



***The North Devon  
Green Party's  
Response to the  
DTI's Energy  
Review, January  
2006***

Q.1. What more could the government do on the demand or supply side for energy to ensure that the UK's long-term goal of reducing carbon emissions is met?

Firstly, we believe the government is lacking an effective cross-departmental framework for reducing carbon emissions. We urge the DTI to support the introduction of a yearly target for reducing CO<sub>2</sub> emissions, alongside effective penalties and political mechanisms for ensuring we keep up with this target.

Introducing domestic tradable carbon quotas would be one very effective measure for reducing emissions. Increasing taxes and levies on fossil fuels to reflect their carbon emissions would be another alternative.

As the consultation paper indicates, energy prices have fallen in real terms over the last twenty years. Low energy prices and increasing energy efficiency has led to complacency and an attitude that it's ok to use more energy. This is bad news for Climate Change, and bad news for businesses and lifestyles that have become increasingly reliant on cheap energy and will have trouble adapting when demand outstrips supply and energy prices rise rapidly.

A bold but effective solution to these many problems is to steadily ramp up taxes on fossil fuels.

Increasing energy prices from these finite sources – which are inevitable in the long run – will create a huge incentive for reducing our energy consumption.

Renewable energy sources, particularly those struggling to compete such as Biomass, small-scale CHP and Solar PV would suddenly become financially viable, and we'd see a massive expansion in these technologies.

Taxes on fossil fuels can be easily justified in creating a fund to tackle the real environmental and social costs of their use. This fund could further subsidise renewable energy sources and energy efficiency measure, as well as helping DEFRA pay for our Climate Change adaptation strategies.

To protect vulnerable householders from fuel poverty, much of the estimated long-term revenue from fossil fuel taxes should be spent immediately on efficiency improvements for households. To overcome the cost-perception gap of such home improvements, a new agency should be set up to fund and install household energy improvements on a "buy now, pay back monthly" arrangement. Such an agency could run at a profit in the long term, and would be attractive to both landlords and homeowners.

A further benefit of an increased tax margin on fossil fuels is that it gives the Government added flexibility to temporarily adjust taxes and smooth out sharp fluctuations in fossil fuel prices, creating a more stable internal economy. By creating a steady predictable long-term increase in consumer energy prices, businesses and individuals would recognise the clear advantages of early investment in energy efficiency and planning for less energy-intensive activities.

Increasing the taxes on fossil fuels will be beneficial to the UK's economic wellbeing in the long run, as the resulting low-energy society will be more stable and robust than other western economies when global fuel prices inevitably rise.

When looking at renewable sources of energy the consultation paper overstates worries about intermittency and grid management, when compared with reports such as those by the Sustainable Development Commission and Oxford's Environmental Change Institute. The consultation paper fails to support its worries with figures for the required amount of additional backup capacity, the costs, or the upper bound for renewables in the generation mix.

The consultation paper overlooks the opportunity to see the variable but predictable output of wind, solar, wave and tidal power as the new "baseload", with coal and gas as top-up sources. The key characteristic of yesterday's baseload power stations such as nuclear as well as today's renewable sources is that it makes no economic sense to try turning their output up and down to meet demand. Renewables should be seen as the new baseload, to be topped up by coal, gas and even biomass as and when required. Overcapacity of intermittent renewables - when we reach that point - could be channelled into hydrogen production for transport or into other technologies which may have come to fruition by then.

The planning system fails to adequately support renewable generation schemes currently, not for lack of clear intention in planning policy statements, regional spatial strategies and local plans, but because of the loopholes which give local uninformed, uninterested councillors an easy way out. PPS22 gives local councillors and planning officers complete freedom to reject schemes, just by asserting that a scheme will have a detrimental effect on the local economy or the local visual amenity or a nearby protected landscape, and saying that in their judgement, this outweighs the wider benefits of renewable energy. The Government needs to tighten up these loopholes, as well as providing compulsory briefing sessions for all councillors to raise their level of knowledge about renewable energy technologies and enable them to make properly-informed choices. Voluntary seminars have proved unsuccessful in attracting those councillors who have the most to learn.

**Q.2. With the UK becoming a net energy importer and with big investments to be made over the next twenty years in generating capacity and networks, what further steps, if any, should the government take to develop our market framework for delivering reliable energy supplies? In particular, we invite views on the implications of increased dependence on gas imports.**

The looming energy gap after the decline of nuclear north sea gas just goes to demonstrate the inherent short-sightedness of a liberalised energy market; unbridled economics will not guide us towards either a sustainable or a stable energy future. The Government needs to make full use of its legislative powers to regain influence over the energy sector and steer it firmly towards the most responsible choices.

As the consultation paper reveals, much of our electricity generating capacity will have to be replaced over the next twenty years, and investors will flock to support the most reliable and profitable schemes. The Government can have a great influence through the regulatory frameworks such as the Renewables Obligation, so to make renewables the most attractive option we ask that the Renewables Obligation be mapped out and extended to 2030 or beyond. Many schemes such as co-firing biomass and landfill gas which currently qualify for significant numbers of ROCs detract from the long term goal of increasing our renewable energy capacity, and such loopholes should be tightened up.

**Q.3. The Energy White Paper left open the option of nuclear new build. Are there particular considerations that should apply to nuclear as the government re-examines the issues bearing on new build, including long-term liabilities and waste management? If so, what are these, and how should the government address them?**

Nuclear power has consistently failed to live up to its promises of cheap, clean electricity. The fact that it is back on the Government agenda is likely to mean one thing: the UK wants to build more nuclear weapons. The convenient excuse of needing to tackle Climate Change is only a cover for more dubious political motives; our dying nuclear electricity generation capacity will be directly replaced by renewables if the legislative framework remains favourable. It is important to note that new nuclear power would compete with renewables for private investment funds from the same sources, as well as the same manufacturing and technical base, so it would be foolish to encourage new nuclear power and assume that the renewables industry would still continue to grow at a rapid pace. It is also important to note that nuclear is not a viable long-term technology, as readily available uranium ores are forecast to be exhausted within sixty years.

"Safety and security" are very relative terms when talking about nuclear power, and no amount of regulation or inspection by a Nuclear Installations Inspectorate will prevent future disasters. The scale of the problem when safety or security are breached, no matter how infrequently, are out of all proportion with the contribution nuclear power makes to our society.

We also believe the legacy of radioactive waste is too high a price to pay for a quick-fix power source which, as the history books will testify, will only power a fraction of our society's energy needs for little more than a century, and we note that there are no acceptable solutions to waste management. Contrary to what is suggested in the consultation paper, we understand that CORWM have yet to identify a satisfactory long-term solution for radioactive waste, and it is worrying that this consultation is scheduled to close before CORWM's report is published.

We believe the Government should leave the door to new nuclear power firmly closed; the many disadvantages of nuclear power clearly outweigh the few benefits, and nothing has changed since the 2003 energy white paper to even justify asking this question again.

#### **Q.4. Are there particular considerations that should apply to carbon abatement and other low-carbon technologies?**

The level of interest in carbon abatement is, in our opinion a smoke-screen to the real issue - namely reducing carbon emissions. Attempts at these "techno-fixes" will inevitably founder, if governments don't level the playing field and make concrete proposals, followed by enforceable legislation, regardless of how unpopular such would be with lobbyists and those with vested interests, leading to significant carbon-emission reductions, in line with their stated Kyoto targets. The objective has to be zero-carbon communities with local councils leading the way, as with Woking, Southampton and, the present flag-ship, from which all should follow, Allan Jones' uniquely successful strategies, now with the GLC.

Particular consideration will therefore have to be given to ensuring that low-carbon technologies are not rendered uncompetitive, especially in comparison to Nuclear, by the low level of investment and the expectation of high return, otherwise all the excitement generated by sequestration and city-dreams of carbon-trading will simply result in a re-shuffling of the deck-chairs.

The irony of nuclear-power being "too cheap to monitor" failed to take into account the billions absorbed by research, the millions needed to build and the billions now needed to decommission. With a similar investment of the inert taxpayer's money, R&D and construction of low-carbon energy sources such as Biomass- and CHP-driven municipal heating, hydrogen-powered public-transport and public service vehicles, geothermal heating, the manufacture of ever-more efficient p.v. cells and the whole raft of domestic micro-technologies will render our interim reliance on finite fossil fuels less fragile.

Whilst enlightened, receptive individuals and communities, together with supportive local governance can increasingly play their part in striving to attain significant CO<sub>2</sub> emission reductions, the real onus is on the Government to maintain the momentum with the proverbial stick and carrot. It goes without saying there is extraordinary inertia, antagonism even, in many regions and localities with regard Biomass & Wind Turbines in particular - fearful of the unrepresentative lobbying of a well-heeled, vociferous and well-organised minority, jealously guarding the presumed value of their post-codes, it will become increasingly necessary for renewable schemes to be considered in the light of the common good for the locality (and of the country) as a whole, not just of those living closest to them.

To reiterate, the particular considerations that should be applied to carbon abatement and other low carbon technologies are essentially financial - the rest will follow. We all know there is an increasingly high price to be paid for our energy needs and this is probably as it should be - we are reaping the whirlwind after generations of myopia and self-delusion. It would be utterly irresponsible to stack the cards in favour of nuclear, for instance, without taking into account the real (usually hidden) costs; similarly, in assessing CO<sub>2</sub> emissions in the production process of any scheme, this has to refer to the whole process, research, manufacture and production, day-to-day running and taking the whole thing apart again - not just carefully selected aspects of that process.

One of the most important cogs in the wheel of energy delivery is also one of the least discussed and most vague - the role of the National Grid, absolutely essential for all renewable schemes, whether large or micro-, yet also, in our opinion, extremely "inefficient" and, if anything, a very powerful force against change, in that it cannot countenance the thought of not being able to control the price of the unit. The Grid will also have to be carefully scrutinised and advised as to the role it can play in encouraging effective generation of low-carbon, renewable energy.

Finally, as said, the buzz-word, carbon "abatement", regardless of the extent to which the sci-fi cure of burying CO<sub>2</sub> in aspic, in a deep empty cavern under the North Sea is either viable or desirable, such developing policies must not, absolutely not, detract from the number one priority of national governments, initially those, it has to be said, in the EU, leading the way to the hallowed ground of carbon-free economies and societies.

**Q.5 What further steps should be taken towards meeting the government's goals for ensuring that every home is adequately and affordably heated?**

Affordable heating could be better achieved if standing charges were discontinued and users paid for the fuel they used only. There should be a sliding scale so that the more that is used the higher the unit rate. Obviously this would be unpopular for large properties but the government could recommend it started at a low increase to begin with. Cutting overall consumption should be the target and incentives should be in place. This should apply to water as well.

Solar water heating is currently one of the most cost-effective renewable energy measures for households, but the capital cost is a hurdle for most households that still needs to be overcome – and measures for overcoming this have already been mentioned in this response.

All new houses are to be pressure tested in the new building regulations. This should be encouraged for old properties - perhaps grants could be available. Draughts are a big factor in making properties cold.

Finally triple glazing should be fitting to conservatories as a building regulation. More research is needed to make sure triple glazing units have a longer life. Most manufacturers only give a 5-year guarantee, which discourages consumers. Scandinavian countries only use triple glazing - so why not here?

**i. The long-term potential of energy efficiency measures in the transport, residential, business and public sectors, and how best to achieve that potential;**

The long-term benefit of energy saving measures will be in making it quicker and easier to meet our remaining energy needs solely from renewable sources. Energy saving measures also have the potential to rapidly reduce our Greenhouse Gas emissions, reducing the cumulative effect on Climate Change, as well as making us less vulnerable to increasing energy prices.

The main obstacle to energy efficiency measures in any sector is the capital cost, which is enough to dissuade most people, even though most such measures bring considerable savings in the long run. As we have already recommended, to overcome the cost-perception gap of such home improvements a new agency should be set up to fund and install household energy improvements on a "buy now, pay back monthly" arrangement.

Introducing domestic tradable carbon quotas would be one very effective measure. Increasing taxes and levies on fuels to reflect their carbon emissions would be an alternative measure.

In transport it would encourage the development of new fuels and more efficient technologies, encourage better use of existing technologies (such as legs and bicycles) and even discourage travel in the first place – travel eats up much of what could otherwise be productive working or recreational time.

Significantly increasing the road tax on less economical vehicles would be an effective measure, but it would have to be more than a token gesture as with this year's increase.

By focussing on efficiency and alternative energy sources, this consultation appears to want to predict and provide for endless growth in energy consumption and transport. We offer an alternative scenario: a future where we consume less, but enjoy more, a future where we spend quality time in our local areas, rather than constantly rushing to be somewhere else. Energy consumption has risen in the past few decades, yet satisfaction, happiness and wellbeing have not increased. We challenge the presumption that perpetual expansion brings any real benefits to people.

## **ii. Implications in the medium and long term for the transmission and distribution networks of significant new build in gas and electricity generation infrastructure;**

Domestic Micro-renewables have the potential to supply a large portion of our energy needs, yet deterrents such as the capital cost are severely limiting the uptake. Another deterrent is that the surplus electricity generated from micro-renewables flows back into the distribution network, yet the costs of installing a meter to measure this and having it read are a disincentive. Householders would be more inclined to install micro-renewables if they could easily feed their surplus back into the grid and be paid at the going rate.

Distribution networks will need to be modified to better reap the benefits of micro-generation.

As an increasingly significant number of renewable energy sources with variable output are connected to the national grid, the accurate forecasting of their variable output will become more important in maintaining a reliable and efficient electricity supply. We believe this should be technically straightforward to accomplish.

### **iii. Opportunities for more joint working with other countries on our energy policy goals;**

Looking to share technologies with other countries is a worthy sentiment; looking to share costs or shift responsibility is not.

It is probably true to say that many businesses are looking for a level playing field - both nationally and internationally - when it comes to powering down their emissions; we know that most businesses would be happy to invest in their own energy efficiency and renewable energy measures as long as their competitors are forced to do the same. Businesses are looking to the Government to impose strict regulations so that everyone can move forward together, and international frameworks such as the Kyoto Protocol are important in ensuring a level playing field for businesses that compete in the international market.

It is absurd to believe that the UK will be able to influence the energy policy of developing countries unless it becomes a role model for a modern low-carbon, low-energy society with high levels of wellbeing. We recognise that ministers are increasingly trying to divert public attention away from their failing internal Climate Change policies and towards the international scene. The consultation paper is self-evidently wrong to state: "But our own actions will have no impact on climate change unless they are part of a wider intermediate effort." If reducing the UK's 2% of carbon emissions would have no impact on Climate Change, it would logically follow that no collective reduction in carbon emissions would have any impact on Climate Change either. This is a false statement, and the consultation paper is obviously trying to move the goalposts to lessen the perception of the UK Government's failure to effectively tackle its own emissions.

### **iv. Potential measures to help bring forward technologies to replace fossil fuels in transport and heat generation in the medium and long term.**

As we stated previously, introducing domestic tradable carbon quotas would be one very effective measure to encourage new technologies. Increasing taxes and levies on fuels to reflect their carbon emissions would be an alternative measure.

Either measure would encourage the development of new fuels and more efficient transport technologies, encourage better use of existing technologies (such as legs and bicycles) and discourage travel in the first place – travel eats up much of what could otherwise be productive working or recreational time.