



International Civil Aviation Organization

**WORKING PAPER**

A42-WP/382<sup>1</sup>

EX/163

29/7/25

Revision No. 1

18/8/25

**ASSEMBLY — 42ND SESSION**

**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 (CORSA)**

**INDUSTRY VIEWS ON AVIATION CLIMATE ACTION**

(Presented by Air Transport Action Group (ATAG))

**EXECUTIVE SUMMARY**

The working paper reaffirms the air transport industry's support for the International Civil Aviation Organization (ICAO)'s Long-Term Aspirational Goal (LTAG) for international civil aviation adopted at the 41<sup>st</sup> ICAO Assembly; the ICAO Carbon Offsetting and Reduction Scheme for International Aviation (CORSA); the outcome of the Third ICAO Conference on Aviation and Alternative Fuels (CAAF/3) meeting; and the work of ICAO to support continued progress towards these climate aims. It also reminds States and other stakeholders that these collective visions for action will not be possible without coordinated action within and outside the aviation sector

**Action:** The Assembly is invited to:

- a) recognise the progress the sector has made on climate action and acknowledge the ambitious industry long-term goal to reach net-zero carbon emissions from global civil aviation by 2050;
- b) note industry's full support with the implementation of CORSA as the only global market-based measure for international aviation;
- c) request Council to continue, with the full support and collaboration of industry, a work-programme to drive progress on the means of implementation for such a long-term goal for aviation climate action including, for example: the need for global policy action on sustainable aviation fuel deployment; assistance with State Action Plans in line with the long term aspirational goal; and capacity building for States in need of support;
- d) encourage the traditional energy sector to truly embrace the challenge of energy transition towards SAF, LCAF and other cleaner energies to ensure a timely shift in resources, expertise and funding with increased dialogue and cooperation to scale up cleaner aviation energy; and
- e) encourage States to take action to support progress towards the long-term aspirational goal within their own capabilities including: ambitious policy measures; ensuring financing of decarbonisation measures in a domestic context; and with assistance from ICAO and other States in capacity building, technology transfer and financing.

<sup>1</sup> English, Arabic, Chinese, French, Russian and Spanish versions provided by ATAG

<i>Strategic Goals:</i>	This working paper relates to the Strategic Goal – <i>Aviation is Environmentally Sustainable</i> .
<i>Financial implications:</i>	None
<i>References:</i>	

## 1. AVIATION'S COMMITMENT TO ADDRESS ITS CLIMATE IMPACT

1.1 At the 41<sup>st</sup> Session of the International Civil Aviation Organization (ICAO) Assembly in 2022, the aviation industry was joined by governments with a common climate aim: international civil aviation operations will achieve net-zero carbon emissions by 2050 i.e., the Long-Term Aspirational Goal (LTAG), supported by accelerated deployment of a comprehensive programme of effective emission reduction, energy transition and innovation across the aviation sector and in partnership with governments around the world. This agreement built on the leadership of the industry demonstrated by its declaration in October 2021, that global (domestic and international) civil aviation will achieve net-zero carbon emissions by 2050.

1.2 The agreement on the LTAG followed another ICAO milestone: the 39<sup>th</sup> Session of the ICAO Assembly agreement to develop the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). It preceded agreement on an underlying measure: the Third ICAO Conference on Aviation Alternative Fuels (CAAF/3).

1.3 The industry is determined to continue and accelerate the efficiency improvements and CO<sub>2</sub> emissions reductions that it has achieved so far. But it also understands the climate challenge requires an even greater commitment, including critical partnership with governments and the energy sector.

1.4 Significant progress has been made in improving the efficiency of aviation-delivered connectivity with CO<sub>2</sub> emissions per seat kilometre reduced by 55% compared to the same flight in 1990. Through the use of new technology aircraft and improvements in operational performance, the industry has avoided 14.6 billion tonnes of CO<sub>2</sub> since 1990. Airlines are investing in over 15,000 new technology aircraft which will help improve efficiency further. However, traffic growth outpaces those improvements, so a longer-term decarbonisation strategy is important – particularly the transition to new fuels.

1.5 The industry has started and is now progressing an energy transition and decarbonisation. This includes accelerating the deployment of Sustainable Aviation Fuels (SAF) produced from a range of sources, including waste, sustainable biomass and power-to-liquid options such as renewable electricity and carbon capture. In addition, significant innovation and research are underway into potential use of hydrogen and electric propulsion solutions for some aviation operations.

1.6 Since the net zero carbon goal was adopted by industry: 53 airlines representing 45% of global traffic have announced voluntary goals for SAF from 5%-30% of their 2030 fuel supply; 45 States have adopted (or are in the process of adopting) SAF policy to help drive demand and supply; and the production of SAF has approximately doubled every year since 2021, to an expected 2 Mt in 2025. However, more work is needed to accelerate this progress further.

## 2. REAFFIRMING SUPPORT FOR ICAO LEADERSHIP IN AVIATION CLIMATE ACTION

2.1 The air transport industry reaffirms its support for the suite of ICAO foundational climate building blocks: net zero carbon by 2050 as outlined in the ICAO LTAG; the world-first market-based mechanism for any global sector, CORSIA; and the ICAO Vision and Global Framework adopted at the CAAF/3.

2.2 Meeting the 2050 goal will be a significant challenge for aviation. The 2025-2030 timeframe will be crucial to set the trajectory towards 2050, particularly on accelerating the scale-up for SAF, lower-carbon aviation fuels, and other cleaner energies. Leveraging this important window for action will require a significant increase in support by States and other stakeholders.

2.3 The air transport industry affirms its support to the Council's LTAG Monitoring and Reporting (LMR) methodology for tracking the progress towards the LTAG. Its outcome will be critical, in the coming years, to understand whether the international aviation sector is on track and if additional actions and support are required.

2.4 CORSIA has been a success in helping to unite 130 States towards support of a global mechanism to halt the growth in net international aviation carbon emissions. The aviation industry confirms its strong support for CORSIA and encourages all States to continue to take part in its activities. CORSIA will need to be robustly implemented as it evolves to better support the energy transition and the path towards the ICAO LTAG, including the nascent carbon removals options which will be vital to decarbonisation. As confirmed in ICAO Assembly Resolution 41-22, CORSIA *is the only global market-based measure applying to CO<sub>2</sub> emissions from international aviation*. Other taxes and levies, which would divert funding from aviation decarbonisation, should be avoided.

2.5 There are signs that policy measures being put in place by States are helping towards meeting the 2030 Vision adopted at CAAF/3. Production estimates for that period are also starting to converge but sustained attention and support will be needed to achieve the 2030 Vision. There is a significant need to consider the post 2030 SAF scale-up requirements, however. Scaling from 5% emissions reductions from SAF in 2030 to the levels required for net zero in 2050 will be a challenge. Therefore, significant policy support for SAF will be needed in the 2030-2045 period to ensure the long-term goal can be reached. Importantly, these policies should address both the demand and supply of alternative fuels and, first, focus on effectively incentivising SAF supply. Although many States will be challenged to allocate direct incentives to SAF scale-up, there are other opportunities for State support in de-risking capital investment, as well as the reallocation of State fossil fuel subsidies to low-carbon alternatives such as SAF.

2.6 ICAO has been undertaking significant facilitation work to support States including the highly successful Assistance, Capacity-building and Training for Sustainable Aviation Fuels (ACT-SAF) and , Assistance, Capacity-building and Training for CORSIA (ACT-CORSIA) programmes as well as the establishment of the important Finvest Hub. These efforts should continue and be strengthened. Industry encourages States to support these efforts with funding and to take advantage of what they offer.

## 3. THE INDUSTRY CANNOT ACT ALONE

3.1 The industry is committed to reaching net-zero carbon emissions by 2050 across global civil operations (domestic and international) and undertaking needed climate action in the lead up to 2050. In

order to achieve this and continue to provide the benefits of connectivity to the world in a sustainable way, it will require assistance from stakeholders.

3.2 Governments at a global level are encouraged to support action by the ICAO Secretariat on implementation measures and political processes to help support the acceleration of action and financing of the decarbonisation of the air transport sector.

3.3 Governments at a regional and national level should implement supportive policy environments for: technology deployment; infrastructure improvements that benefit flight operational efficiency; and particularly the energy transition to renewable energy, low-carbon options, sustainable aviation fuels and consideration of aviation needs as part of government hydrogen strategies. Investment in carbon removals are another vital consideration. Smart regulation and policymaking can provide long-term sustainable and stable investment environments as opposed to short-term punitive measures. The coming decade will be vital in making the necessary investments to meet the needs of the sector out to 2050 and beyond.

3.4 The energy sector will need to support the energy transition, with significant scale up in SAF and alternative energy production, including green hydrogen and low-carbon electricity, around the world. Traditional suppliers must also make equal access to airport fuelling systems a priority to ensure open markets in the field of energy.

3.5 Financial institutions – including the multilateral development banks – must understand the strategic importance of air transport connectivity and provide needed investment for the industry in deploying carbon reduction technology, infrastructure and energy systems, supporting capital deployment for SAF production and carbon removals technologies.

3.6 Customers – including corporate purchasers of airline tickets and individual passengers – can support airlines' offsetting of CO<sub>2</sub> emissions and purchase of sustainable aviation fuel through CORSIA and go beyond with additional voluntary contributions, particularly in the short- and medium-term as ways to help mitigate emissions and accelerate the shift to SAF.

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