# Overview of Climate Goals and ICAO's Work on a Long Term Aspirational Goal for International Aviation (LTAG)

**By ICAO Secretariat**

## Introduction

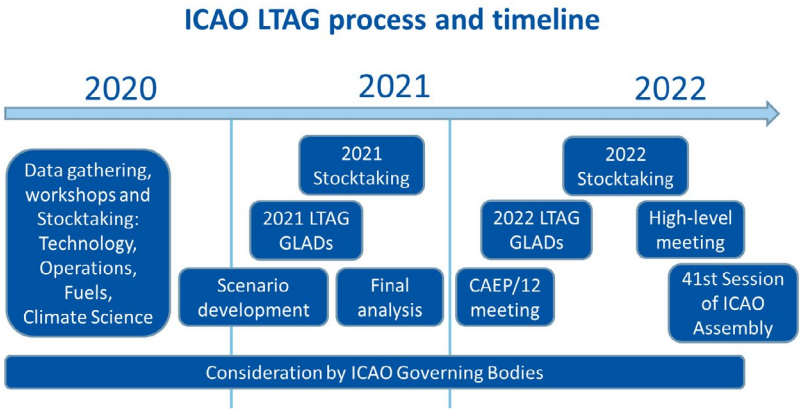
The 2010 International Civil Aviation Organization (ICAO) Assembly adopted the existing global aspirational goals for the international aviation sector of 2% annual fuel efficiency improvements and carbon neutral growth from 2020. Since then, much has happened in the aviation industry with regards to climate change action, with multiple commitments for further action from ICAO Member States and industry partners. This article provides an overview of the current aviation goals related to climate, with a focus on the ICAO's work on the feasibility of a long-term global aspirational goal for international aviation (LTAG). Extensive details on this process are provided in the special LTAG supplement to this ICAO Environmental report.

## Commitments by States and Industry

In 2009, the world's major aviation industry associations, including the Airports Council International (ACI), the Civil Air Navigation Services Organization (CANSO), the International Air Transport Association (IATA), the International Business Aviation Council (IBAC), and the International Coordinating Council of Aerospace Industries Associations (ICCAIA) announced their collective commitment to reduce aviation carbon emissions by 50 per cent by 2050 compared to 2005 levels. In light of recent scientific findings and in support of the 1.5°C temperature goal, in 2021 the aviation industry had further raised their level of ambition and collectively committed to achieve net-zero carbon emissions by 2050[1], This would be supported by accelerated efficiency measures, energy transition, and innovation across the aviation sector and in partnership with governments around the world.

Several ICAO Member States have also committed towards the decarbonization of aviation, including 27 ICAO Member States which are signatories of the "International Aviation Climate Ambition Coalition"[2], and 37 Member States (27 EU Member States and 10 other Member States of the European Civil Aviation Conference (ECAC)), which are the signatories of the "Toulouse Declaration" in support of the goal of carbon neutrality in the air transport sector by 2050[3].

1 Commitment to Fly Net Zero: https://aviationbenefits.org/FlyNetZero
2 International Aviation Climate Ambition Coalition: https://www.gov.uk/government/publications/cop-26-declaration-international-aviation-climate-ambition-coalition/cop-26-declaration-international-aviation-climate-ambition-coalition
3 Toulouse Declaration: https://presidence-francaise.consilium.europa.eu/en/news/european-aviation-summit/




## LTAG overall process

In line with that momentum on climate change action, ICAO made dedicated efforts to explore the feasibility of a long-term global aspirational goal (LTAG) for international aviation, including data collection and information sharing; technical assessment of aviation $CO_2$ emissions reduction scenarios with analyses of costs and necessary investments; consultation and dialogues among stakeholders; and engagement of high-level representatives to facilitate decision. The overall ICAO process and timeline related to LTAG during the triennium is illustrated in the Figure above.

## Data Collection and Information Sharing

As part of the ICAO LTAG work, the 2020 and 2021 ICAO Stocktaking events were convened in September 2020[4] and September 2021[5], respectively, for data collection and information sharing on aviation in-sector carbon dioxide ($CO_2$) emissions reductions. Further details on the Stocktaking Events are provided in the dedicated article in Chapter 4.

Additionally, with a view to providing one single source of information that is frequently updated to access all the latest $CO_2$ reduction innovations for aviation, ICAO developed a series of Tracker Tools[6]. They provide the latest information on aviation $CO_2$ emissions reduction initiatives, and are updated from three streams – technology, operations and fuels, as well as on aviation net zero initiatives. Further information on these trackers are provided in the dedicated article in Chapter 4.

## The ICAO CAEP LTAG Report

Over the last two years, the ICAO Committee on Aviation Environmental Protection (CAEP) undertook its technical work on the feasibility study on LTAG. It has focused on the attainability and readiness of aviation in-sector $CO_2$ reduction measures, including innovative aircraft technologies, operations and fuels, as it would be necessary to assess the in-sector $CO_2$ reduction potentials before considering the need and extent of any complementary measure.


4 2020 Stocktaking website: https://www.icao.int/Meetings/Stocktaking2020/Pages/default.aspx
5 2021 Stocktaking website: https://www.icao.int/Meetings/Stocktaking2021/Pages/default.aspx
6 ICAO Tracker Tools website: https://www.icao.int/environmental-protection/SAC/Pages/GCSA%20main%20page.aspx

The LTAG report, which was unanimously approved at the CAEP/12 meeting in February 2022, consolidates cumulative efforts of over 280 experts over nearly 2 years of intensive work. The LTAG report, which is available on the LTAG report website[7], includes scenarios that highlight the potential for substantial $CO_2$ reductions from innovative aircraft technologies, operations, and fuels, with the assessment of required costs and investments. More details on the LTAG report are provided in the special LTAG supplement to this ICAO Environmental report.

## LTAG consultative process

As part of the consultative process on LTAG among ICAO Member States and stakeholders, ICAO organized the LTAG Global Aviation Dialogues (GLADs) as a series of five regional events held both in May 2021[8] and March/April 2022[9]. The goals and objective so of these events were to share information and raise awareness on the LTAG process and technical analyses, as well as to allow for the exchange of views and expectation to facilitate further LTAG work and decision-making.

The GLADs supported the well-informed deliberations at the High Level Meeting on LTAG (HLM-LTAG), held in June 2022, and the subsequent 41st Session of the Assembly which will deliberate on the LTAG. The GLADs participants also exchanged views on possible building blocks for LTAG considerations, such as: scientific understanding and context, expected potential contribution of technology, operations and fuels, and the level of LTAG ambition. The participants also discussed on possible means of implementation, expected support to ICAO Member States with action plans, roadmaps, and ways of monitoring progress.

## Conclusion

Aviation is moving to address its responsibilities on the climate crisis. ICAO is steadily following up on these developments, with the extensive work associated with the feasibility of a long-term global aspirational goal for international aviation. The LTAG deliberations at the ICAO 41ST Assembly will be of crucial importance to consolidate the aviation's efforts towards decarbonization.

7 ICAO LTAG report website: https://www.icao.int/environmental-protection/LTAG/Pages/LTAGreport.aspx
8 2021 GLADs website: https://www.icao.int/Meetings/2021-ICAO-LTAG-GLADS/Pages/default.aspx
9 2022 GLADs website: https://www.icao.int/Meetings/2022-ICAO-LTAG-GLADS/Pages/default.aspx