The Fifth Carbon Budget - Call for Evidence

www.theccc.org.uk/call-for-evidence

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:

A. Climate Science and International Circumstances

Climate science and international circumstances are important criteria in setting carbon budgets.

- The science indicates the impacts associated with different levels of climate change and the limit on emissions globally if these risks are to be contained.
- International circumstances inform the prospects of future action to reduce emissions globally, potential requirements of the UK to contribute to those actions, and prospects for low-carbon technology development and carbon pricing.
- The EU places obligations on Member States to reduce emissions to contribute to reductions in the bloc as a whole. These imply a minimum level of effort for the UK's carbon budgets.

The Committee intends to draw primarily on the work of the IPCC, as published in the Fifth Assessment Report, in assessing the implications of climate science for the budget advice

The Committee's advice is based on a climate objective to limit central estimates of temperature rise to as close to 2°C as possible, with a very low chance of exceeding 4°C by 2100 (henceforth referred to as "the climate objective"). This is broadly similar to the UNFCCC climate objective, and that of the EU.

In order to achieve this objective, global emissions would have to peak around 2020, before decreasing to roughly half of recent levels by 2050 and falling further thereafter.

The UNFCCC is working toward a global deal consistent with such reductions. Individual parties are submitting pledges for effort beyond 2020, with the details of the agreement to be discussed in Paris late in 2015.

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The EU has agreed a package that requires a reduction in emissions of at least 40% on 1990 levels by 2030, on the way to an 80-95% reduction by 2050. The UK Government supported this package, while arguing for an increase to 50% in the context of a global deal.

The US and China have jointly made pledges for the period beyond 2020. The US has pledged a reduction of 26-28% by 2025 versus 2005, requiring a doubling of the rate of carbon reduction compared to 2005-2020 and on a trajectory to economy-wide cuts of the order of 80% by 2050. China has pledged to peak CO_2 emissions around 2030, and to make best efforts to do so earlier.

Question 1 ***The IPCC's Fifth Assessment Report will form the basis of the Committee's assessment of climate risks and global emissions pathways consistent with climate objectives. What further evidence should the Committee consider in this area?***
ANSWER: No comment.

Question 2 ***To what extent are the UN talks in Paris likely to have implications for the Committee's advice beyond the pledges and positions announced in advance of the talks?***
ANSWER: No comment.

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Question 3 ***Based on the available evidence, does the EU 2030 package reflect the best path to its stated 2050 ambition? How might this package change, specifically its targeted emissions reduction, either before the end of Paris or after Paris?***

The EU 2030 package does not reflect the best path to achieving the EU's stated ambition of 80-95% reduction in emissions by 2050. It is unlikely that events in Paris, however positive or negative, will significantly alter this fact. (It may be noted that the EU itself appears to be undermining ambition in Paris by failing to offer the hope of increasing its 2030 target above 40% even in the event of an ambitious global deal.)

In a number of respects the 2030 package does not reflect the best path to 2050.

Firstly, it does not provide binding renewable energy or energy efficiency targets.

Second, on the basis of the available information, the ETS is expected to be reformed in only modest respects (eg. by aligning the number of emission allowances with the 40% 2030 target without further reform to remove the huge surplus of allowances) and not complemented by any non-price measures (such as a strong EU-level EPS) which are sorely needed.

Third, steps to tackle aviation – a sector which will contribute increasingly to future emissions – have been faltering. Aviation has been included in the ETS but its coverage is inadequate in extending only to intra-EU flights.

Finally, the Effort Sharing Decision appears inadequate to achieve the reductions necessary. The transport and agriculture sectors are those most in need of strong action but the EU legislation aimed at addressing emissions in those sectors is far too weak (eg. emissions limits on van emissions are inadequate, and there are little or no limits on HGV or agricultural emissions). In addition, the ready availability of credits with which countries can avoid making genuine progress undermines the integrity of the obligations which do exist under the ESD.

Although there may be economic advantages for the UK in being a 'first-mover' among EU member states in decarbonising, it will not be in the UK's – or the EU's – long-term interest if weaknesses of this kind at EU level fail to be remedied.

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Question 4 ***How does the UK's legislated 2050 target affect its ability to support international efforts to reduce emissions, including its position in negotiations? Does the level of UK carbon budgets have any additional impact (over-and-above the 2050 target) for the UK in international discussions?***

The UK's legislated targets give the UK a huge boost in supporting appropriately ambitious efforts at the international level to reduce emissions.

The ambition of the carbon budgets has already had a significant influence abroad. The previous Secretary of State for Energy and Climate Change described the EU's commitment to reduce emissions by at least 40% by 2030 in the following terms:

"Effectively what we've done is Europeanise the UK's Climate Change Act – the rest of Europe is levelling up to what the UK has already committed to do."[1]

The existence of robust pre-existing carbon budgets allowed the Secretary of State the political space to focus on securing appropriately ambitious targets at the EU level. The EU is now in a position to seek to 'globalise' the 'Europeanised' ambition of the UK Act. **The eventual influence of the carbon budgets on global action is therefore potentially significant.** (It is noteworthy that at the time the EU position was agreed, the Government had confirmed the level of the fourth carbon budget. Had the carbon budget still been 'subject to review' this uncertainty would have severely undermined the UK's position. This point is returned to in the answer to question 15).

The UK's influence also benefits from the legally binding nature of the Climate Change Act's targets and how, accordingly, they are respected by the UK Government. In short, the UK's emissions reduction commitments are trusted by other countries to really 'mean something': hugely important in incentivising other countries to take similar actions and so build real momentum.

The UK is a self-identified leader in tackling climate change[2] whose Climate Change Act continues to be regarded as the global standard for driving emissions reductions, and emulated abroad.[3] **If the UK (of all countries) were to reveal any failure of commitment by setting a carbon budget lacking in the necessary ambition, the effect on the international community could be great.**

The fifth carbon budget will define how the UK is regarded internationally and, equally importantly, help set the context for global efforts to reduce emissions in the next few critical years.

[1] http://www.edwarddavey.co.uk/web/?q=node/1008
[2] https://www.gov.uk/government/speeches/un-climate-summit-2014-david-camerons-remarks
[3] For example, recent or planned climate laws in Europe modelled on the Climate Change Act include those of Denmark, Finland, and Norway.

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B. The cost-effective path to the 2050 target

The carbon budgets need to set a path that is achievable from today without being over-optimistic about what is achievable in later periods to prepare for the 2050 target.

The Committee has previously set out scenarios for 2030 that balance effort before 2030 with potential opportunities from 2030 to 2050. The scenarios aim to include ways of reducing emissions that are likely to be relatively low cost and actions that will develop options that may need to be deployed at scale by 2050.

These scenarios, reviewed in detail in the Committee's report *The Fourth Carbon Budget Review – the cost-effective path to the 2050 target*, include substantial investment in low-carbon power generation, roll-out of low-carbon heat (heat pumps and district heating), development of the markets for ultra-low emissions vehicles and a combination of energy efficiency measures and fuel switching in industrial sectors.

The scenarios also reflect detailed assessments of what is practically deliverable, and the Committee monitors progress towards them as part of its statutory duties. The *2014 Progress Report to Parliament* indicated that current policy would not be enough to meet the fourth carbon budget, but that the 'policy gap' could be closed at affordable cost.

The set of policy options required to close the gap include:

- Strengthening the EU Emissions Trading System.
- Setting a clear objective for Electricity Market Reform (EMR) beyond 2020.
- Focusing on low-cost residential energy efficiency.
- Simplifying policies targeting commercial energy efficiency.
- Tackling financial and non-financial barriers to low-carbon heat.
- Pushing for strong EU targets for new vehicle efficiency in 2030.

The Government has subsequently published various documents, including its formal response, as required under the Climate Change Act, and the National Infrastructure Plan. The Plan includes investments of around £100 billion in low-carbon power generation in the 2020s, in line with the scenarios from the EMR Delivery Plan that reach 100 gCO_2/kWh by 2030. It also has significant investments in offshore oil and gas and in the road network. This includes £15 billion of new spending on roads and around £50 billion on offshore oil and gas.

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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: No comment.

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: No comment.

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: No comment.

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: No comment.

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?***

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ANSWER: No comment.

C. Budgets and action

The UK's statutory 2050 target requires actions across the economy to reduce emissions. Many of these actions will be driven by (UK and devolved) Government policy and implemented by businesses and consumers. There will be an important role for Local Authorities in successful delivery.

Although the carbon budgets do not require specific actions, they provide an important indication of the overall direction that policy will take in future. Once set, carbon budgets can only be changed if there has been a significant change in the relevant circumstances set out in the Climate Change Act.

Feedback from businesses as part of the Committee's 2013 Call for Evidence for the review of the fourth carbon budget was that stability is an important and valuable characteristic of carbon budgets.

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

ANSWER: No comment.

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: No comment.

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

ANSWER: No comment.

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D. Other issues

The Climate Change Act requires that in designing the fifth carbon budget we consider impacts on competitiveness, fiscal circumstances, fuel poverty and security of energy supply, as well as differences in circumstances between UK nations. High-level conclusions on these from our advice on the fourth carbon budget were:

- **Competitiveness** risks for energy-intensive industries over the period to 2020 can be addressed under policies already announced by the Government. Incremental impacts of the fourth carbon budget are limited and manageable.

- **Fiscal impacts**. The order of magnitude of any fiscal impacts through the 2020s is likely to be small, and with adjusted VED banding and full auctioning of EU ETS allowances could be neutral or broadly positive.

- **Fuel poverty**. Energy policies are likely to have broadly neutral impacts on fuel poverty to 2020, with the impact of increases in electricity prices due to investment in low-carbon generation being offset by energy efficiency improvement delivered under the Energy Company Obligation. Incremental impacts through the 2020s are likely to be limited and manageable through a combination of further energy efficiency improvement, and possible income transfers or social tariffs.

- **Security of supply** risks due to increasing levels of intermittent power generation through the 2020s can be managed through a range of flexibility options including demand-side response, increased interconnection and flexible generation. Decarbonisation of the economy will reduce the reliance on fossil fuels through the 2020s and thus help mitigate any geopolitical risks of fuel supply interruption and price volatility.

- **Devolved administrations**. Significant abatement opportunities exist at the national level across all of the key options (i.e. renewable electricity, energy efficiency, low-carbon heat, more carbon-efficient vehicles, agriculture and land use).

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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: No comment.

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: No comment.

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

ClientEarth believes that the approach taken by the Committee in recommending the level of the fourth carbon budget was the right one and it supports the Committee's intention to recommend the fifth carbon budget on the same basis, ie. in order "to keep UK emissions on a cost-effective path to the 2050 goal to reduce UK emissions by 80%."[4]

This approach respects the fundamental purpose of the Climate Change Act. It also makes sense since the Secretary of State can be expected (a) to adopt a similar framework of analysis,[5] and (b) given past practice and the Climate Change Act itself,[6] to follow the Committee's recommendation for the fifth carbon budget.

In conducting its analysis, the Committee must of course assume that the fourth carbon budget will in due course be met by domestic action. To countenance

[4] http://www.theccc.org.uk/2015/05/27/making-informed-choices-on-climate-change-in-2015/

[5] The Secretary of State is legally mandated, in setting the carbon budget, to give serious consideration to how the level of the budget will allow the 2050 target to be met (section 8(2)(a)).

[6] The first four carbon budgets have been set at the level recommended by the Committee. Section 9(4) of the Climate Change Act requires the Secretary of State to justify to Parliament any departure from the Committee's recommendation.

otherwise would be premature (and risk any future failure being rewarded). Most fundamentally, relaxing the trajectory previously charted for 2030 and beyond would risk "endanger[ing] the feasibility of the path to 2050"[7] and by extension the purpose of the Climate Change Act as a whole.

The Committee is right to have previously identified that a "key objective of the Climate Change Act was to set a target which would not vary with the ups and downs of global negotiations."[8] Having in mind the regrettable uncertainty which resulted from the previous Government committing to revisit the fourth carbon budget in the light of evolving EU circumstances, **ClientEarth believes that the Committee's recommendation to Government for the fifth carbon budget should strongly caution against any similar contingency being introduced by the Government this time around**. Fundamental to the effectiveness of the Climate Change Act is the certainty provided by carbon budgets, something severely undermined by the adoption of carbon budgets which are expressed to be unsettled.

In order to assist the Government in taking early positive action towards achieving the fifth carbon budget in the most cost-effective and transparent manner, **the Committee should, when it makes its recommendation, consider drawing Government's attention to the nature of section 14 of the Climate Change Act**. Section 14 requires that a clear set of proposals and policies <u>for meeting the fifth carbon budget</u> – and against which progress can be measured – are set out in detail "as soon as practicable" after the fifth carbon budget is set.

ClientEarth notes that the Committee is not calling for evidence in relation to the treatment under the Climate Change Act of emissions from international aviation and shipping. ClientEarth would welcome such a call being made.

[7] http://archive.theccc.org.uk/aws2/4th%20Budget/CCC-4th-Budget-Book_plain_singles.pdf, p.11
[8] http://archive.theccc.org.uk/aws2/4th%20Budget/CCC-4th-Budget-Book_plain_singles.pdf, p.17

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