

THIRD CONFERENCE ON AVIATION AND ALTERNATIVE FUELS (CAAF/3)

Dubai, United Arab Emirates, 20 to 24 November 2023

Agenda Item 2: Supporting policies to promote the development and deployment of cleaner energy for aviation

INTERNATIONAL AEROSPACE MANUFACTURERS COMMITMENT TO 100% SUSTAINABLE AVIATION FUELS COMPATIBILITY BY 2030

(Presented by the International Coordinating Council of Aerospace Industries Associations (ICCAIA))

SUMMARY

In this Information Paper, the International Coordinating Council of Aerospace Industries Associations (ICCAIA) presents its already-released public statement on ensuring that civil aeroplanes can safely operate using 100% suitably qualified Sustainable Aviation Fuel by 2030 in support of both the Net Zero 2050 Goal and the CAAF/3 process.

1. INTRODUCTION

- 1.1 To support both the ICAO Long-Term Aspirational Goal of Net Zero Emissions by 2050 and the CAAF/3 process, the manufacturing community, represented by the International Coordinating Council of Aerospace Industries Associations, made a public statement in answer to the text of Block 1, paragraph 8 c) of the draft CAAF/3 outcomes document.
- 1.2 In the statement, manufacturers acknowledge the need to ensure that internationally-operated civil aerospace products are capable of operating using 100%, suitably ASTM qualified, Sustainable Aviation Fuel (SAF). This is a necessary step to enable maximised uptake of SAF. The statement emphasises the importance of both newly-built aircraft and engines as well as those already in service having the ability to use 100% SAF.
- 1.3 Whilst there are potentially different routes to qualifying fuels for new in-production aeroplanes versus in-service fleets, manufacturers have undertaken to ensure that products can use 100% suitably qualified SAF by 2030.
- 1.4 The full text of the commitment is presented in the Appendix.

APPENDIX

ICCAIA PUBLIC STATEMENT ON 100% SAF COMPATIBILITY BY 2030

Montreal, 13 September 2023:

Today, a group of the international community of civil aerospace airframe and engine manufacturers and service providers represented by ICCAIA, committed that their civil aviation products will be compatible with, and achieve the ability to operate using, 100% ASTM qualified Sustainable Aviation Fuels (SAF) by 2030. Together, the parties to this agreement currently produce and support aircraft engaged in 99% of all international operations of civil aeroplanes, both with airlines and within the business aviation community.

SAF is a synthetic jet fuel made from renewable source materials such as plants, that do not interfere with edible crops, or various forms of waste that is mixed directly with conventional jet fuel in a ratio of up to 50% to ensure compatibility with existing aircraft and engines — the maximum allowed under current fuel ASTM International specifications. On a lifecycle basis, unblended SAF reduces CO2 emissions by up to 80% on average, so the ability to operate on 100% SAF plays an important role in the sector's decarbonisation strategy and to fully realize the potential of this SAF transition. The civil aerospace manufacturing community is working with SAF producers on two options to achieve the 100% compatibility commitment. The first option is to include specific compounds (so-called 'aromatics') that are present in conventional fuel to ensure use as a 'drop-in' fuel compatible with the existing fleet, while the second option will not require these compounds and may require further validation and/or modifications to existing aircraft, engines and fuel systems.

In early 2022, ICCAIA, on behalf of the civil aviation manufacturing and services sector, committed to achieving Net Zero CO2 emissions by 2050. Subsequently, the same ambitious goal was reflected in ICAO's Long Term Aspirational Goal (LTAG) in October of 2022. At the Paris Air Show in June of this year seven Chief Technology Officers (CTOs) of sector-leading companies made a commitment to achieving a level of SAF compatibility that represents a key milestone to achieving the Net Zero goal. Today's commitment builds on what was stated by the CTOs. As a part of the delivery of technical solutions required to reduce the carbon emissions of the air transportation sector, the companies support accelerating the availability and adoption of qualified SAF. Greater uptake of SAF would further mitigate the projected growth in aviation CO2 emissions as the customer demand for global air travel increases. Increasing the production and use of SAF is a critical step for achieving the air transport sector's net zero CO2 emissions goal by 2050.

With current supply of SAF at 0.1% of global fuel use and prices two to five times that of conventional jet fuel, urgent action is needed to both accelerate SAF production/availability and to address the significant price disparity. By committing to achieve 100% compatibility across aircraft platforms with approved SAF by 2030, the manufacturing community is doing its part to encourage a drastic increase in production by providing certainty that the aircraft and engines offered to the market will be capable of using sustainable fuels in high quantities without the need for blending.

Manufacturers therefore strongly support the development of government policies and initiatives that stimulate investment in SAF production capacity, reduce costs and encourage greater industry uptake.

Successful decarbonisation of civil aviation is only possible with strong policy support of technical innovation and cooperation between governments and industry.