

Minutes of CCC Meeting - 08/01/2010

Present were Adair Turner, Jim Skea, Sam Fankhauser, Robert May, Michael Grubb, Brian Hoskins, David Kennedy

1. Review of UK low carbon research, development, demonstration and deployment

The Committee has been requested to review UK low carbon R&D by the Government's Chief Scientist.

The Committee agreed an approach to the review based around:

- Setting out a technology path to meet the UK's 2050 emissions reduction path, identifying current state of development of technologies and challenges in bringing these to market.
- Developing and applying a methodology to identify technologies which the UK might be best placed to support (e.g. because the UK is critical to development of particular technologies, or because emissions reductions through technology deployment will help to meet carbon budgets and targets, or because there is an economic opportunity for the UK given its skills base).
- Assessing the current framework for low carbon technology support, including mechanisms, balance and amount of funding, and institutions. As part of this assessment, the review will cover the interface between the UK and the international framework for low carbon R&D.

The Committee requested that the Secretariat develop the methodology for identifying UK priorities, and propose a straw man of possible positions to come out of the review for the meeting scheduled in February.

2. Advice to the Scottish Government on emissions reduction targets under the (Scottish) Climate Change Act.

The Scottish Parliament recently adopted a Climate Change Act which includes interim and long term emissions reduction targets, and provisions for setting of annual emissions reduction targets and a cumulative emissions budget covering the period to 2050.

The Scottish Government has requested the Committee to advise on a range of issues under the Act.

The Committee agreed advice including:

- A proposed approach to international aviation and shipping emissions which allocates UK bunker fuels estimates to the Scottish level.
- An approach to the traded sector which derives a Scottish cap from the Europe wide cap in the EU ETS, whilst stressing the need for power sector decarbonisation in order to be on track to meeting the long term emissions reduction target.
- Estimating required emissions reduction effort in the non-traded sector as the residual of the target to reduce emissions in 2020 by 42% relative to 1990, net of emissions in aviation and shipping and in the traded sector.
- Comparing required effort with feasible emissions reduction potential in the non-traded sectors and identifying any gaps.
- Setting out options to address any gap, including identifying and unlocking further domestic abatement potential, purchasing credits within limits stipulated in the Climate Change Act, and adjusting the target. The Committee will not be prescriptive about which of these options may be appropriate.
- However, the Committee will stress that emissions reduction effort in the non-traded sector should be constant notwithstanding any changes to the traded sector cap following a global deal to reduce emissions and increased EU ambition.
- The Committee will recommend a path to 2020 which follows official projections to 2012, and then moves to a straight line trajectory to the 2020 target.

The Secretariat agreed to circulate a draft report to the Scottish Government for detailed comments within a week of the meeting. The Committee will sign off the report at the meeting schedule in February.

3. Advice to the UK Government on the fourth carbon budget (2023-27)

The Committee is required to advise the Government on the fourth carbon budget by the end of 2010.

The Committee agreed an approach to developing this advice based around:

- A review of the latest scientific evidence to assess the extent to which previous modelling assumptions remain valid.
- An assessment of the evolving international framework, with implications for the UK on the first three budgets (should the UK move to the Intended budget?), the path through the 2020s, and the long term target.
- Sectoral analysis of possible paths through the 2020s. As part of this analysis, the Committee will consider:

- **Within transport**, the balance between electric vehicles, hydrogen and biofuels.
- **Within heat**, the balance between electric (heat pumps and other) / biomass / biogas heating, the ongoing role for any residual energy efficiency improvement, and the scope for use of new technologies in energy intensive industries (e.g. CCS in iron & steel and cement).
- **Within power**, the role for marine technologies and CCS gas, and a range of options for increasing system flexibility (e.g. smart grid, storage, interconnection, etc.).
- **Within agriculture**, supply side options over and above those identified in the 2020 Marginal Abatement Cost Curve, together with scope for demand side emissions reductions.

The Secretariat will update the Committee on Copenhagen and subsequent commitments under the Accord at the meeting scheduled in February.