



ICAO

ENVIRONMENT

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New ICAO Activities and State Action Plans

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ICAO Global Aspirational Goals – Relationship with State Action Plans

Selecting mitigation measures from the **basket of measures** and quantifying their expected impacts (expected results) are required elements of a State Action Plan

2% fuel improvement per year

Carbon neutral growth from 2020



- ICAO utilizes the information submitted in all States' Action Plans to assess global progress towards the ICAO **global aspirational goals**
- Results are presented in an aggregated manner



Fuel efficiency & aircraft technology

2% fuel improvement per year

ICAO develops **standards, policies and guidance** to ensure that the latest technology is incorporated to new type and in-production aircraft.

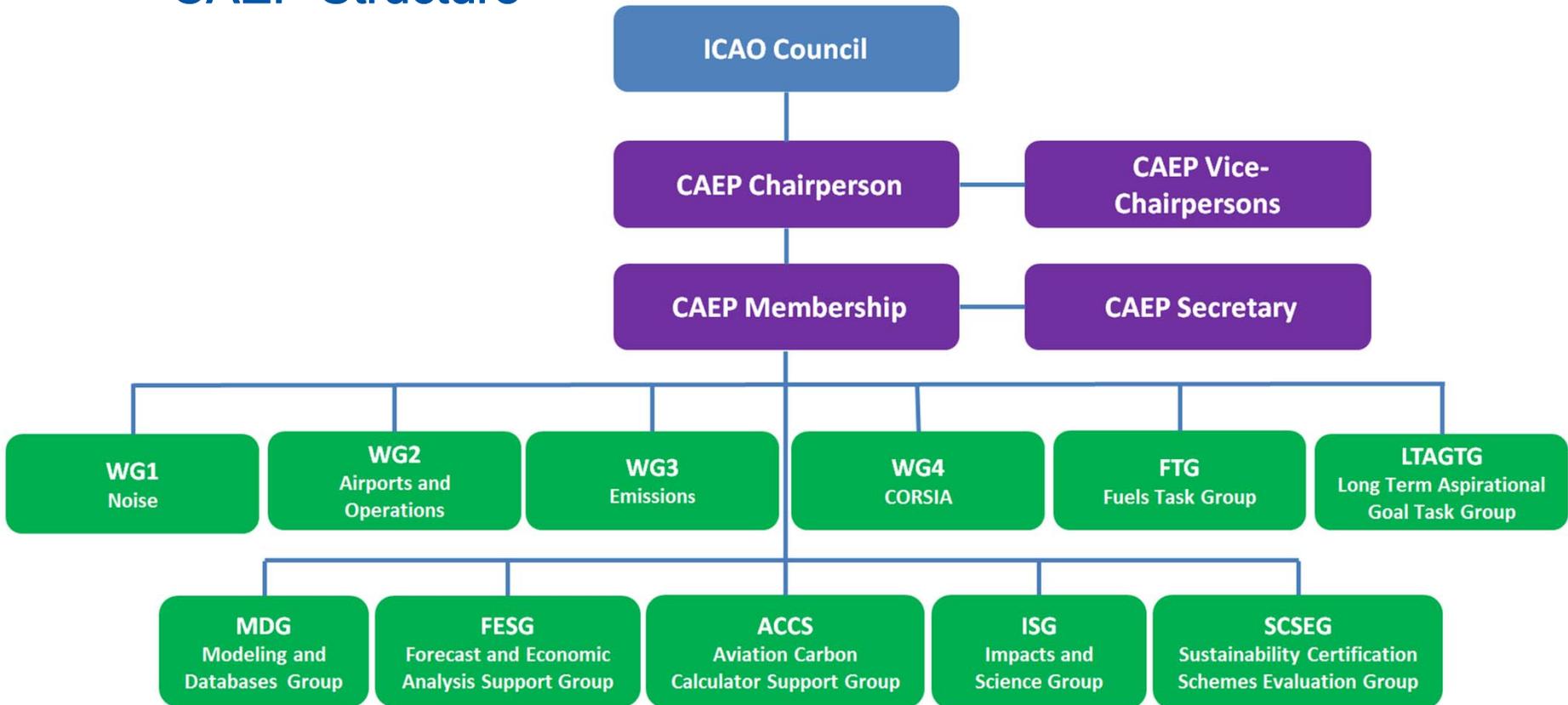
Annex 16 Vol III - ICAO Aeroplane CO₂ Emissions Standard (2016)

- New aircraft type designs from 2020
- Aircraft that are already in production as of 2023

States may be interested in highlighting their compliance with this standard within their State Action Plan
(Mitigation Measure: Technology)

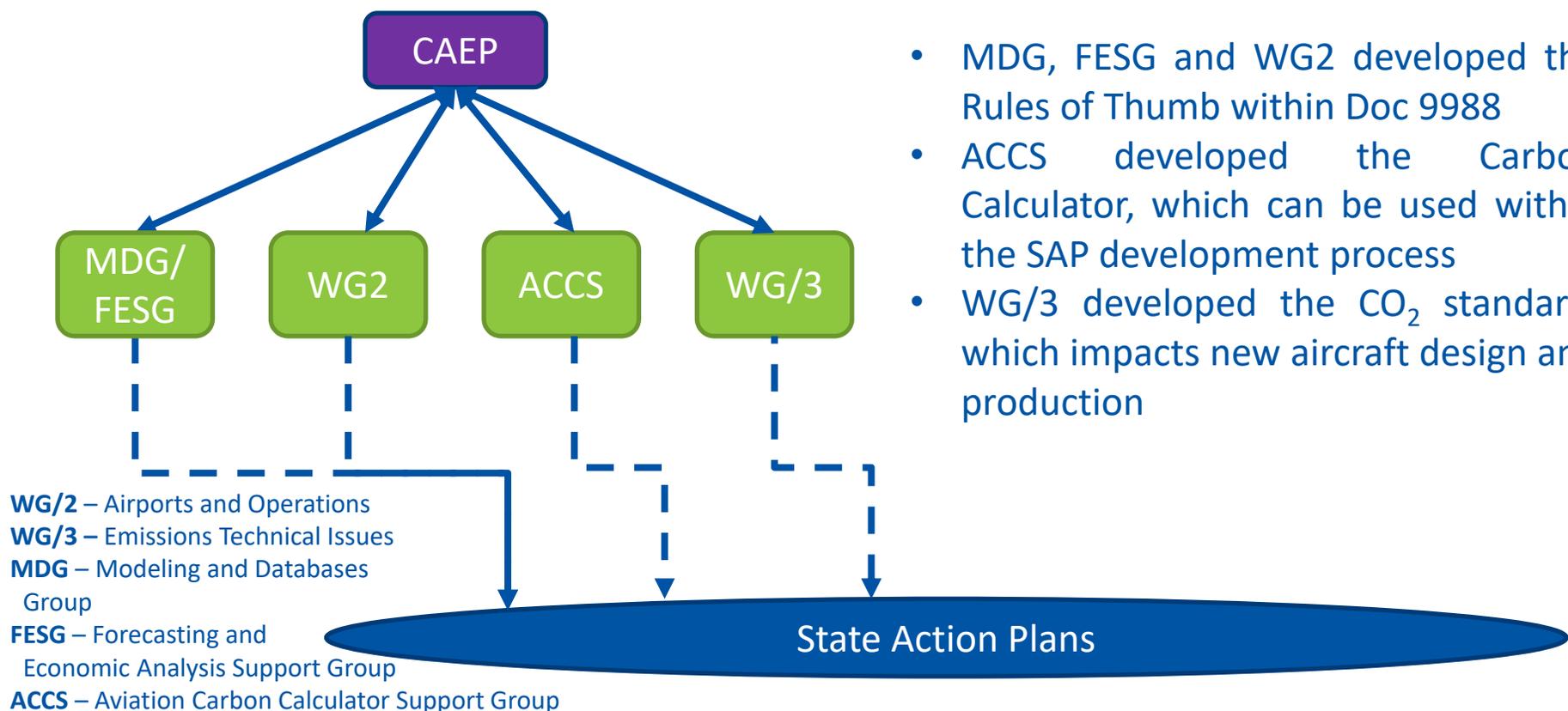


CAEP Structure





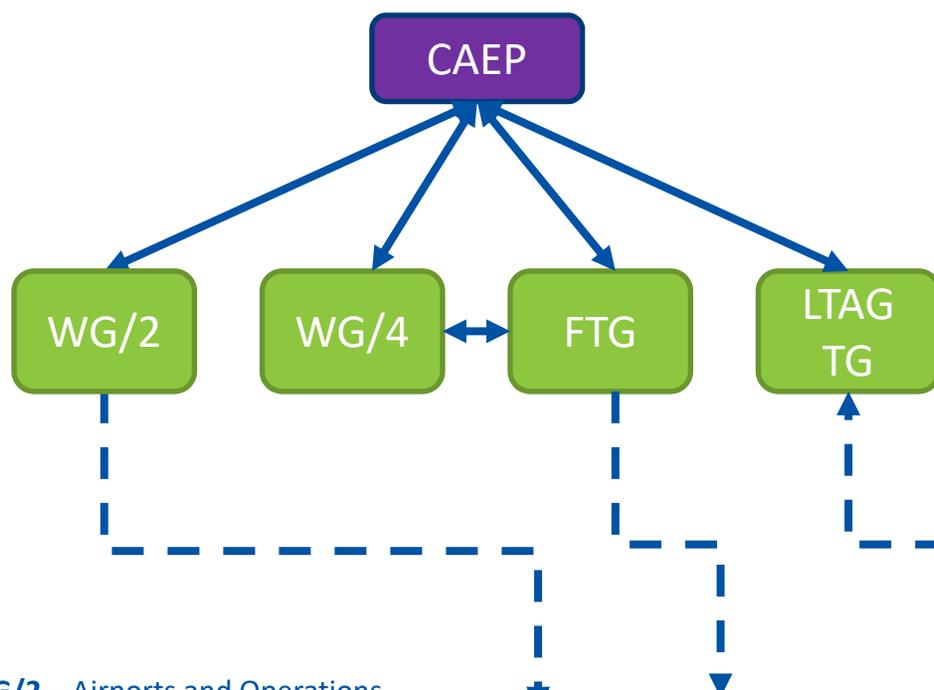
State Action Plan interactions with CAEP working groups, con't



- MDG, FESG and WG2 developed the Rules of Thumb within Doc 9988
- ACCS developed the Carbon Calculator, which can be used within the SAP development process
- WG/3 developed the CO₂ standard, which impacts new aircraft design and production



State Action Plan interactions with CAEP working groups, con't



- WG/2 includes work on air traffic management and flight efficiency (“operational procedures” within the basket of measures)
 - Documents developed by WG/2 can support SAP development
- WG/4 and FTG’s interaction with SAP will be covered in the next presentation
- Information from publically-available SAPs will feed into LTAG TG work

WG/2 – Airports and Operations

WG/4 – CORSIA

FTG – Fuels Task Group

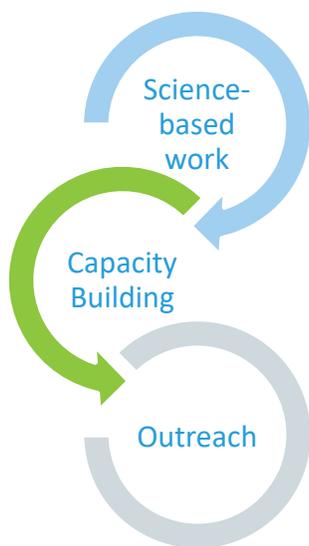
LTAG TG – Long Term Aspirational Goal Task Group

State Action Plans

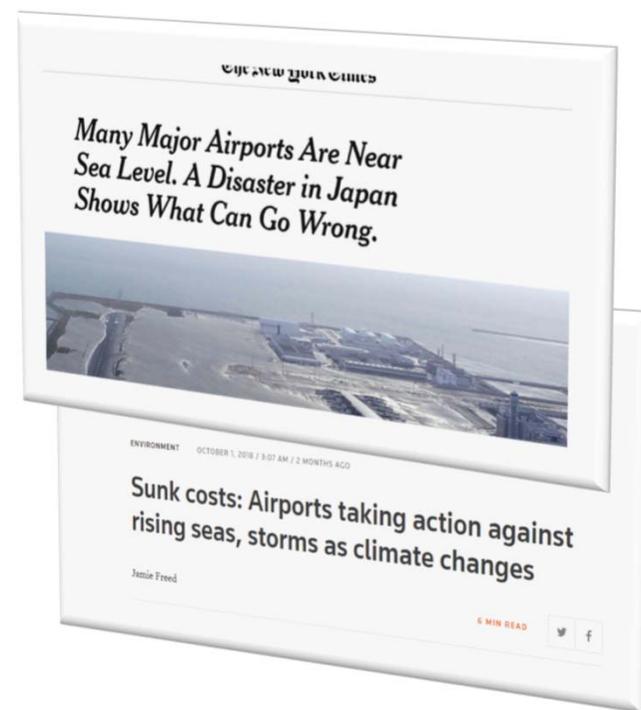


Adaptation and resilience to climate change

ICAO's work:



- Report on the possible effects of climate change on air navigation services over the North Atlantic
- Airport Planning Manual, Part 2 (Doc 9184)
- Climate Adaptation Synthesis (2019)
- Eco-Airport Toolkit e-collection
- Development of a climate change risk assessment methodology
- Cooperation with other UN Bodies
- Build partnerships to implement resilience programs at airports
- Raise awareness, key to enhancing preparedness: ICAO Environmental reports, Green Airport Seminar





Climate Adaptation Synthesis (2019)

FIGURE 1: Based on replies from ICAO Member States, the ICAO Global Climate Adaptation Risk Map (ICAO, 2019) shows the nature of the climate change impacts on international aviation.



- Not a required element of a State Action Plan
- Could be a useful element to consider within the context of your State Action Plan



ICAO Stocktaking Seminar on aviation in-sector CO₂ emissions reductions

UPCOMING
EVENT

Dates: **8-11 September 2020** / Location: **Virtual**

Free-of-charge, but registration is required:

<https://www.icao.int/Meetings/Stocktaking2020/Pages/default.aspx>

What to do next ?

- Register online
- Forward the invitation to relevant stakeholders
- Submit a questionnaire (available online)

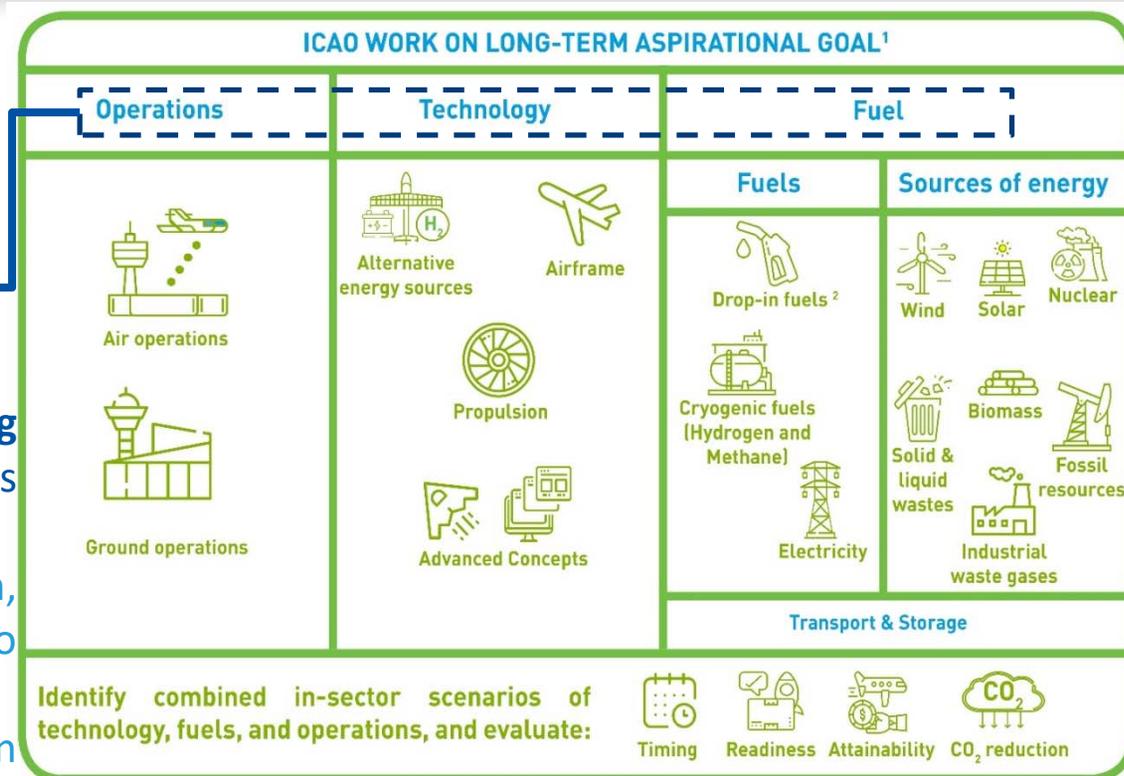




Interactions between Long-Term Aspirational Goal (LTAG) & State Action Plan (SAP)

“In-sector” measures from the basket of measures

- LTAG work is assessing both **existing and innovative in-sector** emissions reductions measures.
- **SAP → LTAG**: source of information, experiences and good practices to be shared (bottom up)
- **LTAG → SAP**: source of inspiration for you to build **your next State Action Plan** (top bottom)



¹ This work should identify and evaluate existing, foreseen, and innovative in-sector measures in technology, fuels and operations, and their enablers, including information of probable costs. This will assist in identifying gaps, and information and expertise needed, in order to complete a thorough assessment of all in sector CO₂ reductions for international aviation. This should include timing, readiness, attainability and the quantity of CO₂ reduction possible, based on a feasible roll out into the aviation sector.

² Sustainable Aviation Fuels (SAF), Low Carbon Aviation Fuels (LCAF), E-Fuels. Icons made by Freepik from www.flaticon.com



Stocktaking Process



- **Questionnaires**
- Open and inclusive

- All ICAO Member States and relevant stakeholders are invited to submit a Stocktaking Questionnaire to share information on measures they implement or plan to implement



LTAG work



- **1 - Data Gathering**

- All publically-available SAPs will be assessed within the context of the LTAG work

BOTTOM UP APPROACH

State Action Plans



Stocktaking Process

LTAG work



- Questionnaires
- Open invitation



- 1 - Data Gathering

- Work on LTAG and Stocktaking: great source of inspiration for you to **build your next State Action Plan**
- Submitted questionnaires from stakeholders in your State may also provide new or updated quantified information that may be relevant for the State Action Plan
→ important role of the SAP Focal Point in coordinating with national Stakeholders

TOP BOTTOM APPROACH

State Action Plans



Three “in-sector” measures aligned with the Global Coalition for Sustainable Aviation

In-sector aviation CO2 emissions reduction initiatives - Tracker tool

Updates on recent **in-sector** aviation CO₂ emissions reduction initiatives is continuously monitored through the Tracker tool



The main objective of the ICAO Global Coalition for Sustainable Aviation is to promote the sustainable growth of international aviation.

As part of the Coalition, the ICAO in-sector aviation CO₂ emissions reduction initiatives tracker tool provides a variety of information related to initiatives to reduce the environmental footprint of aviation, including details on past and ongoing measures and initiatives.

The tracker tool has **three main streams: Technology, Operations and Sustainable Aviation Fuels.**



Technology



Operations



Sustainable Aviation Fuels

www.icao.int/ENV



Including New Activities in a State Action Plan

- The adoption of new measures or technologies may require coordination with new stakeholders
 - Research organizations and academia
 - Start-up companies
 - Energy suppliers
 - Battery producers
 - New fuel suppliers
 - Waste management companies
 - NGOs and local communities





Quantification within State Action Plans

- Including quantified information within State Action Plans ensures that:
 - Your State develops a **clear understanding** of the share and projections of international aviation CO₂ emissions
 - ICAO can **assess progress towards the global aspirational goals**
- ICAO has developed a range of tools to support the quantification of the State Action Plans

A40-18, para 11 – ... **the action plans should include** information on the basket of measures considered by States, reflecting respective national capacities and circumstances, **quantified information** on the expected environmental benefits from the implementation of the measures chosen from the basket, and information on any specific assistance needs;



Publicly-available State Action Plans

- States that have granted ICAO permission to make their State Action Plan publicly-available are posted on:
 - https://www.icao.int/environmental-protection/Pages/ClimateChange_ActionPlan.aspx
- States are encouraged to make their SAP publicly available
 - Showcases your State's commitment to environmental actions
 - Provides an example for States that have not yet developed a SAP
 - Ensures that your State's information will be considered within:
 - ICAO Work on the Feasibility of a Long-Term Aspirational Goal (LTAG) for International Aviation



Conclusions

- Think about highlighting your State's compliance with ICAO **standards** within your State Action Plan
- Think about **adaptation and resilience** for your next State Action Plan
- **ICAO Stocktaking and LTAG** work align with the basket of measures:
 - SAPs are a great source of information, experiences and **good practices to be shared** with Stocktaking and LTAG. (→ **Submit a Questionnaire**)
 - Stocktaking & LTAG are a great source of **inspiration** for you to build your next State Action Plan (→ **Register and follow recent developments**)
- In order to include new activities within a State Action Plan, coordination with **new stakeholders** may be needed
- Interdependencies with other sectors require **strong coordination**
- Long term sustainable solutions should include **holistic approaches**



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(ESAF) Office
Nairobi

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(APAC) Sub-office
Beijing

Asia and Pacific
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Bangkok



THANK YOU