



WORKING PAPER

ASSEMBLY — 37TH SESSION

EXECUTIVE COMMITTEE

Agenda Item 17: Environmental protection

**A MORE AMBITIOUS, COLLECTIVE APPROACH TO INTERNATIONAL AVIATION
GREENHOUSE GAS EMISSIONS**

(Presented by Canada, Mexico and the United States)

EXECUTIVE SUMMARY

The international civil aviation sector demonstrated its commitment to work together to mitigate its climate change impacts by adopting at the High-level Meeting on International Aviation and Climate Change the first global Programme of Action of any sector that included a global, aspirational goal of annual fuel efficiency improvement to 2050. The HLM also concluded that more can and should be done beyond this initial agreement, calling for further work on goals of greater ambition such as carbon neutral growth and on a framework for market based measures in international civil aviation. This paper proposes a package approach to both these elements as a component of the climate portion of the resolution of the 37th Session of the Assembly.

Action: The Assembly is invited to consider and adopt for inclusion in the resolution the proposed text in 4.2, 4.3, and 4.4.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective C, <i>Environmental Protection – minimize the adverse effect of global civil aviation on the environment.</i>
<i>Financial implications:</i>	No additional resources required.
<i>References:</i>	High-level Meeting on International Aviation and Climate Change Declaration Resolution A36-22 Appendix L – <i>Market Based Measures Including Emissions Trading</i> Doc 9885 – <i>Guidance on the Use of Emissions Trading for Aviation</i>

1. INTRODUCTION

1.1 The Group on International Aviation and Climate Change (GIACC) was established by the 36th Session of the Assembly to develop an aggressive Programme of Action on International Aviation and Climate Change, including global aspirational goals and an implementation framework.

1.2 The High-level Meeting on International Aviation and Climate Change (HLM) in October 2009 was the culmination of the GIACC process to address international aviation CO₂ emissions. The Programme of Action was a fundamental step demonstrating the global civil aviation sector commitment to work together to mitigate its climate change impact. The Programme of Action includes:

- a) short term (to 2012), medium term (to 2020) and long term (to 2050) global aspirational goals of two percent annual fuel efficiency improvements. The goals are collective and do not attribute obligations to individual States;

- b) a basket of measures from which States may choose in formulating action plans to contribute to the global aspirational goals;
- c) commitment to develop an approach and for all States to submit to the Secretariat data on traffic and fuel consumption per Article 67 of the Convention on International Aviation (the Convention); and
- d) encouragement of all States to develop and file with ICAO action plans outlining their respective approaches.

1.3 However, the HLM concluded that more can and should be done beyond the initial agreement. The HLM recommended further work on goals of greater ambition, including carbon neutral growth and emission reductions, taking into account the collective commitments announced by the international air transport industry, the special circumstances and respective capabilities of developing countries and the sustainable growth of the international aviation industry. In addition, the HLM called for a process to develop a framework for market-based measures (MBMs) in international civil aviation. At a minimum, principles should be established for the application of MBMs by States to facilitate a coherent approach consistent with the safe and orderly development of international air transport services.

1.4 The matter of identifying a more ambitious global goal for international civil aviation beyond fuel efficiency improvement and the issue of how States develop and consult on MBMs applied to international air transport were the central points of discussion in an informal “friends of the President” group (the DGCA Climate Group) called by Council President Kobeh. Representatives of many States underscored the need for an agreement on these matters as a “package”. This paper proposes a “package” approach as an element for the climate portion of the resolution of the 37th Assembly.

2. MORE AMBITIOUS GOAL

2.1 Discussion in the DGCA Climate Group focused on a more ambitious global goal of carbon neutral growth for international aviation in the medium term (2020) and emphasized that the more ambitious global goal would not attribute specific obligations to individual States. The different circumstances and respective capabilities of States would determine what actions each State could contribute.

2.2 The level of ambition for the goal is critical. The global civil aviation industry has committed to reach carbon neutral growth from 2020, without any governmental help or action. A goal of carbon neutral growth would limit the level of CO₂ emissions of the global sector relative to its emissions from a chosen baseline period. States across the globe are already taking a variety of actions, enabling a more ambitious goal using an earlier baseline by which to compare global emissions levels, which we suggest be 2005. In its report, GIACC calculated cumulative benefits of the fuel-efficiency goal from a 2005 baseline. Global industry uses 2005 as a baseline from which to measure emissions reductions in the long term (2050).

2.3 A more ambitious global goal of carbon neutral growth by 2020 compared to 2005 levels would represent an important step beyond the HLM to demonstrate the commitment of the international civil aviation community toward meeting ICAO’s collective commitment to limit or reduce international civil aviation GHG emissions. It would also serve as a concrete demonstration of the commitment of ICAO and its Contracting States to contribute to efforts to limit the increase in global temperature to 2 degrees Celsius. The goal would be ambitious and would require, at a global level, a determined, collective commitment by all States to foster the necessary innovation and deployment of new technologies and measures to complement the commitments already made by the international aviation industry.

2.4 Consistent with the Programme of Action, each State would determine its plan of action to contribute to meeting the global goal, based on research, its own national capacities and circumstance, as well as projected growth for its international aviation sector. It is recognized that while all countries would strive to meet the goal, emissions from some Contracting States may increase due to anticipated growth in their international air traffic until lower emitting technologies, fuels, and other measures are developed and deployed.

2.5 All States would be encouraged to submit action plans to contribute to achieving collectively the goals. Action plans should draw on the basket of measures agreed at the HLM. Those States above a *de minimis* threshold of international aviation activity, such as a proposed level of 1/2 of 1% of total revenue ton kilometres accounting for more than 90% of emissions, would be expected to do so.

3. **INTERNATIONAL APPLICATION OF MARKET-BASED MEASURES**

3.1 The matter of how States should work together regarding MBMs and international civil aviation has been a recurring issue since the 36th Session of the Assembly and remains controversial. The broad variation in States' interest and plans to implement MBMs for international civil aviation, as part of the effort to address civil aviation's CO₂ emissions, was a key theme in the GIACC and Climate Group processes. The international nature of aviation and the need to avoid discrimination among carriers have led States and industry to favor a global sectoral approach. However, there is no consensus on such a global approach at this time. In the interim, some States have developed and are preparing to apply MBMs, including emissions trading schemes that could apply to international civil aviation. Others may consider other MBMs or other approaches such as improvements in ATM and the use of alternative fuels.

3.2 ICAO guidance for applying many MBMs—such as taxes and charges—to international civil aviation already exists for local environmental emissions, such as noise and air pollutants; however, there is insufficient guidance for applying these types of MBMs to address international civil aviation GHG emissions. ICAO has provided guidance on the use of emissions trading for international civil aviation in ICAO Doc 9885. There remains disagreement over this guidance as well as A36-22 Appendix L regarding the application of one State's emissions trading system to another State's airlines. Bridging this difference would help to ensure a coherent approach across different measures that may be taken by States, while maintaining the safe and orderly development of international air transport.

3.3 To address the potential divergence in approaches, principles should be agreed to guide the development of MBMs as they apply to international civil aviation. The principles would complement existing ICAO guidance on the application of emissions trading schemes to international civil aviation. As noted above, the issue of mutual agreement between States has been controversial. Those supporting the concept point to the importance of agreement to ensure non-discrimination on terms acceptable to both parties; others express concern that mutual agreement with many parties would make progress difficult. Nevertheless, the majority of ICAO Contracting States believe that development and application of emissions trading schemes to international civil aviation should have agreement between the affected States. States seeking to apply emissions trading to international civil aviation should engage other States whose carriers would be affected with a view to seeking a mutually agreeable way forward, if possible; so too, States receiving such proposals should engage constructively with the proposing State(s). Guiding the proposed principle in paragraph 4.4 is the notion that States, as a matter of normal course in relations with other States, consult on international civil aviation matters including the exchange of air transport rights and obligations, consistent with the safe and orderly development of international air transport.

4. PROPOSED “PACKAGE” APPROACH

4.1 An effective, global framework to limit or reduce CO₂ emissions from international civil aviation should include an agreement on the two central components of the aviation and climate change debate, as outlined above: an ambitious global goal and principles to guide States’ application of MBMs. The following provisions should appear, then, in the resolution of the 37th Session of the Assembly:

4.2 Regarding a more ambitious, global goal to address international civil aviation CO₂ emissions:

“The Assembly resolves that ICAO and its Contracting States shall strive to achieve a collective global goal of carbon neutral growth by 2020 based on a 2005 baseline. Contracting States will send to the ICAO Secretariat, by mid 2012, their national plans of action for achieving the collective global goal of carbon neutral growth. Those States below a *de minimis* threshold of international aviation activity of 1/2 of 1% of total revenue ton kilometres would be welcome, but not expected, to submit action plans. The Assembly requests the Secretariat to prepare an action plan template for review and adoption by Parties at a Council session in 2011. Each State will determine its plan of actions, based on its own national capacities and circumstances as well as projected growth for its sector. The Assembly recognizes that while all countries will strive to meet the goal, emissions from some Contracting States may increase due to expected growth in air traffic until lower emitting technologies and fuels and other mitigating measures are developed and deployed.”

4.3 Regarding principles that could be applied across a range of MBMs to international civil aviation:

- a) “MBMs should be consistent with sustainable growth of the international civil aviation sector”;
- b) “MBMs should recognize investments already made to improve efficiency”;
- c) “MBMs should avoid significant market distortions and respect non-discrimination among operators”;
- d) “MBMs should not be duplicative and international civil aviation CO₂ emissions should be accounted for only once”;
- e) “MBMs should be cost-effective, transparent, and as simple as possible, and should stimulate emissions reduction”;
- f) “Where appropriate, MBMs should include open access to carbon markets”;
- g) “Emissions reductions achieved through MBMs should be clearly demonstrated and calculated in the context of robust emissions reporting”; and
- h) “These principles should be reviewed and refined based on experience.”

4.4 Regarding principles that could be applied to emissions trading in particular:

- a) “The Assembly urges Contracting States seeking to implement an emissions trading system that applies to other Contracting States’ aircraft operators to do so on the basis of mutual agreement”; and
- b) “The Assembly urges Contracting States that receive such proposals from other States to engage constructively in negotiations with the proposing State or States to achieve an agreed way forward, if possible.”