

**58th Conference of Directors General of Civil Aviation
Asia and Pacific Region
Dhaka, Bangladesh 15-19 October 2023**

Agenda item 7: Aviation and Environment

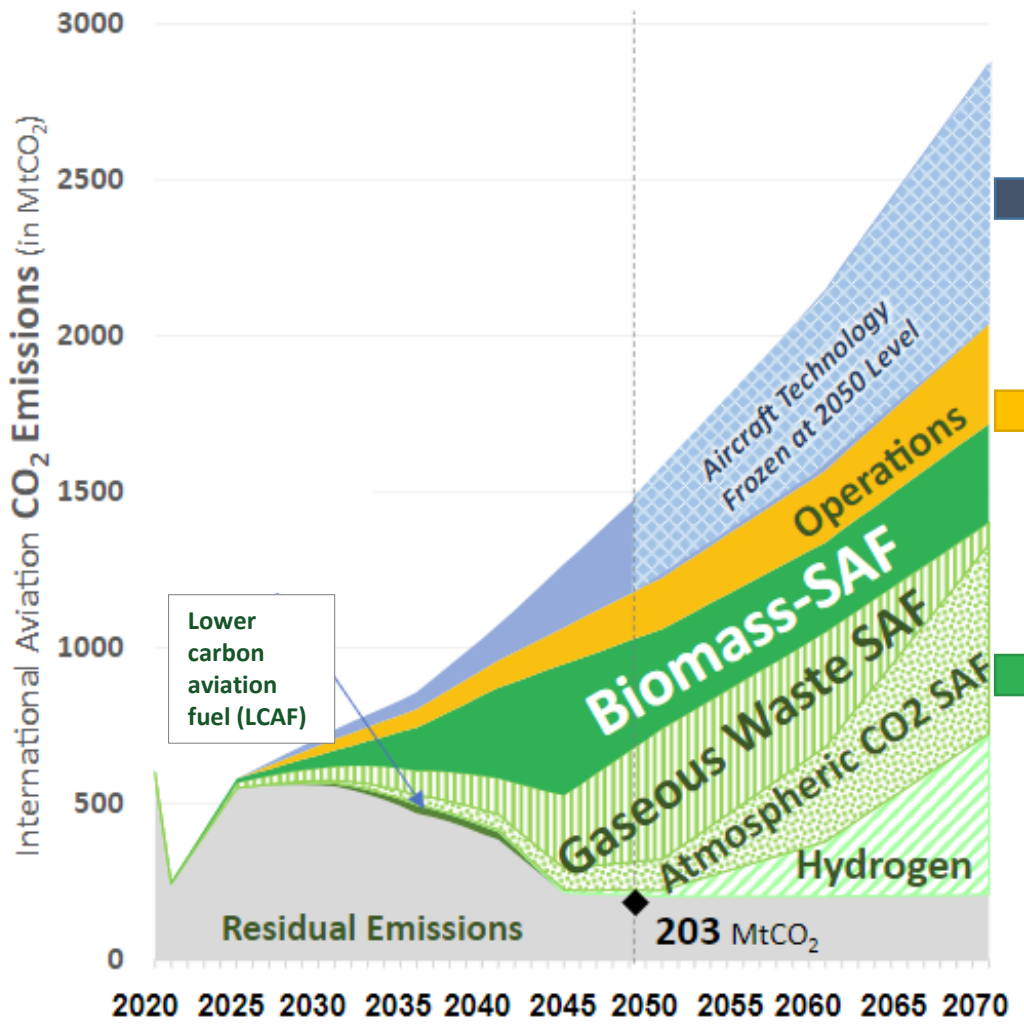
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Long-Term Aspirational Goal (LTAG)

- LTAG of **net-zero carbon emissions from international aviation by 2050** (Resolution A41-21 Para 7)
- In support of Paris Agreement's temperature goal
- LTAG supported by wide range of stakeholders
- SAF, LCAF, and other cleaner energy sources are key to the achievement of the LTAG
- Convening of ICAO CAAF/3 in November 2023 in Dubai, UAE



LTAG Report – contributions from technology, operations and fuels



Based on LTAG scenario with high ambition

Advanced tube and wing, unconventional airframe/propulsion concept aircraft, non-drop-in fuels such as battery electric etc.

Improvements in the performance of flights across all phases

Sustainable aviation fuels (SAF) and other cleaner energy have the largest impact (contributing more than half) on residual CO₂ emissions
Contributions from hydrogen may increase in the 2050s and 2060s if technically feasible and commercially viable

ICAO Environmental Regional Seminars

- In-person regional seminars in April/May 2023
- Raise awareness on A41 results, and gather initial expectations from States for CAAF/3
- Regional seminar for APAC region held from 3 – 4 May 2023 in Bangkok, Thailand



ICAO State Action Plans Initiative

- A41-21 encourages all ICAO Member States to prepare, update and submit their action plans to ICAO as soon as possible, preferably by the end of June 2024
- Fully quantified SAPs will help compile information to monitor progress for implementation of LTAG
- 140 States representing more than 98% of global RTK have voluntarily submitted SAPs to ICAO
- ICAO working on update of ICAO Doc 9988, Guidance on the Development of States' Action Plans on CO₂ Emissions Reduction Activities



**Are you ready for a sustainable future?
Did your State submit an Action Plan?**

What is a State Action Plan?

- A voluntary reporting tool for States to communicate information on actions to address CO₂ emissions from international aviation to ICAO.
- A bottom-up approach that enables ICAO to compile global progress towards meeting the aspirational goals.

What does a State Action Plan contain?

At minimum, a State Action Plan should contain five elements:

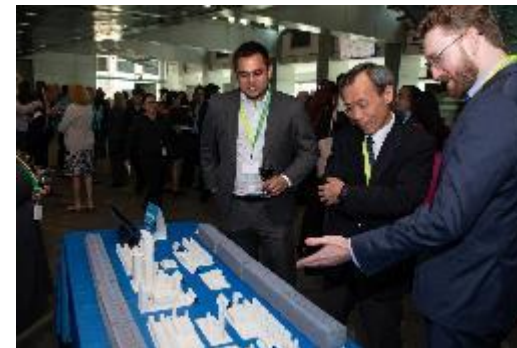
- 1 – Focal Point Information**
Contact information of the officially nominated State Action Plan Focal Point
- 2 – Baseline Scenario**
Estimated fuel consumption, CO₂ emissions, and RTK for international aviation (without action)
- 3 – Mitigation Measures**
Details of the actions to be taken to mitigate CO₂ emissions
- 4 – Expected Results**
Estimated impact of selected mitigation measures on the baseline, including fuel consumption, CO₂ emissions
- 5 – Assistance (if needed)**
Details of any assistance needed by the State

Top 10 reasons to develop a State Action Plan

1. Develop a better understanding of the share and projections of international aviation CO₂ emissions in your State;
2. identification of the most relevant mitigation actions;
3. synergizes the multiplication of the environmental effects of mitigation measures;
4. enable enhanced cooperation between aviation stakeholders that can positively reflect on all operational areas;
5. identification of assistance needs.
6. harmonization of policies;
7. enhancing stakeholders' support and understanding for policy decisions;
8. establishment of cross-sectoral partnerships;
9. facilitation of technology transfer; and
10. facilitation of capacity building.

2023 ICAO LTAG Stocktaking

- Held in conjunction with the first pre-CAAF/3 consultation event, the hybrid LTAG Stocktaking on aviation in sector CO₂ emissions reductions was held from 11 to 13 July 2023.
- Focused on fuel related measures, and covered all aviation in-sector CO₂ reduction measures, including latest developments and innovations
- Over 1000 participants, nearly 100 panelists



CORSIA developments

- **High levels of readiness for implementation**
 - 125 States voluntarily participate in CORSIA for 2024
 - As of Sep 2023, 108 States already submitted their 2022 CO₂ emissions through CORSIA Central Registry
 - Continual updates to the CO₂ Estimation and Reporting Tool (CERT), ICAO document on CORSIA eligible fuels, eligible emissions units, etc.
- **Continued support to States through:**
 - ACT-CORSIA buddy partnerships
 - Navigating CORSIA Series – 2023 Edition
 - Updates to training material on CORSIA model regulations
 - CORSIA Verification Virtual Classroom
- **Further updates available in monthly CORSIA Newsletter**

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is the first global market-based scheme that applies to a sector. It complements other aviation in-sector emissions reductions efforts such as technological innovations, operational improvements and sustainable aviation fuels to meet the ICAO aspirational goal of carbon neutral growth.

For more details on CORSIA click [here](#)

Reporting 2022 CO₂ Emissions through the CORSIA Central Registry (CCR)

Update In accordance with the provisions of Annex 16, Volume IV, States have to submit CO₂ emissions, through the CORSIA Central Registry (CCR), by 31 August 2023. As of 31 August 2023, 100 States had submitted their 2022 CO₂ emissions through the CCR.

Category	Count
AOs	500
States	147

Category	Count
VBs	60
States	39

Year	Emissions (Mtonnes)
2021	~300
2020	~350
2019	~350

Month	Submitted	Under submission
Jan	0	0
Feb	0	0
Mar	0	0
Apr	0	0
May	0	0
Jun	0	0
Jul	~10	~10
Aug	~100	~10

*Data include CO₂ emissions submitted by States through the CORSIA Central Registry (CCR) and emissions previously reported to ICAO in accordance with the CORSIA submission deadlines.

As per the SARPs in Annex 16, Volume IV, the Secretariat will provide data to fill the emissions gap for States that do not submit data through the CCR in accordance with the CORSIA submission deadlines.

The Secretariat will compile the 2022 CO₂ emissions and any 2022 CEF-related data in Part III and Part IV, respectively, of the ICAO CORSIA document "CORSIA Central Registry (CCR): Information and Data for Transparency". The documents will be published no later than 31 October 2023 on the [ICAO website](#).

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ICAO Assistance, Capacity-building and Training on SAF (ACT-SAF) programme

- Launched in June 2022
- Provides tailored support for States in various stages of SAF development and deployment, facilitate partnerships under ICAO coordination, and serve as platform to facilitate knowledge sharing
- More than 130 States and Organizations participating in ACT-SAF



Financing

- In March and June 2023, the ICAO Council held three high-level exchanges related to climate financing with multilateral development banks, private banks, investment and energy companies to discuss challenges and opportunities on aviation decarbonization
- Further discussions during pre-CAAF/3 policy and finance consultations in July 2023
- ICAO Fininvest initiative – concept under consideration to address A41-21 Resolution



Third ICAO Conference on Aviation and Alternative Fuels (CAAF/3)

- Reviewing **the 2050 ICAO Vision for SAF, including LCAF and other cleaner energy sources for aviation**, in order to **define an ICAO global framework**, in line with No Country Left Behind (NCLB) initiative and taking into account national circumstances and capabilities
- CAAF/3 (20 – 24 November 2023) preceded by 2 pre-CAAF/3 events
 - Pre-CAAF/3 policy and finance consultation (July 2023)
 - Pre-CAAF/3 outcomes consultation (September 2023)
- Adopting a robust framework at CAAF/3 will send the right signal to the world on ICAO's leadership and engagement across States and other stakeholders in the aviation energy transition

