

## Natural England Position Statement: *Energy*

### 1.0 Key Issues

- Natural England's position on energy is shaped by our statutory duties and our purpose to conserve, enhance and manage the natural environment for the benefit of current and future generations.
- Climate change represents the most serious long term threat to the natural environment because of the damage it will cause to ecosystems, the biodiversity, landscape value, and services to society which they support.
- Reducing the rate of climate change depends on reducing our emissions of carbon dioxide and other green house gases, including those released during energy generation.
- Maintaining reliable and affordable energy supplies is essential to our modern lifestyle, and greater efficiency in the use of energy is the cheapest and most obvious mitigation measure but has proven very hard to achieve.
- The present challenge is to move to a low carbon economy without unacceptable<sup>1</sup> impacts on the natural environment.
- This shift demands greater efficiency in energy use, as well as a substantial investment in renewable and clean energy for electricity, heat and transport.
- The UK has a binding EU commitment to a renewable energy target of 15% of total energy supply to come from renewable sources by 2020<sup>2</sup>. This target applies to all forms of energy (transport fuel, electricity and heat).
- Different energy developments have different impacts on the natural environment: these will vary in terms of significance and reversibility, dependent on their technology, scale and location.
- We already have a diverse energy mixture in the UK: the probability is that we will continue to depend on a mixture which will become more diverse and whose proportions will alter over time.

### 2.0 We believe

- Improving energy efficiency is the most effective mitigation measure to reduce greenhouse gas pollution and so conserve the natural environment.
- A strategic assessment of what would constitute the optimal energy mix is still required to ensure that those options which promise to achieve renewable and clean energy targets while presenting the lowest impacts on the environment are prioritised and successfully incentivised.
- There is a need to support renewable and clean energy developments in appropriate locations in order to reduce greenhouse gas emissions.

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<sup>1</sup> Unacceptable impacts: significant, not suitable for sufficient mitigation, and or irreversible

<sup>2</sup> This is the UK's share of the overall EU target for 20% of total energy supply from renewable sources by 2020.

- Because the impacts of all technologies are dependent on scale and location, every case will have to be assessed on its merits.
- While our decision making processes will be consistent, we will reach individual decisions shaped by the particular environmental conditions encountered.
- In some locations, micro and community scale energy generation schemes will be highly effective with minimal impacts on the environment (e.g. high-gain solar panels in urban areas, micro combined heat and power in homes and businesses, farm scale anaerobic digestors in rural areas).
- The success of off-shore applications can be increased by learning the lessons so far – particularly those illustrated by the London Array project.
- The success of on-shore developments can also be increased by learning and sharing lessons – e.g. the value of very small changes in positioning.
- Bio-energy crops need to be sown, grown, harvested, sourced and processed to rigorous standards of sustainability, including impacts on biodiversity and landscape.
- The wide range of greenhouse gas savings from bio-fuels (7% - 77%)<sup>3</sup> emphasises the need to maximise those savings while minimising other environmental impacts to deliver meaningful gains for the natural environment.

### **3.0 We call for**

- Government to undertake a strategic assessment of the relative environmental impact of different renewable and clean energy developments in order to better inform long term decisions by policy makers and investors.
- Greater support offered to developers to enable them to make high quality applications which minimise impacts on the environment and maximise the potential for the UK to successfully move to low carbon economy.
- Greater support and incentives for micro and community scale renewables to make rapid progress toward the UK renewables target while larger scale projects, which need a much longer lead-in time, are developed.
- Greater access to the national grid for generators of renewable energy.
- More robust sustainability standards applied to bio-energy domestically and internationally, with those standards including impacts on biodiversity, ecosystem services, and landscape value.
- Increased research into environmental impact assessment, particularly compound and cumulative impacts, and impacts offshore.

*May 2008*

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<sup>3</sup> Low Carbon Vehicle Partnership for DEFRA 2007