

Suggestions concerning Aviation and Climate Change Discussion Paper

29th April, 2013

CO₂ reduction goal of UK and EU aviation in 2050

In Chapter 3 deliberations are given on possible reduction goals in the UK. Also the carbon reduction goals of IATA, ACI, CANSO, and ICCAIA on behalf of the international aviation industry are mentioned. Two relevant goals are a CO₂ cap as from 2020 and 50% CO₂ reduction in 2050 compared to 2005. We suggest your government and those of the other EU Member States to adopt these reduction goals in their policy on sustainable aviation.

The EU Member States agreed on the ICAO [Resolution A 37-19](#) (2010) “affirming that addressing GHG emissions from international aviation requires the active engagement and cooperation of States and the industry and noting the collective commitments” of the industry’s reduction goals mentioned above. These goals do not imply specific obligations to individual States, but the active engagement and cooperation of EU Member States would be more effective if they would adopt these goals in their policies making their aviation more sustainable. Governmental goals should anyway not be lower than the industrial goals. Another valid reason to adopt these goals by Member States is that a reduction of 50% in 2050 by aviation matches very well with the necessary global CO₂ reduction in 2050 to prevent a temperature rise of more than two degrees.

It should be remarked that ICAO mentions a desirability contrasting its carbon reduction goals, being “to promote sustainable growth of aviation” during the reduction period. It appears to be quite impossible to combine these tight reduction goals with the current aviation growth in mature economies. We did a scrutiny using available recent scientific studies (amongst those of Lee et al. and the International Energy Agency) concluding that a growth according to IPCC scenario A1 would lead to an increase of CO₂ emissions and RF of carbon and non-carbon GHG by a factor 3.4 in 2050 over 2005, despite the introduction of bio fuels and a fuel efficiency improvement of 1.5% to 1% per annum between 2005 and 2050. We therefore concluded that governments adopting the CO₂ reduction goals of IATA could advance IATA’s success rate by not expanding their airport capacities. Reference: <http://www.aviationandclimate.com/carbon.htm>

EU aviation is one of the three largest aviation activities in the world, having a great influence on aviation in other parts of the world. If governments of EU Member States would succeed to reduce the CO₂ emissions of their aviation, or if the EU as a whole would succeed to do so for the entire EU aviation, this would be a substantial contribution to the success of the IATA reduction goals. However, if Member States would allow their aviation sectors to grow and increase their CO₂ emissions, it would contribute to a disastrous failure of global aviation to become sustainable.

‘Leakage’ to overseas hubs.

In Chapter 5 the risk of ‘leakage’ to overseas airports is mentioned as a consequence of not expanding UK airports having capacity constraints. Although this would be a logical consequence of taking such a measure in the UK only, one could consider the fact that these overseas hubs are also facing capacity constraints. Maybe not as serious as in London, but the constraints are clearly recognized by the EC. Suppose the relevant Member States would be prepared to not expand these hubs, leakage within the EU could be prevented. That would produce a considerable contribution to a CO₂ reduction success on a global scale.

We would very much like to learn your views on the possibility of the UK government seeking the creation of a level playing field between the Member States operating the West-European hubs , to prevent leakages between hubs if capacity constraints are used as a means of reducing CO₂ emissions. We could suggest the Dutch government to seek co-operation with the British government on this.

Hi-speed rail to overcome capacity constraints.

In the case of Amsterdam Airport Schiphol we estimated the market share of passengers on short-haul trips within the reach of the future hi-speed rail system in West Europe (including Southern England) to be over 30% of the total number of passengers. Maybe such a share would be lower in the UK, but if one includes the transfer traffic to and from the Continent, it may still be substantial.

If integration between air and rail networks leads to unused short-haul slots at the hubs, which in turn are utilized for growth in mid-haul and long haul traffic, it would be possible to accommodate a growing market demand under air traffic caps at these hubs. Since most EU hubs are connected to this hi-speed rail network, it could be developed as an important feeder system to and from the catchment areas of the hubs. Hi-speed trains already are much greener than airplanes and they may become fully carbon neutral, which is not at all possible for aviation. So this capacity expansion would increase sustainability of transport. Moreover, their energy supply will not suffer under the fast increasing oil prices and shortages of bio fuel threatening the aviation. Reference:

<http://www.aviationandclimate.com/hi-speed.htm>

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