



**WWF** *for a living planet*

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## Parliamentary briefing

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# Including the emissions from international aviation in the Climate Change Bill

### Summary

- The Government has said that practical difficulties prevent it from including international aviation in the targets in the Climate Change Bill. WWF believes these can be resolved and should not delay inclusion of aviation in the Bill from the outset.
- The Government's official position is that we should wait until rules on the EU Emissions Trading Scheme (ETS) have been finalised before considering how to include aviation within the Bill's targets. The Committee on Climate Change will then look into a method for doing so.
- If international aviation emissions are to be included in the reduction targets of the Climate Change Bill then the UK's net responsibility must be calculated in order to map the UK's net progress. This is because airlines may increase their flights but buy allowances from the ETS to offset the growth in emissions.
- The only allocation of emissions to Member States that will occur as a result of ETS will be for the purposes of auctioning the small percentage of permits that are not handed free of charge directly to airlines. Therefore, the ETS will not produce a workable method for allocating the UK's net aviation emissions.
- Instead the Government will have to make a unilateral decision on how emissions should be allocated to the UK. This is perfectly possible now and a potential formula for doing so, which uses aviation bunker fuel sales, is described in the brief.
- Not to include aviation now runs the risk that the targets in the Climate Change Bill will be diluted and the carbon budgets will have to be adjusted later causing uncertainty for other business sectors.

### Introduction

In the Lords the Bill was amended to allow for the inclusion of the UK's share of international aviation emissions but within a five year timeframe. This was because many peers felt that there was not yet a feasible way to include the emissions in the targets.

The Government states that practical difficulties hold it back from including the UK's fair share of emissions from international aviation in the targets in the Climate Change Bill. WWF has



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written this short briefing note to point out that these practical issues can be resolved and should not be seen as a reason for failing to include aviation in the Bill from the outset. The Government intends that the Committee on Climate Change will report on whether international aviation should be included in the 2050 target and to assess the implications and practicalities of including it.

Lord Rooker said<sup>1</sup>:

*“When the EU Emissions Trading Scheme’s rules on aviation have been finalised, we will ask the Committee on Climate Change for its advice on a methodology. We need to know whether there is a methodology for including international aviation emissions that is workable, compatible with the EU Emissions Trading Scheme and takes account of progress in the United Nations framework and the wider international context. We shall need to know the impacts of adopting such a methodology...”*

*“That is the basis on which we cannot accept the amendments, but I hope that I have made that case in a wholly positive spirit.”*

WWF, however, believes that the methodology can easily be resolved now as the finalisation of the ETS is not an obstacle. Indeed, the conclusion of the ETS aviation deal will not prevent the Government from having to make unilateral decisions on how emissions should be allocated to the UK. Therefore, there should be no delay in including the emissions in the targets of the Bill. We are also concerned that the link with ETS will be exploited to weaken the UK’s overall totals unnecessarily, by including aviation using a later baseline year.

### **Reporting emissions and allocating responsibility to the UK**

In order for international aviation emissions to be included within the Bill, three data questions must be resolved:

- the way of counting the UK’s fair share of international aviation emissions
- the baseline year, so that 2020 and 2050 targets can be set according to a fixed baseline amount of emissions
- the way of determining what the UK’s net emissions will be, once aviation has entered the EU ETS (after 2012) and airlines are purchasing emissions reduction credits.

### **An answer to the first two questions is readily available in the form of ‘bunker fuels’ data.**

Although emissions from international aviation are not included in global climate agreements, states are required under the terms of the Kyoto Protocol to report them as a ‘memo item’, and the Intergovernmental Panel on Climate Change (IPCC) publishes internationally-accepted guidelines on how to do this. These IPCC guidelines are for reporting bunker fuel emissions. Emissions from all departing flights is well approximated by emissions from aviation bunker fuels (ie from fuel sold in the UK), since airlines are careful to carry no more fuel than is required for each trip.

The Government has for several years compiled and reported official figures for emissions from international aviation based on bunker fuel sales for inclusion in our national GHG inventory and has used this data for Government projections<sup>2</sup>.

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<sup>1</sup> Hansard, Lord Rooker, 9 January 2008, Col: 886

<sup>2</sup> For example: “projections are consistent with the national aviation bunker fuel consumption and CO2 emissions, i.e. they only account for the first legs of departing (outward) flights from the UK.” MARKAL-Macro analysis of long-run costs of climate change mitigation targets, Defra, November 2007.  
<http://www.defra.gov.uk/environment/climatechange/research/pdf/markal-analysis-cc-targets.pdf>

These official figures go back to 1990 and so could be used to include aviation emissions on the same basis as other sectors from the moment the Bill becomes law. Furthermore, the Government reports that bunker fuel emissions are ‘the most likely of the possible methodologies for international aviation CO2 allocation currently being developed’<sup>3</sup> in international negotiations.

The Government, however, has stated that adopting one methodology or other at this stage would be a unilateral decision that might ‘prejudice international negotiations’. But, as is explained below, its own proposals involve exactly the same degree of unilateral decision-making.

**The EU Emissions Trading Scheme will not, on its own, provide a workable methodology.**

The Government’s position is that we should wait until rules on the EU ETS have been finalised before considering how to include aviation within the Bill’s targets. The ETS, however, will not allocate the UK with its net responsibility for international aviation emissions - rather it counts the emissions of airlines operating in the EU.

The only allocation of emissions to Member States that will occur as a result of ETS will be for the purposes of auctioning the small percentage of permits that are not handed free of charge directly to airlines<sup>4</sup>. As the allocation of the majority of permits will be directly to airlines, allocation for the auctioned segment will work by assigning *airlines* to Member States. This is straightforward where carriers are registered in an EU Member State, but non-EU carriers will also be covered by the scheme, and these will be assigned to the Member State from which they conduct their most extensive operations. So a United Airlines flight from Washington to Paris would count to the UK, since United’s main European base is at Heathrow. Conversely, the large numbers of flights by Ryanair out of the UK would all count to Ireland. Clearly, this is not an acceptable way to reckon the UK’s net emissions, and the Government has conceded as much<sup>5</sup>. Therefore, the ETS will not produce a workable method for allocating the UK’s net aviation emissions.

Instead a formula, as described below, will have to be devised and this will require unilateral decisions to be made by the UK. But defining the UK’s share of aviation emissions, in order to arrive at the UK’s net aviation emissions, is precisely what the Government has professed itself unwilling to do, and is the sole justification for not using the bunker fuels emissions data in the first place.

WWF believes, as the illustrative formula shows below, that there is no reason why a method cannot be devised now.

**A potential formula to calculate the UK’s net emissions once aviation enters EU ETS**

Under current proposals, airlines will be able to trade their emissions and buy extra allowances from 2012 once aviation enters the EU Emissions Trading Scheme (ETS). If international aviation emissions are to be included in the reduction targets of the Climate Change Bill then the UK’s net responsibility must be calculated in order to map the UK’s net progress. This is because over time there may be an increase in flights from the UK, but airlines will be buying allowances to offset this, so a proper measurement must be developed.

If the counting method for the UK’s aviation emissions is bunker fuel sales then the airlines responsible for the UK’s emissions will be those airlines buying bunker fuels in the UK and

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<sup>3</sup> MARKAL Macro analysis of long run costs of climate change mitigation targets, Defra 2007, page 4. <http://www.defra.gov.uk/environment/climatechange/research/pdf/markal-analysis-cc-targets.pdf>

<sup>4</sup> Since Member States do not wish auctioning revenues to go into Commission coffers.

<sup>5</sup> “For instance, it is expected that under the EU ETS, emissions and credits would be allocated to airlines rather than countries. It is not yet clear how this would sit with the system of national responsibility under the Bill.” (Taking Forward the UK Climate Change Bill, Defra, October 2007, n.13 to para 1.28. <http://www.official-documents.gov.uk/document/cm72/7225/7225.pdf>

using British airports. The EU allowances that these airlines can buy/sell once they enter the EU ETS in 2012 will need to be reported. As many airlines operate out of numerous countries a proportion of the allowances that each airline has purchased/sold will need to be allocated to their UK operations for the sake of the formula. This proportion should reflect the share of the airline's total emissions that arise from flights out of the UK. If, for example, 50% of Ryanair's total emissions arose from flights out of the UK then 50% of the allowances it buys/sells in the ETS should count for its UK operations.

Any increase in emissions from bunker fuel sales in the UK could then be balanced by the purchasing of allowances. The end result is a formula that is able to take into account the increase/decrease in flying from the UK (to an international destination) and the amount of allowances these airlines have bought. Hence a net account for the UK is arrived at.

#### How the formula could look - summary

1. Count UK international aviation emissions and measure from a 1990 baseline. Use aviation bunker fuel sales in the UK as an indicator.
2. Calculate how much fuel each of the airlines that operate out of the UK use.
3. Calculate the amount of allowances these airlines have bought/sold from the ETS and apportion these amounts to the UK's 'account' according to how important the UK is for the airline.
4. Balance the UK's aviation bunker fuel sales against the ETS allowances that the airlines have in order to arrive at a net figure for the UK.

#### **Conclusion**

Including the UK's international aviation emissions on the basis of bunker fuel sales and a corresponding formula would incorporate emissions from international aviation sooner, would use the same baseline year as other sectors, and would involve no greater unilateral decision on the part of the UK Government than required by its own proposal (to link national totals to the EU ETS).

In effect the only differences between WWF's and the Government's proposals are:

- the date from which emissions are counted towards UK totals : WWF – immediately; Government – in 2012, if ETS is not delayed (as it may be due to a legal challenge from the US).
- the baseline year: WWF – 1990; Government – 2004-06 average. Aviation emissions have doubled in the period 1990-2006, and including them at 2004-06 levels would dilute the Bill's overall targets by around 3%.

Under the WWF proposal:

- aviation would still be able to trade its permits once it entered the EU ETS, and these could be credited to the UK's national totals by applying the 'formula' to calculate which are within 'the UK's share'
- sufficient flexibility would remain to alter the basis of inclusion in the event of international agreement. As with other sectors in the Bill, if there is a change in international carbon reporting practice, there can be a change in the terms of inclusion.

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