



**WWF** *for a living planet*

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Ofgem  
Millbank  
London

March 2010

Dear Sir/Madam,

**PROJECT DISCOVERY: OPTIONS FOR DELIVERING SECURE AND SUSTAINABLE ENERGY SUPPLIES (Ofgem's second consultation, Feb-March 2010)**

WWF-UK welcomes the opportunity to respond to Ofgem's second consultation on its Project Discovery energy market scenarios work and options for delivering secure and sustainable energy supplies. WWF-UK has extensive experience and knowledge of the UK power, transport and housing sectors and we have responded to many previous consultations on energy and climate change policy issues.

WWF-UK regards climate change as one of the most serious threats facing the planet and human development, and one which demands urgent global and national action. To give a reasonable chance of keeping the rise in average global temperatures to less than 2°C above pre-industrial levels – a threshold above which the risk of severe and irreversible tipping points in the climate becomes increasingly likely – **the world's emissions of greenhouse gases must peak no later than 2015 and then start to fall steeply. Global emissions will need to fall by at least 80% below 1990 levels by 2050, and developed countries like the UK need to be essentially net-zero emitters by that date.**

WWF-UK welcomes the growing recognition by the UK Government, Ofgem and the Committee on Climate Change (CCC) that excessive reliance on market mechanisms, like the EU emissions trading scheme (EU ETS), will *not* be enough to deliver the 'step change' in energy demand reduction and clean energy investment that are necessary to meet critical environmental goals. **In particular, WWF-UK urges the Government and Ofgem to accept the CCC's recommendation that the UK power sector should be almost decarbonised by 2030, and to ensure that the energy policy and market regulation frameworks are specifically tailored to enable the efficient and effective delivery of this goal.**

It is vital that the chosen frameworks strongly prioritise and encourage ambitious action on demand management and energy efficiency, and the production of very low and zero carbon energy from sustainable sources in particular low-impact renewables. A growing body of evidence, including forthcoming reports from the European Climate Foundation and UK NGOs, confirm that a future energy system based substantially or entirely on renewables is achievable and affordable.



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WWF-UK welcomes Project Discovery's contribution to providing additional exploration of the issues and stresses likely to face the UK energy system over the next 10-15 years. However, we believe it is fundamentally up to the Government to set the structure of the UK's electricity, gas and heat markets and to determine the rules and regulation required. There are important questions over the extent to which the operation of the energy system, and the patterns of investment, should be driven entirely by the market or rebalanced to an approach with a greater element of strategic planning.

WWF believes there is a strong case for the latter, given the substantial challenges involved in transforming energy systems to the secure, sustainable and zero carbon model that is vital for the 21<sup>st</sup> century. However, a move towards a more strategically planned approach must be substantially led by the Government on behalf of what is best for, what is called for and what is needed by the country and its citizens. So we would have concerns if the role of the regulator moved into the realms of setting policy.

In this letter of response WWF-UK provides its top-line views on the main changes to the UK energy system and market we believe are urgently required, and our views on the main proposals in Ofgem's consultation. However we have not responded to each of the fourteen consultation questions one by one.

The UK faces some critical decisions on its future energy infrastructure and also to the way in which consumers of all sorts use energy. The challenges facing the energy sector are very clear – however, there is a real risk that lack of clarity in market arrangements, and particularly the low (and heavily discounted) carbon prices under the EU emissions trading scheme are creating a dangerous risk of lock-in to high-carbon infrastructure. Moreover, the energy market has evolved over a period of relative stability – the fact that we now need to re-engineer much of our infrastructure to make it fit to meet the zero-carbon challenge of the 21<sup>st</sup> century means that a much bolder, strategic approach is required. This must be strongly guided by environmental concerns – we need to secure not just a zero-carbon future, but one which is based on technologies which are truly sustainable in the widest and strictest sense.

The UK and Scottish Climate Change Acts, and the legally binding target for renewables to provide 15% of the UK's final energy demand by 2020, must be the main guiderails for this transformation. In particular, the Committee on Climate Change's recommendation for a near-zero carbon power sector by 2030 provides a clear and necessary basis for planning – we urge the Government and Ofgem to accept it.

The UK has the best potential resources of renewables in Europe and has the means to deliver a renewables revolution. What is missing is a credible, robust, consistent and long-term plan and joined-up climate and energy policy from the Government. Sadly, the pace of change has so far been very slow. In 2008, the UK produced only 1.5% of its total energy from renewables, despite having some sort of support measures in place since the early 1990s.

Therefore, WWF-UK believes that new forms of intervention in the energy market are required.

A key question raised in this consultation is which of the policy packages will deliver secure and sustainable energy supplies at the *lowest cost to customers*. While cost is a very important consideration, we would be concerned if this over-ruled sustainability concerns. Having said that, Ofgem's own scenario analysis shows that the impact on energy bills is lower under those involving a high level of energy efficiency and renewable deployment and to achieve this level of renewable deployment the incentives must be right. Furthermore, WWF-UK believes different rules and incentives are also needed to enable all energy stakeholders to reduce the risk and increase their revenue from sustainable practices.

WWF is interested in proposals for the UK to adopt a single buyer market. This type of model is used commonly elsewhere in Europe, and establishes a system payment to ensure adequate flexible 'back-up' capacity for variable renewables. It could also be structured in a way that recognises and values demand management activities as an alternative to supply side investments.

WWF also sees a strong case for regulatory action to provide clarity of outcomes for investors and strategic planners. In particular, we see great merit in a regulatory emissions performance standard for new, and over time existing, power plant. This technology-neutral approach would provide certainty of outcome, clear rules to guide investment and could help to drive innovation – especially when accompanied by well-targeted policies to incentivise clean technologies such as renewable energy sources. An EPS should accompany a well-focused programme to demonstrate the commercial and technical viability of carbon capture and storage, focused on retrofits to existing plants and full-scale CCS on new gasification units. This approach would ensure rapid learning and demonstration while minimising environmental and financial risks.

Without these regulation and market changes, investors and the engineering community will not have the confidence to engage in the UK in a way that allows the Government to meet its legally-binding targets.

However, WWF is keen to understand how Ofgem's Project Discovery work will fit in with the Government's plans for a dialogue with stakeholders building on the Energy Market Assessment (EMA) published alongside the Budget. The EMA appears to be pointing to some different conclusions to Project Discovery, notably by appearing to rule out a single buyer agency. However, WWF agrees with the EMA's conclusion that simplistic measures to underpin the carbon price will not be sufficient on their own to guarantee investment in the right package of infrastructure.

The Project Discovery consultation document only briefly touches on grid network issues and other non-financial barriers, but for many renewable energy projects these are significant barriers. WWF is convinced that a strategic approach to grid development at European level is vital to enable and encourage a high-renewables future, and also to unlock the vast potential for marine renewable energy. We hope the Government takes into consideration all these issues when it assesses and determines what changes are necessary to ensure the UK meets its climate change mitigation and renewable energy targets in line with its important sustainable development goals.

WWF-UK is disappointed to find that Ofgem did not amend the Project Discovery scenarios as we suggested in our response to last autumn's consultation. We remain convinced that a fifth truly clean future energy future scenario, one which models by 2025/2030 far higher levels of

renewables, including small-scale and community projects (with no new-build or replacement of the UK's nuclear fleet) is feasible.

Finally, we believe there is an obvious contradiction in the use of the word 'sustainable' in the title of this consultation paper with the inclusion of new nuclear power in the four scenarios, including the two so-called 'green' scenarios. Although nuclear power does not produce carbon emissions in the generation of electricity, nuclear power is certainly not clean, green or part of the sustainable development agenda, as it produces radioactive waste/pollutants. In our view, nuclear power is not necessary on either environmental or security of supply grounds – indeed, its active development acts as a major disincentive to the promotion of clean renewable power.

We hope you find our responses of use and please don't hesitate to get in touch if you would like to arrange a meeting over the coming months to discuss our views in more detail.

Yours sincerely,

Dr Keith Allott  
(Head of Climate Change, WWF-UK)