

Angus Brendan MacNeil, MP
Chair, Energy and Climate Change Committee
House of Commons
London SW1A 0AA

24th March 2016

Dear Mr MacNeil,

RE: Energy and Climate Change Committee inquiry on “Setting the fifth carbon budget”

It was a pleasure to appear before your Committee during its inquiry into the advice provided by the Committee on Climate Change on the level at which to set the fifth carbon budget. You followed up my appearance with some specific questions about international aviation and shipping (IAS) that we did not have time to discuss at the hearing. Please find below my response to those questions.

Question 1: *What challenges does the Government face in accounting for shipping in the fifth carbon budget, and what are the main technological solutions that will enable mitigation in this sector?*

Answer: There are no significant challenges in the formal accounting for emissions from international shipping. They are already included in the UK emissions inventory that tracks all emissions included in carbon budgets, and they are already reported on this basis to the relevant committee of the United Nations (the UN Framework Convention on Climate Change). The existence of agreed international reporting practices is one of the issues we must consider under the Climate Change Act when recommending they be included in the carbon budgets.

The level we have recommended in the fifth carbon budget is the same level as implied under the International Maritime Organisation’s (IMO) framework, under its “Energy Efficiency Design Index”. This allows all countries to move together and does not require UK unilateral policies. It could involve such measures as use of larger ships and specific technological improvements (e.g. more fuel efficient propulsion systems, optimising hull designs). Individual shipping companies may also choose to adopt measures that fall outside the initial IMO framework, such as optimising the speed of their ships, the routes they take and measures by shipping companies and port operators to reduce congestion at ports.

Question 2: *Should shipping emissions also now be included in earlier budgets?*

Answer: There is no need to retrospectively change the existing carbon budgets. The existing budgets were set on the basis that IAS emissions are part of the 2050 target. As such, the emissions reductions required by all the other sectors under the existing budgets are consistent with a path that assumes international shipping (and international aviation) are included in budgets at a later stage. Since the earlier budgets were set in the knowledge that international shipping (and aviation) would be formally included at some point there is no need to change them retrospectively.

Question 3: *Do you see a way forward for aviation emissions to be included in future carbon budgets?*

Answer: Yes. As noted in reply to Question #2, the existing carbon budgets (numbers 1 through 4) have already been set in anticipation that international aviation emissions will be introduced at some point. Our advice for the fifth carbon budget is provided on the same basis. This Autumn the International Civil Aviation Organisation (ICAO) - the relevant UN body overseeing international aviation – is aiming to agree

an international mechanism for controlling international aviation emissions. If this is agreed we will assess the implications for carbon budgets, including whether it is practical to include international aviation emissions in carbon budgets or more sensible to continue to formally exclude, whilst making allowance for, these emissions.

Question 4: *If and when aviation emissions become measurable, would it be appropriate for already agreed carbon budgets to be modified to incorporate them?*

Answer: Aviation emissions are already measurable and domestic aviation emissions already form part of the carbon budgets. Intra-EU flights are currently covered by the EU ETS, whilst other international flights are excluded. It is not currently possible to include the former in carbon budgets with sufficient accuracy because the proportion of intra-EU flights attributable to the UK under the EU ETS is not identifiable. As regards other international flights, the ICAO negotiations, covering aviation's contribution to global emissions reduction and attribution mechanisms, are on-going.

As noted above (see answer to question 2), the existing carbon budgets have already been set on the basis that international aviation would be included at some point before 2050. The proposed level for the fifth carbon budget has also been provided on that basis. Therefore, it would not be necessary to alter existing budgets when international aviation is formally included.

Question 5: *What should government be thinking of when drawing up an effective policy framework for aviation emissions?*

Answer: The Committee on Climate Change has previously advised on the level of aviation emissions that is compatible with meeting the 2050 target (i.e. around 2005 levels, 37.5 MtCO₂e). This level is based on a combination of technical improvements (e.g. fuel efficiency, alternative fuels) which in turn allow demand to grow by about 60% on 2005 levels by 2050. The Government should more formally consider the measures that it can put in place to overcome any barriers to UK-based aviation making its contribution to the 2050 target. Part of that, as noted in our 2015 Progress report to Parliament, should be a policy-framework on aviation that explicitly incorporates the actions required to 2050.

I would be happy to discuss any of these, or other, responses with you and your Committee.

Yours sincerely,



Lord Deben, Chairman, Committee on Climate Change