



**ICAO Workshop on Aviation and Carbon Markets  
18-19 June 2008, Montreal**

**Closing remarks  
Ms. F. Odutola, D/ATB, ICAO**

After two days of a very informative workshop, I would like to summarize some of the proposals and questions raised during this event as ICAO moves towards establishing the programme of action on international aviation emissions.

I will begin with references to the excellent keynote address by the Executive Secretary of the UNFCCC, Mr. Yvo de Boer. Mr. de Boer put two very important questions to the audience: What is the international aviation sector going to contribute to a Copenhagen deal? And, to what extent does ICAO think this would be possible without a cap-and-trade approach?

Mr. de Boer commended ICAO for organizing this timely workshop on a carbon market for the international aviation sector, adding he was convinced that it could work for aviation, as it does for other markets.

Mr. de Boer nevertheless recognised the difficulties in doing so and highlighted a few of the challenges:

- how to ensure that all countries are engaged
- how to assist developing countries in reducing their emissions; and
- how to ensure that economic growth imperatives are respected.

The question of how to improve aviation emissions data and estimation/modelling, and how to effectively convey such data to the public and to policymakers, was also addressed. This involves providing clear and accurate information on the volumes and growth of emissions for domestic and international air transport, as well as knowledge of the experience of different States or regions.

On the issue of non CO<sub>2</sub> multipliers, it was made clear that no specific recommendation can be given to date, as there are still scientific uncertainties, including a lack of consensus on the most appropriate metrics to be used. It was demonstrated that RFI is unsuitable for a changing atmosphere and a changing aviation fleet; the choice of multipliers requires that climate protection goals and priorities be established by policymakers.

These priorities are:

- 1) Penalty for past contribution of aviation to today's climate change;
- 2) Trade/offset for future climate impacts of today's emissions against a savings in another economic sector; and
- 3) Targets to avoid dangerous climate change (eg 3°C or 550 ppm CO<sub>2</sub> eq)

A number of other interesting issues were raised during this segment of the workshop, including the question of how we can develop a multiplier for aviation if climate impacts of aviation are flight dependent.

The afternoon session on Day 1 focused on existing emissions trading schemes. The following questions were raised:

- How linkable are the ET schemes?
- Why is aviation being given such a priority among the new sectors to be included when it still constitutes a very small proportion of the emissions even within the transport sector?
- EU ETS is the only one to date with a proposal for the inclusion of aviation—how long will this be the case?
- What is the best solution for aviation?
  - Fleet renewal with more efficient aircraft
  - Technical fixes to airframe and surfaces
  - Biofuel admixtures
  - Optimisation of timetables and routes: Define the cost-curve over time for each of these and other emissions-reducing actions
  - Buy emissions reductions on the market accordingly
  - Pass through costs and accept some extra reduction in demand increase.

Today we reviewed emerging carbon markets and how the aviation sector can still take advantage of market opportunities. Some suggestions were given on how airlines can implement strategies to navigate the projects.

It was mentioned that the aviation sector is experiencing the highest growth rates in terms of emissions, but that was later shown not to be the case. Even within the transport sector, road transport related emissions were shown to be growing and projected to grow at much higher rates than aviation.

It was also pointed out that CDM is a very important market yet still very limited.

We learned that offsets are generating an increasing level of interest from the general public. Consumers pay careful attention to details and therefore credibility is paramount. The public demands a robust and truthful system.

We have also learned that for offset programmes to be successful, they need to demonstrate high environmental standards. Therefore, it is necessary that a third party verify the credibility and environmental quality of all proposed programmes.

Questions still remain on how to include offsets in the travel business. For instance, should offsetting one's carbon footprint be the choice of the consumer or should it be included in the price of travel? How can we determine the real amount of CO<sub>2</sub> per flight so that consumers pay an accurate price? How can we be sure that we are reducing emissions when offsetting them? As well, what is the best way to change travel policies and make travel less of a pollutant?

There is the notion that offsets are very interesting to the aviation sector in the short term but that once a regulatory market enters into force, airlines could withdraw.

Another important issue raised is that offsetting efforts already being made within the aviation sector which should be accounted for but, at present, are not.

This afternoon session also talked about the challenges in creating global schemes by linking existing ones. We have been informed that a unilateral link (open system) is easy to implement and most of the schemes that will be implemented will be unilaterally linked with the CDM.

For this scenario, prices are possibly converging to the price of CERs. There are many possibilities for aviation emissions trading schemes to be implemented. In the case of choosing a separate system with links to CDM, the carbon price shall be the same as for other domestic systems.

A global scheme will more likely emerge from linking regional and national schemes; and an environmentally more effective CDM will continue to play a role, although offsetting alone will not be enough.

The workshop was informed that the best solution would be a global scheme but that the ultimate goal is, in fact, global coverage. There are a limited number of schemes and not much uniformity. ICAO can play an important role in linking these schemes.

A crucial aspect is that such schemes could be accounted for and recognized as offsetting aviation emissions and ICAO could monitor and report the total aviation emissions offsets.

The astronomical increase in fuel prices in recent times and its implications on the carbon market was an overriding issue. It was noted that for the first time, the cost of fuel is higher than the cost of carbon. Approximately 40% of the cost of an air ticket is attributable to fuel costs, capacity is being reduced and all of this is having an impact on fuel burn and emissions. These implications differ by region.

With regards to financing mitigation and adaptation, we learnt that there is some discussion and emerging proposals on investment and financial flows relevant to the development of an effective and appropriate international response to climate change, such as the adaptation fund. Private funding is also being considered.

Some of these funds are now considering using resources from the aviation sector to fund adaptation, mitigation or technology transfer.

Those would take the form of auction of allowances for international aviation and marine emissions or an international air travel levy.

ICAO needs to be aware and fully consider such proposals with a view to informing the GIACC on the adequacy and viability of such proposals.

I would like to remind you that carbon markets are only one part of the solution. We must continue to address all possible measures, including new technologies to reduce emissions at source, new operational measures that result in shorter and more direct air routes and more environmentally- friendly operations and market-based measures to complement the package of solutions.

A plethora of useful information has been gathered at this workshop which, in no small way, will assist this organization in working out the modalities for enabling the aviation sector to play its role in protecting the environment from the adverse effect of its activities.

Finally, on behalf of the entire organization I wish to thank the Environment Unit for organizing such an insightful and informative workshop.

My most sincere gratitude also goes to the speakers and chairs/moderators of the different panels who took the time out of their very busy schedules to be here and share their important work. Last but not the least, I would like to thank each and every one of you for attending and have a safe return home.