17)

The Combined Heat and Power Association warned that a truly comprehensive strategy will only be achieved once energy conservation and low-carbon heat supply are given the same attention as the production of electricity. Heating our homes accounts for a massive 20% of CO2 emissions, whilst the heat consumed in industry emits an additional 20%. There is very little mention of CHP in the Low Carbon Transition Plan – it looks as though we will have to wait until the autumn when the Government is expected to publish a Heat and Energy Saving Strategy before we find out if it has any new plans. (18) This is a significant omission given the recent report by Pöyry Energy Consulting which showed that industries across the UK could generate as much electricity as 10 nuclear power stations and halve gas imports by installing or extending CHP plants. Pöyry found nine sites where CHP could be applied or extended. Currently 5.5GW of electricity is produced by CHP plants, but Pöyry suggests there could be up to 16GW more. (19)

As reported in NuClear News No.1 if all gas central heating boilers that need replaced are replaced with Micro-CHP boilers we could have installed the equivalent of ten nuclear reactors by 2020. (20)

It is, then, the failure to appreciate that there is a local energy revolution waiting to happen which is the main failing of the Low Carbon Transition Plan. In the early 1980s, consultants McKinsey completed a study for a US telecoms company predicting there would be fewer than one million wireless subscribers in the US by the turn of the century. Today, nearly 2.5bn subscribers across the globe are using digital wireless technologies for voice, email, internet access, music and video services. (21) Clearly this should be a warning about basing plans and predictions on the status quo. Unfortunately that seems to be just what the Government has been doing.

- (1) UK Low Carbon Transition Plan, DECC, July 2009. [http://www.decc.gov.uk/Media/viewfile.ashx?FilePath=White Papers\UK Low Carbon Transition Plan WP09\1\\_20090715190000\\_e\\_@@\\_DECCWPUKLCTransitionPlan.pdf&filetype=4](http://www.decc.gov.uk/Media/viewfile.ashx?FilePath=White%20Papers\UK%20Low%20Carbon%20Transition%20Plan%20WP09\1_20090715190000_e_@@_DECCWPUKLCTransitionPlan.pdf&filetype=4)
- (2) Guardian 16th July 2009  
<http://www.guardian.co.uk/environment/2009/jul/15/low-carbon-transition-white-paper>
- (3) Times 21st July 2009  
[http://www.timesonline.co.uk/tol/comment/columnists/guest\\_contributors/article6721144.ece](http://www.timesonline.co.uk/tol/comment/columnists/guest_contributors/article6721144.ece)
- (4) WWF Press Release 16th July 2009  
[http://scotland.wwf.org.uk/what\\_we\\_do/latest\\_wwf\\_scotland\\_news.cfm?3174/UK-Low-Carbon-Transition-Plan---WWF-Scotland-comment](http://scotland.wwf.org.uk/what_we_do/latest_wwf_scotland_news.cfm?3174/UK-Low-Carbon-Transition-Plan---WWF-Scotland-comment)
- (5) Independent 16th July 2009 <http://www.independent.co.uk/environment/climate-change/milibands-manifesto-to-make-britain-a-lowcarbon-economy-1748282.html>
- (6) UK Renewable Energy Strategy 2009, DECC July 2009. Page 38  
[http://www.decc.gov.uk/Media/viewfile.ashx?FilePath=What we do\UK energy supply\Energy mix\Renewable energy\Renewable Energy Strategy\1\\_20090715120226\\_e\\_@@\\_TheUKRenewableEnergyStrategy2009.pdf&filetype=4](http://www.decc.gov.uk/Media/viewfile.ashx?FilePath=What%20we%20do\UK%20energy%20supply\Energy%20mix\Renewable%20energy\Renewable%20Energy%20Strategy\1_20090715120226_e_@@_TheUKRenewableEnergyStrategy2009.pdf&filetype=4)
- (7) Kyoto to Kettering, Copenhagen to Croydon: local government's manifesto for building low-carbon communities. LGA July 2009. <http://www.lga.gov.uk/lga/publications/publication-display.do?id=2399913>
- (8) Ekklesia 16th July 2009  
<http://www.ekklesia.co.uk/node/9915>
- (9) Potential for Microgeneration: Study and Analysis, EST, eConnect, Element Energy, November 2005. <http://www.berr.gov.uk/files/file27558.pdf>
- (10) Building 16th July 2009 <http://www.building.co.uk/story.asp?sectioncode=747&storycode=3145024&c=3>
- (11) Guardian 17th July 2009 <http://www.guardian.co.uk/business/2009/jul/16/green-energy-plans-criticised>
- (12) Business Green 22nd July 2009  
<http://www.businessgreen.com/business-green/news/2246496/frustrated-solarcentury-finds>
- (13) 2020: A Vision for UK PV. UK Photovoltaics Manufacturers Association. <http://www.uk-pv.org/UK-PV-report-03-09.pdf>
- (14) Guardian 16th July 2009  
<http://www.guardian.co.uk/environment/2009/jul/16/clean-energy-cashback>
- (15) Location, location, location. Domestic small-scale wind field trial report, EST, July 2009.  
<http://server-uk.imrworldwide.com/cgi-bin/b?cg=corporatedocs&ci=energyst&tu=http://www.energysavingtrust.org.uk/content/download/554381/1961689/version/3/file/location>
- (16) H&V News 20th July 2009  
<http://www.hvnplus.co.uk/page.cfm?action=Archive/ArchiveID=4/EntryID=1505>  
Heating and Plumbing Monthly 20th July 2009 <http://www.hpmmag.com/newsitem.asp?newsID=160>
- (17) New Energy Focus 21st July 2009 [http://www.newenergyfocus.com/do/ecco.py/view\\_item?listid=1&listcatid=32&listitemid=2845&section=Solar](http://www.newenergyfocus.com/do/ecco.py/view_item?listid=1&listcatid=32&listitemid=2845&section=Solar)
- (18) CHP Association Press Release 15th July 2009  
[http://www.chpa.co.uk/news/press\\_releases/2009/150709%20Energy%20strategies%20welcome,%20but%20still%20not%20the%20whole%20picture.pdf](http://www.chpa.co.uk/news/press_releases/2009/150709%20Energy%20strategies%20welcome,%20but%20still%20not%20the%20whole%20picture.pdf)
- (19) Poyry, Securing Power Summary, Greenpeace, June 2008  
[http://www.greenpeace.org.uk/files/pdfs/climate/industrialCHP\\_summary.pdf](http://www.greenpeace.org.uk/files/pdfs/climate/industrialCHP_summary.pdf)
- (20) Nuclear Energy and Micro-CHP. Micro-CHP blog, 10th January 2008.  
<http://microchp.blogspot.com/2008/01/nuclear-energy-and-micro-chp.html>
- (21) BBC 21st July 2009 <http://news.bbc.co.uk/1/hi/sci/tech/8158869.stm>

## 6. Scotland could be 100% renewable in twenty years

A new report, based on research by independent energy analysts Garrad Hassan, and commissioned by Friends of the Earth Scotland, the World Development Movement, WWF Scotland and RSPB Scotland, has shown for the first time that a truly sustainable energy future is achievable for Scotland, meeting climate change, renewable energy and energy saving targets and creating new economic opportunities while protecting sensitive environments and maintaining security of supply. (1) (2)

The Power of Scotland Renewed shows there is enormous potential to increase generation of electricity from renewable sources during the next two decades, so much so that by 2030 renewable energy can meet between 60% and 143% of Scotland's projected annual electricity demand. If Scotland also meets official targets for energy saving, the research concludes it is feasible for all fossil fuel fired generation to be closed by 2030, delivering almost complete decarbonisation for Scotland's electricity supply. Even in the "business as usual" case Scotland does not require any new fossil or nuclear capacity to maintain security of supply. (3)

(1) Full report: Power of Scotland Renewed, by Ben Murray, FoE (S), RSPB, WDF, WWF July 2009. [http://www.foe-scotland.org.uk/Attachment/128\\_PowerofScotlandRenewed\\_final.pdf](http://www.foe-scotland.org.uk/Attachment/128_PowerofScotlandRenewed_final.pdf)

(2) Summary report: Power of Scotland Renewed. [http://www.foe-scotland.org.uk/Attachment/125\\_PowerofScotland12ppt.pdf](http://www.foe-scotland.org.uk/Attachment/125_PowerofScotland12ppt.pdf)

(3) Scotsman 15th July 2009

<http://thescotsman.scotsman.com/latestnews/Renewable-energy--39can-provide.5458459.jp>

## 7. Nukes vs Wind

The Confederation of British Industry has thrown its weight behind the nuclear industry's calls for the government to scale back "overambitious" wind power targets in favour of new reactors. E.ON and EDF recently told the government it must choose between new nuclear and major renewables developments. (1) With global warming, energy security and fuel poverty all rendering energy policy a matter of life and death today, in their own ways, this new polarisation in the nuclear debate is a desperately dangerous development, says Jeremy Leggett of Solar Century. (2)

The CBI called for a major shift in the Government's energy policy to avoid a dangerous reliance on foreign-sourced gas in two decades' time. In what amounted to an admission that nuclear power is distracting attention from renewables, the CBI said incentives focused on ramping up wind power will draw investment away from other low-carbon energy sources such as nuclear and clean coal. (3)

But, in fact, a close examination of the report produced for the CBI by McKinsey (4) shows that whilst the CBI attacked the proposed renewable target, demanding more reactors instead, its report shows a 'business as usual' scenario and a so-called 'balanced pathway' scenario with virtually the same amount of electricity coming from renewables. Where the two scenarios differ radically is in the amount of electricity generated by gas. Under the 'business as usual' scenario gas provides 36% and nuclear only 20%. But under the 'balanced pathway' scenario nuclear's contribution is increased to 34% at the expense of gas.

The CBI report is focused almost exclusively on electricity, as opposed to energy, virtually ignoring heat, and leaving it with a huge credibility gap. Some 47% of carbon emissions were produced by heating in 2005. Apart from the footnotes there are only two mentions of combined heat and power (CHP), for example, and the word solar does not appear once.

A report by Pöyry Energy Consulting has shown that industries across the UK could generate as much electricity as 10 nuclear power stations and halve gas imports by installing or extending CHP plants. Currently 5.5GW of electricity is produced by CHP plants, but Poyry suggests there could be up to 16GW more. (5) If the CBI really wants to drive the UK towards a sustainable energy future it should be promoting technologies such as CHP and solar thermal rather than expensive and dangerous waste producing unsustainable nuclear energy.

Writing in The Telegraph, Geoffrey Lean says when in trouble the nuclear industry has traditionally sought government support and tried to stifle rival technologies. That seems to be happening again. So far not enough are under construction even to make up for old ones being taken out of service. And

troubles are multiplying. But nuclear firms have threatened to drop plans for new reactors unless the Government scales back its targets for windpower. (6)

- (1) Guardian 16th March 2009 <http://www.guardian.co.uk/business/2009/mar/16/nuclear-power-renewables-edf>
- (2) Guardian 13th July 2009 <http://www.guardian.co.uk/environment/cif-green/2009/jul/13/energy-renewableenergy>
- (3) Independent 13th July 2009 <http://www.independent.co.uk/news/business/news/cbi-demands-an-overhaul-of-britains-energy-policy-1743694.html>
- (4) Decision Time: Driving the UK towards a sustainable energy future, CBI, July 2009. [http://www.cbi.org.uk/ndbs/press.nsf/0363c1f07c6ca12a8025671c00381cc7/a65ac8500938c7e1802575f3005c6a02/\\$FILE/CBI%20DecisionTime%20July%202009%20PDF.pdf](http://www.cbi.org.uk/ndbs/press.nsf/0363c1f07c6ca12a8025671c00381cc7/a65ac8500938c7e1802575f3005c6a02/$FILE/CBI%20DecisionTime%20July%202009%20PDF.pdf)
- (5) Poyry, Securing Power Summary, Greenpeace, June 2008 [http://www.greenpeace.org.uk/files/pdfs/climate/industrialCHP\\_summary.pdf](http://www.greenpeace.org.uk/files/pdfs/climate/industrialCHP_summary.pdf)  
Full Report: <http://www.greenpeace.org.uk/files/pdfs/climate/securingpower0708.pdf>
- (6) Telegraph 18th July 2009 <http://www.telegraph.co.uk/comment/5852895/Warning-signs-on-nuclear-power.html>

## 8. Nuclear Irrelevant

Britain's much-heralded nuclear revival will not take place or will prove "irrelevant" according to Jonathan Porritt, who is stepping down as Chairman of the Government's Sustainable Development Commission (SDC). He says years have been wasted in pursuit of new reactors. Civil servants failed to get on and implement the 2003 Energy White Paper, which called for energy efficiency and renewables - instead they "*kept the nuclear flame burning*" until the Secretary of State changed. "*We have had years of delay on critical things that could have been done on renewable energy and energy efficiency. We had six to eight years of prevarication when we could have been getting on with it.*" He said that he did not think that nuclear power would be revived "*because the markets will not put up with it*" and, even if it was, "*it is going to be so small as not to be terribly relevant*". (1)

Porritt says "*Little more than a year ago, these nuclear zealots were telling the world that any new nuclear in the UK would require zero public subsidies. Hardened anti-nuclear campaigners such as myself fell about laughing ... Government said we were wrong, explicitly. Now, they are all in there asking for large amounts of public money.*" (2)

- (1) Telegraph 25th July 2009 <http://www.telegraph.co.uk/news/uknews/5901859/Britains-nuclear-policy-condemned-by-Jonathon-Porritt.html>
- (2) Guardian 25th July 2009 <http://www.guardian.co.uk/theguardian/2009/jul/25/jonathan-porritt>

## 9. Eon jumps the gun

Greenpeace is threatening to take legal action against E.ON and other nuclear companies for rushing ahead with plans to build new reactors before they have got the proper consents following reports that preparatory bore holes will start being drilled on 3rd August at Oldbury in Gloucestershire. EDF is also thought to be considering similar work at Hinkley in Somerset.

Greenpeace points out we are still waiting for the final national policy statement on nuclear, the finalised "justification" report and the assessment of reactor designs by the Nuclear Installations Inspectorate (NII). Greenpeace has asked the government to ensure that no work goes ahead unless and until it has been formally permitted. (1)

E.ON denied it was jumping the gun: "*We will do nothing of a serious nature until the government gives the green light. This is just preparatory seismic work to make sure the ground is suitable. We are not preparing the foundations or anything like that*". E.ON has awarded Hydrock Group Ltd a preliminary ground investigation contract, involving the drilling of some 22 boreholes with work due to start on 3 August 2009. (2)

- (1) Guardian 27th July 2009 <http://www.guardian.co.uk/business/2009/jul/26/greenpeace-legal-action-eon-nuclear-reactors>
- (2) Nuclear Engineering International 21st July 2009 <http://www.neimagazine.com/story.asp?sectionCode=132&storyCode=2053621>



Gloucestershire Gazette 24th July 2009

[http://www.gazetteseries.co.uk/news/4510835.Preliminary\\_work\\_to\\_begin\\_on\\_new\\_nuclear\\_power\\_station/](http://www.gazetteseries.co.uk/news/4510835.Preliminary_work_to_begin_on_new_nuclear_power_station/)

## 10. Another democracy bypass

A deal between councils and EDF to process plans for a new reactor at Hinkley Point in Somerset has led to fears that it bypasses the democratic process. A planning performance agreement (PPA) will go to councillors to sign off shortly, before the government consultation on a nuclear national policy statement (NPS). (1)

Somerset County Council, Sedgemoor District Council and West Somerset Council have announced they are considering asking EDF Energy to fund the planning process for two new reactors at Hinkley under a PPA. The councils say the move is necessary because the planning application will be so complex and will require experts in so many fields, and because repeated requests for Government funding have failed.

Stop Hinkley says *“There is a clear conflict of interest in this deal with such a large, powerful developer. The councils should do all they can to keep clear ground between themselves and EDF. Currently the lines are very blurred.”* (2)

(1) Planning Resource 17th July 2009

<http://www.planningresource.co.uk/news/ByDiscipline/environment/login/920454/>

(2) This is the West Country 22nd July 2009

[http://www.thisisthewestcountry.co.uk/news/4506489.War\\_of\\_words\\_over\\_Hinkley\\_cash\\_deal/Burnham-on-sea.com](http://www.thisisthewestcountry.co.uk/news/4506489.War_of_words_over_Hinkley_cash_deal/Burnham-on-sea.com) 19th July 2009

<http://www.burnham-on-sea.com/news/2009/hinkley-point-cash-19-07-09.php>

## 11. Deeply, seriously mad.

Gordon Brown has called for a *“renewed global bargain for nuclear energy”* as the world heads towards 2010’s discussions about a new nuclear non-proliferation treaty. He wants to help press the world’s nuclear powers to negotiate a multilateral reduction in the number of warheads they hold, and to offer assistance to states keen on developing civil nuclear energy in return for assurances they too will not attempt to acquire a nuclear arsenal. (1)

The Road to 2010 paper (2) sets out what it calls *“an ambitious plan”* which includes establishing *“the right conditions for nuclear power to play its part in combating climate change, global poverty and energy shortages”*. Among the specific measures announced was a new Nuclear Centre of Excellence to promote wider access to civil nuclear power across the world – *“which cannot be diverted for use in weapons programmes”*. This Centre, to be developed in partnership with industry and other countries, will receive initial funding of £20million from the Government. (3)

Brown says the International Atomic Energy Agency should be rejuvenated and he will push for significantly increased funds. A multilateral fuel cycle could also give the IAEA a greater role and remove potential proliferation points such as uranium enrichment and used fuel reprocessing. The UK will submit its proposal for a multilaterally supervised fuel regime to the IAEA board in September. (4)

Greenpeace pointed out the fatal flaw at the heart of the proposal. The fact is 90% of nuclear technology and materials are dual use, so can be used to create both nuclear power and nuclear weapons. You simply can’t spread nuclear power without spreading nuclear weapons. An international nuclear fuel bank would mean a massive increase in the transportation of nuclear materials by air, land and sea - leaving them open to attacks by terrorists and to radioactive materials being stolen and made into dirty bombs. *“Gordon Brown’s nuclear obsession will damage not only the UK’s renewable energy policy but international security. Safe, clean renewable technology exists today and could be rolled out globally to help power a more peaceful world.”* (5) Labour MP, Paul Flynn called the

document “*deeply, seriously mad*”. (6)

In contrast the Labour MP for Copeland, Jamie Reed said: the “*Government has listened to where we need to be, it has listened to the voices of the Sellafield trade unions and it is now advocating an unprecedented future to the UK nuclear industry and by definition and in particular, Sellafield.*” Under these proposals nuclear materials from missile warheads from around the world could be sent to Sellafield and turned into nuclear fuel. “*This is the single most important indication yet that the Sellafield site and the workforce will be needed to undertake new reprocessing and fuel manufacture missions in the future.*” (7)

Reed has been promoting the idea that there should be a new plutonium fuel manufacturing plant built alongside the existing Sellafield Mox Plant. He says Copeland and the country could not move forward without a Sellafield Mox Plant (SMP), and action needs to be taken either to safeguard or replace it to help Britain secure its own energy needs and stop reliance on other countries. The performance of the existing Mox plant is officially “under review” 10 years after being built at a cost of nearly £500 million but the bill has now soared to around £2 billion due to delays in discharging contracts. (8)

(1) Politics.co.uk 16th July 2009 [http://www.politics.co.uk/news/foreign-policy/brown-wants-uk-leadership-on-nuclear-diplomacy-\\$1311907.htm](http://www.politics.co.uk/news/foreign-policy/brown-wants-uk-leadership-on-nuclear-diplomacy-$1311907.htm)

(2) The Road to 2010, the Cabinet Office, July 2009. <http://www.cabinetoffice.gov.uk/media/224864/roadto2010.pdf>

(3) Cabinet Office Press Release 16th July 2009

<http://www.wired-gov.net/wg/wg-news-1.nsf/0/A36E3F9421B6D56C802575F50033683A?OpenDocument>

(4) World Nuclear News 16th July 2009 [http://www.world-nuclear-news.org/NP\\_Nuclear\\_essential\\_to\\_any\\_global\\_solution\\_1607092.html](http://www.world-nuclear-news.org/NP_Nuclear_essential_to_any_global_solution_1607092.html)

(5) Greenpeace UK Press Release 16th July 2009

<http://www.greenpeace.org.uk/media/press-releases/nuclear-non-proliferation-announcement-greenpeace-response-20090716>

(6) Paul Flynn MP's blog 16th July 2009

[http://paulflynnmp.typepad.com/my\\_weblog/2009/07/deeply-seriously-mad.html](http://paulflynnmp.typepad.com/my_weblog/2009/07/deeply-seriously-mad.html)

(7) North West Evening Mail 18th July 2009 [http://www.nwemail.co.uk/gordon\\_brown\\_raises\\_hopes\\_of\\_sellafeld\\_jobs\\_boost\\_1\\_585221?referrerPath=home/north\\_west\\_evening\\_mail\\_search\\_page\\_2\\_3320](http://www.nwemail.co.uk/gordon_brown_raises_hopes_of_sellafeld_jobs_boost_1_585221?referrerPath=home/north_west_evening_mail_search_page_2_3320)

(8) Whitehaven News 8th July 2009 [http://www.whitehaven-news.co.uk/news/new\\_plant\\_at\\_sellafeld\\_could\\_create\\_5\\_000\\_jobs\\_\\_mps\\_told\\_1\\_580005?referrerPath=news](http://www.whitehaven-news.co.uk/news/new_plant_at_sellafeld_could_create_5_000_jobs__mps_told_1_580005?referrerPath=news)

## 12. Pointless nukes

A new report from the Green Party - Nuclear Power? No Point!, makes a powerful case that nuclear power has no rationale in terms of either economics or helping the fight against climate change. Written by London Assembly Chair Darren Johnson, the report argues that new reactors would contribute too little to our energy supply. The money would be better spent on energy efficiency which would have a much bigger impact on CO2 emissions.

Nuclear Power, No Point, by Darren Johnson AM, Green Party, July 2009

[http://www.greenparty.org.uk/assets/files/reports/Nuclear\\_Power\\_No\\_Point.pdf](http://www.greenparty.org.uk/assets/files/reports/Nuclear_Power_No_Point.pdf)