



WORKING PAPER

**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**
- Agenda Item 5: Reviewing the 2050 ICAO Vision for SAF, including LCAF and other cleaner energy for aviation, in order to define a global framework**

**BUILDING A VISION CONSISTENT WITH THE 2050 ZERO CARBON GOAL ANCHORED
ON TRULY SUSTAINABLE ALTERNATIVE FUELS**

(Presented by International Coalition for Sustainable Aviation (ICSA))

SUMMARY

This working paper proposes adopting a vision that: (i) prioritizes high standards of environmental and social integrity; (ii) expresses aspirational goals using metrics that primarily focus on the carbon intensity of alternative fuels on a lifecycle basis; and (iii) includes provisions to avoid double claiming of emissions reductions. This working paper also highlights the need to ensure that alternative jet fuels deliver public-health benefits by reducing jet fuel aromatic content, and thereby toxic non-volatile particulate matter emissions.

Action by the Conference is in paragraph 5.

1. ADOPTING A VISION THAT PRIORITIZES THE ENVIRONMENTAL AND SOCIAL INTEGRITY OF ALTERNATIVE FUELS

1.1 The International Coalition for Sustainable Aviation (ICSA) welcomes the opportunity to provide comments in preparation for the 3rd Conference on Aviation and Alternative Fuels. The CAAF/3 meeting needs to focus on building ambitious consensus around a Vision consistent with the 2050 zero carbon goal as enshrined in Resolution A41-21.¹

1.2 The CAAF/3 meeting is an important opportunity for ICAO to develop a vision that will contribute to the decarbonization goals of the LTAG, while fostering cooperation amongst States and

¹ https://www.icao.int/environmental-protection/Documents/Assembly/Resolution_A41-21_Climate_change.pdf

helping to create the certainty that is required to support investment in alternative fuels. ICSA believes this is achievable while maintaining high standards of environmental integrity and credibility.

1.3 A successful outcome requires focusing on defining an ambitious vision that prioritizes the environmental and social integrity of alternative fuels and therefore avoids trading an environmental threat for another.

1.4 ICAO should build on the work accomplished to date by the Committee on Aviation Environmental Protection (CAEP). In particular, the CAEP report on the Long-Term Aspiration Goal (LTAG) provides an aspirational trajectory consistent with the goals for CAAF/3 (see, notably, integrated scenario #3). The trajectory for alternative fuels in this scenario should inform the CAAF/3 discussion on a suitable vision. The CAAF/3 meeting should also build on the Carbon Offsetting and Reductions Scheme for International Aviation (CORSA) Sustainability framework for CORSA eligible fuels, but recognizing the need for its continuous improvement.

1.5 Setting an aspirational goal for alternative fuels requires adopting, primarily, a metric that focuses on the carbon intensity of alternative fuels on a lifecycle basis, consistent with the methodology applicable to CORSA eligible fuels, which quantifies emissions reductions as compared to conventional jet fuels. This metric could be complemented, if necessary, with the proportion of conventional aviation fuels to be substituted with alternative fuels, as endorsed in the CAAF/2 Declaration with the 2050 Vision for Sustainable Aviation Fuels.² But the focus should always be on quality rather than quantity.

2. THE IMPERATIVE OF AVOIDING OF DOUBLE CLAIMING

2.1 In addition to a robust sustainability standard, CAAF/3 should emphasize transparency to ensure that alternative fuels are accurately reported and accounted for. Avoiding double claiming is critical for the integrity of the CAAF/3 Vision.

2.2 Any discussions on concepts such as book and claim in the context of supporting policies are premature until robust reporting and accounting methodologies are in place to avoid double claiming. It is critical to note that Parties to the Paris Agreement need timely access to relevant information on the features and usage of CORSA eligible fuels to be able to meet their own reporting and accounting obligations and avoid double claiming. Unfortunately, that is not the case under the current framework yet, meaning that unless ICAO takes swift action in the near term, any CORSA eligible fuel claim beginning in 2024 would be prone to double claiming. Any such lack integrity risks undermining public confidence. Embarking on discussions around book and claim before adopting categorical measures to avoid double claiming would only exacerbate the problem.

3. TERMINOLOGY

3.1 Finally, when defining the CAAF/3 Vision, CAAF/3 should pay careful attention to its use of terminology. This is particularly relevant as the original CAAF/2 vision focused solely on Sustainable Aviation Fuels (SAF), whereas the scope for CAAF/3 has been expanded to cover not only other *cleaner energy sources* such as cryogenic hydrogen and electricity, but also *Lower Carbon Aviation Fuels* (LCAF) of fossil origin. ICSA believes that while LCAFs may have potentially lower carbon emissions on a lifecycle basis, all fuels of fossil origin must, by definition, be regarded as unsustainable. Additionally,

² <https://www.icao.int/environmental-protection/GFAAF/pages/ICAO-Vision.aspx>

LCAF can only marginally reduce carbon emissions on a lifecycle basis and therefore cannot contribute effectively to a sustainable aviation future.

3.2 The CAAF/3 vision should avoid the use of encompassing terms such as “sustainable fuels” and instead use suitable terms such as “alternative fuels”. This is particularly relevant when referring to LCAF.

4. ENSURING ALTERNATIVE AVIATION FUELS DELIVER PUBLIC HEALTH BENEFITS

4.1 Fuel-related emissions from landing and take-off operations disproportionately affect local communities as well as workers within the airport envelope. Communities living in proximity to airports are exposed to elevated levels of non-volatile Particulate Matter (nvPM)—and within these ultrafine particles (UFP)—and are at risk of adverse health effects, a critical issue upon which ICAO needs to act without further delay.

4.2 While SAF blends have the potential to reduce harmful aviation emissions by reducing aromatic content (a main precursor of nvPM), such an outcome will not happen unless ICAO adopts a complementary ICAO standard regulating nvPM emissions. Furthermore, the gradual scale-up of SAF without insignificant aromatic content means that a fuel swap will help only marginally in the near term— if at all— which is insufficient to protect overburdened communities already suffering decades’ worth of accumulated adverse health effects.

4.3 ICAO shall complement CAAF/3 vision with a commitment to (i) reduce aromatic content in a manner compatible with existing airworthiness certifications, and (ii) phase out aromatic content from alternative and conventional jet fuel.

5. ACTION BY THE CAAF/3

5.1 The CAAF/3 is invited to:

- a) agree to adopt a global aspirational quantified objective for 2050 and an aspirational trajectory that are consistent with the Paris Agreement temperature goals, and that prioritize the environmental and social integrity of alternative fuels;
- b) agree to adopt objectives expressed in terms of a metric that quantifies high-integrity emissions reductions as compared to conventional jet fuels;
- c) agree to commit to avoid double claiming and to adopt measures to ensure that alternative fuels are accurately reported and accounted for: and
- d) recommend ICAO to adopt measures to ensure that the deployment of alternative aviation fuels contribute to reduce non-volatile particulate matter emissions.