

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

Dubai, United Arab Emirates, 20 to 24 November 2023

- Agenda Item 1: Setting the scene Latest developments in cleaner energy technology for international aviation and its contribution to the Long-Term Global Aspirational Goal
- Agenda Item 2: Supporting policies to promote the development and deployment of cleaner energy for aviation
- Agenda Item 3: Assistance and capacity building for cleaner energy
- Agenda Item 4: Financing cleaner energy
- 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

SECOND ICAO CONFERENCE ON AVIATION ALTERNATIVE FUELS (CAAF/2)

(Presented by the ICAO Secretariat)

SUMMARY

This paper provides background information on the outcome of the second ICAO Conference on Aviation Alternative Fuels (CAAF/2, held in October 2017 in Mexico City, Mexico) in the form of the Declaration approved by the conference, as reference.

More information is available at the CAAF/2 website: https://www.icao.int/Meetings/CAAF2/Pages/default.aspx

DECLARATION OF THE SECOND CONFERENCE ON AVIATION AND ALTERNATIVE FUELS (CAAF/2) Mexico City, Mexico, 11 to 13 October 2017

Whereas the ICAO 39th Assembly recognized the importance of research and development in fuel efficiency and alternative fuels for aviation that will enable international air transport operations with a lower environmental impact, both in terms of local air quality and the global climate;

Whereas the ICAO 39th Assembly requested the Council to continuously monitor the implementation of all elements of the basket of measures and consider the necessary policies and actions

to ensure that progress is achieved in all of the elements in a balanced way with an increasing percentage of emissions reductions accruing from non-MBM measures over time;

Noting that the introduction of sustainable aviation fuels (SAF) is one of the measures that can contribute significantly to ICAO's climate objectives and to the goal set forth in ICAO Assembly Resolution A39-2, and address environmental challenges facing aviation, and may also realize economic, social, and environmental advantages that contribute to the ambitious and transformational vision set out in 13 out of 17 of the United Nations Sustainable Development Goals;

Whereas the ICAO 39th Assembly acknowledged the need for SAF to be developed and deployed in an economically feasible, socially and environmentally acceptable manner, and progress achieved in the harmonization of the approaches to sustainability;

Noting that, since CAAF/1 in 2009, significant progress developing a SAF industry has occurred, including establishing an internationally recognized specification, reducing SAF production costs, and starting commercial SAF deployment at locations around the world;

Acknowledging that ICAO has been successfully fostering international cooperation by means of dedicated workshops and seminars and should continue to do so, and also *welcoming* the ICAO initiative on State Action Plans, including those measures related to development and deployment of SAF;

Acknowledging the challenges faced by the emerging SAF industry in competing with the well-established CAF industry, and the need for financial mechanisms and policies to ensure the competitiveness of SAF and reduce the risk of SAF investments. This includes reducing time and expenses required for technical certification of SAF;

Recognizing that States and industry have the primary role in SAF deployment and that public-private partnerships have been, and will continue to be, instrumental to SAF deployment;

Acknowledging the availability of SAF onsite at airports is an element that could facilitate the deployment of SAF on a commercial scale;

Noting that the aviation industry is already facilitating the use of SAF on a regular basis, with several airlines using SAF and airports receiving SAF on an ad-hoc basis, or are in the process of enabling supplies of SAF;

Acknowledging that global and interdisciplinary collaborations are needed for technical certification of SAF, and that inter-institutional and inter-sectoral coordination is needed for developing policies, research, and financing for SAF to avoid inconsistent actions;

Acknowledging the importance of having a variety of funding sources throughout the development cycle of the SAF industry;

Recognizing that the environmental benefits of SAF production and use are valuable. However, airports' initiatives on SAF are highly dependent on airport ownership formats, a clear business case, stakeholder partnerships, and local subsidies, grants or other incentives available at particular airports, as well as appropriate engagement and collaboration with commercial and business aircraft operators;

Noting that commercial aviation has currently no alternatives to liquid fuels as a source of energy, while in many cases ground transportation can rely on other sources such as electricity. For these reasons,

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States should be encouraged to promote the use of SAF for the aviation sector or policies that strive to establish a level playing field between aviation and other transportation sectors;

Noting the several potential policy options for incentivizing SAF production and deployment, such as SAF blending mandates or targets, subsidies, production facility grants, loan guarantees, and tax credits.

Declares that:

- 1. The Conference endorses the 2050 ICAO Vision for Sustainable Aviation Fuels as a living inspirational path and calls on States, industry and other stakeholders, for a significant proportion of conventional aviation fuels (CAF) to be substituted with sustainable aviation fuels (SAF) by 2050, for international civil aviation to reduce carbon emissions significantly, and whilst pursuing all opportunities in the basket of mitigation measures to reduce emissions as necessary;
- 2. The Conference recognizes that the sustainability of alternative aviation fuels is of essential importance to the efforts of international civil aviation to reduce its CO₂ emissions. This is ensured by application of sustainability criteria to SAF as is currently under consideration by ICAO;
- 3. The Conference notes that this path is based on the assumptions of a progressive increased use of SAF, and should be periodically reviewed through a stocktaking process to continuously assess progress on the SAF development and deployment, including the necessity to consider policies and actions, and the organization of regular workshops and seminars, leading up to the convening of CAAF/3 no later than 2025, with a view to updating the 2050 ICAO Vision to include a quantified proportion of CAF to be substituted with SAF by 2050, and carbon reductions achieved by SAF;
- 4. ICAO and its Member States, in cooperation with the aviation industry and other stakeholders, will work together to pursue any opportunities to implement necessary policies, technology and financing measures, with an increasing proportion of SAF into the fuel supply over time towards the 2050 ICAO Vision, without any attribution of specific obligations to individual States;
- 5. ICAO will act primarily as a facilitator to support States on their efforts to develop and deploy SAF, by sharing information and best practices, communicating the economic and environmental value of SAF, facilitating discussions between financial institutions and industry, and developing guidance material;
- 6. ICAO will facilitate capacity building and assistance for States to develop and deploy SAF that are well suited to their national circumstances and resources;
- 7. ICAO, States, and stakeholders should develop guidance materials describing the drop-in nature of SAFs to support SAF deployment by aircraft operators, including for the integration of SAF into the hydrant system; and on the different models available for funding, incentives, development, and transfer of technology for SAF;
- 8. States are encouraged to support ICAO efforts for international cooperation on SAF development and deployment by sharing examples of policy implementation, results, and lessons learned, which could be useful to other States and CAEP work, as well as other ICAO outreach and capacity building initiatives;
- 9. ICAO should continue to work with States, industry and other stakeholders to update the Global Framework on Aviation Alternative Fuels (GFAAF);

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- 10. States are encouraged to support the approval of new conversion processes under development, and explore means and policies for reducing time and expenses required for technical certification of SAF, such as the D4054 Clearinghouse concept;
- 11. States are encouraged to support the development and implementation of stable policy frameworks that facilitate the deployment of SAF, including via policy incentives, collaborative research, and assistance, while avoiding distortions of fair competition;
- 12. States are encouraged to develop policies that promote the use of SAF, or promote policies that strive to establish a level playing field between aviation and other transportation sectors on the use of sustainable fuels;
- 13. States are encouraged to evaluate the policy effectiveness by means of qualitative metrics such as flexibility, certainty, financial costs and benefits, price sensitivity to externalities, ease of implementation, contribution to SAF deployment and CO₂ reduction, unintended consequences, and robustness, while recognising the importance of quantitative metrics to inform policy decisions;
- 14. States are encouraged to provide examples of successful renewable energy and SAF policy implementation case studies; results and possible lessons learned, which could be useful to other States and current CAEP work, and could be used to promote the economic, social, and environmental advantages that may arise from the development of a SAF industry;
- 15. States are encouraged to evaluate available funding sources, and to the extent possible, facilitate accessibility to funding sources appropriate to development needs. This includes supporting airlines and airports that decide to implement the supply of SAFs and support new feasibility studies for the supply of SAFs at airports;
- 16. States are encouraged to promote collaborative initiatives amongst States, and with industry, in supporting global efforts to pursue price parity between SAF and CAF, including utilizing of existing facilities to produce SAF, and identifying and exploring sustainable feedstock resources and conversion processes;
- 17. States are encouraged to foster the further development of innovative technological pathways to produce SAF from sources such as renewable electricity, while additional efforts should be made to scale up the market of these fuels;
- 18. The 2050 ICAO Vision does not set a precedent for or prejudge the work to be undertaken by the ICAO Council regarding the exploration of a long term global aspirational goal for international aviation under paragraph 9 of Assembly Resolution A39-2, or the periodic review of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) under paragraph 18 of Assembly Resolution A39-3.