



# Environmental Audit Committee inquiry into the UK's carbon budgets

## Memorandum by Aviation Environment Federation

1. The Aviation Environment Federation (AEF) is the principal UK non-profit making environmental association concerned with the environmental effects of aviation and supported by individuals and community groups affected by the UK's airfields and airports. We promote a sustainable future for aviation which fully recognises, and takes account of all its environmental and amenity effects. These range from aircraft noise issues associated with small airstrips or helipads to the contribution of airline emissions to climate change.

### Summary

2. The following summarises our consultation response.
  - The budgets recommended by the Committee on Climate Change, and those now published by the Government, are inconsistent with the 2050 target as they fail to include aviation emissions. These emissions, under Government forecasts, are set to continue growing making their future inclusion in the carbon budgets increasingly difficult.
  - There currently seems to be a lack of clarity within Government about the Committee's advice on how aviation emissions should be accounted for. We are concerned that the policies of the Department for Transport are currently out of step with the commitment from the Department of Energy and Climate Change to cut all the UK's emissions by 80% of 1990 levels by 2050 and that DfT publications mis-state the advice of the Committee.
  - The integrity of the UK's carbon budgets will be compromised if no restrictions are placed on the use of credits from the EU ETS, as the ETS is insufficiently stringent to be compatible with the goal of limiting global warming to no more than 2°C.

### **Are the Committee on Climate Change's recommended budgets to 2020 consistent with the UK's target for 2050?**

3. We are concerned that the proposed carbon budgets to 2020 fail to cover the UK's international aviation emissions and that in this important respect the budgets would be inconsistent with the UK's target for 2050.
4. There has been a great deal of confusion about whether international aviation emissions are inside or outside the UK's target to cut greenhouse gas emissions 80% on 1990 levels by 2050. The advice of the Committee on Climate Change was as follows:

The 80% target should apply to the sum of all sectors of the UK economy, including international aviation and shipping. To the extent that international aviation and shipping emissions are not reduced by 80%, more effort would have to be made in other sectors.

5. However, the Committee concluded:

International aviation and shipping should not be included in budgets, but there need to be clear strategies to achieve emissions reductions, and the Committee's annual reports of progress against budgets should be accompanied by reports on international aviation and shipping.... The Committee's annual reports on progress in these sectors should keep under review whether at any time it does become appropriate to include either sector within the budget process.<sup>1</sup>

6. AEF welcomes the CCC's recognition that emissions from international aviation must be included in the UK's long term target and the fact that the Government has accepted this recommendation<sup>2</sup>.

7. We are somewhat concerned that some government departments do not seem to have understood the (somewhat technical but nevertheless clear) distinction between medium term *budgets* and longer term *targets*. A recent Department for Transport publication, for example, stated:

The Committee on Climate Change (CCC) recommended on 1 December 2008 that the scope of the targets and budgets in the Climate Change Act should not be extended to include international aviation and shipping.<sup>3</sup>

8. If there is to be any chance of Government departments demonstrating joined up thinking on this issue it is important that all departments fully understand that commitments that have been made, namely that the 80% target will apply to the UK's share of international aviation (and shipping) emissions; government policy made now needs to reflect this.

9. We believe, however, that leaving aviation out of the carbon budgets is a mistake. We have long argued for the importance of including aviation in the UK's carbon budgeting strategy. In brief:

(i) We do not accept the argument that a lack of international agreement about how to allocate aviation emissions for the purposes of international climate policy is a good reason for choosing not to allocate them for the purposes of UK policy. The UK Climate Act does not require international assent. Annex I parties to the Kyoto Protocol already report emissions from international bunker fuels (aviation and shipping) annually as a memo item to the UNFCCC; it would be straightforward to apply the same methodology to the UK carbon budgeting system. While it may be argued that such a decision may require review at a future date if international consensus on allocation is forthcoming, we believe it is likely to cause less turbulence and distortion to the budgets than omitting these emissions altogether.

(ii) The CCC suggests that "the UK carbon budget can be designed to take account of a reasonable estimate of the UK's international aviation

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<sup>1</sup> December 2008, the first report of the Committee on Climate Change, Building a low-carbon economy – The UK's contribution to tackling climate change, Executive Summary

<sup>2</sup> 16<sup>th</sup> October 2008, DECC press release

<http://nds.coi.gov.uk/environment/fullDetail.asp?ReleaseID=381477&NewsAreaID=2&NavigatedFromDepartment=True>

<sup>3</sup> March 2009, DfT, *Reforming the Framework for the Economic Regulation of UK airports*, Annex 5 section 1.8

emissions and their likely growth even if international aviation emissions are formally excluded from the budget”, and that the burden for making deeper cuts to account for estimates of aviation and shipping growth will fall on the sectors within the budgets. In fact the Climate Act requires both the Secretary of State and the Committee on Climate Change, when deciding on carbon budgets, to take into account “the estimated amount of reportable emissions from international aviation and international shipping for the budgetary period or periods in question.”<sup>4</sup> Given that this estimate is to be made, we do not understand why it should not be included in a straightforward manner into the budgets.

- (iii) Every credible projection for UK aviation emissions concludes that unless there are radical changes in both government policy and new technologies then these emissions will continue to rise. Failing to include aviation in the carbon budgets and thus allowing them to grow without effective controls is likely to mean that every year we are a step further away from being able to bring aviation emissions within the 80% target for 2050 – something to which the Government is now committed.
- (iv) There is still no policy in place, even for the future, to tackle aviation’s non-CO2 impacts. The Climate Act applies to ‘targeted greenhouse gases’. While we welcome the decision to take account of climate damage beyond that of carbon dioxide, we note that aviation’s non-CO2 impacts are primarily from NOx and from water vapour; neither of these are in the list of targeted gases as they cause climate damage only at altitude. While there is scope in the Act to amend the definition of targeted greenhouse gases, the fact that the impact of aviation on the climate is around twice that of carbon dioxide alone means that the distortion from omitting aviation from the budgets is twice as serious and makes it harder still to meet the objective shared by the EU and UK of limiting global warming to no more than 2°C.

10. We therefore urge the Environmental Audit Committee to press for Ministers to exercise their powers as specified in the Climate Act to amend the Act to directly include international aviation in the carbon budgets.

**What are the issues around using emissions trading (both credits from the EU Emissions Trading Scheme and carbon offset credits) to meet the UK carbon budgets?**

11. We are very concerned about the CCC’s recommendation that no restrictions be applied to the use of credits from the EU ETS to meet the UK’s carbon budgets.
12. There are two pieces of European climate policy important for the UK’s carbon budgets: the EU Emissions Trading Scheme and the commitment to cut Europe’s greenhouse gases by 20% of 1990 levels by 2020. Europe has promised to increase this target to 30% if a successful global climate deal is agreed, though the working assumption in terms of sectoral caps is that the reduction will be 20%. These two policy commitments have recently been

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<sup>4</sup> Climate Change Act 2008, Clause 10  
[http://www.opsi.gov.uk/acts/acts2008/pdf/ukpga\\_20080027\\_en.pdf](http://www.opsi.gov.uk/acts/acts2008/pdf/ukpga_20080027_en.pdf)

harmonised in the Climate and Energy Package. This specifies that in order to meet the 2020 target, the burden of reductions is to be split between traded and non-traded sectors; those covered by the EU ETS will need to cut their emissions by 21% while non-traded sectors need to make a cut of 10%.

13. The Committee's December report argues that "As Europe's share of international aviation is included within the EU ETS, with a total cap (aviation plus other sectors) which is consistent with climate objectives, there is no necessity to include international aviation emissions within the UK national budget. Aviation will be subject to a carbon price which encourages supply side abatement and demand constraint: and growth in Europe's aviation emissions will have to be offset by more rapid reductions in other sectors within Europe."
14. There are a number of problems with this short statement, however.
  - (i) The total cap, based on a 20% reduction in greenhouse gases by 2020, is not consistent with the key climate objective of limiting global warming to no more than 2° C. The 20% target is based on political feasibility, not up-to-date climate science. Even the CCC report, in its chapter on budget setting, states in connection with the EU programme that "The 20-30% range straddles the sort of developed country reductions which Chapter 1 suggested are likely to be required in order to meet global climate stabilisation goals: 20% would be too low".<sup>5</sup> Many NGOs believe that even a 30% cut would be insufficient and that developed countries need to adopt an aggregate reduction target of more than 40% to play a fair part in protecting the global climate.<sup>6</sup>
  - (ii) If the cap agreed for Europe includes emissions from aviation but the UK's budgets do not then non-aviation sectors will be allocated higher caps than they should be. Phase III of the EU ETS begins in 2013 and abandons the idea of national totals in favour of a sectoral approach. Nevertheless, the CCC's UK target for 2020 reflects, in part, what the Committee considers is the UK's fair share of the EU commitment. If the next stage is for the UK's capped total to be divided among all sectors *other than* aviation and shipping then we are surely setting ourselves up for failure in terms of meeting the EU's target. The CCC's goal of defining policy that is consistent with EU policy has, in this respect, failed.
  - (iii) Impact assessments for the inclusion of aviation into the ETS from 2012 suggest there will be very little impact on either "supply side abatement" or "demand constraint". The impact assessment conducted for the European Commission when the scheme was first proposed concluded that between 2005 and 2020, as a result of aviation's inclusion in the EU ETS revenue tonne kilometres would grow not by 142% but by 135%. Emissions would, the report suggests, grow by just 2.8% less than they would have done under business as usual scenarios by 2020<sup>7</sup>. A more recent assessment of the financial impacts of the scheme, by Merrill

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<sup>5</sup> December 2008, the first report of the Committee on Climate Change, Building a low-carbon economy – The UK's contribution to tackling climate change, page 110

<sup>6</sup> April 2009, Climate Action Network International, *Position on an Annex I aggregate target*

<sup>7</sup> December 2006, Commission of the European Communities, *Impact assessment of the inclusion of aviation activities in the scheme for greenhouse gas allowance trading within the Community*

Lynch, found that the impact on ticket prices will range from between 1.5 and 5.2 Euros<sup>8</sup>; we do not believe that such increases will lead to ‘demand constraint’. An independent report from the Tyndall Centre concluded that the ETS as currently designed will have minimal impact on aviation emissions<sup>9</sup>.

- (iv) Growth in Europe’s aviation emissions will not necessarily be offset by reductions in other sectors in Europe as the ETS allows for up to 50% of the reductions to come from offset schemes elsewhere in the world. Aviation will have direct access to CERs and ERUs for up to 15% of their emissions in 2012, while from 2013 onwards this drops to 1.5%, to account for the fact that aviation will benefit from much more lenient terms than other sectors with respect to both the cap and the auction level. But for the scheme as a whole, up to 50% of the required reductions from 2013 can come from offset credits: an increase in access compared with phase II<sup>10</sup>. Non-aviation sectors will thus have less need for their EUAs and will be able to sell them on to airlines, putting actual reductions from the aviation sector even further out of reach.

### **How compatible are current Government policies with achievement of the overall budget?**

- 15. AEF does not believe that the Government’s policy for aviation expansion outlined in the 2003 Aviation White Paper is compatible with achievement of the 2050 target to cut UK emissions by 80%. While aviation is currently excluded from the carbon budgets outlined this month with the 2009 budget, it is essential, if the sector is to have any chance of being accommodated in future budgets, that the right policy decisions are taken now.
- 16. We conclude by quoting Sir Nicholas Stern, who wrote about this subject just prior to the announcement of the 2009 budget.

[The] Budget can succeed in accelerating action on climate change only if the rest of government policy is consistent. For example, big transport decisions, such as the third runway at Heathrow, should be taken only if they make sense in the context of a coherent carbon and transport policy for the UK, and, preferably, for Europe as a whole. I would be surprised if the construction of a third runway at Heathrow passed that test...<sup>11</sup>

AEF, April 2009

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<sup>8</sup> September 2008, Merrill Lynch, *Aviation in the EU ETS; an incentive for efficiency*  
[http://www.london-accord.co.uk/accord\\_2008/reports/merrilllynch\\_aviation.pdf](http://www.london-accord.co.uk/accord_2008/reports/merrilllynch_aviation.pdf)

<sup>9</sup> November 2008, Bows A and Anderson K *A bottom-up analysis of including aviation within the EU’s Emissions Trading Scheme*

<sup>10</sup> December 2008, Europa Press Releases, MEMO/08/796: *Questions and Answers on the revised EU Emissions Trading Scheme*  
<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/796&format=HTML&aged=0&language=EN&guiLanguage=en>

<sup>11</sup> April 2009, Stern N *Enough green talk. Now make it happen.*, TimesOnline  
[http://www.timesonline.co.uk/tol/comment/columnists/guest\\_contributors/article6135687.ece](http://www.timesonline.co.uk/tol/comment/columnists/guest_contributors/article6135687.ece)