UKELA CLIMATE CHANGE WORKING PARTY RESPONSE

DTI Consultation paper on "Our Energy Challenge: securing clean, affordable energy for the long term"

Energy Review Team
Department of Trade and Industry
1 Victoria Street
London SW1H 0ET

EnergyReviewConsultation@dti.gsi.gov.uk 14 April 2006
By Email and Post

Dear Sirs

DTI consultation paper on "Our Energy Challenge: securing clean, affordable energy for the long term" ("Consultation Paper") - United Kingdom Environment Law Association ("UKELA") Climate Change Working Party response

As co-chairperson of the UKELA Climate Change Working Party, I have pleasure in enclosing the response of the Working Party to the above Consultation Paper.

If you or any of your colleagues would like to discuss any aspect of our response please do not hesitate to contact either me or my co-chair Michael Woods. My direct dial telephone number is 0870 839 1263 and e-mail address is tom.bainbridge@hammonds.com. Michael's direct dial telephone number is 0207 809 2554 and email address is michael.woods@shlegal.com

I would like to thank you on behalf of the UKELA Climate Change Working Party for the opportunity to respond to the Consultation Paper.

Yours faithfully

Tom Bainbridge
Co-Chairperson, UKELA Climate Change Working Party

cc. Michael Woods – Stephenson Harwood, UKELA Climate Change Working Party Co-Chair
cc: Mark Brumwell – S J Berwin, UKELA Working Party Co-ordinator

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Introduction

This submission is made on behalf of the UK Environmental Law Association (UKELA) Climate Change Working Party.

UKELA is the UK forum that aims to make law work for a better environment and to improve understanding and awareness of environmental law. UKELA's members are involved in the practice, study or formulation of environmental law in the UK and the European Union. It attracts both lawyers and non-lawyers and has a broad membership.

We believe that many of the objectives set out in the Government's 2003 Energy White Paper remain valid but we welcome the Government's efforts to reassess priorities and to address implementation of measures to achieve stated policy objectives.

In this response, we set out our views on some of the legal issues relevant to issues of policy being considered by the Government in its review.

Overall our view is that effective delivery of policy objectives requires an integrated and effective set of implementing measures – regulatory or otherwise. Business, the public and the environment all benefit from measures that are clear, provide long-term certainty, avoid unnecessary complexity and are simple to enforce.

We have considered in particular the legal issues raised by nuclear new build, carbon capture and storage and energy efficiency in the residential and business sectors.

In relation to nuclear new build there remain public concerns surrounding safety of operation and radioactive waste, whilst business is requesting a simplified and accelerated consenting process and certainty over long-term waste solutions. If nuclear is to form part of the future energy mix then Government needs to ensure that both public and business concerns are properly and demonstrably balanced and addressed.

No regulatory framework currently exists which adequately addresses the risks associated with carbon capture and storage although this looks like a promising technology. If carbon capture and storage is to form part of future energy and climate change policy then Government needs to press for international and European agreement on a framework for the recognition and regulation of carbon capture and storage and to bring forward early proposals for a long-term storage monitoring, safety and liability regime.

There are numerous EU and UK measures promoting energy efficiency but their record on delivery is poor. We would urge the Government to commit to remedying this. Government

should look to improve the effectiveness of existing measures and to provide for early and effective implementation of a number of recent European energy efficiency directives. In the long term, however, Government should examine the scope for rationalising energy efficiency measures into a simpler and more integrated regime. We would support consideration of a much broader based system for carbon trading.

Q3 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?

1 Considerations that apply to nuclear energy

1.1 The recent report by the Sustainability Development Commission (SDC) on nuclear new build argues that although nuclear offers a relatively secure electricity supply and has a good safety record in the UK, it has major disadvantages which outweigh these benefits.

1.2 Disadvantages identified by the report include:

1.2.1 No long-term waste management solution.

1.2.2 Uncertain economics could lead to the emergence of hidden subsidies and taxpayers could be landed with a significantly higher bill than currently forecast.

1.2.3 Exacerbating the shortcomings of a rigid, centralised energy distribution system could undermine efforts to promote alternative low or zero carbon technologies and energy efficiency as will the diversion of funds into the nuclear industry.

1.2.4 Other countries, with lower safety and regulatory standards, could be encouraged to opt for nuclear, increasing the potential for accidents, proliferation and terrorist attacks.

1.3 However, those in support of nuclear energy refer to the rising costs of fossil fuels and the production of carbon dioxide, the most important greenhouse gas, consequent upon their combustion in power stations.

1.4 In giving due consideration to the above matters we consider that the following legal issues must be taken into account:

2 The future legal context for nuclear new build

2.1 The OSPAR Ministerial Meeting of July 1998 at Sintra established the objective to prevent by 2020 pollution of the maritime area by ionising radiation through progressive and substantial reductions of discharges, emissions and losses of radioactive substances, including radioactive waste, with the ultimate aim of achieving concentrations in the environment near background values for naturally occurring radioactive substances and close to zero for artificial radioactive substances.

2.2 The OSPAR provisions reflect accepted international environmental principles many of which emerged during the UNCED process[1] – these include a commitment to 'sustainable management'; the incorporation of the precautionary principle and the polluter-pays principle, and the concepts of best available techniques (BAT), best available practice and clean technology. Put simply, the move is towards elimination of pollution instead of merely prevention, reduction and control.

2.3 The programme for the more detailed implementation of the OSPAR decision requires Member States to produce a National Plan to achieve emissions close to zero for artificial radioactive substances. The Government has adopted a Strategy for Radioactive Discharges 2001-2020 to achieve the OSPAR objectives.

2.4 Two further OSPAR decisions are significant. First, OSPAR decision 2000/1 requires substantial reductions and elimination of discharges, emissions and losses of radioactive substances, with special emphasis on nuclear reprocessing.

2.5 The Nuclear Energy Agency (NEA) study into alternative nuclear fuel cycles has identified that implementing the non-reprocessing option (dry storage) for spent fuel would eliminate the discharges and emissions of radioactive substances that currently arise from reprocessing.

2.6 Second, OSPAR Decision 2001/1 requires the review of authorisations for discharges or releases of radioactive substances from nuclear reprocessing activities in response to the 'urgent need to achieve further substantial reductions or elimination of discharges, emissions and losses of radioactive substances.'

2.7 Thus, any authorisation for nuclear new build must take into account the UK's international legal obligations and the Government's national plan for achieving elimination of radioactive emissions according to the OSPAR principles as set out above.

3 Radiological Safety

3.1 There is a concern that international advice on the effects of low level radiation may have been underestimating risks from exposure to radionuclides within the body. These concerns have been considered by the Committee Examining Radiation Risks

[1] Sands, Principles of International Environmental Law, Second Edition, page 409

from Internal Emitters (CERRIE). CERRIE concluded that reliable quantitative estimates of uncertainties in dose coefficients are not yet available for a range of radionuclides, but that uncertainties in estimating equivalent dose may well vary in magnitude from a factor of 2 to more than a factor of 10. On top of these, there are additional uncertainties associated with tissue weighting factors used to estimate effective dose.

3.2 CERRIE also considers newly discovered effects of radiation, such as genomic instability (on-going long term increase in mutations within cells and their progeny), bystander effects (cells next to those that are hit by radiation may also be affected) and minisatelite mutations (inherited germline DNA changes) all of which it recommended need further research.

3.3 Whilst CERRIE does not recommend any changes to the central values of risk factors or dose coefficients that are currently recommended in international advice, these are risk factors that may require regulators to take a more precautionary approach in the future.

4 Planning and authorisation of nuclear new build

4.1 It is acknowledged that the nuclear decommissioning programme will leave a gap in the country's electricity generation capacity although new interest in conventional generation sources attributable to an increase in wholesale electricity costs may fill this.

4.2 Any new nuclear build is likely to suffer long planning and consenting delay. This period maybe too long for new nuclear power stations to make any contribution towards the Governments 2010 CO_2 target or Kyoto commitments.

4.3 Any new nuclear build programme must first overcome public unease concerning safety issues and waste and secure a bundle of consents. Apart from planning matters, licences and authorisations will be required under the Nuclear Installations Act 1965, the Radioactive Substances Act 1993 and the Justification of Practices involving Ionizing Radiation Regulations 2004, covering design, safety, operation and waste management.

4.4 It has been suggested by the Nuclear Industry Association that one of the preconditions for an environment in which private investors would feel comfortable is for the government to change the rules so that planning permission can be granted more swiftly.

4.5 Early strategic environmental assessments would be essential allowing for quicker site-specific investigations and environmental assessments to be achieved. But a rigorous environmental and safety assessment process must not be prejudiced in any way by a new consents regime simply to facilitate a new nuclear build programme. In addition, there will be a need to engage the public on issues connected with new

nuclear build in order that the public is able to make an informed contribution to the decision making process.

5 Waste issues

5.1 The Government has established the Committee on Radioactive Waste Management (CORWM) to examine options for long term storage of radioactive waste.

5.2 UKELA notes that CORWM has said it has no position on nuclear new build, its task is to recommend best option for long-term management of wastes which *exist now* or will be created as a result of decommissioning.

5.3 However, CORWM has stated that solutions for existing wastes would be robust but that any future consideration of new build, including waste considerations, should be subject to CORWM's own public assessment process as the decision raises separate ethical and political questions from those considered in its public engagement exercises.

5.4 CORWM also points out that nuclear new build might undermine support for its process and make it more difficult to achieve public confidence. This is significant given that public acceptance in this area takes on greater importance than with other industrial projects.

5.5 The assumptions of wastes arising for new build are based on ten AP1000 reactors of Westinghouse design. CORWM note increased waste activity from these facilities is about 5%. However, the SDC reports that this analysis is based on a number of complex assumptions and suggests that the increase in total activity could be as high as a factor of 9 some ten years after the final fuel removal.

5.6 According to SDC approximately 5000te UK spent fuel is currently stored. This material is intensely radioactive and generates heat. Spent fuel can be used for reprocessing, but more will be generated if the UK proceeds with a nuclear new build programme. Currently there is 4,700te of spent fuel already stored which will never be reprocessed.

6 Costs and liabilities

6.1 The NDA was established by the Energy Act 2004 to 'oversee the management and decommissioning and clean-up of the UK's civil nuclear legacy'.

6.2 UKELA notes that civil stocks of plutonium are currently treated as an asset but that the NDA is currently negotiating with the Government on whether, and how much, plutonium should be classified as waste. The SDC suggests that re-classifying plutonium as a waste could add several billion pounds to the total cost of dealing with the UK nuclear legacy.

6.3 In addition, the SDC points out that the long term liabilities associated with waste management and decommissioning have been significant hurdles in the past for private investors. It suggests that one way private investors could be required to fund such liabilities would be to pay a proportion of their operating income each year into a liability fund to ensure that the money was available. We would urge the Government to increase transparency both to potential investors in new nuclear build and the public concerning the decisions reached on the status of plutonium stock and the implications for the economics of any new nuclear new build programme.

Q4 Are there particular considerations that should apply to carbon abatement and other low-carbon technologies.

1 Introduction

1.1 Carbon capture and storage has significant potential to permit existing fossil fuel power stations to continue to contribute to the electricity generation mix and to contribute towards climate change objectives. There is ongoing work by the UNFCCC in relation to the status of carbon capture and storage under the Kyoto Protocol and the approach to issues such as leakage and permanence. It is clearly essential that sufficient safeguards are put in place to ensure the long-term integrity of stored carbon dioxide reservoirs.

2 International law

2.1 The international community is reassessing the two main agreements relevant to this activity being carried on beneath the sea bed, namely the London Convention 1972 and the 1992 OSPAR Convention.

London Convention

2.2 The London Convention 1972 mainly applies to the water column rather than any sub-sea activity, but the 1996 London Protocol, which superceded the Convention when it entered into force on 24th March 2006, represents a major change of approach to the question of how to regulate the use of the sea as a depository for waste materials, inasmuch as it introduces a general prohibition on dumping of waste materials except for materials on an approved list.

2.3 At the moment CO_2 is not on that approved list. However, the Protocol does not include pipeline discharges from land, operational discharges from vessels or offshore installations or placement for a purpose other than disposal. Enhanced Oil Recovery (EOR) and CO_2 storage associated with gas and oil recovery are generally considered by industry to be purposes other than disposal. Temporary storage of carbon dioxide could be considered 'a placement for a purpose other than deposit' and so permissible under the Protocol as it stands although it is questionable whether, to contribute towards climate change objectives, it is appropriate to consider carbon storage as

"temporary". The operator would need to show that he will extract the CO_2 at a later date for other uses such as EOR.

2.4 The Protocol also contains a stricter precautionary approach than the 1972 Convention as it requires its Contracting Parties to apply the Precautionary Principle (Resolution LDC 44(14) 1991) instead of being 'guided by' it. CO_2 is likely to fall within its scope because it applies to the introduction into the marine environment of 'wastes or other matter'. However, the test is 'whether it is more likely than not to cause damage to the marine environment'. In the experience of the Norwegians they consider that underground storage in large amounts *may,* but is unlikely to, (Norwegian Research Council Project No 151393/210) cause some damage 'locally' to the atmosphere, which is covered by the United Nations Convention on the Law of the Sea 1982. But if the storage is by injection into a geological structure in the subsoil in such a manner that it is *unlikely* to escape, such an injection may pass the 'likely' test. Given that oil companies have been using this operation for the purposes of EOR for over a decade there is an expectation that 'good oilfield practice' will suffice.

2.5 There will be a first meeting under the Protocol in November 2006, with a prior meeting of the Legal Working Group to be held at the IMO on April 10th -12th to discuss the compatibility of CO_2 capture and storage in sub-seabed structures after the Technical Working Party meeting on 3rd – 7th April. It is widely anticipated that clarification and amendments to facilitate and/or regulate the storage of CO_2 will be made at these meetings, for ratification in November.

OSPAR Convention

2.6 The OSPAR Convention was not drafted with carbon storage in mind. In 2004 the Jurists and Linguists Group of OSPAR accepted an amendment to consider the subject. The placement of CO_2 arising from operations of offshore installations is not prohibited but is regulated as is placement for scientific research. The Convention does not distinguish between ocean storage and subsoil storage, therefore if it does not cause 'pollution' there is no prohibition under Annexes I, II & III. However, the precautionary principle must be considered for any substance introduced 'directly or indirectly' into the marine environment.

2.7 When considering the interpretation of international agreements the International Court of Justice held that scientific developments could be taken into account (Botswana 2000). The Vienna Convention on Treaties also provides that all Treaties must be interpreted in good faith.

Conclusion

2.8 If the UK Government decides that it wishes to encourage carbon capture and storage projects, then it will be essential that it gives priority to the process of amending/clarifying the London Protocol and the OSPAR Convention to make clear that carbon capture and storage projects are permissible under international law and to ensure that an international framework exists for the regulation of such projects.

3 EC Law

3.1 Under the European Union framework a number of Directives could possibly apply to carbon capture and storage. The Netherlands legal taskforce reported on the subject in 2001 and concluded that CO_2 is within the scope of the Waste Framework Directive but is outside the scope of the Landfill Directive (1999/31/EC). The taskforce highlighted the possibility of Member States interpreting directives differently, which results in the need to discuss at EC level a consistent approach to capture and storage activities. We would agree that if carbon capture and storage is to go ahead it would be very helpful to agree a common approach at European level.

3.2 If the EU Emissions Trading Scheme is to provide an incentive for carbon capture and storage, then it will need to be clarified to provide for these activities and the European Commission's monitoring and reporting guidelines[2] amended accordingly. In particular, the development and adoption of guidelines on the monitoring and reporting of CO_2 capture and storage as referred to at paragraph 4.2.2.1.3 of the Commission's guidelines will need to be developed. The issues which will need to be considered include:

3.2.1 how to account for fugitive emissions during the capture, transport and injection of CO_2;

3.2.2 how to account for possible long term seepage of CO_2 from storage sites back to the atmosphere over the long-term; and

3.2.3 how to account for any future removal of CO_2 from storage sites.

3.3 The first issue will need to be addressed within the reporting and monitoring guidelines. Given the difficulty of accurately predicting whether long-term leakage will occur and if so to what extent, the second issue is more complex. If no account of this is included in the EU ETS then the operator will effectively receive credit for stored carbon, which subsequently escapes. However, it is also necessary to address the requirement for certainty. It seems to us, therefore, that an estimate as to long-term leakage should be included in the EU ETS but that if long-term monitoring should show that leakage exceeds that estimate this should be accounted for by national governments in their National Greenhouse Gas Inventories under the UNFCCC. The final issue should be straightforward in terms of calculating how much CO_2 is removed from a site but if it is to be accounted for in the EU ETS an amendment to the Directive could well be required to bring storage sites within the scope of the Directive.

4 Long term liability

4.1 We note that the environmental, health and safety risks associated with injection of CO_2 into a geologic formation have been successfully managed for well over a decade

[2] Commission Decision of 29 January 2004 establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC (2004/156/EC).

in commercial oil and gas operations. However, to contribute to climate change objectives carbon capture and storage involves the storage of carbon dioxide over an extremely long time-scale and there will always be a residual risk of leakage at some point in the future. Therefore, a key issue to be addressed is long-term liability for monitoring the integrity of the site and addressing the consequences of any future leakage.

4.2 Norway is the state with the most experience of carbon storage in the ocean subsoil and has passed national legislation to cover this which provides a possible model for a long-term liability regime. There, the Pollution Control Act has special rules on liability for environmental damage, based on strict and severe liability of the operator of the installation or activity that causes the damage. This statute provides for the liability to remain with the operator for the first two years and thereafter to transfer to the regulatory body. This would have clear funding implications for the regulatory body taking this responsibility. A further drawback to this approach is that even if leakage of CO_2 from underground deposits into the sea occurs this may well not result in a type of damage to public or private interests that gives rise to a compensatable loss.

4.3 Alternatively liability could be addressed in a similar manner to liability for decommissioning on the UK continental shelf, which could include the posting of surety bonds, letters of credit, trust funds or environmental liability insurance. Operators will want to be able to predict the extent of their liability, which might be achieved to some extent through a finite liability cap. However, the allocation of liability must be such as to ensure the environmental integrity and safety of any carbon capture and storage project.

5 Carbon capture and storage authority (CCS Authority)

5.1 We would support the recommendation made by the House of Commons Science and Technology Committee in its report Meeting UK Energy and Climate Needs: the Role of Carbon Capture and Storage that the different parts of Government Departments and agencies having expertise and functions relating to the regulation and monitoring of carbon capture and storage should be brought together into one body.

5.2 We would suggest that, given that the most significant potential for carbon capture and storage for the UK is offshore[3], it may be appropriate for these functions to fall to the proposed Marine Management Organisation (MMO) if such a body is established under the Marine Bill. We note in this respect that functions being considered for the new MMO include delivery of an integrated licensing regime for offshore activities and also competent authority for the purposes of the Environmental Liability Directive.

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[3] Evidence given to BGS to the Science and Technology Committee indicates that there is no significant potential for onshore CO2 storage in oil or gas fields in the UK (with the possible exception of the Wytch farm oil field in Dorset) and that the UK's onshore aquifer storage potential has not yet been fully investigated. In contrast, BGS estimates the storage capacity of North Sea oil and gas fields to be 4.7 Gigatonnes (Gt) of CO_2, equivalent to 20 years' worth of all present day power generation emissions, and storage potential in North Sea deep saline aquifers to be a further 250 Gt of CO_2.

5.3 We would recommend that proposals are developed quickly to put in place a licensing regime for carbon capture and storage activities and suggest that the MMO may be the most appropriate body to oversee such a regime. The regime is likely to need to include provisions in relation to:

5.3.1 appropriate due diligence in determining the suitability of sites before carbon capture and storage begins;

5.3.2 monitoring and reporting by the operator in relation to the integrity of storage; and

5.3.3 emergency plans in the event of sudden unanticipated losses of CO_2 during the storage process.

6 Incentives for carbon capture and storage

6.1 The largest, most easily captured, potential sources of CO_2 in the UK are from the power generation sector and other point sources. However, the government has not taken any steps to create incentives for CO_2 emitters to capture CO_2. In view of the fact that any financial support mechanism is likely to be legally complex and require primary legislation it is essential that proposals are brought forward in the very near future if the framework is to be put in place in time for investment decisions on currently proposed demonstration projects. We note in this respect the consultation being conducted by the Treasury: A Consultation on Barriers to Commercial Deployment.

Comments:

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

We comment below on the legal issues raised by some of the existing policies on energy efficiency and options for policy extensions described in *"Energy Efficiency: The Government's Plan for Action"* published in April 2004, the *"Energy Efficiency Innovation Review"* (EEIR) published in December 2005 and the Government's response to the House of Lords Science and Technology Committee report on Energy Efficiency which was published on 16 January 2006.

We note also that improvements in the transport sector have primarily been left to voluntary agreements and while these have delivered some improvements there may be scope for mandatory targets in the future.

1 Energy End Use Efficiency and Energy Services Directive

1.1 The Energy End Use Efficiency and Energy Services Directive was adopted on 14 March 2006 and the majority of its provisions must be implemented by 2008. We would welcome the Government's early proposals regarding early effective implementation of this Directive.

2 Energy Efficiency Commitment (EEC)

2.1 The EEIR suggested as a policy option the extension of the EEC in terms of a possible increase in the level of the target for EEC Phase 3 (1 April 2008 to 31 March 2011) and the possibility of an increased role for trading within the EEC framework.

2.2 An increase in the level of the target can be achieved through secondary legislation made under section 41A of the Electricity Act 1989 and section 33BC of the Gas Act 1986.

2.3 In relation to the possible introduction of an increased role for trading, we note that Article 7 of the Electricity and Gas (Energy Efficiency Obligations) Order 2004 already allows a supplier's target to be treated as having been achieved by a qualifying action taken by another supplier or transferred to another supplier with Ofgem's consent. We consider that an increased role for trading would require amendment to the EEC primary legislative framework.

2.4 The EEIR refers in particular to the possibility to a "cap and trade" scheme. We would suggest that consideration is also given to the renewables obligation framework (sections 32 to 32C) as a possible alternative model for the introduction of trading. We note in this respect the similarity of drafting between Section 41A of the Electricity Act 1989 and section 32 of the Electricity Act 1989. However, we recognise that the model would need to be tailored to reflect the different policy objective which is to be achieved. If a "cap and trade" scheme is chosen, then we believe that consideration must be given to how this would relate to any new UK ETS (see below).

3 Energy Performance in Buildings Directive

3.1 We note that the Government is yet to implement several aspects of the Energy Performance in Buildings Directive. It is essential that the Government publishes as soon as possible its proposals for implementation of Articles 7 to 10 of the Directive in order that Articles 7, 8 and 9 are achieved within the three year deferral period for compliance (ie by 4 January 2009). It is also important that the Government sets out clearly its position in relation to interpretation of the Directive, in particular its interpretation of the definition of "public building."

3.2 The full potential of the Directive will only be realised if there is an effective monitoring and compliance regime for ensuring requirements are adhered to. The Government has just implemented Articles 3 to 6 of the Directive as part of revisions made to Part L of the Building Regulations. Compliance with Part L of the Building Regulations has historically been poor and urgent consideration needs to be given to how this can be improved. Furthermore, the energy price-based banding on certification may be of little value in the rented sector where certificates may become out of date and not reflective of current energy prices. More effective signals need to be given to building users to influence their use of energy. We would welcome early revision of the Building Regulations to address energy use within a building rather than merely the potential of building design.

4 Consumer products

4.1 The Government's recently published Climate Change Programme indicates that the Government "*would prefer voluntary agreements where they are effective*". It refers to a clear intention of the new Eco-design of Energy Using Products Framework Directive as being to "*encourage voluntary action by manufacturers to improve their products*".

4.2 The Directive makes clear that voluntary action is only acceptable where it will achieve this objective more effectively than mandatory requirements. Recital (16) of the Directive states that "*Priority should be given to alternative courses of action such as self-regulation by industry where such action is likely to deliver the policy objectives faster or in a less costly manner than mandatory requirements*". Article 15 of the Directive requires an implementing measure for products meeting specified criteria unless existing Community legislation and self-regulation "*are expected to achieve the policy objectives more quickly or at lesser expense than mandatory requirements*."

4.3 It is clear that the Directive requires a mandatory approach *unless* it can be shown that a voluntary approach will be more effective i.e. (1) it achieves the desired result and (2) does so either more quickly or more cheaply. We would, therefore, expect that there will be at least some products where the Directive would require a mandatory approach and are surprised that the Climate Change Programme places such emphasis on a voluntary approach to the apparent exclusion of a regulatory one (although we acknowledge that agreeing implementing measures could be a lengthy process).

5 New UK ETS

5.1 The EEIR refers to a suggestion made by the Carbon Trust that a new UK ETS be introduced to cover the less energy intensive sectors that are not included in the EU ETS. The Climate Change Programme 2006 indicates that the Government is considering the proposal.

5.2 An issue identified by the Carbon Trust is the relationship between any UK ETS and the EU ETS and the Trust has suggested that it may be possible to link the two schemes to allow purchase from the EU ETS sectors. It will also be important to consider the relationship of any proposed new UK ETS with other developments at European level such as the proposal for "white-certificate trading".

5.3 The House of Lords Science and Technology Committee report on Energy Efficiency raised the potential for a system of domestic tradable quotas but concluded that it was not a practicable option within the foreseeable future. We would support further consideration of the potential for such a scheme in the longer term as it offers the possibility of radically rationalising all existing emissions reduction and energy efficiency measures into a system which provides much clearer signals and clearer choices to individuals. There would be many political, legal and ethical issues that would need to be taken into account in any such consideration.

UKELA

14 April 2006

Contact details:

The co-convenors of UKELA's climate change working group can be contacted at:

Tom Bainbridge
Hammonds
7 Cutlers Gardens
Devonshire Square
London
EC2M 4YH

Tel: 0870 839 1263
Fax:0870 460 2721

Michael Woods
Stephenson Harwood
One, St Paul's Churchyard
London
EC4M 8SH

Tel: 020 7809 2554
Fax: 020 7003 8610