



International Civil Aviation Organization

**WORKING PAPER**

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**ASSEMBLY — 40TH SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 16: Environmental Protection – International Aviation and Climate Change — Policy and Standardization**

**SETTING A LONG-TERM CLIMATE CHANGE GOAL FOR INTERNATIONAL AVIATION**

(Presented by the International Coalition for Sustainable Aviation (ICSA))

**EXECUTIVE SUMMARY**

This working paper notes the urgent need for all States and sectors to deliver the goals set out in the Paris Agreement, reinforced by the recent IPCC Special Report on the impacts of global warming of 1.5°C. IMO has recently agreed an absolute CO<sub>2</sub> emissions reduction target for 2050 along with the goal of complete decarbonization no later than 2099. The working paper sets out a proposed timetable for ICAO to agree a long-term goal (LTG) no later than the 41<sup>st</sup> Assembly. Action by the Assembly is in paragraph 4.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective - Environmental Protection
<i>Financial implications:</i>	The work will require states and international organisations to commit appropriate resources to the work of CAEP, as well as support from ICAO Environment Branch. Much of this work is already underway in CAEP as part of the CAEP12 work programme.
<i>References:</i>	<ul style="list-style-type: none"><li>• <a href="https://theicct.org/publications/IMO-initial-GHG-strategy">https://theicct.org/publications/IMO-initial-GHG-strategy</a></li><li>• <a href="http://www.imo.org/en/MediaCentre/HotTopics/Pages/Reducing-greenhouse-gas-emissions-from-ships.aspx">http://www.imo.org/en/MediaCentre/HotTopics/Pages/Reducing-greenhouse-gas-emissions-from-ships.aspx</a></li><li>• A40-WP/58</li></ul>

<sup>1</sup> Language versions provided by ICSA.

## 1. INTRODUCTION

1.1 The 2015 Paris Agreement commits to: “Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels...”. The Agreement further commits parties to “achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases”, bringing international aviation within its remit. In October 2018, the Intergovernmental Panel on Climate Change (IPCC) published “The Global Warming of 1.5 °C”, its Special Report on the impacts of global warming of 1.5°C above pre-industrial levels, and related greenhouse gas pathways.

1.2 In the report, IPCC notes that limiting global warming to 1.5°C will “require rapid, far-reaching and unprecedented changes in all aspects of society” with the aim of reaching net-zero emissions by the second half of the century. It also found that the impacts of only holding the global average temperature to 2°C above pre-industrial levels would be considerably more disastrous for human populations and the ecosystems on which they depend, highlighting why pursuing efforts to keep warming to 1.5°C should be the goal for all policy makers. Furthermore, the report shows that, while transformational change is happening in the power sector with the rapid expansion of renewable electricity generation capacity, progress in the transportation sector is lagging behind and needs to start its own transformation immediately. It also highlights the need for urgent action by the global community to cut the impact of short-lived climate pollutants (SLCPs).

1.3 Public awareness and concern about aviation’s contribution to climate change is at all time high. The topic was at the top of the industry’s agenda at this year’s Paris Air Show and at IATA’s AGM, and a European airline recently launched a ‘fly responsibly’ campaign that encourages passengers to think about how they can minimise emissions, including using other modes for some journeys. The sector’s public visibility will only increase as its emissions grow while, at the same time, there’s a scientific, societal and political move towards net zero emissions by mid-century.

1.4 Despite successive Assembly resolutions calling on the Council to continue exploring the feasibility of a long-term goal (Assembly Resolutions, 37-19, 38-18 and 39-2), ICAO is yet to bring forward a proposal, while the industry’s own 2050 long-term goal (LTG) for international aviation was developed and agreed over a decade ago. Clause 9 of the proposed revisions to Assembly Resolution A39-2, *Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change*, set out in A40-WP/58, simply repeats ICAO’s long-standing policy in this area and falls significantly short of an effective response to calls for states and sectors to show greater ambition to tackle climate change.

## 2. SECTORAL RESPONSES: INTERNATIONAL SHIPPING AND AVIATION

2.1 In contrast to international aviation, the 72<sup>nd</sup> meeting of the International Maritime Organisation’s (IMO) Marine Environmental Protection Committee (MEPC 72) adopted a long term climate goal via a resolution establishing an initial greenhouse gas strategy for international shipping (Ref: <http://www.imo.org/en/MediaCentre/HotTopics/Pages/Reducing-greenhouse-gas-emissions-from-ships.aspx> ). The strategy includes an absolute CO<sub>2</sub> emissions reduction target for 2050 (i.e. without offsetting) that would require cutting accumulated emissions between 60% and 70% versus business as usual (BAU), along with the goal of complete decarbonization no later than 2099 (Ref: <https://theicct.org/publications/IMO-initial-GHG-strategy> ).

2.2 An ICSA analysis, presented to CAEP, concludes that international aviation will at least triple its proportional share of a Paris-compatible 1.5°C budget through 2050 under current policies. By 2050, international aviation could account for 18% of global carbon dioxide (CO<sub>2</sub>), and by 2060 100% of emissions if the overall global economy decarbonizes to meet a 1.5°C temperature goal. This analysis highlights the urgency to begin decarbonizing aviation under a LTG.

### **3. THE URGENT NEED FOR ICAO TO DEVELOP A LTG FOR INTERNATIONAL AVIATION**

3.1 The temperature-based goals in the Paris Agreement cover all States and sectors including international aviation. A temperature-based goal further mandates action to address all drivers of climate change, including CO<sub>2</sub> but also SLCPs such as cruise nitrogen oxides (NO<sub>x</sub>), black carbon, and aviation induced cloudiness (AIC). ICSA believes that ICAO should set a LTG as a matter of urgency, demonstrating how the sector, in relation to both CO<sub>2</sub> and non- CO<sub>2</sub>, will make a fair contribution to the overall effort necessary to deliver net-zero emissions and the 1.5°C temperature goal. The IPCC Special Report, and the UN Secretary General’s Climate Change Summit, called for more ambition and highlighted that the timing of climate action is critical. ICSA calls on the 40<sup>th</sup> Assembly to formally commit to a process and timetable for the analysis and development of a proposal for a long-term goal, to be presented for adoption as soon as possible at an extraordinary meeting of the Assembly, but certainly no later than the scheduled date for the 41<sup>st</sup> Assembly in 2022. Delaying this decision beyond the 41<sup>st</sup> Assembly would be unacceptable to civil society organisations, and would fail to send the necessary signals to the industry on the scale of improvement required to guide the development of sustainable alternative fuels, and new technologies. This would be a missed opportunity.

3.2 The CAEP Secretariat has already provided CAEP with an initial assessment of international aviation emissions in the context of 1.5 °C and 2 °C scenarios, and further analysis has been tasked from CAEP’s Impacts and Science Group in the CAEP12 cycle.

3.3 ICSA supports this ongoing analysis of a long-term goal by CAEP, although the initial focus on a ‘bottom-up approach’ informed by actions and measures being undertaken by states, must be expanded to include a scientific analysis of the reductions required by the international aviation sector to play an equitable role in contributing to the Paris Agreement (a ‘top-down approach’). While the initial focus of this work is on carbon dioxide (CO<sub>2</sub>), setting a long-term climate change goal should also be informed by an assessment of all aviation’s impacts on climate change, including SLCPs.

3.4 In drafting a long-term goal, ICAO should be cognisant of the connection between a credible long-term goal, and the adoption of effective short-term measures to reduce emissions from the sector. The ongoing increase in emissions from the international aviation sector is rapidly decreasing the remaining carbon budget for a 1.5°C goal, thereby necessitating steeper cuts in the future in order to stay within this temperature increase. Conversely, an immediate and sustained decrease in emissions from the international aviation sector would facilitate a less drastic reduction in emissions. To minimise disruption to the sector, target setting should therefore draw a clear link between immediate emission reductions and a long-term goal.

3.5 ICSA invites the 40th Assembly to request Council to:

3.5.1 instruct CAEP to complete its analysis of a long-term goal, based on a top-down as well as a bottom-up approach, and taking SLCPs into account, no later than the second steering group meeting of the CAEP12 cycle in 2020;

3.5.2 initiate a high-level meeting early in 2021 to share CAEP's analysis with all member states and international organisations, and to discuss the all elements of a recommendation;

3.5.3 recommend a proposal for a long-term goal for agreement by members states as soon as possible thereafter, if necessary by convening an extraordinary meeting of the Assembly, but no later than the scheduled 41st session of the Assembly in 2022.

#### 4. **CONCLUSION**

4.1 Agree that the development of an ICAO long-term climate goal, consistent with the objectives of the Paris Agreement, is a matter of urgency;

4.2 Develop a process to agree a LTG taking into account ICISA's recommendations in section 3 of this working paper.

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