

The Fifth Carbon Budget - Call for Evidence

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Question and Response form

When responding please provide answers that are as specific and evidence-based as possible, providing data and references to the extent possible. Please limit your response to a maximum of 400 words per question.

Questions for consideration:

Question 5 *In the area(s) of your expertise, what are the opportunities and challenges in reducing emissions to 2032, and at what cost? What may be required by 2032 to prepare for the 2050 target, recognising that this may require that emissions in some areas are reduced close to zero?*

ANSWER:

The current political landscape, which is hostile towards some types of renewable energy generation, presents a significant challenge to reducing emissions to 2032 targets, and beyond in the most cost effective way for UK consumers. As stated in the Queen's Speech, the Government are seeking to cut subsidies for onshore wind generation, the cheapest renewable technology, as they believe that they have reached a sufficient level of deployment to reach 2020 targets.

Independent external analysis that we have shared with the Committee on Climate Change shows that there is evidence to suggest that onshore wind beyond 13GW is both possible and desirable. Modelling undertaken in this report finds that onshore wind is the lowest-cost option for decarbonisation in the long term and that there are sufficient good quality sites for UK deployment of at least 30GW. It finds that continued deployment of onshore wind can reduce the cost of decarbonisation in the UK, producing average annual savings of £190 million (when 20GW total capacity is available), and £450 million (when 30GW of total capacity is available).

Modelling the evolution of the UK energy system to 2050, using credible assumptions from publicly available sources, the analysis shows that onshore wind remains the technology of choice for achieving least-cost decarbonisation over the long term.

To meet the ambitious emission reduction targets in 2032 and 2050, a range of renewable energy sources will be needed to ensure energy security. Renewable Heat technology is expected to miss the 2020 target. Even if only 16.7GW of onshore wind was delivered by 2020 this low-cost technology would easily make up for the renewable heat shortfall. Limiting onshore wind's contribution to the energy mix will make it difficult to meet 2032 targets, and even more challenging to hit the 2050 targets.

Question 6 *What, if any, is the role of consumer, individual or household behaviour in delivering emissions reductions between now and 2032? And, separately, after 2032?*

ANSWER:

Question 7 *Is there evidence to suggest that actions to further reduce emissions after 2032 are likely to be more or less challenging to achieve than actions in the period up to 2032?*

ANSWER:

Achieving carbon reduction targets after 2032 will be more challenging than in the period leading up to 2032. To reach these ambitious carbon reduction targets all low-carbon technologies will need to be deployed to their full potential. Policy uncertainty, or the removal of financial support for the cheapest renewable technologies, such as onshore wind, disincentivises investment and will make de-carbonisation needlessly expensive. Future investment in these technologies will be more difficult to galvanise, preventing these industries from reaching maximum theoretical deployment.

Question 8 *Are there alternatives for closing the 'policy gap' to the fourth carbon budget that could be more effective? What evidence supports that?*

ANSWER:

Question 9 *Are the investments envisaged in the National Infrastructure Plan consistent with meeting legislated carbon budgets and following the cost-effective path to the 2050 target? Would they have wider implications for global emissions and the UK's position in international climate negotiations?*

ANSWER:

Question 10 *As a business, as a Local Authority, or as a consumer, how do carbon budgets affect your planning and decision-making?*

ANSWER:

Question 11 *What challenges and opportunities do carbon budgets bring, including in relation to your ability to compete internationally? What evidence do you have for this from your experience of carbon budgets to date?*

ANSWER:

Question 12 *What would you consider to be important characteristics of an effective carbon budget? What is the evidence for their importance?*

ANSWER:

A suite of technologies will be needed to meet the carbon emission reduction targets, including carbon capture and storage, renewable generation and nuclear generation. To ensure that equal funding and attention is given to all of these areas, specific targets should be given to the deployment of each. Long-term visibility of carbon budgets is also required, to provide investment certainty for long lead-time projects. Especially where investment is required to deliver cost reductions in technology.

Question 13 *What evidence should the Committee draw on in assessing the (incremental) impacts of the fifth carbon budget on competitiveness, the fiscal balance, fuel poverty and security of supply?*

ANSWER:

Question 14 *What new evidence exists on differences in circumstances between England, Wales, Scotland and Northern Ireland that should be reflected in the Committee's advice on the fifth carbon budget?*

ANSWER:

The Government's decision to cut subsidies for onshore wind will impact the future energy mix. The Committee should consider how this would cut across the spirit of "devo-max" and the commitments made under the aegis of the Smith Commission to the ability of Scotland to deploy electricity capacity of its own choosing within the Levy Control Framework.

Question 15 *Is there anything else not covered in your answers to previous questions that you would like to add?*

ANSWER: