

Review highlights major role for renewables in meeting UK climate targets

Issue No: 36

EMBARGOED until: 00.01 on Monday 9 May 2011

The Committee on Climate Change said today that renewable energy should make a major contribution to decarbonising the UK economy over the next decades.

The conclusions are set out in the Committee's Renewable Energy Review which was requested under the Coalition Agreement.

The review concludes that a renewable energy share of around 30% by 2030 would be appropriate, with scope for a higher share (e.g. up to 45%) depending on the extent to which renewable technology costs fall and possible constraints on deployment of low-carbon alternatives.

It highlights a range of promising renewable energy technologies which could in future become competitive, including electricity generation from wind and marine, air and ground source heat pumps and the use of bioenergy for heat generation.

It sets out options for addressing intermittency of renewable power generation, including demand-side flexibility, interconnection, and back-up generation, which could support a very high share of renewables in power.

Analysis in the report highlights the importance of other low-carbon technologies for power generation, most notably nuclear and Carbon Capture and Storage (CCS), which have a potentially major role to play in required power sector decarbonisation to 2030.

The review concludes that nuclear generation in particular appears likely to be the most cost-effective form of low-carbon power generation in the 2020s (i.e. before costs of other technologies have fallen), justifying significant investment if safety concerns can be addressed. Gas CCS may be particularly useful in providing flexible generation.

Given significant uncertainties over future developments, the review recommends that the Government should adopt a portfolio approach to technology development. This should cover both renewable generation and other low-carbon technologies.

The review sets out an illustrative scenario where 40% of our electricity comes from renewables, 40% from nuclear, 15% from coal and gas with CCS and less than 10% from unabated gas.

To underpin the portfolio approach, the review argues that the Government should make clear commitments to support less mature renewable technologies such as offshore wind and marine generation through the 2020s. These commitments should then be implemented under new electricity market arrangements.

The review also makes the following recommendations:

- A flexible approach to ambition for offshore wind generation in 2020 is appropriate. If a set of alternative options can be found to meet the EU renewable energy target, then offshore wind ambition in 2020 could be moderated.
- The Green Investment Bank would be more effective if it were able to borrow from its inception.
- New commitments on funding for renewable heat investment in the period from 2015 to 2020 and in the 2020s will be required in due course.
- Training and accreditation of renewable heat installers should be a priority if supply chain bottlenecks are to be avoided.
- Approaches to energy efficiency improvement through the Green Deal and renewable heat deployment through the Renewable Heat Incentive should be integrated. For example, renewable heat should be marketed as part of a whole house approach under the Green Deal, which could also provide finance to cover up-front investment costs.
- Given sustainability concerns (e.g. the tension between use of land for growth of biofuels feedstocks and food) a cautious approach to the use of biofuels in surface transport is appropriate. Pursuing alternatives to decarbonising transport – electrification and improved efficiency – is therefore an urgent priority.

Chair of the Committee on Climate Change, Lord Adair Turner said:

“Our analysis shows that renewable energy technologies are very promising, and have an important role to play in helping to meet the UK’s carbon budgets and 2050 target, alongside other low-carbon technologies such as nuclear and CCS. The focus now should be creating a stable investment climate for renewables, making longer-term commitments to support less mature technologies, and putting in place incentives to deliver significantly increased investment in renewable power and heat generation required over the next decade”.

ENDS

Notes to Editors

Committee on Climate Change (CCC)

The Committee on Climate Change (CCC) is an independent statutory body established under the Climate Change Act (2008) to advise the UK Government on setting carbon budgets, and to report to Parliament on the progress made in reducing greenhouse gas emissions: www.theccc.org.uk/.

- “*The Renewable Energy Review*” will be published on the CCC website on Monday 9 May 2011. You can access it then by following this link: <http://www.theccc.org.uk/reports>
- The Committee was asked to review the potential by Chris Huhne, Secretary of State for Energy and Climate Change, shortly after the Coalition Government took office last year.
- This follows on from a [letter](#) written to Huhne, where the Committee advised Government to press on with its efforts to ensure that the share of renewable energy is increased from current low levels (3%) to 15% by 2020.

For further information/ media bids please contact:

- Jo Wilson, Communications Officer, joanne.wilson@theccc.gsi.gov.uk, 0207 592 1553, 07768 370 528.
- Emily Towers, Communications Manager, emily.towers@theccc.gsi.gov.uk, 0207 592 1554, 07766 366 577.