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INTERNATIONAL CIVIL AVIATION ORGANIZATION

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ENVIRONMENT



Environmental Protection: 41st ICAO Assembly ENV Resolutions

ICAO/ SASO ENV Workshop

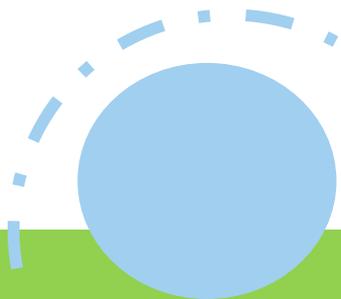
Eswatini, Mbabane (24-27 Oct 2023)

Ms. Chinga Mazhetese

Regional Officer: Environment/ Meteorology

ICAO ESAF Office

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Agenda

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1. Overview
2. A41-20: General provisions, Noise and Local Air Quality
3. A41-21: Climate Change
4. A41-22: CORSIA
5. Conclusion



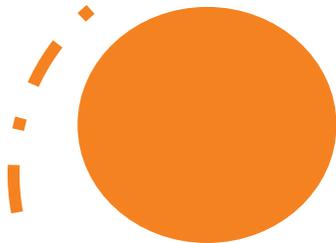


Overview



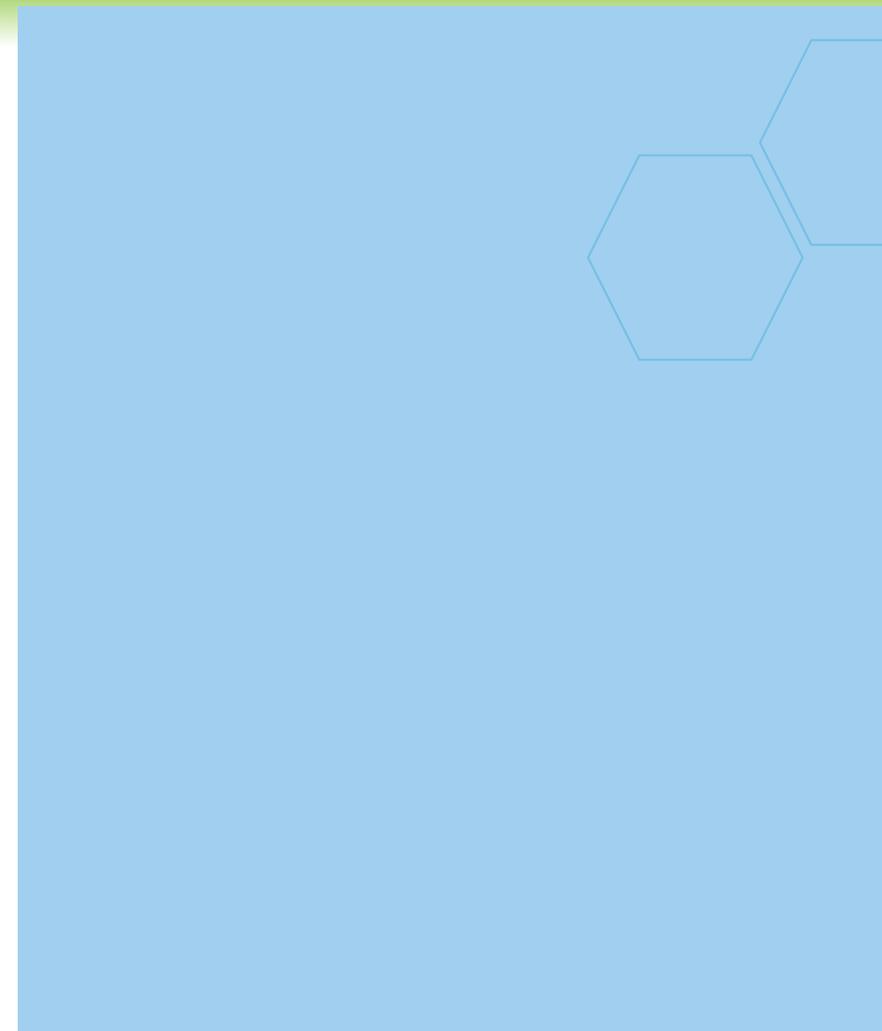
Three (3) Resolutions on environmental protection from the 41st Session of the ICAO Assembly:

- **A41-20:** *Consolidated statement of continuing ICAO policies and practices related to environmental protection- **General provisions, noise and local air quality***
- **A41-21:** *Consolidated statement of continuing ICAO policies and practices related to environmental protection- **Climate change***
- **A41-22:** *Consolidated statement of continuing ICAO policies and practices related to environmental protection- Carbon Offsetting and Reduction Scheme for International Aviation (**CORSIA**)*





A41-20: General provisions, Noise and Local Air Quality —

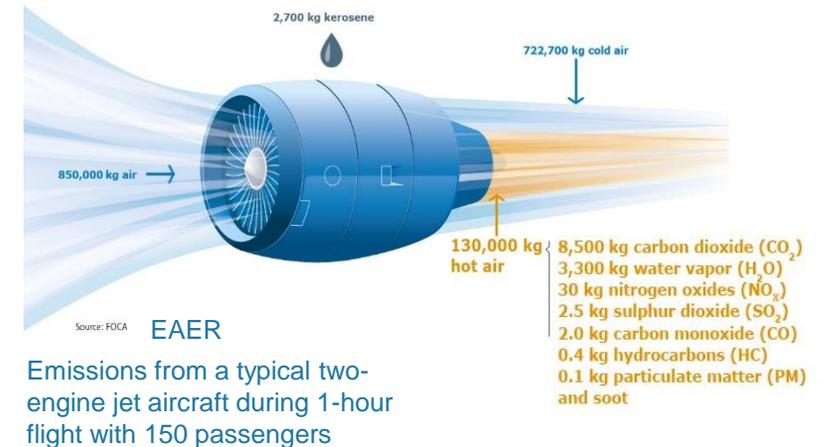


A41-20: General provisions, noise and local air quality

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Adverse environmental effects of civil aviation

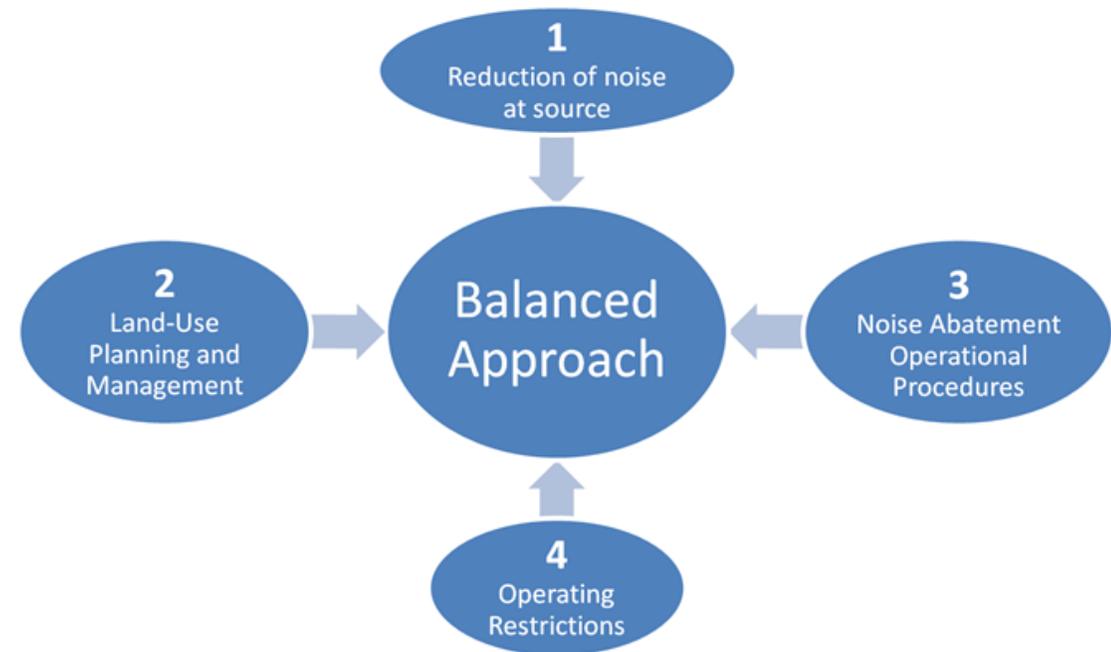
- Reduced by the application of comprehensive measures e.g.
 - Use of clean, renewable and sustainable energy sources
 - Land-use planning and management
 - Technological improvements
 - More efficient Air Traffic Management (ATM)
 - Community engagement etc.



Reliable and best available information on the environmental effects of aviation is essential for the development of policy by ICAO and also by States

Objectives:

- Limit or reduce the number of people affected by significant aircraft noise;
- Limit or reduce the impact of aviation emissions on Local Air Quality (LAQ);
- Limit or reduce the impact of aviation greenhouse gas emissions on the global climate; and
- Ensure future resilience of air transport by adapting its infrastructure and operations to the consequences of climate change



What does this mean for the Continent, States and the Industry?

- States to consider adoption of:
 - the ‘**balanced approach to noise management**’ (ICAO Doc 9829); and
 - the **community engagement principles** in ICAO Circular 351
- Phase-out of subsonic jet aircraft which exceed the noise levels in Annex 16 Vol I:
 - *States **not to introduce any phase-outs** of aircraft which exceed the noise levels in Chapter 3 of Annex 16 Vol I **before considering a number of factors***



A41-21:Climate Change

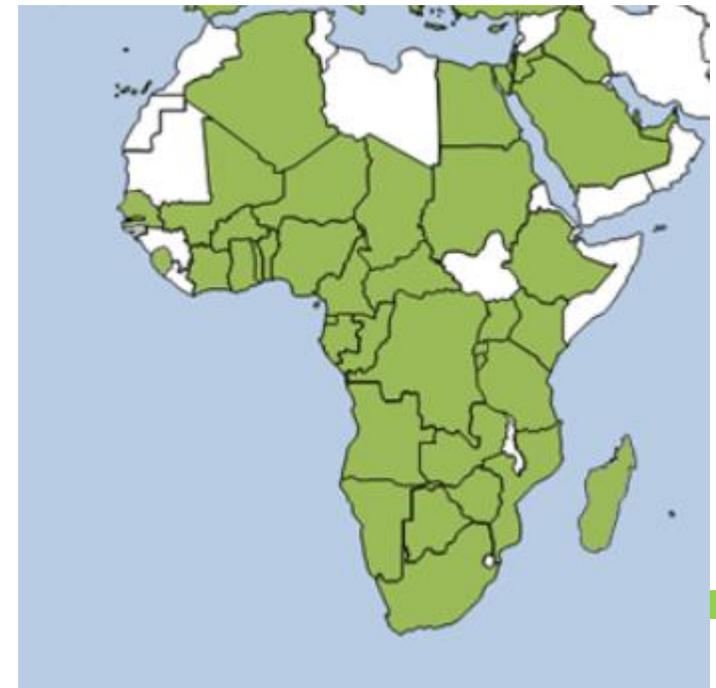


Limiting or reducing emissions that contribute to global climate change:

- ICAO's work on the environment contributes to 14 of the 17 UN Sustainable Development Goals (SDGs)
- Submission and update of voluntary **State Action Plans** to ICAO
 - On reduction of emissions from international aviation
 - Outlining respective policies, actions and roadmaps, including long term projections
 - States developing/ updating SAPs to submit to ICAO by the **end of June 2024**.
 - *Once every 3 years thereafter*

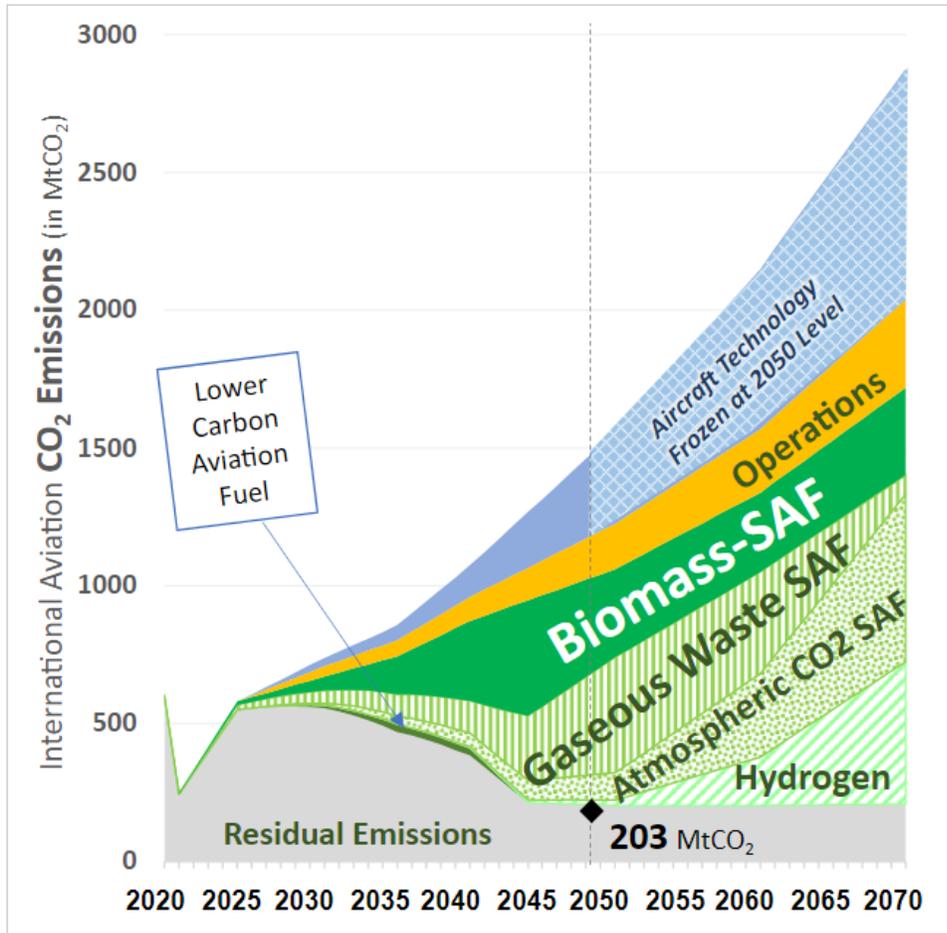
UN SDG 13: *'Take urgent action to combat climate change and its impact'*

Map of State Action Plans Submitted to ICAO



Goals

- aspirational global fuel efficiency improvement rate of 2% per annum from 2021-2050
- **Long-Term Aspirational Goal (LTAG) for international aviation**
 - Net-zero carbon emissions by 2050
 - In support of the Paris Agreement's temperature goal
- Information from SAPs can be used to monitor progress towards the achievement of the LTAG



What does this mean for the Continent, States and the Industry?

- **LTAG**
 - Does not attribute specific obligations or commitments
 - E.g. in the form of emission reduction goals to individual States
 - States to contribute to achieving LTAG:
 - In accordance with national circumstances
 - Within their own national timeframe
 - each State's special circumstances and respective capabilities will inform the State's contribution to LTAG e.g.
 - Maturity of aviation markets
 - National priorities for air transport development etc.

Sustainable Aviation Fuels (SAFs) play a pivotal role

Role Sustainable Aviation Fuels (SAFs) towards LTAG

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SAF

- renewable or waste-derived aviation fuels that meets sustainability criteria in Annex 16 Vol IV
- **CORSIA**
 - specific methodologies that allow aircraft operators to **reduce their offsetting requirements through the use of SAF and Lower Carbon Aviation Fuels (LCAF)**,
 - including globally-accepted **sustainability criteria** and **life cycle** methodologies



Guidance on potential policies and coordinated approaches for the deployment of SAF (2022)



What does this mean for the Continent, States and the Industry?

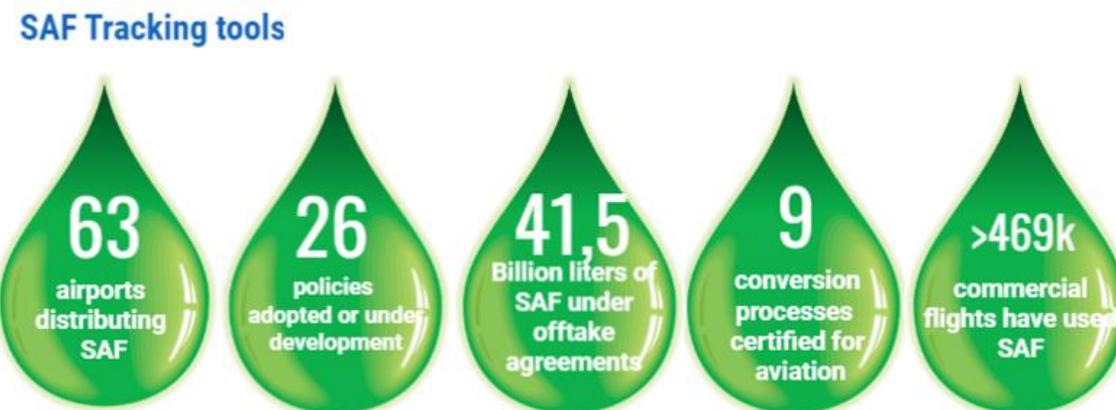
- **SAPs**
 - All States are invited to submit SAPs containing **quantified information** to ICAO;
 - States encouraged to support each other through **SAP Buddy Partnerships**.
- **Role of Sustainable Aviation Fuels (SAFs) in achieving the LTAG**
 - States and Industry partners are encouraged to consider becoming **ICAO ACT SAF Partners**;
 - Transition towards SAF will require significant investments (public & private) across all Regions;
 - ICAO currently connecting with financial institutions across all Regions
 - Aeroplane Operators- CORSIA Monitoring, Reporting and Verification (**MRV**)
 - provides useful information on SAF/LCAF monitoring.



Role of Sustainable Aviation Fuels (SAFs) in achieving LTAG

- **Sustainable Aviation Fuels (SAF) development and deployment**
 - is particularly important;
 - drop-in fuels have the **largest potential** to reduce the overall emission from international aviation by 2050;
 - according to the ICAO Report on the feasibility of a LTAG for international civil aviation CO₂ emission reductions

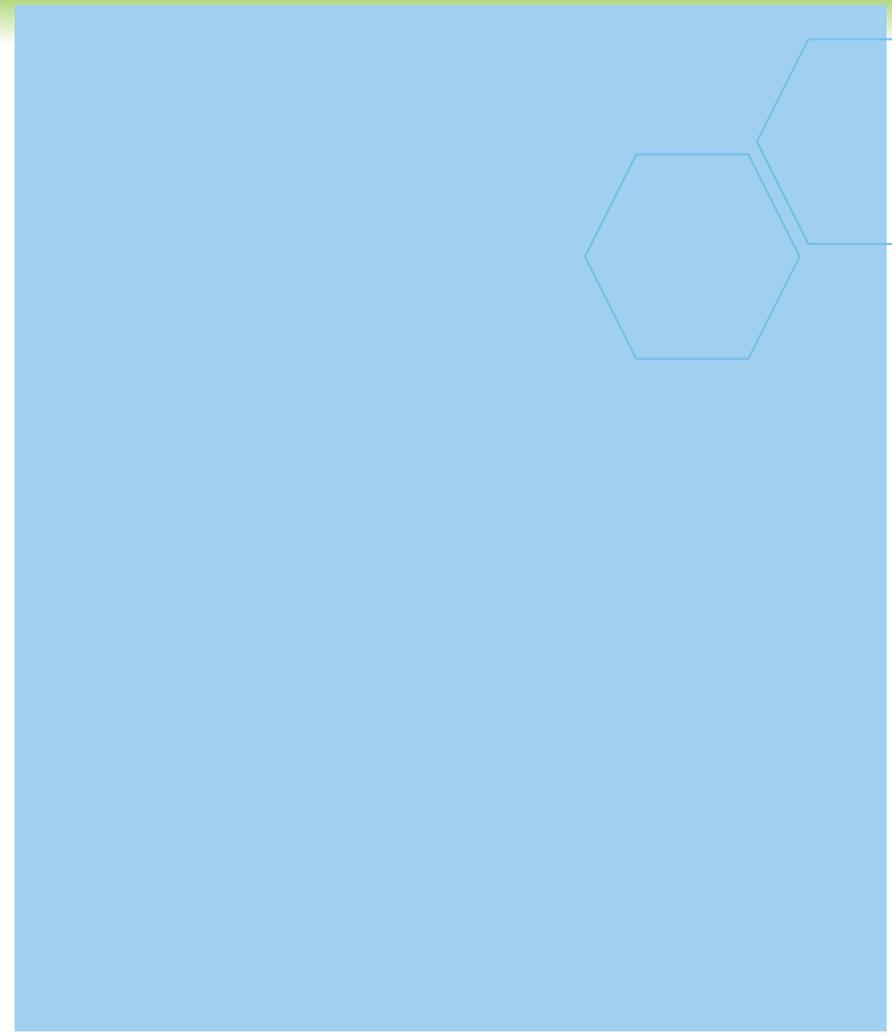
Illustration: Airport distributing SAF and airports in on-going alternative fuel purchase agreements





A41-22: CORSIA

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CORSIA Offsetting requirements

The State will calculate the AO's amount of CO₂ emissions required to be offset in a given year from 01 Jan 2021-31 Dec 2032 prior to consideration of CORSIA eligible fuels, as follows:

$$OR_y = OE \times SGF_y$$

Sector's Growth Factor (SGF):

$$SGF = \frac{(SE_y - SE_{B,y})}{SE_y}$$

The State will calculate the AO's amount of CO₂ emissions required to be offset in a given year (y) from 01 Jan 2033 -31 Dec 2035 prior to the consideration of CORSIA eligible fuels, every year as follows:

$$OR_y = \%S_y * (OE_y \times SGF_y) + \%O_y * (OE_y \times OGF_y)$$



First CORSIA periodic review in 2022 during A41

1. CORSIA Baseline (*Paragraph 11*)

Baseline **for** the Pilot Phase (*Paragraph 11*)

– 2019 emissions

CORSIA Baseline **after** the Pilot Phase (2024-2035)

– 85% of 2019 emissions

2. Offsetting Requirements: % Sectoral/ Individual

(*Paragraph 11*)

– For 2030-2032

- 100% sectoral growth
- (*Previously included at least 20% individual*)

– For 2033-2035

- 85% sectoral growth/ 15% individual growth
- *No longer 30% sectoral and 70% Individual*

3. New entrants: (*Paragraph 12*)

- Now 0.1% of 2019 emissions for all CORSIA Phases
 - Extended beyond the Pilot Phase until 2035



What does this mean for the Continent, States and the Industry?

- AOs to continue with the CORSIA MRV in accordance with the timelines in A16 Vol IV;
- AOs and States to note and consider the A41 CORSIA review when calculating CORSIA Offsetting requirements;
- States to take necessary actions to ensure that national policies and regulatory frameworks are established for the enforcement of the CORSIA (Annex 16 Vol IV); and
- Establishment of partnerships among States (ICAO ACT-CORSIA Programme).



Thank You