

Response from the Aviation Environment Federation to the Energy and Climate Change Committee's inquiry into the Fifth Carbon Budget



Friday 29th January

We warmly welcome the opportunity to provide evidence to the Committee's inquiry into the fifth carbon budget. Given our interest and expertise as an organisation, we have responded only in relation to the appropriate treatment of international aviation emissions under the Climate Change Act.

The Aviation Environment Federation (AEF) is the principal UK NGO concerned exclusively with the environmental impacts of aviation. As well as supporting our members with local issues, we have regular input into international, EU and UK policy discussions. We engaged with the Airports Commission throughout its work programme, including being called to give evidence on climate change to a panel of commissioners in July 2013, and we provided both written and oral evidence to the Environmental Audit Committee in relation to its recent inquiry into the policy implications of the climate change, noise and air quality impacts of Heathrow expansion. At the UN we are the lead representative of the environmental umbrella organisation ICSA, which is actively engaged in the current talks aimed at agreeing global climate measures for aviation.

Our submission to this enquiry supports the CCC's recommendation that aviation emissions must be accounted for in the setting of the fifth carbon budget, effectively increasing its stringency for other sectors while ensuring that aviation emissions remain part of the overall UK picture. With the Government having indicated its theoretical support for a new runway in the South East, which could significantly increase the scale of the UK aviation emissions challenge, it is particularly important that the fifth carbon budget reflects the need for aviation to play a part in delivering the 80% emissions cut to which the UK is legally committed in order to provide the appropriate framework for future policy. While we are disappointed that the CCC has not recommended formal inclusion of aviation in the budget, which would provide greater certainty in relation to the sector's future development, we consider the CCC's recommended approach of setting the budget with a view to aviation's formal inclusion in future budgets to provide a 'next best' alternative.

1. What is your view on the Committee on Climate Change's advice on the fifth carbon budget?

2. Should the Government set the fifth carbon budget in line with the Committee on Climate Change's advice?

We note that the CCC advised in November 2015¹ that:

Emissions from international aviation should continue to be allowed for by setting the budget on the path to meeting the 2050 target with international aviation emissions included. However, the accounting for these emissions remains uncertain, so they should not be formally included in the fifth carbon budget.

International aviation emissions must be accounted for when setting the level of stringency of the fifth carbon budget.

AEF strongly supports the CCC's recommendation that the 2050 target enshrined in the Climate Change Act should apply to all sectors including aviation, and that the level of the fifth carbon budget must reflect this.

The Climate Change Act treats emissions from international aviation and shipping differently from those of other sectors (and from domestic aviation emissions), on the basis that the accounting methodology for these emissions was unclear when the Act came into force. Until these methodological issues are resolved, emissions from international aviation and shipping are not formally included in carbon budgets.

Nevertheless the Act requires that (i) emissions from these sectors should be included as soon as possible, and (ii) in the interim they must be taken into account in the setting of carbon budgets for other sectors. This reflects an understanding that in order for the UK to deliver its fair share of climate mitigation, it must ensure that the economy-wide 80% emissions cut applies to all sectors of the economy. EU-wide targets similarly apply to all sectors, including aviation².

The CCC has long recommended that in order to allow for aviation's future inclusion in carbon budgets, Government should plan on the assumption that emissions from the sector in 2050 should not exceed their level in 2005 – 37.5 MtCO₂ – allowing for a 60% growth in aviation passengers between 2005 and 2050. AEF considers this a generous target. In June 2015 the CCC recommended that Government should by 2016 set out a policy plan for delivering the target. Since this is a less stringent target than the economy-wide 80% cut in 1990 levels of emissions, other sectors would need to make up the shortfall by delivering emissions cuts of 85% on average.

The Government's legislated carbon budgets so far reflect the need for emissions from aviation to be included in the long term by setting aside 'headroom' for them in line with this recommendation. Similarly the Government's statement in 2012 on the treatment of aviation and shipping emissions under the Climate Change Act specifies that "Government reaffirms its overall commitment to the 2050 target and recognises that emissions from international aviation and shipping should be treated the same as emissions from all other

¹ <https://www.theccc.org.uk/publication/the-fifth-carbon-budget-the-next-step-towards-a-low-carbon-economy/>

² Annex to the Impact Assessment accompanying the package of implementation measures for the EU's objectives on climate change and renewable energy for 2020, 27.2.2008, section 5.3.1 <http://ec.europa.eu/transparency/regdoc/rep/2/2008/EN/2-2008-85-EN-1-0.Pdf>

sectors, in order to reach our long-term climate goals.”³ It is important that the Government continues to account for aviation in this way.

Formal inclusion of international aviation in the fifth carbon budget would be desirable and – we believe – possible, but is less important than ensuring its emissions are accounted for.

While CCC had previously recommended formal inclusion of international aviation emissions in carbon budgets, the advice from November 2015 was that given recent changes to the policy landscape, inclusion of these emissions should be postponed. Specifically, CCC argued, the fact that aviation’s inclusion in the EU Emissions Trading System has been scaled back pending possible agreement at the UN’s aviation body this October on a global ‘Market Based Measure’ (MBM) for aviation makes it hard at present to define an appropriate accounting methodology for aviation in the context of carbon budgets.

AEF made the case, in response to the CCC’s call for evidence on the fifth carbon budget, for aviation’s inclusion in the fifth and future carbon budgets on the basis that this would provide certainty in relation to the working assumption that aviation must be included in the 2050 160 Mt emissions target for the UK as a whole⁴. We argued both that (i) complications in relation to the approach to accounting for aviation emissions will have been removed prior to the commencement of the fifth carbon budget in 2028 and that (ii) in fact, whatever the outcome of current policy discussions, a solution can be drawn up to tackle emissions, with various possible approaches available.

It remains our view that formal inclusion of international aviation in the fifth carbon budget is both possible and desirable. Nevertheless it is not *critical* as long as the current approach of setting aside headroom with a view to the sector’s future inclusion is continued, and as long as the Government accepts the need to develop appropriate policy measures to ensure that emissions from the sector are on a path consistent with the long term goal. Should it become apparent that other sectors are not on a path to delivering 85% emissions cuts, or should the overall ambition of the Act be increased, or should a methodology be agreed for including aviation’s non-CO₂ effects on climate change alongside CO₂, the leniency afforded to aviation may have to be reviewed in future.

International measures for aviation emissions do not lessen the importance of a UK carbon accounting framework under the Climate Change Act.

AEF is actively involved in the current talks taking place at the UN’s aviation body, ICAO, on the development of a globally-agreed MBM for aviation. It is hoped that agreement on such a scheme will be reached this October. If the proposal is adopted, the GMBM will contribute to the achievement of ICAO’s goal to keep net CO₂ emissions from international aviation at or below 2020 levels (sometimes referred to as ‘carbon-neutral growth’). Forecasts show

³http://www.aef.org.uk/uploads/Government_decision_on_aviation_shipping_and_carbon_budgets.pdf

⁴<http://www.aef.org.uk/uploads/AEF-response-on-CCC-5th-carbon-budget.pdf>

that without an MBM to close the gap, emissions will grow annually after 2020 even allowing for the introduction of new technology and alternative fuels.

But while international measures such as the MBM can help to increase the scope of environmental action, the question of appropriate target setting at a national level is a separate issue, not least as the level of ambition of the MBM is unlikely to match that of the Climate Change Act (see below).

To the extent that the UK benefits from aviation it also needs to account for the sector's environmental impacts; Heathrow's success as a hub airport means that it is responsible for more emissions annually from international flights than any other airport in the world⁵. It is entirely appropriate that the UK should set out national level objectives and targets for climate change, reinforced through the Climate Change Act, and should then consider the extent to which international measures can help to deliver them and whether complementary policies are required.

3. What challenges will the Government face in meeting the fifth carbon budget?

Allowing headroom for international aviation emissions in the setting of the fifth carbon budget would not introduce any new obligations and would simply continue the approach taken so far. But the more carbon budgets begin to bite, the greater the temptation is likely to be for Government to seek to reinterpret how this sector should be treated under the Climate Change Act. Allowing for international aviation in the fifth carbon budget will mean challenges for Government both:

- (i) in ensuring that other sectors stay on course to deliver a level of climate mitigation that leaves headroom for aviation emissions, and
- (ii) in ensuring that appropriate policies are in place and appropriate infrastructure decisions are made to keep aviation emissions on course not to exceed 37.5 Mt by 2050, a level the CCC has described as "at the limit of what is feasible" given the need to limit overall UK emissions to 160 Mt⁶. UK aviation emissions are currently set to overshoot this recommended level even without new runways, underlining the need for a policy plan to tackle them, as CCC recommended earlier this year⁷.

Continuing to account for aviation when setting the level of the carbon budget is, however, critical.

1. The value and integrity of the Climate Change Act, and its ability to ensure the UK plays its fair part in delivering global climate goals, relies on all sectors, including aviation, being included.

⁵ Southgate D 2013, *Aviation Carbon Footprint Global Scheduled Domestic Passenger Flights – 2012*
<https://southgateaviation.files.wordpress.com/2013/09/global-domestic-footprint-finalv6.pdf#page=41>

⁶ http://www.aef.org.uk/uploads/CCC_letter_aviation_commission.pdf

⁷ <http://www.aef.org.uk/2015/06/30/government-must-curb-growing-aviation-demand-to-meet-co2-targets-warns-climate-committee/>

The modelling underpinning the Climate Change Act and giving it credibility and scientific robustness assumes that all sectors globally play a part in achieving climate mitigation. As CCC itself has argued “A failure to include international aviation and shipping emissions in the accounting framework of the Climate Change Act would represent a departure from the approach taken by the Government in its Carbon Plan, and from international approaches. It could result either in increased costs and risks of meeting carbon budgets, or in accepting higher risks of dangerous climate change.”⁸

2. The MBM, even if successful, is unlikely to mitigate aviation emissions sufficiently to meet the requirements of the Climate Change Act.

The final details of the global MBM have yet to be agreed but an offsetting scheme based on a 2020 stabilisation goal is unlikely to deliver sufficient CO₂ mitigation in the context of (i) the UK’s commitment to achieve an 80% emissions cut on a 1990 baseline through largely domestic action, (ii) similar longstanding pledges made by other developed countries and (iii) the level of global ambition on climate agreed in Paris.

By way of illustration, the Airports Commission has estimated that in order to keep aviation emissions to the 37.5 Mt level recommended by CCC while relying on carbon pricing alone to manage emissions, the carbon price would need to increase from around £5 today to £334 by 2050 even without any new airport capacity, or to £634 by 2050 with a third runway at Heathrow⁹. The global MBM by contrast has been modelled on an assumed carbon price of just \$50 (around £32) by 2050.

Complementary policies, including appropriate planning decisions, are therefore needed to drive appropriate investment and give a stable backdrop to carbon markets, both in the UK and in other countries responsible for significant aviation emissions. Just as CCC has recommended measures such as a decarbonisation target for electricity and Government investment in renewables, alongside participation of the sector in the EU ETS, so complementary measures are likely to be necessary for aviation regardless of whether it is successfully included in carbon markets.

Ensuring that the sector remains covered by the Climate Change Act will help to ensure that the Government develops a plan for doing this.

⁸ CCC April 2012 Scope of carbon budgets: statutory advice on inclusion of aviation and shipping https://www.theccc.org.uk/archive/aws/IA&S/CCC_IAS_Core_ScopeOfBudgets_April2012.pdf

⁹ Under the ‘Assessment of need’ scenario (the one subsequently regarded as the main forecast)