



International Civil Aviation Organization

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EXECUTIVE COMMITTEE

Agenda Item 16: Environmental Protection-International Aviation and Climate Change

Agenda Item 17: Environmental Protection-Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)

PERSPECTIVES AND RECOMMENDATIONS ON INTERNATIONAL AVIATION CARBON REDUCTION GOALS AND MEASURES

(Presented by China)

EXECUTIVE SUMMARY

China civil aviation actively participates in the consultation on emission reduction goals and global reduction programme of international aviation and insists on promoting building of a fair and reasonable, each-doing-its-best, and win-win cooperation international aviation and climate change governance system on a multilateral platform. China civil aviation always advocates following the principles of global climate change of the United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement, especially the principles of equity, common but differentiated responsibilities, and respective capabilities. Under the framework of nationally determined contributions, it ensures that the global collective international aviation reduction goals and implementation programme can guarantee that all States fairly obtain opportunities for sustainable development of international aviation, especially the development rights of international air transport of developing countries and the interests of related industrial development are not harmed.

Action: The Assembly is invited to:

- recognize that international aviation emissions reduction is an important part of global effort to address climate change, and it should follow the principles of equity, common but differentiated responsibilities, and respective capabilities, with States making national determined contributions based on their national circumstances and stages of development;
- acknowledge the significant contributions made by developing countries, including China, to the sustainable development of global international aviation;
- agree to the Long-term aspirational goal (LTAG) Monitoring and Reporting (LMR) content and methodology proposal put forward in 3.1.2 and request the Council to incorporate them into the relevant task arrangements; and
- agree to the recommendations on development of CORSIA periodic review methodology put forward in 3.1.3 and request the Council to incorporate them into the task of developing CORSIA periodic review methodology.

Strategic Goals:

This working paper relates to Strategic Goal of *Aviation is Environmentally Sustainable*.

¹ English and Chinese versions provided by China

<i>Financial implications:</i>	The activities referred to the attached Assembly working paper will be undertaken subject to the resources available in the 2026-2028 Regular Budget, and/or from extra budgetary contributions as guided by the ICAO Business Plan 2026-2028.
<i>References:</i>	<i>United Nations Framework Convention on Climate Change</i> and its <i>Paris Agreement</i> <i>Convention on International Civil Aviation</i> Assembly Resolutions A41-21 and A41-22 A41-WP/468, A41-WP/469 and A41-WP/470

1. INTRODUCTION

1.1 The International Civil Aviation Organization (ICAO) has acknowledged in its previous resolutions on climate change issues the principles of common but differentiated responsibilities (CBDR) and equity established by the United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement, taking into account different national circumstances; and has acknowledged the principle of non-discrimination and equal and fair opportunities for the development of international aviation as stipulated in the Chicago Convention. The design and implementation of international aviation and climate change action plans should follow and reflect the above principles.

1.2 To address international aviation and climate change is an integral part of global climate governance. Adhering to the above principles, the international civil aviation industry could make greater contribution to achieving the package of goals under the Paris Agreement based on the function of nationally determined contributions (NDCs), fair and reasonable, each-doing-its-best, multilateral communication, and win-win cooperation.

1.3 ICAO has put forward goals of CNG 2020, Long-term aspirational goal (LTAG) 2050 and reducing CO₂ emissions in international aviation by 5 per cent by 2030 through the use of Sustainable Aviation Fuels (SAF), Lower Carbon Aviation Fuels (LCAF) and other aviation cleaner energies. China proposes that in order to improve the realizability of the above goals and the feasibility of related plans and measures, developed countries should actively undertake historical responsibilities and provide developing countries with sufficient, affordable, monitorable, reportable, and verifiable financial and technical support, adhering to the principles mentioned in 1.1.

1.4 As the largest developing country and second largest civil aviation transportation market, China civil aviation has been upholding the philosophy of green development and has always been an important participant in and contributor to promoting the sustainable development of global civil aviation, and has achieved remarkable results in the green development of civil aviation. Adhering to the principle of CBDR, China is willing to promote ICAO's multilateral platform of emission reduction cooperation and inviting all States to join the co-building of Green Air Silk Road Initiative, to make proactive and nationally determined contributions within its capabilities to promote the sustainable development of international aviation and achieve the package of goals under the Paris Agreement.

2. GREEN DEVELOPMENT ACHIEVEMENTS OF CHINA CIVIL AVIATION

2.1 Based on its own capabilities, China civil aviation has made systematic deployment and arrangements for the green development, taken proactive and solid emissions reduction actions, and achieved positive results. By the end of 2024, the carbon emission per ton-kilometer of China civil aviation transport fleet stood at 0.854 kilograms, and the carbon emission per passenger at airports was 0.271

kilograms. Both figures have reached the best level in history and ranked among the forefront of major aviation powers.

2.1.1 Vigorously promoting the research, development and application of sustainable aviation fuel (SAF). In September 2024, China civil aviation launched the SAF pilot project, focusing on research and exploration in key areas such as fuel supply guarantee models, oil quality monitoring, effect evaluation, and policy and standard development, so as to accumulate experience and lay a solid foundation for the subsequent active and steady promotion of SAF application. The second phase was launched in 2025, which further expanded the scope of the pilot project and focused on advancing the development of sustainable certification mechanisms. Up to now, a total of about 42,000 relevant flights have been operated, and aviation safety has remained stable during the pilot period.

2.1.2 Continuously advancing the electrification of airport operations. Since 2018, drawing on previous pilot experience, China civil aviation has scientifically promoted key initiatives such as the application of new energy vehicles at airports and the installation and use of aircraft auxiliary power-unit (APU) replacement facilities. By the end of May 2025, the proportion of electric vehicles used on the premises of Chinese airports has exceeded 30%, and the localization rate of facilities and equipment has surpassed 90%. For airports with an annual passenger throughput of over 5 million, the installation and utilization rate of aircraft APU replacement equipment has remained steadily above 95%, reducing CO₂ emissions by about 3.5 million tons annually. The annual power generation from photovoltaic projects at the airports has exceeded 60 million kilowatt-hours.

3. CHINA'S VIEWS AND PERSPECTIVES ON INTERNATIONAL AVIATION AND CLIMATE CHANGE

3.1 To address international aviation and climate change is an integral part of global climate governance. It should adhere to United Nations Sustainable Development Goals (UNSDG) and the basic principles established by the UNFCCC and its Paris Agreement, in particular the principle of CBDR and respective capabilities. Taking into account different national circumstances and in accordance with the framework of nationally determined contributions (NDCs) set out in the Paris Agreement, ICAO Member States should, through function of each-doing-its-best, multilateral communication, and win-win cooperation, promote international aviation to make greater contributions to the achievement of the package of goals under the Paris Agreement.

3.1.1 ICAO's goals of CNG 2020, LTAG 2050 and reducing CO₂ emissions in international aviation by 5 per cent by 2030 through the use of aviation cleaner energies were not based on sufficient technical and economic feasibility analysis, and the in-depth assessment of the costs and impacts on countries, especially developing countries, were not conducted, therefore they haven't fulfilled the task required by the Assembly Resolution. As proposed in China's working paper (A41-WP/469) submitted to the 41st Session of the Assembly, if developed countries fail to fully and effectively fulfill their international obligations under the UNFCCC through ICAO, achieving the so-called global collective goals would require developing countries and emerging market economies to achieve a cumulative emissions reduction far exceeding that of developed countries, unless developing countries abandon the development of their international aviation or keep their own international aviation at an extremely low level of development (as shown in the Appendix).

3.1.2 As for LTAG Monitoring and Reporting (LMR), clause 9 of A41-21 clearly stated that "Requests the Council to regularly monitor progress on the implementation of all elements of the basket of measures towards the achievement of the LTAG, including through...further assessment of the CO₂

emissions reduction and cost impacts of a changing climate on international aviation, regions and countries, in particular developing countries...and means of implementation.” In order to fulfill requirements of the Assembly Resolution, the implementation of LMR should be specified at the regional and State level to provide sufficient scientific and technical information support for all States. Meanwhile, the design elements of LMR should include developing countries’ demand for funds and technologies for international aviation emissions reduction, the funds and technical support provided by developed countries to developing countries for international aviation emissions reduction, the funds and technical support obtained by developing countries, as well as the international aviation emissions reduction achievements achieved with such funds and technical support.

3.1.3 Market-based measures and the use of SAF and other aviation cleaner energies are important approaches to achieving decarbonization in international aviation.

Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). The 41st Session of the Assembly adjusted the calculation rule for CORSIA offsetting responsibilities to enhance its fairness. However, the essence that the calculation rule is linked to CNG 2020 and individual carbon emissions growth remains unchanged. It is necessary to improve and revise it through subsequent periodic review. China holds the view that when developing the methodology of CORSIA periodic review, in addition to objective description of international aviation emissions, offsetting product demands and consumption, it is more important to propose directions for subsequent optimization and revision adhering to the guiding principles for the design and implementation of market-based measures (MBMs) for international aviation adopted based on the Assembly Resolutions². This is also the requirements of Assembly Resolution A41/22-17. At the same time, China has always maintained that, to avoid the unfair impact of CORSIA implementation on developing countries and enhance effectiveness of CORSIA implementation, all States should participate in the CORSIA implementation in a voluntary manner, which includes voluntarily determining baseline and eligible offsetting products and standards. Moreover, developed countries should undertake historical emissions from their international aviation³.

SAF. At present, the application of SAF and other aviation cleaner energies are still constrained by raw material supply, refining processes, safety certification, sustainability certification, and prices. To enhance the large-scale application of SAF, States need to strengthen cooperation on the basis of mutual respect and mutual benefit. Meanwhile, developed countries should provide developing countries with assistance in finance, technology and capacity building.

3.2 Whether developed countries can provide sufficient, affordable, monitorable, reportable, and verifiable financial assistance to developing countries for advancing the low-carbon transition of aviation will determine the success or failure of the ICAO LTAG. The United Nations has made arrangements regarding funding for global climate governance. In developing and implementing the funding mechanism for aviation emissions reduction, ICAO, when building and implementing the aviation emissions fund mechanism, should comply with the relevant principles of the UN, in particular the international legal principles approved by the UNFCCC and its Paris Agreement, consisting of developed countries shall provide climate assistance funds to developing countries, and the principle of voluntariness on other countries..

² China elaborates on this methodology in CAEP/13-WP/78; Russia supports it in CAEP/13-WP/79.

³ China elaborates on the framework of nationally determined plans to implement the CORSIA (NDPIC) in Appendix B to the A41-WP/468.

APPENDIX

1. China has submitted a working paper (A41-WP/469) to 41st Session of the Assembly, claiming that according to the classification of countries of World Economic Situation and Prospects published by the United Nations, international aviation emissions data⁴ published by International Energy Agency (IEA) are divided into developed countries and developing countries (including economies in transition), and calculate international aviation emissions under 2 scenarios. Take scenario 1 as an example⁵. In order to achieve ICAO's goal of LTAG 2050, if CORSIA continues to be implemented after 2035 with the responsibility distribution methodology remaining unchanged, and the baseline decreases proportionally to zero during 2035-2050, the international aviation will need to cumulatively reduce 12.54 billion tons of carbon emissions between 2021 and 2050. Among them, the emissions reduction amount by airlines from developing countries will account for 70%, which is significantly higher than that by airlines from developed countries (as shown in Figure 1).

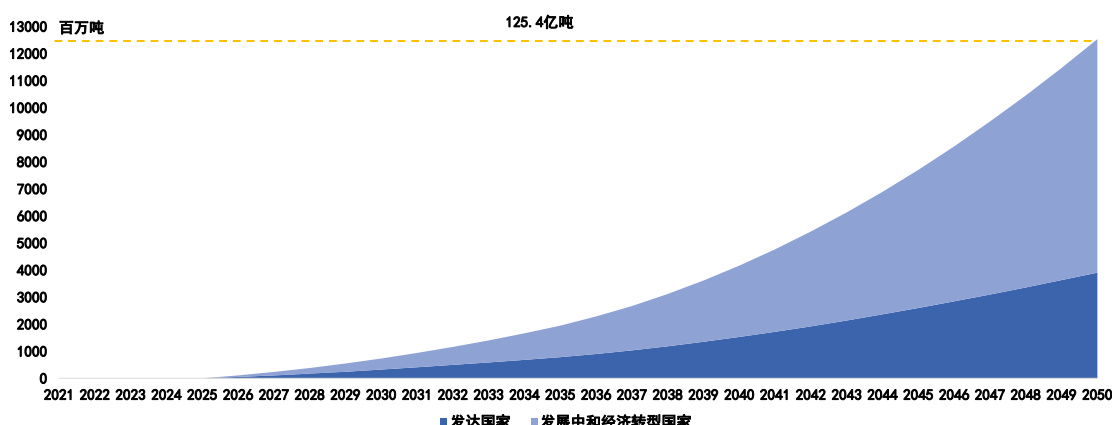


Figure1 Cumulative CO₂ emissions are needed to be reduced by global international aviation to achieve LTAG 2050 from 2021 to 2050

Data Source: Working Paper (A41-WP/469) submitted to the 41st Session of the Assembly by China

— END —

⁴ The international aviation emissions data from the IEA are calculated based on fuel consumption, which, in the phase where SAF has not yet achieved commercial large-scale use, basically reflects the changes in fuel efficiency brought by advancement in aircraft technology and operational technology. Therefore, the projections of future international aviation carbon emissions in China's working paper (A41-WP/469) submitted to the 41st Session of the Assembly have taken into account the emissions reduction effects resulting from aircraft technology upgrades and improved operational efficiency.

⁵ A41-WP/469 Scenario 1 assumes that international aviation carbon emissions return to the 2019 levels in 2025, the growth rate of international aviation emissions in 2026-2030 returns to the average annual growth rate of 2000-2010, and the average annual growth rate of international aviation emissions in 2031-2035 is 0.5% lower than that in 2026-2030, and that every subsequent five-year period will witness a 0.5% reduction in the growth rate compared to the preceding period, and so on.