

Friends of the Earth

SUBMISSION TO PIU ENERGY PROJECT

Introduction

1. Friends of the Earth (FOE) welcomes the Government's consideration of energy supply and demand issues over the longer term, combined with the need to make an effective UK contribution to tackling global climate change. In particular, FOE welcomes the opportunity to make this contribution to the work of the Performance and Innovation Unit (P113) which is expected to make recommendations to the Prime Minister before the end of the year.
2. This submission is from Friends of the Earth (England Wales and Northern Ireland). However, it is noted that Northern Ireland is not included in the P113's remit. Friends of the Earth Scotland is expected to comment separately in respect of that territory.
3. While it is understandable for the Prime Minister to seek the advice of the P113 on matters of strategic importance, FOE believes that this process should not be a substitute for informed Parliamentary and wide-spread public consultation and debate. This is particularly so given the long-term nature of energy infrastructure, and of issues like climate change and radioactive waste management. The Government's guidelines on public consultation, prepared by the Cabinet Office, should act as a minimum standard for the widest possible involvement in decision making about the future. We firmly believe any conclusions arising from the review should be put to wider consultation through a green paper and eventual white paper before being implemented.

Principles

4. Friends of the Earth strongly believe that any policy review, and in particular one of such importance in respect of resource consumption, emissions and waste, should be set within a framework of sustainable development.
5. We have, elsewhere, defined six broad policy goals in respect of sustainable development:
 - *Sustainable development should satisfy economic, environmental and social needs in the present and future, and efficiently maintain the economic and environmental means to do so.*
 - *Sustainable development should provide the opportunity for all people to satisfy their needs equitably, both within and between nations as well as within and between generations.*

- *Sustainable development should minimise activities that cause serious environmental damage, ensure that renewable resources are managed and used in ways which do not diminish the capacity of ecological systems to continue providing those resources, and ensure that non-renewables are managed and used in ways which account for future needs and the availability of alternative resources.*
- *Sustainable development should operate within critical ecological limits.*
- *Sustainable development should ensure that unique environmental resources, goods and services and irreplaceable cultural or historic figures ie. critical natural and physical capital are passed on to future generations intact.*
- *Sustainable development should maintain high environmental quality standards throughout urban and rural areas.*

6. In addition, we have identified five key principles of sustainable development:

- ***The Precautionary Principle** recognises that where there are threats of serious or irreversible damage to the environment, the lack of full scientific certainty should not be used as a reason to delay taking cost-effective action to prevent or minimise such damage.*
- ***The Integration Principle** recognises that environmental requirements must be integrated into the definition and implementation of all areas of policy-making.*
- ***The Polluter Pays Principle** recognises that the costs of preventing or cleaning up pollution and waste should be borne by those responsible for causing the pollution and waste, and not by society at large.*
- ***The Preventative Principle** recognises that it is better for society to avoid incurring the costs that result from development activities which seriously damage natural or physical capital.*
- ***The Participation Principle** recognises that an essential prerequisite for achieving sustainable development is to encourage broad and effective public participation in decision-making.*

7. These goals and principles should, in our view, underpin a sustainable energy policy. They are one cornerstone of our response here.

Energy and the UK economy

8. The other cornerstone is a recognition of the UK economy's current dependence on the combustion of fossil fuels and the energy derived from nuclear power. All but 1% of our current energy needs comes from these sources. The key environmental effects of this are worth stressing:

- each UK citizen is currently responsible for about nine times their per capita share of what might be considered a sustainable level of global CO₂ emissions;
 - combustion, whether to produce electricity or heat, is the principal cause of the UK's sulphur dioxide emissions which cause local air quality problems in the areas around power stations, wider air quality problems through the production of sulphate particles and acidification problems in the UK and in the near continent;
 - combustion for transport purposes is the principal cause of air quality problems in the UK, in the places in which people live and work;
 - the extraction and transport of fossil fuels for use in the UK has effects right around the world, in terms of air and marine pollution, despoliation of land and the generation of conflict with people of other cultures;
 - the UK possesses a growing stockpile of radioactive waste for which no long term solution has been found.
- some 6 million households currently cannot afford to adequately heat their homes because of a combination of poverty, and poor insulation.

9. These effects demonstrate the highly unsustainable way in which the UK's energy needs are met at present. All would be sufficient reason for a thorough review of the demand for and sources of energy in the UK. The concerns over future security and diversity of supply only add to the concern.

Applying the goals and principles of sustainable development to energy policy

10. The first conclusion that can be drawn, when these goals and principles are applied to energy policy, was made strongly by the Royal Commission on Environmental Pollution in its 22nd report. That is the need to cut UK emissions of carbon dioxide by 60% by 2050. This requires nothing less than a revolution in the way our economy is powered. Moreover, the achievement of this target will need to be followed by further reductions in the second half of the century. The advance of this revolution should be a key aim of policy and the development of a 'road-map' to secure it a key output of the current review.
11. Notwithstanding the benefits in terms of savings in emissions and cuts in resource consumption to be gained from energy efficiency, efficiency measures alone are unlikely to be able to secure the cuts in carbon dioxide wanted. Rather, a shift away from fossil fuel use to alternative sources of energy is needed.
12. Two alternative sources are available: nuclear power and renewable energy. Despite forty years of research and investment, nuclear power is more expensive than conventional sources of energy (and some renewables), inherently unsafe, vulnerable to terrorist attack and produces waste for which no safe disposal route has been found. To expect to meet Britain's energy needs from nuclear power would be grossly irresponsible. **A vital conclusion from the current review must be that nuclear power has no future as a source of energy in the UK.**
13. Sources of renewable energy, on the other hand, are abundant and widely distributed. Renewable energy is inherently safe, falling in price and relatively underdeveloped. Its environmental effects are largely local. It has also has the potential for significant job creation in the United Kingdom. In our view, therefore, the further development of renewable sources of power should be the foundation of Britain's energy policy.
14. That being said, in order to maximise cuts in carbon dioxide, it is also important that greater stress is laid on energy efficiency, particularly considering the large savings that it can provide at zero or even negative net economic cost. Insufficient attention appears to have been paid to this in the review so far.
15. Substantial reductions in the other environmental effects of energy use, such as sulphur dioxide emissions and marine pollution, can be achieved through the revolution in energy supply required to meet climate change objectives. This revolution will also go some way toward addressing concerns about the security of energy supply. However, care needs to be taken to ensure policy to reduce emissions is applied in ways that don't cause additional hardship for people on low incomes. Additional measures to combat fuel poverty won't, in themselves, lead to reductions in emissions, but are justified as part of a wider strategy to make the revolution in supply as painless as possible.

Policy measures to promote sustainable energy

16. Over the last five years, through the Climate Change Programme, the Utilities Act 2000, the integrated transport policy and many other changes, the Government has begun to lay the foundations for the revolution in energy policy that is needed. The Renewables Obligation sets a target for the use of renewable energy to generate electricity. The Climate Change Levy makes a start toward the taxation of energy use as opposed to labour. Specific grant regimes have been established to promote renewable investment and planning policies are being changed to identify suitable sites for renewable power generation. Energy efficiency programmes are providing incentives for the introduction of more efficient technology while specific measures are being targeted to tackle fuel poverty. In the transport sphere, high levels of fuel taxation and reforms to vehicle excise duty and company car tax allowances are focussing purchasers' minds on more fuel-efficient vehicles. The ten year plan contains measures designed to blunt the growth in traffic and to promote alternative forms of travel. Land-use policies are increasingly frowning on traffic-generating development.

17. However, there is considerable doubt as to whether the policies being implemented will achieve even the Government's manifesto pledge of reducing CO₂ emissions by 20% from 1990 levels by 2010. Cambridge Econometrics have claimed, using different modelling assumptions, that they will lead only to a fall of around 7%. Given the time taken to implement new policy measures, and the lag in their having an effect, there is therefore a case for reviewing the Climate Programme earlier than currently planned (ie: 2002 rather than 2004).
18. It is indisputable that the measures currently in the Climate Programme will be insufficient to achieve the further reductions in CO₂ emissions needed after 2010. Indeed, the Government's own modelling suggests that emissions will rise after that period. A critical focus of the current review should therefore be on the policies needed to secure further reductions post-2010.
19. Much of the work needed to secure further reductions post-2010 has already been done as much can be gained from the extension, acceleration and intensification of existing policies. The task at hand therefore is not so much about the identification of new policy tools. For example, the Renewables Obligation currently requires a steady increase in renewable provision for electricity up to 2010. Regional renewable capacity studies are being carried out to identify sites for this expansion and a modest grants regime has been established to stimulate investment. However no policy exists to extend this policy post-2010. The task is therefore to set longer-term, larger targets. A key output arising **from this review must be a recommendation that the Government sets a larger, longer-term statutory target for the proportion of electricity to be generated from renewable sources, for example, 30% by 2020.** The establishment of such a long-term target would enable judgements to be made about the adequacy and effectiveness of the policies that are designed to meet it. Without such a target, these judgements cannot be made.
20. Two areas of policy stand out which do need reform. Firstly, there is an urgent need for a review of NETA as these currently unfairly penalise intermittent and small-scale suppliers of electricity. Such a reform is vital if the next generation of renewables, including locally-based photovoltaics, is to gain a foothold. Secondly, the definition of renewable in respect of the Obligation needs to be redefined to exclude energy from waste. Although it clearly makes sense to recover energy from waste, its eligibility for subsidies provides a perverse incentive in that it reduces the cost of landfill and incineration, as compared to reuse and recycling. Regulation, not subsidies, in our view, are the most appropriate tool to ensure energy from waste is recovered.
21. **More broadly, besides promoting renewable power, the Government needs also to introduce measures to promote efficiency and curb unnecessary demand.** Although a range of measures can be used for these ends (including new product standards, public information campaigns etc), fiscal measures are amongst the most effective. Friends of the Earth has welcomed the widespread introduction of green taxes and levies over the last eight years. However it must be noted that large discrepancies exist between the tax levels that apply to different energy uses. Until recently, it has proven fairly easy for the Government to increase taxes on road fuels. Plans for the taxation of industrial and commercial energy use have been implemented but large exemptions have been given to energy intensive sectors of industry. Because of fuel poverty, it has proven extremely

difficult to tax domestic energy consumption. Some sectors, such as aviation, have escaped energy taxation altogether, while others such as the use of fuel by off-road mobile machinery are subject to strange and seemingly perverse incentives.

22. **It is crucial that energy taxes increase gradually over the next decade. It is equally crucial that firms and households are convinced that this will be the case as a clear understanding of the direction of energy taxation over time allows for strategic, effective and efficient responses.** The scrapping of the road fuel duty escalator and the recent effective cuts in road fuel duty rate have seriously undermined confidence in the Government's commitment to reduce greenhouse gas emissions from transport. As a matter of urgency the Government needs to make a clear commitment to a steady rise in energy taxation over the next decade. Once the operation and impacts of the climate change levy has been reviewed, the Government should consider options for increasing the rates. Concerns of the impacts of these higher energy tax rates should be dealt with through both tax breaks for investment and public spending on alternatives where appropriate.
23. **The Government must also set in train plans to increase energy taxation in the domestic sector. To date the appallingly high levels of fuel poverty in the UK have justifiably prevented the Government from taking action in this area.** However, with new measures and funding to tackle this problem in place, we believe the time is right for the Government to review the options for designing and introducing a domestic energy tax. Such a review could follow a similar process to the Task Force on the economic instruments and the business use of energy. Revenues could be used to eliminate fuel poverty.
24. Furthermore the Government should review the tax system to remove perverse tax incentives. For example, households wishing to reduce their energy demand and energy bills through energy conservation investments which they install are taxed are twice as much for doing so as for using the energy. This is an anomaly that should be removed immediately. Wide sectors of industry, that are subject to fuel duties on their haulage and the climate change levy on their use of energy for stationary plant, still receive subsidised 'red diesel' for the fuel used by their off-road mobile machinery. This makes no sense.
25. **On the other hand, tax policy should actively promote the revolution in the UK's energy supply.** Increases in energy taxes must, of course, therefore exempt renewable sources of energy. But tax policy can go further than this. We have lobbied for and welcomed the Government's recent use of enhanced capital allowances both within the climate change levy and through the green technology challenge. More can be done to bring through the next generation of renewable energy technologies. We have proposed a tax credit of at least 50% of the investment cost in offshore wind energy, photovoltaics and wave power. These technologies have a key role to play in reducing UK greenhouse gas emissions. This measure would reduce the cost of these technologies and the risk associated with investing in them. It would speed up investment rates, increase technological innovation and reduce the costs of future investments. Major opportunities for UK businesses will be created by the increase in demand for these technologies.
26. Rewarding firms and people for changing behaviour in ways that manage energy demand can be also achieved through tax reliefs. For example, we support proposals for tax relief for public transport season tickets to encourage commuters to use the bus, tram or train rather than the car and for contract carriage of employees on local bus services to encourage commuting by bus.

The use of tax policy, whether as a stick to discourage the use of fossil fuels and nuclear power or as a carrot to promote renewables and energy efficiency, needs to be supplemented by public spending programmes to support desired investment. A critical area in this respect is transport. The Government's ten-year plan, if viewed over the longer time-horizon afforded by this review, can be seen as a mixed bag. On the one hand it is intended to provide for substantial investment in rail and bus provision. On the other, it devotes £60 billion to upgrading road

networks that will only generate more demand for travel by car and lorry. Furthermore, although the road investment is provided directly by central government, much of the rail investment is dependent on private finance. A longer term view is desperately needed in transport policy and government should be thinking now about targets for the level of traffic in 2020.

28. A further example of the need for long-term thinking in public spending relates to investment in renewable technologies. The £100 million additional support for renewables allocated by the Prime Minister for is welcome, but further incentives will be needed if longer term targets for renewables are to be achieved.
29. **Finally, tax policy and spending plans need to be supplemented by appropriate public information strategies.** The recent fuel protests are an example of how policy can run awry if parts of society are either ignorant of the purpose of policy or ignorant of the measures they can take to respond to the price signal. In the case of the fuel protests, small hauliers were ill-informed in both ways: the fuel duty inflator was widely perceived as a revenue-raising exercise and small hauliers were given little information on how they could, for example, purchase more fuel-efficient trucks. It is vital that the slow but steady increase in energy taxes proposed above is accompanied by measures to help households and companies to reorder their affairs in ways that consume less energy.
30. These public information campaigns involve far more than merely advertising, although that is necessary. Government support for local energy efficiency schemes, for local renewable energy projects, for the dissemination of research into, for example, the benefits of different green electricity tariffs or school travel plans are all part of the picture. The active involvement of the wider community, including voluntary and business groups is essential.

Conclusion

31. Britain faces a choice. The driving force of energy policy should be and is the need to cut emissions of carbon dioxide. Such a policy will have the supplementary benefit of reducing air and marine pollution. One response to this need involves the widespread use of another unsustainable form of power nuclear energy. This response is already being actively promoted by those with an interest. It would be expensive, dangerous and leave future generations with a legacy of toxic and radioactive waste, for which no safe disposal route is known.
32. The other response involves a revolution in the way energy is provided in the UK. It involves the uptake of a mix of different renewable energy technologies along with measures to internalise the cost of energy use and thereby promote more efficient technologies. It would provide thousands of new jobs and could facilitate the growth of a major export industry. **It is vital that this energy review puts Britain on this second course.**