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Exchange of views on the expectations for CAAF/3



ICAO Environmental Regional Seminars

13 April – 8 May 2023



- **Background on previous CAAF and CAAF/2 meetings**
- **Recommendations and Declaration from CAAF/2, including:**
 - 2050 ICAO Vision for Sustainable Aviation Fuels
- **Decisions at the 41st ICAO Assembly, and process for CAAF/3**
- **Dialogue session**

- **The ICAO Conference on Aviation and Alternative Fuels (CAAF) was held in Brazil on 16 – 18 November 2009**
 - Responds to A36-22: *Consolidated statement of continuing ICAO policies and practices related to environmental protection*, which recognized the **urgent need for more concerted and effective action to reduce the carbon footprint of international aviation**, the importance of research and development in fuel efficiency and **alternative fuels**



- **The second ICAO Conference on Aviation and Alternative Fuels (CAAF/2) was held in Mexico on 11-13 October 2017**
 - Responds to A39-2: *Consolidated statement of continuing ICAO policies and practices related to environmental protection – climate change*, which reaffirmed the need for alternative fuels to be developed and deployed in an economically, socially and environmentally acceptable manner
 - The 39th ICAO Assembly also welcomed the convening of CAAF/2, which the aim of developing an **ICAO Vision** on Aviation Alternative Fuels





• Declaration of the CAAF/2 (1/3)

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;

Policy planning

- 2050 ICAO Vision for SAF as a living aspirational path and calls on States, industry and other stakeholders for a significant proportion of CAF to be substituted with SAF by 2050
- Periodically reviewed, through a stocktaking process, and CAAF/3 no later than 2025, with a view to update the 2050 ICAO Vision
- 2050 ICAO Vision, without any obligation to specific obligations to individual States

Regulatory framework

- Application of sustainability criteria to SAF by ICAO

Implementation support

- ICAO to share information and best practices
- ICAO to facilitate capacity building and assistance to States
- ICAO, States and stakeholders to develop guidance material



• Declaration of the CAAF/2 (2/3)

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);

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;

Policy planning

- Updating of the GFAAF
- States to support development and implementation of stable policy frameworks that facilitate the deployment of SAF, and to evaluate policy effectiveness

Regulatory framework

- States to support the approval of new conversion processes under development

Implementation support

- States to support ICAO efforts for international cooperation on SAF development and deployment
- States to provide examples of successful renewable energy and SAF policy implementation case studies; results and possible lessons learned



- **Declaration of the CAAF/2 (3/3)**

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 prejudice 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.

Financing

- States to evaluate available funding sources, and to extent possible, facilitate accessibility to funding sources appropriate to development needs

Implementation support

- States to promote collaborative initiatives amongst States, and with industry, in supporting global efforts to pursue price parity between SAF and CAF
- States to foster further development of innovative technological pathways

Policy planning

- 2050 ICAO Vision does not set a precedent for or prejudice work undertaken on exploration of an LTAG, or periodic review of CORSIA

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



Policy planning

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- Periodically reviewed, through a stocktaking process, and CAAF/3 no later than 2025, with a view to update the 2050 ICAO Vision
- 2050 ICAO Vision, without any obligation to specific obligations to individual States
- Updating of the GFAAF
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Regulatory framework

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Implementation support

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- ICAO, States and stakeholders to develop guidance material
- States to support ICAO efforts for international cooperation on SAF development and deployment
- States to provide examples of successful renewable energy and SAF policy implementation case studies; results and possible lessons learned
- States to promote collaborative initiatives amongst States, and with industry, in supporting global efforts to pursue price parity between SAF and CAF
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Financing

- States to evaluate available funding sources, and to extent possible, facilitate accessibility to funding sources appropriate to development needs



- A41-21, para 28 f) – (requests the Council to) continue to assess progress on the development and deployment of SAF, LCAF and other cleaner energy sources for aviation as part of the ICAO stocktaking process, and **convene the CAAF/3 in 2023 for reviewing the 2050 ICAO Vision for SAF, including LCAF and other cleaner energy sources for aviation, in order to define a global framework** in line with the No Country Left Behind (NCLB) initiative and taking into account national circumstances and capabilities;
- A41-21, para 6 to 9 – LTAG and monitoring of progress
- A41-21, para 10 to 13 – States Actions Plans, including aviation cleaner energy
- A41-21, para 17 and 18 – Implementation support and financing
- A41-21, para 27 and 28 – States and ICAO actions on aviation cleaner energy



CAAF/3 – Possible themes/issues for ICAO Global Framework for Aviation Cleaner Energy

1. Policy and planning (linked to A41-21, para 7 to 13, 28)

- Quantified and collective ICAO Vision/goals for SAF, LCAF and other aviation cleaner energy, in support of the LTAG
- Development and implementation of voluntary State Action Plans and roadmaps, with the ICAO guidance and tools
- Monitoring of progress and enabling adjustment mechanisms
- Non-financial policy options for States to consider to support scale-up and deployment of fuels at national/regional level

2. Regulatory framework (linked to A41-21, para 9, 27, 28)

- Continued harmonized-approach on fuel sustainability criteria, life-cycle values, and certification
- Aviation infrastructure framework to support deployment and use to alternate fuels.
- Harmonized fuel accounting & reporting methodologies (as part of LTAG monitoring)

3. Implementation support (linked to A41-21, para 17, 18, 28)

- ACT-SAF (assistance, capacity-building and training) programme for SAF/LCAF and other aviation cleaner energy
- Specific support to States on feasibility studies, policy development, pilot projects
- Facilitating State-based action for business implementation
- Partnerships amongst States, industry and other stakeholders, and coordination/cooperation at national/regional levels

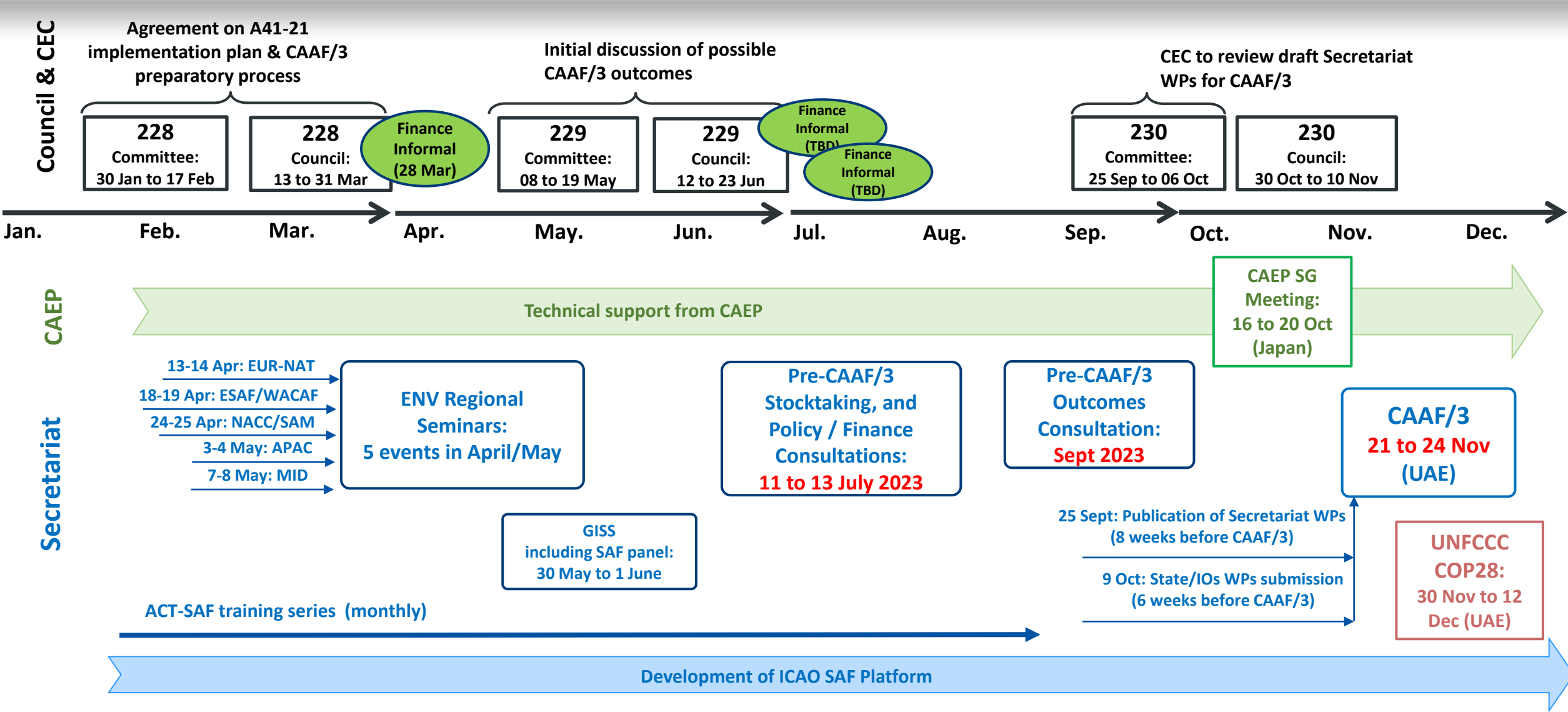
4. Financing (linked to A41-21, para 17, 18, 28)

- Financial-support measures for States to consider (e.g. grant, incentive, tax relief) to de-risk and establish the supply-chain at national/regional levels
- ICAO and States working with financial institutions to facilitate better access to public & private finance and investment for development and deployment of aviation cleaner energy
- ICAO climate finance initiative / ICAO funding mechanism



Third ICAO Conference on Aviation and Alternative Fuels (CAAF/3) – A41-21 para. 28

f) continue to assess progress on the development and deployment of SAF, LCAF and other cleaner energy sources for aviation as part of the ICAO stocktaking process, and **convene the CAAF/3 in 2023 for reviewing the 2050 ICAO Vision for SAF, including LCAF and other cleaner energy sources for aviation, in order to define a global framework** in line with the No Country Left Behind (NCLB) initiative and taking into account national circumstances and capabilities





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Dialogue session



Can you share your State/Organization's expectations for CAAF/3, in support of the development, deployment and access to cleaner energy for aviation?



- **What additional information does your State/Organization need to be better prepared toward discussion at CAAF/3?**





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THANK YOU