



Including aviation in the EU Emissions Trading Scheme - Joint NGO statement on key improvements

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Summary

This paper presents the views of the environmental NGOs on the Commission's draft proposal to include aviation in the EU Emissions Trading Scheme (EU ETS).

It is clear that the EU ETS will not, by itself, curb the rapid growth in aviation emissions. However, in order to maximise the emission savings that do take place within the sector and to improve the environmental effectiveness of the EU ETS as a whole, NGOs are calling for improvements to the Directive:

- **Keep all ancillary policy options open:** to recognise that inclusion of aviation in the EU ETS is not going to be sufficient to bring the sector's emissions down to sustainable levels;
- **Adopt an emissions multiplier of at least 2,** to be reviewed only when effective measures are implemented to address the aviation sector's full climate impact – which is greater than the impact of CO₂ alone;
- **Ensure that the aviation industry meets its own efficiency improvement target before allowances from other sectors can be purchased and put in place quantitative limits on buying credits from other sectors.** This will create a strong mechanism to ensure aviation emissions will actually be reduced as a consequence of this Directive;
- **Place a stringent quantitative and qualitative limit on access to Clean Development Mechanism and Joint Implementation (CDM/JI) credits;**
- **Set a cap not exceeding 50% of the average level of emissions in 2004/2006 for the phase ending in 2012.** After this phase a cap should be set in line with the EU target, agreed at the Spring Council 2007, of a 30% cut in greenhouse gas emissions by 2020;
- **Allocate 100% of the allowances by auction;**
- **Include all flights departing from and arriving in the EU in the scheme from 2010.**

THE POLITICAL CHALLENGE

During the past year the evidence about human induced climate change has increased substantially. The most recent assessment by the Intergovernmental Panel on Climate Change (IPCC) recognizes that the “warming of the climate system is unequivocal” and that “most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations”¹. In addition the Stern Review contained the first overall estimate of the costs associated with climate change.

¹ *Climate Change 2007 - The Physical Science Basis: Contribution of Working Group I to the Fourth Assessment Report of the IPCC (Summary for Policymakers, pages 5 and 10).*

This stated that “if we don’t act, the overall costs and risks of climate change will be equivalent to losing at least 5% of global GDP each year, now and forever”, and concluded that this major economic loss would have disproportionate impacts since “the most vulnerable – the poorest countries and populations – will suffer earliest and most, even though they have contributed least to the causes of climate change”².

Recognition of the contribution unabated climate change will make to global conflict led to the 2007 Nobel Peace Prize being awarded to Al Gore and the IPCC, and the year culminated with the UN’s climate change conference in Bali where political leaders hammered out a deal which launches formal negotiations to reach a post 2012 agreement by the end of 2009.

At the Spring Council summit in March 2007 Heads of State and Governments of the EU had committed to reduce their emissions by 20% below 1990 levels by 2020, rising to 30% if there was a commensurate post 2012 global agreement³. Following this commitment and the UN conference in Bali, the European Commission released its ‘energy package’ on 23 January this year. This included a draft Decision on how only a 20% emission reduction target will be split between Member States (“effort sharing”)⁴. It also contains the draft revised EU ETS Directive which will dictate how the broader scheme develops post 2012.

Against this backdrop the political process to include aviation into the EU ETS is nearing completion. This now appears likely by the end of 2008, just in advance of the debate on the general EU ETS review. Following the political commitments expressed by EU Heads of State in the 2007 Spring Summit and delegation to the Bali climate conference it is essential that the aviation ETS sets the standard for the general review, ensuring all industrial sectors are contributing their fair share towards combatting climate change.

EXPECTED IMPACTS OF THE EUROPEAN COMMISSION’S PROPOSAL TO INCLUDE AVIATION IN THE EU ETS

Although the European Commission’s legislative proposal is welcome, it is clear that it needs to be significantly improved to meet its stated objective: “to address the growing climate change impact attributable to aviation”⁵. According to the Commission’s own Impact Assessment⁶, significant emissions reductions from the aviation sector will not occur. Under the Commission’s proposal, aviation emissions will grow by 78% between 2005 and 2020, instead of 83% under a ‘do-nothing’ (business-as-usual) approach, a reduction equivalent to less than one year’s growth in emissions.

In addition, the Commission estimates that the costs incurred from inclusion in the scheme will only slightly lower the demand for air travel. By 2020, demand will have grown by 135% (relative to 2005 levels) compared to 142% in the absence of a trading scheme⁷. CE Delft have estimated that the Proposal would result in a **modest increase in ticket prices** of between €1.1

² *Stern Review on the Economics of Climate Change* (October 2006) http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm (Summary of conclusions)

³ Brussels European Council, 8/9 March 2007. Presidency Conclusions. http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/93135.pdf

⁴ Such a proposal strongly violates the recent UNFCCC agreement in Bali on the range of emission reductions that are needed from developed countries – set at 25-40% below 1990 levels by 2020. A 20% cut is also inconsistent with the EU objective of keeping mean temperature increase as far below two degrees Celsius as possible. The science dictates that at least a 30% domestic target is necessary. Finally, we believe that the progress achieved during the climate negotiations in Bali offers the EU sufficient certainty about the future of the international UN regime and reason enough to revise its unilateral commitment from –20% to –30%.

⁵ http://eur-lex.europa.eu/LexUriServ/site/en/com/2006/com2006_0818en01.pdf

⁶ http://ec.europa.eu/environment/climat/pdf/aviation/sec_2006_1684_en.pdf

⁷ Based on the scenario with €15 per tonne CO₂ allowance price.

and €3.3 for a short haul round trip and an increase of €2.1 to €6.4 for a medium haul trip⁸. Other impact assessments such as that undertaken by Ernst and Young for the airline associations give figures in the same ranges.

It is clear from the Commission's impact assessment that the aviation industry - both aircraft operators and airports - will not suffer significant negative impacts. There are two main reasons to support this assessment:

- The aviation business in itself is 'geographically bound' and there is virtually no risk of relocating activities outside the EU. The possibility of locating hubs outside the EU is, according to the Commission, minimal because "*the size of the EU economy means that it would not make sense for an airline to consider re-locating a hub to outside of the EU, since the potential to maximize revenues from EU-based clients would then be forgone.*" Making stopovers in neighboring countries is also considered unlikely by the Commission, which gives the example of Dubai in its impact assessment: "*the advantage in terms of lower EU ETS compliance costs associated with stopovers in Dubai is small compared to the disadvantages in terms of extra fuel costs and longer flight times implied*".
- The impact assessment also states that aircraft operators are expected to pass on most of the compliance costs to consumers, so the only impact of this proposal on airlines would be "*a modest impact on future forecasted demand.*" This has been estimated to be a "*maximum reduction figure of 1.9% across all flights*". Even the main airline association (International Air Transport Association) presented a study which estimates that the impact on airline profitability is "*complex*" and recognises that it might actually be "*slightly positive for the profitability of flights arriving and departing the EU*"⁹.

Moreover, the aviation industry already enjoys important advantages compared to other modes of transport. Aviation is exempted from fuel taxes and VAT, and the industry receives many direct and indirect subsidies (start-up aids for aircraft production and airport construction, for example). Inclusion in the EU ETS will not fully address these disparities. For example:

- Based on current taxes on road fuels in the EU – which are approximately € 0.65 per litre on average – aviation's current exemption from fuel taxes would be worth about € 35 bn per annum in the EU. The inclusion in the EU ETS will not address this as it is likely that the allowance price will only correspond to few €cents per litre of kerosene¹⁰;
- Electricity producers are included in the wider EU ETS and are able to pass through the value of the carbon allowances to their customers which means that rail companies have to pay for all the allowances in the EU ETS. Anything but 100% auctioning of allowances to the aviation sector will benefit aircraft operators over their rail competitors.

KEY IMPROVEMENTS

NGOs are asking the Parliament and the Council to improve the Commission's Proposal. These improvements relate to the rules on access to emission permits from other sectors, the non-CO₂ impacts of aviation, the cap, allowance distribution and the start date. They are not expected to have a disproportionate impact on the aviation industry and will be a very modest step towards the creation of a level playing field in the transport sector. In this section the vote in the

⁸ "Allocation of allowances for aviation in the EU ETS – the impact on the profitability of the aviation sector under high levels of auctioning" CE Delft (June 2007).

⁹ IATA Economics. January 2007. Financial impact of extending the EU ETS to airlines.

¹⁰ For more information please consult "Clearing the Air: the Myth and Reality of aviation and climate change": http://www.transportenvironment.org/docs/Publications/2006/2006-06_aviation_clearing_the_air_myths_reality.pdf

European Parliament in November, the political agreement reached by Council in December 2007, and the views of environmental NGOs are discussed.

1) Emission reductions within the aviation sector should be ensured

Given the special character of the aviation industry and its rapid growth, there is a real risk that airlines will prefer to limit their action to buying emissions permits from other sectors, instead of improving their own efficiency¹¹. A report by the Tyndall Centre for Climate Change (Manchester University) shows that if the EU is to achieve its climate protection targets, emission reductions within the aviation sector are needed¹². Indeed the Parliament was supportive of a separate scheme for aviation in its Resolution in 2006¹³.

The Commission's proposal contained no specific measures which would ensure that a proportion of the emission reductions will be made by the aviation sector itself.

In the plenary the European Parliament voted in favour of restricting the percentage of allowances that aircraft operators can buy from other sectors, and further restricted the percentage of allowances that could be bought from Clean Development Mechanism (CDM) or Joint Implementation (JI) projects, to a percentage of the total allowances that they are required to surrender (i.e. total emissions). They also voted in favour of including provisions that will require airlines to improve their fuel efficiency before they are allowed to buy emission permits from other sectors – i.e. only operators in line with the industry's voluntary fuel efficiency target of a 50% improvement by 2020 (compared to 2000)¹⁴ would have access to non-aviation emission permits.

The Council did not adopt any provisions to ensure emission reductions within the aviation sector.

A major opportunity to incentivize emission cuts within the aviation sector itself will be lost if the types of amendments proposed by the European Parliament are not adopted in the final Directive. Without such improvements the EU ETS will hardly affect the continued rapid growth of emissions from the sector.

2) The climate impacts of aviation are higher than the impact of CO₂ alone and should be accounted for from the start of the scheme.

There have been a number of studies assessing aviation emissions and their climatic effects. The figures now used by the IPCC are those presented by Sausen et al. (2005) in their study on Aviation Radiative Forcing in 2000¹⁵. This report provided an updated analysis of the contribution of aviation emissions to climate change, including both the direct and indirect impacts of CO₂, water vapour, nitrogen oxides, sulphate particles and soot particles. The combined impact of these gases was found to generate a Radiative Forcing Index (RFI) for aviation of 1.9 (i.e. aviation emissions have a global warming impact 1.9 times higher than CO₂ emissions alone). However, this does not include any value for the impact of aviation-induced cirrus cloud, since scientific uncertainty exists about the correct RFI value for cirrus. Existing

¹¹ This was clearly acknowledged in the Commission's own impact assessment.

¹² http://www.foe.co.uk/resource/reports/aviation_tyndall_07_main.pdf

¹³ <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P6-TA-2006-0296+0+DOC+XML+V0/EN>

¹⁴ To learn more about these self imposed industry commitments see: <http://www.sustainableaviation.co.uk/>. This target translates into a 3.5% fuel efficiency improvement per year. This same ACARE (Advisory Council for Aeronautical Research in Europe) target was also recently adopted by the EU's Joint Technology Initiative (JTI) see:- <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/181>

¹⁵ Sausen et al. (June 2005), *Aviation Radiative Forcing in 2000: An Update of IPCC (1999)*, and IPCC 4th Assessment Report: Working Group III report "Mitigation of Climate Change", chapter 5

studies however, suggest that including cirrus cloud impacts would result in a multiplier of between 2 and 5.

The Commission's proposal contained no provisions to address the non-CO₂ effects of aviation within the EU ETS itself although the draft states that "To address other gases, by the end of 2008, the Commission will put forward a proposal to address the nitrogen oxide emissions from aviation after a thorough impact assessment"¹⁶. The draft also acknowledges the IPCC estimate that the total impact of aviation is two to four times higher than the effect of CO₂ emissions alone, and the recent European Community research which indicates a figure of two.

The European Parliament voted in favour of amendments to deal with the non-CO₂ effects of aviation within the EU ETS. They proposed that a multiplier of 2.0 on the use of emission permits from other sectors and CDM/JI project credits be adopted, until flanking instruments to specifically address NOx emissions are introduced. Under this scenario a tonne of CO₂ emissions from aviation would be equivalent to 2 tonnes of CO₂ from land-based sources. MEPs also voted that a multiplier to take account of the effects of contrails and cirrus clouds on climate should be introduced as soon as the scientific understanding improves. Finally, the European Parliament called for Air Traffic Management authorities to investigate and work towards the elimination of the formation of aviation-induced clouds by avoiding aircraft navigation into zones where the atmospheric conditions suggest that the formation of such clouds is likely to occur.

No specific amendments to the Commission's proposal on this issue were adopted by the Council.

Although some scientific uncertainty remains as to the exact quantification of cirrus effects, the precautionary principle as enshrined in the Treaty (Art. 174) implies that this should not be used as a reason to ignore them. Environmental NGOs will continue to call for the speedy development and implementation of appropriate robust measures to address the non-CO₂ effects of aviation on the climate. However, in the mean time, it is crucial that non-CO₂ effects are not ignored. Given that aviation emissions are at least twice as damaging as carbon emissions alone, including aviation in EU ETS without a multiplier would allow the sector to pollute at twice the rate of other industries, resulting in significant climatic harm and an unfair advantage for aviation.

Therefore, based on the precautionary principle (and the Community's own research), we support the Parliament's proposal that a temporary multiplier of 2 is adopted. Only once appropriate stringent and compulsory measures are developed to address the non-CO₂ impacts of aviation, including effective legislation on NOx, should the use of the multiplier be reviewed¹⁷.

¹⁶ The European Commission has asked a consortium of consultants led by CE Delft to open discussions about measures to tackle nitrogen oxide (NOx) emissions from aviation. We welcome this step, but consider that, since the process is only just beginning, and a proposal is not due until later this year, any measures introduced are likely to lag behind the inclusion of aviation in the ETS.

¹⁷ Any proposal for an instrument to address NOx emissions should cover en-route NOx emissions, not just those of the Landing and Take-Off (LTO) cycle (which anyway have a negative impact on local air quality, rather than the global atmosphere). Failure to meet these conditions would be a violation of the principle that the polluter should pay, and should be accounted for by the continued use of an appropriate multiplier within the EU ETS.

3) Access to project credits from Clean Development Mechanism/Joint Implementation projects should be limited

It is important to note that the use of credits from CDM projects does not reduce global emissions overall. At best the CDM is a zero sum game - allowing emissions to increase in the country where the credits are being used. However, there is growing concern that many non-additional projects are being approved. These are projects which would have taken place anyway and are therefore actually allowing an increase in emissions globally when they are used to 'offset' emissions elsewhere. In the first half of 2007, for example, several articles in the mainstream media referred to poor quality CDM projects¹⁸. Indeed, a recent report by the Oeko-Institut suggested that approximately 20% of emission reductions certified under the CDM may have happened anyway¹⁹. This is the equivalent to around 34MtCO₂ per year – or the emissions from 7 coal fired power stations.

Putting concerns over additionality to one side - developed countries, who are historically responsible for the vast majority of human induced greenhouse gas emissions in the atmosphere, have a moral obligation to dramatically reduce their emissions, as well as a commitment to go first under the Kyoto Protocol, which clearly states the principle of common but differentiated responsibilities. The EU ETS will not help to achieve this if it continues to transfer the majority of the responsibility for tackling climate change to the developing world, thereby allowing sectors within the scheme to simply buy their way out of the problem²⁰. Concerns over the quality of CDM project credits merely add to the urgency of adopting a stringent cap on access to these credits.

For the period 2011-2012 the Commission's proposal restricted the number of allowances that could be bought from CDM or JI projects to the average of the percentages specified by Member States in the wider ETS (equating to roughly 10%). However, this percentage limit applies to the total allowances that the sector is required to surrender (i.e total emissions) – rather than the cap (as is the case in the wider scheme).

The European Parliament has voted in favour of further restricting the percentage of allowances that aircraft operators can buy from CDM or JI projects. They also voted for an amendment which stated that access to project credits should be reviewed alongside their use in other sectors as part of the overall review of the ETS.

The Council have opted to increase the limit on the number of CDM/JI allowances that can be surrendered by airlines to 15% of the total emissions from the sector.

Only the Parliament's proposals make some contribution to incorporating the principle of supplementarity - i.e. that the use of project credits should be a supplemental to the use of ETS allowances. However, NGOs believe there is still a clear need to improve these provisions. The most urgent changes would be (1) to change the reference to the limit on CDM and JI to a fraction of the cap rather a fraction of emissions - in line with the wider EU ETS. In this way - the number of project credits that may be surrendered does not increase with increasing

¹⁸ "Carbon trading 'not cutting CO2'" Tom Clarke, Channel 4 News report, 7 February 2007 http://www.channel4.com/news/articles/business_money/carbon+trading+not+cutting+co2/191945#fold and "Abuse and incompetence in fight against global warming" Nick Davies, 2 June 2007, The Guardian. <http://business.guardian.co.uk/story/0,,2093836,00.html>

¹⁹ "Is the CDM fulfilling its environmental objectives? An evaluation of the CDM and options for improvement" a report for WWF by the Oeko-Institut, November 2007.

²⁰ For example see "Emissions Impossible: access to JI/CDM credits in phase II of the EU ETS" WWF-UK, June 2007.

emissions; (2) to introduce clear qualitative criteria, providing a greater level of assurance that projects are truly additional, have a positive sustainable development impact, and contribute to a low carbon economy. NGOs propose that the use of project credits within the EU ETS should be limited to those certified by the Gold Standard²¹.

Beyond 2012 the level of access to and quality of project credits will be addressed in the revised EU ETS Directive.

4) The cap should be strengthened to ensure that the aviation sector's contribution to emissions reductions is meaningful and fair compared with other EU ETS sectors.

Under the Commission's proposal, the aviation sector will need to cap its emissions at the average level in the years 2004-2006 (the baseline). In practice, this means that the cap for the sector is set at approximately 90% above 1990 levels, while the cap for other sectors in the EU ETS must put the EU on track to meet the EU's Kyoto target (an 8% reduction below 1990 levels between 2008 and 2012).

Under the Commission's proposal, as already mentioned, the aviation sector would need to cap its emissions at the average level in the years 2004-2006 (the baseline).

The Parliament voted for the cap be set at 90% of the average level in the years 2004-2006 (the baseline), for the Phase starting in 2011. According to the European Parliament the cap for the negotiation period starting in 2013 should be revised downwards in line with the EU economy wide target for 2020.

The Council made no changes to the cap proposed by the Commission. It proposed, however, that a review of the Directive, as it applies to aviation activities, should be undertaken by June 2015 to consider, amongst other issues "the extent to which the total quantity of allowances to be allocated to aircraft operatorsshould be reduced in line with overall EU emissions reductions targets;".

The aviation industry must play its full and fair part in achieving the EU's climate commitments. The Parliament's proposal goes some way towards this but is not sufficient since it equates to an increase of 70% above the emissions from the sector in 1990. For the aviation sector to play a fair role in the Kyoto first commitment period, the cap on aviation would translate into a 50% cut below emissions in 2004/2006. Furthermore for phases of the scheme beyond 2012 it is crucial that the cap on aviation is reduced in line with the overall EU emissions reductions targets out to 2020 and beyond. As such we welcome the proposal by the Council that as part of a review of scheme the cap should be revised downwards. However we believe this revision should take place as soon as possible and certainly before 2015.

It is also important to note that a less stringent cap or a later baseline would not adequately address the concern that this proposal will disadvantage the fastest growing aviation markets (such as those in new EU Member States) over others. The problem of disproportionate impacts arises in case of inefficiencies or unfair **distribution of allowances** within the cap and **is not changed by the level of the cap or the baseline**. Fastest growing markets might be prejudiced

²¹ <http://www.cdmgoldstandard.org>. The Gold Standard is an independent, transparent, internationally recognised benchmark for "high quality" carbon offset projects. This standard is restricted to renewable energy and end use efficiency projects, requires projects to follow a conservative interpretation of the UNFCCC-additionality test and to provide evidence by a UNFCCC-accredited independent third party that they are making a real contribution to sustainable development.

if allowances are initially allocated to aircraft operators based on their performance or fuel consumption in an historical period. However, this historical period is not the same as the baseline (in the current Commission Proposal the historical period for allowance distribution is *the year ending 24 months before the start of each negotiation period*, unlike the baseline for the cap which refers to 2004-2006 emission levels). It is clear that such impacts need to be resolved or minimized in the **process of distributing allowances** (see next section).

5) Allowance distribution methodology - 100% of allowances should be auctioned

Auctioning

Free handouts of allowances, through grandfathering or benchmarking will reduce incentives for airlines to seek to reduce emissions themselves and could create significant market distortions. The Commission's proposal to revise the EU ETS Directive (released in January) considered auctioning "*the basic principle of allocation*". According to the Commission auctioning also "*best ensures efficiency of the ETS, transparency and simplicity of the system and avoids undesirable distributional effects*"²².

The Commission has proposed that the percentage of allowances to be auctioned (in 2011 and 2012) will correspond to the average percentage proposed by the Member States for phase II of the EU ETS. In reality this is just under 4% of the total allocation.

The European Parliament has strengthened this provision, adopting an amendment that asks for 25% of the permits to be auctioned up to the end of 2012 and allows the level of auctioning in future periods to be increased in line with the maximum level in other sectors.

The Council has opted to propose that 10% of allowances should be auctioned.

Environmental NGOs support full auctioning (100%) as it is, from an environmental, social and economic point of view, the superior way to distribute allowances. It:

- constitutes the practical application of the polluter-pays principle;
- generates revenues which can be used for climate change mitigation and adaptation measures (WWF estimates that full auctioning would generate between €3.3. and €9.8 billion per year²³);
- would not unduly damage the profit margins of airlines and would result in an extremely modest rise in ticket prices^{24,25};
- efficiently distributes permits without market distortions and does not penalize new entrants or rapidly-growing economies (particularly in the new Member States); and
- completely avoids the occurrence of 'windfall profits', essentially a massive capital transfer from consumers to airlines. New research undertaken on behalf of the UK Government concluded that a high level of free allocation would be likely to generate windfall profits for airlines and that a substantial level of auctioning would be needed to avoid this outcome²⁵.

²² http://ec.europa.eu/environment/climat/emission/pdf/com_2008_16_en.pdf

²³ Based on the aviation sector being allocated allowances based on emissions in 2005 (217.69MtCO₂) and the allowance price being €15 to €45.

²⁴ "Allocation of allowances for aviation in the EU ETS – the impact on the profitability of the aviation sector under high levels of auctioning." CE Delft, June 2007. The full report and WWF summary can be found at http://www.wwf.org.uk/news/n_0000004116.asp

²⁵ "A study to estimate ticket price changes for aviation in the EU ETS: a report for Defra and DfT", November 2007. <http://www.defra.gov.uk/environment/climatechange/trading/eu/future/pdf/ticketprices-report.pdf>

Beyond 2012 the level of auctioning will be addressed in the revised EU ETS Directive. Worryingly, however, the current draft of the Directive states that aviation will be treated like energy intensive sectors, in other words that it will receive 80% of its allowances for free in 2013 and will continue to be eligible for a percentage of free allocation up to 2020 by which time it will have been in the scheme for 10 years²⁶. For a sector which will clearly rely heavily on the purchase of credits from other sectors, and which evidence suggests may be able to pass through the costs (including opportunity costs) to the ticket price, continued free allocation is completely unacceptable.

Given the international character of aviation, it is important for the EU to gather as much support as possible from third countries and ensure that the impact of their participation in the scheme is fair. With this in mind, we suggest that auctioning revenues from flights operated to/from a third country be shared equally between that country and the EU. This is particularly important in the case of developing countries. The remainder of the revenues from auctioning should then be earmarked for climate change mitigation and adaptation activities. We advocate that 50% of these revenues remain in the EU, with the remaining 50% going to climate change mitigation and adaptation in developing countries. Whereas the Commission and the European Parliament have recognized the need for earmarking the funds, the Council has proposed only a weak “should” form of wording on this point.

Benchmark based on RTK

Under the Commission’s proposal, however, airlines will receive the majority of their allowances for free via the use of an updated benchmark²⁷ based on an airline’s performance in the year ending two years before the start of a trading phase. In the current proposal this performance will be assessed by multiplying the total payload of an airline (the weight carried in terms of freight and passengers) by the total number of kilometres between airports it travels²⁸. In the aviation sector this is known as ‘revenue tonne kilometres’ (**RTK**)²⁹.

It is clear that all benchmark parameters will lead to some distributional impacts and market disruptions – there will always be winners and losers. However, if full auctioning of allowances does not receive the necessary political support then the second best option is to allocate a small percentage of allowances as assessed via an ‘output based’ benchmark such as the **RTK benchmark** proposed by the Commission which rewards early action³⁰. Such a benchmark takes into account the actual weight transported by an airline and will best incentivise the most efficient use of aircraft. For passenger flights, for example, it should encourage airlines to maximise the number of people on their flights.

Not only is this type of benchmark the best option (apart from auctioning) from an environmental point of view, recent research for the UK Government also showed that this had

²⁶ The revised draft Directive reads “Aviation should be treated as other industries which receive transitional free allocation rather than as electricity generators, which means that from 2013 onwards, 80% of allowances should be allocated for free in 2013, and thereafter the free allocation to aviation should decrease each year by equal amounts resulting in no free allocation in 2020”

²⁷ The use of an updated benchmark could actually act as a perverse incentive for ticket price reductions every five years to boost demand for air transport. So in 2008 (two years before aviation is currently due to enter the ETS) airlines might try to maximise the number of allowances they will receive by reducing their ticket prices and encouraging more people to fly. The proposal in its current form might therefore lead to an increase in emissions from the aviation sector one year out of every five.

²⁸ The Council have proposed that an additional fixed factor of 95km is added to this distance.

²⁹ In the current proposal passenger kilometers are translated into tonne kilometers by assuming an average weight of a passenger (including luggage) of 100kg

³⁰ By allocating allowances in this way airlines will receive a share of the total amount of allowances which is in proportion to their share in total output.

fewer distributional impacts for the airline types analysed than either ‘input-based’ (discussed below) or ‘fleet age’ benchmarks³¹.

The Commission have proposed to allocate free allowances, based on the application of an RTK benchmark as discussed previously. They also propose a passenger weight of 100kg to translate passenger-kilometers into tonne-kilometers. This weight translation is not in line with latest scientific knowledge in this area (or with the conclusions of research for the UK Government²⁹).

The European Parliament supported the use of RTK and the proposed passenger translation weight.

The Council supported the use of RTK but have increased the passenger translation weight to 110kg.

NGOs believe that a value of 160kg for the passenger translation weight should be used for the RTK benchmark, if some allowances are to be provided for free as this better takes into account the weight of the seat, toilet and other fittings³².

New entrants

In order to take into account the fastest growing aviation markets and new market entrants the Parliament and Council are also seeking to create a **reserve fund**. Although this might help to minimize some of the problems associated with the free distribution of permits based on historical performance, this reserve fund will create new problems given the difficulties associated with the definition of a new entrant. Environmental NGOs underline that the best method to avoid disproportionate impacts from this Directive on new entrants and fastest growing aviation markets is to apply **full auctioning**. The higher the level of auctioning the less penalized new entrants and fast growing aviation markets will be.

The Commission did not suggest a ‘new entrant’ or special reserve fund in their proposal.

The European Parliament supported an amendment that would require a reserve to be established with the percentage of the total quantity of allowances allocated to the reserve to be set by the Commission for each period.

The Council have opted for the creation of a reserve that would retain 3% of the total quantity of allowances.

6) All flights departing from and arriving in the EU should be included from 2010. The scope should be as broad as possible, including emissions from business flights.

Analysis by the Commission confirms that the option of including all departing and arriving flights into the scheme would give the biggest environmental benefits, and would not introduce distortional effects in terms of competition between airlines, airports or tourist destinations. Nor, in the Commission’s view, would it be counter to any international treaties or agreements.

³¹ *The impacts of the use of different benchmarking methodologies on the initial allocation of emissions trading scheme permits to airlines: Final report to DfT Aviation and Environmental Division and the Environment Agency (July 2007)*, CE-Delft and Manchester Metropolitan University, <http://www.dft.gov.uk/pgr/aviation/environmentalissues/benchmarkingmethodologies/>

³² For more information on allocation see the NGO briefing ‘Briefing: allocation of allowances to airlines in the EU Emissions Trading Scheme (benchmarking and Auctioning)’, September 2007.

The Commission's proposal states that intra-EU flights will be included in 2011 and that all flights arriving at or departing from an EU airport will be in the scheme by 2012.

The European Parliament has voted to include all flights from 2011.

The Council supports the inclusion of all flights from 2012.

There is no legal or political justification for the Commission's two-step approach, and certainly none on environmental grounds, since an intra-EU scheme would cover only approximately a quarter of emissions of all flights. Also the Council has not given a specific reason for postponing the start of the scheme to 2012. Environmental NGOs advocate that all flights departing from arriving in the EU should be included in the EU ETS from the start of the scheme and that a more ambitious start date of 2010 should be set.

Flights to and from ultraperipheral (outermost) regions and airlines operating few flights

The Commission's proposal states "*Special consideration to the treatment of air services to remote or isolated regions, where are particularly dependent on air transport services, can best be given within the framework of existing measures such as public service obligations and aid having a social character under Article 87(2) of the Treaty.*"

The European Parliament's report stated "*Member States may also use the revenues to mitigate or even eliminate any accessibility and competitiveness problems arising for outermost regions and problems for public service obligations in connection with the implementation of this Directive.*"

The Council has proposed that flights to and from ultraperipheral regions are excluded from the scope of the scheme. The Council's proposal could, in addition, exempt routes "where the capacity offered does not exceed 30 000 seats per year"

We recognize that inclusion in the scheme may have greater consequences for the flights to and from the outermost regions, due to their specific natural and economic conditions, such as the small number of passengers and their dependency on these flights. Indeed, the Council has proposed that these flights are excluded from the scope of the scheme. However, such a move would weaken the EU ETS and set a dangerous precedent, not least for the international negotiations associated with the inclusion of non-EU carriers³³. Given the special character of these regions, most of these flights are protected from closure by existing public service obligations and are often the recipients of subsidies³⁴. In our view, these instruments offer adequate support to 'lifeline' flights and NGOs support the European Parliament approach in this issue.

Exclusion of smaller aircraft

The Commission proposal includes all flights above 5,700 kg of Maximum Take-Off Weight (MTOW).

The Parliament voted to increase this weight to 20,000 kg MTOW

The Council supported the Commission's proposal.

³³ Note that the EU is 'fighting' to keep its ability to include carriers from third countries in the scheme. It does not seem to be coherent to call for the inclusion of flights to/from developing countries (for example, in Africa) and the exclusion of flights to some EU regions.

³⁴ "Outermost regions: European Commission authorises social aid for air passengers" IP/05/455 European Commission press release

NGOs agree with the Commission Proposal (and the Council) that all flights above 5,700 kg of Maximum Take-Off Weight (MTOW) should be included. This threshold ensures that market distortions are minimised, while the environmental effectiveness of the scheme is maximized, by ensuring that all business aviation jets and commercial aircraft would be included. With a higher value of 20,000 kg of MTOW, as voted for by the European Parliament, most business jets would be outside the scope of the scheme, leading to market distortions. Moreover, it would be extremely unfair to exempt business aviation and private jets: the fastest growing aviation markets that are mainly used by the wealthiest people in society.

7) Parallel and complementary policies and measures

It should be recognised in the EU ETS Directive that the inclusion of aviation in the scheme should be seen as only the first step in addressing the climate change impacts of the sector. Other policies and measures are needed, as the European Parliament recognised in its resolution of June 2006 and reinforced in its Plenary vote.

Parallel and complementary measures could include:

- a kerosene tax on fuel for domestic flights and, where there is agreement, a tax on fuel on flights between two member states;
- the immediate ending of VAT exemption, for example with a tax on air tickets;
- en-route NOx emissions charges;
- capacity constraint measures;
- a concrete proposal on tackling contrail-formation, where appropriate, and the prioritisation of work to quantify the impacts of contrails and contrail cirrus and to determine appropriate Air Traffic Control measures to mitigate them; and
- improved air traffic management systems and more direct routing.

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