

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:

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.

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 CO₂ 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: It seems that if genuine notice was taken of the IPCC work and actions genuinely and consistently taken in response then that would suffice.

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: Let's hope for all our sakes that the talks actually come to a meaningful conclusion and that stringent measures are approved to reduce co2 at Paris. This should either give the committee a lot of positive follow up or some very urgent call to get "sense" and action

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?*

ANSWER: If we stick to the path and actually give clear policy messages to those of us on the ground actually trying to deliver actions to help implement then the path is good. What is not helping is yo yo policy and a lack of what is perceived as a STRONG leadership on the urgency and need to implement.

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?*

ANSWER: maybe I don't understand this question – I don't see any

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 gCO₂/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.

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 opportunity is for our Govt to genuinely and consistently embrace the opportunities that carbon reduction offer in the context of the wider economy. Embracing energy efficiency, carbon reduction and renewable generation is good for business and economies and for international political pressure by avoiding such a reliance on oil. This is echoed again and again and evidence is simple to see – lower bills for energy and resource means more money into individuals, community and business pockets as opposed to unstable foreign govts. The costs would appear to be competitive providing they are judged on a level and genuine basis – fossil industry is hugely subsidised and yet is centuries old yet we get hostile response to these new industries getting the long term leg up they deserve and also support required to improve housing stock and commercial building space – it creates jobs and savings and must be seen as a LONG term investment.

Failure to act will continue to add risk and cost to society in response measures – what a waste!

What is required is a bit of long term thinking, commitment and understanding of the basic sound business logic of whole heartedly grabbing this opportunity

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: I think all the survey work suggests that people accept climate change as an issue that must get attention and action. People are clearly on side with investment into renewable energy as the install figures and surveys demonstrate – 80% plus in many cases. Solar and so forth the most popular energy source and traditional methods get very low support. People just need consistent policy and leadership to allow them to feel comfortable that the rug will not be pulled on the

efforts.

People are increasingly showing us the way – Govt must simply give a strong framework and leave it alone and allow for this long term investment to happen.

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: I am sure once the low hanging fruit is taken things may get harder. But as momentum and confidence builds then industry will further invest in research to keep bringing market led innovation that will help fuel further the cuts that are required and if in the “developed” world we show that a low carbon economy works then “they” will go straight to that technology and by pass traditional fossil and carbon based models as shown simply with the mobile phone take up by passing traditional phone lines.

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: If policy simply perceived this as an opportunity rather than a have to do – then policy would fall in to place through demand. If we could get our leaders to simply see the opportunity through example and sound open minded logic – then we would be on our way. How – get our relevant leaders on the ground seeing and believing and keep it simple for people to understand – also it’s NOW not in the future that we can do this – it’s a long term game.

Evidence – History has shown repeatedly that “seeing is believing” But take up of carbon measures when genuinely offered and public opinion speaks volumes here. People want to act they just need a clear policy and tool kit to be allowed to.

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: I could not say. What is a better plan though ??

More roads to encourage yet more vehicles or fast trains and a subsidised transport system to encourage people not to use the car in the first place.

More imported oil or investment to produce our own energy and save energy, thus reduce balance of payments problems and put more money in people's pockets to spend in our economy, creating jobs in our economy.

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: They are inconsistent and too fast changing – we are finding that this is stifling people's confidence to take measures seriously and thus adopt the measures required. People keep hearing different messages and get confused – If we need green energy and climate action why do some of our leaders say we don't and stand in the way and why do we keep cutting spending on energy efficiency and generation whilst still supporting fossil fuels and "dashing" for gas etc.

A strong carbon budget with long term thinking, policy and investment would really help drive consistent change as we know from adoption of product lifecycles the

more people take things up the more others will follow.

We find it VERY hard a demoralising as a renewable energy business (Caplor Energy) – to plan ahead and really deliver and what I say here is what we constantly get as feedback from potential carbon reducing clients.

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: As I have said through my answers. The opportunities are vast. Energy saving and reduction offers –

- 1) Jobs directly in the industries supplying
- 2) Reduction in imports of fuels good for balance of payments
- 3) Improved profitability for people that make the investment through lower bills and greater client and employee satisfaction – and thus more jobs protected and created. We install system where owners can pay a salary or more on the money they save.
- 4) Investment in manufacturing, supply chain, logistics, direct employment – there are huge benefits through the whole economy not just directly to the installer and customer or individuals making efficiency investments.
- 5) Finance and banking also get a solid return – but in an age of very low and uncertain financial return we find people adopt these measures where they can be assured as it's a simply good long term investment for them which are surly lacking in a world currently. Our average domestic client is retired – they see the merit of protecting the climate whilst lowering outgoing and doing something useful with their savings.
- 6) Internationally – we can IF we adopt and invest in the UK – after all the above benefits then take this learning and export it to a huge chunk of the world that needs comfort, energy efficiency and energy production – we could be doing that if we were given the long term policy and investment that was required. As a business ourselves we wish to export but are constantly side swiped by UK policy and lack of vision. Energy and carbon inefficiency is a negative to the UK and the world – The UK is missing a trick by not adopting what is the fastest

growing energy sources on the planet and giving the support to supply billions of people globally with the tools they need to enjoy a positive and energy benefiting life that we in the west have done.

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

ANSWER: Again I say

A long term cross party leadership that gives the budget financially to build a society that we need to reduce emissions to a level that is safe for future generations. This can be delivered easily but only with clear leadership and long term support. Simply re iterating that things need done and scaring people with long term what if's will not work in fact humans with short term view will slowly turn off potentially.

People / leaders needs to believe and put in place a budget that delivers the economic opportunity that today's "economy driven model" requires to act.

Good business is good for business and for the country and the planet – simply get that message through and all will be well in the world.

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).

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: If comparing – then one must compare eggs with eggs. What is the cost of this v that must be seen in the round and long term with associated costs included. E.g. what does foreign policy and wars cost to protect oil compared to internal investment in efficiency and generation? The impacts must be set over these long term picture. The planet would laugh at us talking in decades when its billions of years old – we must start to see that (clearly not being nuts I know planets don't laugh)

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: We are all in this together – just get on with it.

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

ANSWER:

Did I say – we need long term policy and investment to give people confidence to act on climate change?? If not it's that simple.

Get our leaders to believe it matters through good education and then show them the economic and social win. The people will do it if they help.

My answers are rushed sadly – but I am very happy to help in any context in these debates and routinely do. Contact me

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