

# High-level meeting on the feasibility of a long-term aspirational goal for international aviation CO<sub>2</sub> emissions reductions

By ICAO Secretariat

## Introduction

Ministers and officials from 119 Member States and International Organizations attended the High-level Meeting on the feasibility of a Long-Term Aspirational Goal for international aviation CO<sub>2</sub> emissions reductions (HLM-LTAG), which was convened from 19 to 22 July 2022, at ICAO Headquarters in Montréal, Canada, as a hybrid event with in-person and virtual participation.

The need for the HLM-LTAG stems from the ICAO Assembly Resolution A40-18, paragraph 9, which requested the Council to explore the feasibility of an LTAG, and for the progress of the work to be presented to the 41<sup>st</sup> Session of the ICAO Assembly. The HLM-LTAG was invited to discuss the CO<sub>2</sub> emissions reduction scenarios and options for a goal, along with the means of implementation and the monitoring of progress, before concluding with recommendations. The meeting documentation is available on the dedicated web-page<sup>1</sup>.

The HLM-LTAG was preceded by the online 2022 ICAO Stocktaking, held on 18 July 2022, to enable the sharing of the latest information, including green innovations on technology, operations and fuels, and to set the scene for the subsequent High-Level Meeting. The figure below shows the ICAO LTAG process and timeline leading up to the HLM-LTAG.

## HLM-LTAG Opening

On Tuesday, 19 July 2022, the HLM-LTAG was opened with an address by the President of the ICAO Council and a video on LTAG<sup>2</sup>. The President welcomed the Delegations and encouraged them to demonstrate collective determination to build a sustainable future for international aviation, and to show strong political will on the part of States to work together through ICAO with each other and with the aviation industry to deliver outcomes for an ambitious LTAG. He underscored that LTAG must be delivered together with concrete and practical means of support for implementation support and for monitoring progress, as agreement of a “balanced package” for all, under the leadership of ICAO in a post-COVID world.

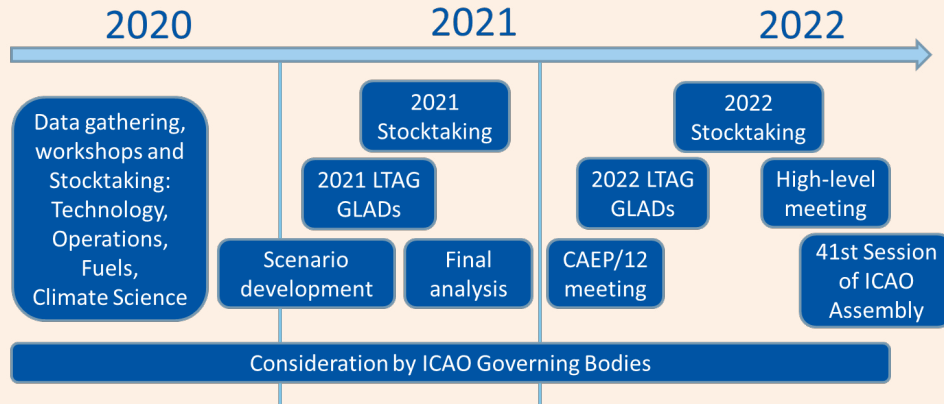
Afterwards, Dr. Bertrand Piccard, Initiator and Chairman of the Solar Impulse Foundation, provided his keynote address, underscoring the crucial role of innovations and aspirations in sustainable growth and development of the aviation sector.

Participants of the meeting unanimously elected The Honourable Bishop Juan Edghill, Minister of Public Works of Guyana, as Chairperson for the event, as well as first and second Vice-Chairpersons Ms. Aishath Nahula, Minister of Transport and Civil Aviation of Maldives, and Ms. Charity Musila, the Alternate Representative of Kenya to ICAO.

1 HLM-LTAG web-page: <http://www.icao.int/Meetings/HLM-LTAG/Pages/default.aspx>

2 ICAO LTAG video: [https://youtu.be/8fCvQ\\_Htmqo](https://youtu.be/8fCvQ_Htmqo)

### ICAO LTAG process and timeline



Following a comprehensive presentation from the ICAO Secretariat to set the scene for the LTAG, the floor was opened for pre-reserved oral statements from Member States’ high-level representatives. The statements were delivered by high-level representatives from 27 Member States: Argentina, Brazil, Cabo Verde, Canada, Chile, China, Czechia, France, Greece, India, Indonesia, Japan, Malaysia, Maldives, Netherlands, New Zealand, Oman, Qatar, Republic of Korea, Russian Federation, Rwanda, Saudi Arabia, Singapore, Spain, United Arab Emirates, United Kingdom and the United States. Guatemala and Peru provided their views on an LTAG. The Airports Council International, Air Transport Action Group, and the European Union also delivered oral statements.

### HLM-LTAG Discussions

A total of 8 Working Papers were presented by the ICAO Secretariat, and 22 by Member States and International Organizations at the HLM-LTAG. There were 12 Information Papers. The HLM-LTAG agenda (Table 1) provided the basis for the discussions.

All HLM-LTAG participants expressed the importance of taking action on the existential threat of climate change, and the need for a global long-term objective for international aviation, taking into account different circumstances and readiness levels of States, and the flexibility for each States to contribute to the collective efforts, while also recognizing the necessary means of implementation of an LTAG in the spirit of ICAO’s No Country Left Behind initiative.

Many also expressed views on the critical importance of establishing practical means of implementation, including through ICAO State Action Plans (SAPs), facilitating the implementation of robust actions by States in reducing international aviation CO<sub>2</sub> emissions, as well as the establishment of ICAO’s partnerships with States and other international organizations for assistance projects for aviation CO<sub>2</sub> reduction measures. They also expressed the view that capacity-building, financing and other assistance to States, in particular to developing countries, would be crucial in ensuring the implementation of any agreed LTAG, recognizing different circumstances of individual States and regions and that not one solution will fit all States and stakeholders.

<b>Agenda Item 1:</b>	CO <sub>2</sub> emissions reduction scenarios and options for a long-term global aspirational goal for international aviation
<b>Agenda Item 2:</b>	Means of implementation for a long-term global aspirational goal for international aviation
<b>Agenda Item 3:</b>	Means of monitoring progress and next steps
<b>Agenda Item 4:</b>	Conclusions and Recommendations of the Meeting

TABLE 1: HLM-LTAG Agenda.

Recognizing that the largest potential impact on aviation CO<sub>2</sub> emissions reduction will come from fuel-related measures, participants supported the recent June 2022 launch of the ICAO Assistance, Capacity-building and Training for Sustainable Aviation Fuels (ACT-SAF), and noted its possible extension to additional aspects (such as aircraft technologies, operational improvements), as a means to provide implementation support for the collective achievement of any agreed LTAG.

Establishing the means to monitor the progress for the achievement of any agreed LTAG, on a regular basis, and in a non-intrusive and transparent manner would be important, building upon existing means to do so, such as the ICAO Stocktaking process and tracker tools as part of monitoring the latest innovations and initiatives for reduction of aviation CO<sub>2</sub> emissions, as well as information from SAPs and the CO<sub>2</sub> reporting mechanism under CORSIA.

## HLM-LTAG Conclusions

Following the exchange of views by the participants on possible HLM-LTAG outcomes, in light of the latest IPCC scientific understanding, the meeting agreed to recommend the Conclusions<sup>3</sup> of the HLM-LTAG to be further considered by the ICAO Council for presentation of its proposal to the 41<sup>st</sup> Session of the ICAO Assembly, as provided below.

1. ICAO and its Member States are encouraged to work together to strive to achieve a collective long-term global aspirational goal for international aviation (LTAG) of net-zero carbon emissions by 2050, in support of the Paris Agreement's temperature goal, recognizing that each State's special circumstances and respective capabilities (e.g., the level of development, maturity of aviation markets, sustainable growth of its international aviation, just transition, and national priorities of air transport development) will inform the ability of each State to contribute to the LTAG within its own national timeframe.
2. While recognizing that the LTAG is a collective global aspirational goal, and it does not attribute specific obligations or commitments in the form of emissions

reduction goals to individual States, each State is urged to contribute to achieving the goal in a socially, economically and environmentally sustainable manner and in accordance with national circumstances.

3. Recalled the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement and acknowledged its principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances;
4. Also acknowledged the principles of non-discrimination and equal and fair opportunities to develop international aviation set forth in the Chicago Convention.
5. Affirmed that addressing GHG emissions from international aviation requires the active engagement and cooperation of States and the industry, and noted the collective commitment announced by the international air transport industry, to achieve net-zero carbon emissions by 2050.
6. ICAO and its Member States are invited to work together with relevant organizations to strive to achieve the maximum possible level of progress on the implementation of aviation in-sector CO<sub>2</sub> emissions reduction measures (e.g. technology, operations and fuels), recognizing that the largest potential impact on aviation CO<sub>2</sub> emissions reduction will come from fuel-related measures.
7. ICAO and its Member States are encouraged to keep abreast of innovative aircraft technologies, new types of operations conducive to emissions reductions, and Sustainable Aviation Fuels (SAF), Lower Carbon Aviation Fuels (LCAF) and other cleaner energy sources in line with the *No Country Left Behind* initiative, in order to enable timely certification, as well as timely update and development of relevant ICAO SARPs and guidance, as appropriate. ICAO and its Member States are urged to continue work on the elements of the basket of measures for the achievement of the LTAG, including:

- **Regarding Aircraft Technology:**

ICAO and its Member States are encouraged to

3 [https://www.icao.int/Meetings/HLM-LTAG/Documents/HLM-LTAG\\_SD\\_004\\_REV2\\_v2\\_clean.pdf](https://www.icao.int/Meetings/HLM-LTAG/Documents/HLM-LTAG_SD_004_REV2_v2_clean.pdf)

work with manufacturers and aircraft operators to encourage the introduction of increasingly fuel-efficient aircraft into the market and facilitate cost-effective fleet renewal as well as to incentivize and accelerate investments in the research and development of new aircraft with zero CO<sub>2</sub> emissions.

• **Regarding Operations:**

ICAO and its Member States are encouraged to work with manufacturers, Air Navigation Service Providers (ANSPs), aircraft operators and airports to implement enhanced air and ground operations, including by accelerating the deployment of the ICAO Aviation System Block Updates (ASBUs) and its implementation in accordance with the Global Air Navigation Plan (GANP).

• **Regarding Fuels:**

- a) ICAO Member States are invited to incentivize, through policies and policy tools, the research, development and deployment of Sustainable Aviation Fuels (SAF), Lower Carbon Aviation Fuels (LCAF) and other cleaner energy sources for aviation;
- b) ICAO is invited to review the 2050 ICAO Vision for SAF, including LCAF and other cleaner energy sources for aviation, at the third ICAO Conference on Aviation and Alternative Fuels (CAAF/3) in 2023, in order to define a global framework in line with the *No Country Left Behind* initiative and taking into account national circumstances and capabilities; and
- c) ICAO and its Member States are invited to work with the relevant stakeholders to accelerate the research and certification of new fuel pathways and the certification of new aircraft and engines, to allow the use of 100% SAF, to scale up SAF supply, especially through encouraging and promoting SAF and/or LCAF purchase agreements, as well as to support timely delivery of any necessary changes to airport and energy supply infrastructure.

8. Means of implementation commensurate to the level of ambition, including financing, will promote the achievement of the LTAG. It requires substantial investments for States, according to their national circumstances, and that various possible modalities and/or funding mechanisms could be used by ICAO to facilitate financing and investment support for implementation of specific aviation CO<sub>2</sub> reduction measures. ICAO is invited to initiate specific measures or mechanisms so as to facilitate, in particular for developing countries and States having particular needs, better access to private investment capacities, as well as funding from financial institutions, such as development banks, for projects contributing to the decarbonisation of international aviation, as well as encourage new and additional funding to this purpose. ICAO is also invited to further consider the establishment of a climate finance initiative or funding mechanism under ICAO, while addressing the possible financial, institutional and legal challenges, and report to the 42<sup>nd</sup> Session of the ICAO Assembly.
9. This will be complementary to a robust assistance and cooperation programme dedicated to LTAG in order to share information on best practices and provide guidance, capacity building, and other technical assistance. Welcoming the establishment of the ICAO Assistance, Capacity-building and Training for SAF (ACT-SAF) programme, it should be extended to add support to the implementation of other emissions reduction measures in an ICAO ACT-LTAG programme (e.g., aircraft technologies, operational improvements, infrastructural changes, LCAF and other cleaner energy sources for aviation).
10. Additionally, ICAO is encouraged to promote the voluntary transfer of technology, in particular for developing countries and States having particular needs, to enable them to adapt to cutting-edge technology and to enhance their contribution to achieve the LTAG.
11. In line with the *No Country Left Behind* initiative, ICAO Member States are urged to make regular and substantial contributions to the ICAO Environment Fund, to address specific ICAO activities on the LTAG, including ACT-SAF programme, aiming at assisting developing States and States having particular needs. States are also encouraged to develop specific projects under the ICAO Technical Cooperation Programme.

12. All ICAO Member States are encouraged to submit and update voluntary action plans to ICAO to reduce CO<sub>2</sub> emissions from international aviation, with a view to achieving the LTAG. State Action Plans should outline respective actions and roadmaps, including long-term projections, and highlight respective national capacities and circumstances and any specific assistance needs for the implementation of CO<sub>2</sub> reduction measures. ICAO and its Member States are invited to provide assistance for preparation and implementation of such plans and the necessary capacity building, including through cooperation and assistance on identifying possible sources of financing for decarbonization of aviation, in cooperation with financial and other relevant organizations.
13. ICAO is invited to regularly monitor progress on the implementation of all elements of the basket of measures towards the achievement of the LTAG, including through: the ICAO environment stocktaking process; the review of the ICAO Vision for SAF; further assessment of the CO<sub>2</sub> reduction and cost impacts of a changing climate on international aviation and regions and countries, in particular developing countries, and the impact on the development of the sector, as well as the cost impacts of the efforts to achieve the LTAG; monitoring of information from State Action Plans for international aviation CO<sub>2</sub> emissions; and means of implementation. To this purpose, ICAO is invited to consider necessary methodologies for the monitoring of progress, and report to a future Session of the ICAO Assembly.
14. Starting from the conclusions of the HLM-LTAG above, further deliberations among Member States will continue towards the 41<sup>st</sup> Session of the ICAO Assembly.

## Towards 41<sup>st</sup> Session of ICAO Assembly

In his closing remarks to the four-day round of discussions, ICAO Secretary General Juan Carlos Salazar emphasized that recovering from the effects of the pandemic and combatting climate change go hand-in-hand. He also underscored that, as a global sector, aviation has a golden opportunity to show leadership as we “build back better”, aiming towards a sustainable decarbonized future.

The ICAO Council deliberated the outcomes of the HLM-LTAG, and agreed on the Working Paper<sup>4</sup> proposing revisions to the Assembly Resolution A40-18 on international aviation and climate change. These will be considered during the 41<sup>st</sup> Session of the ICAO Assembly (27 September – 7 October 2022).

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4 [https://www.icao.int/Meetings/a41/Documents/WP/wp\\_369\\_en.pdf](https://www.icao.int/Meetings/a41/Documents/WP/wp_369_en.pdf)