

AVIATION CO₂ REDUCTIONS



STOCKTAKING SEMINAR

TECHNOLOGY · OPERATIONS · SUSTAINABLE AVIATION FUELS



Overview of ICAO work on the field of Environmental Protection

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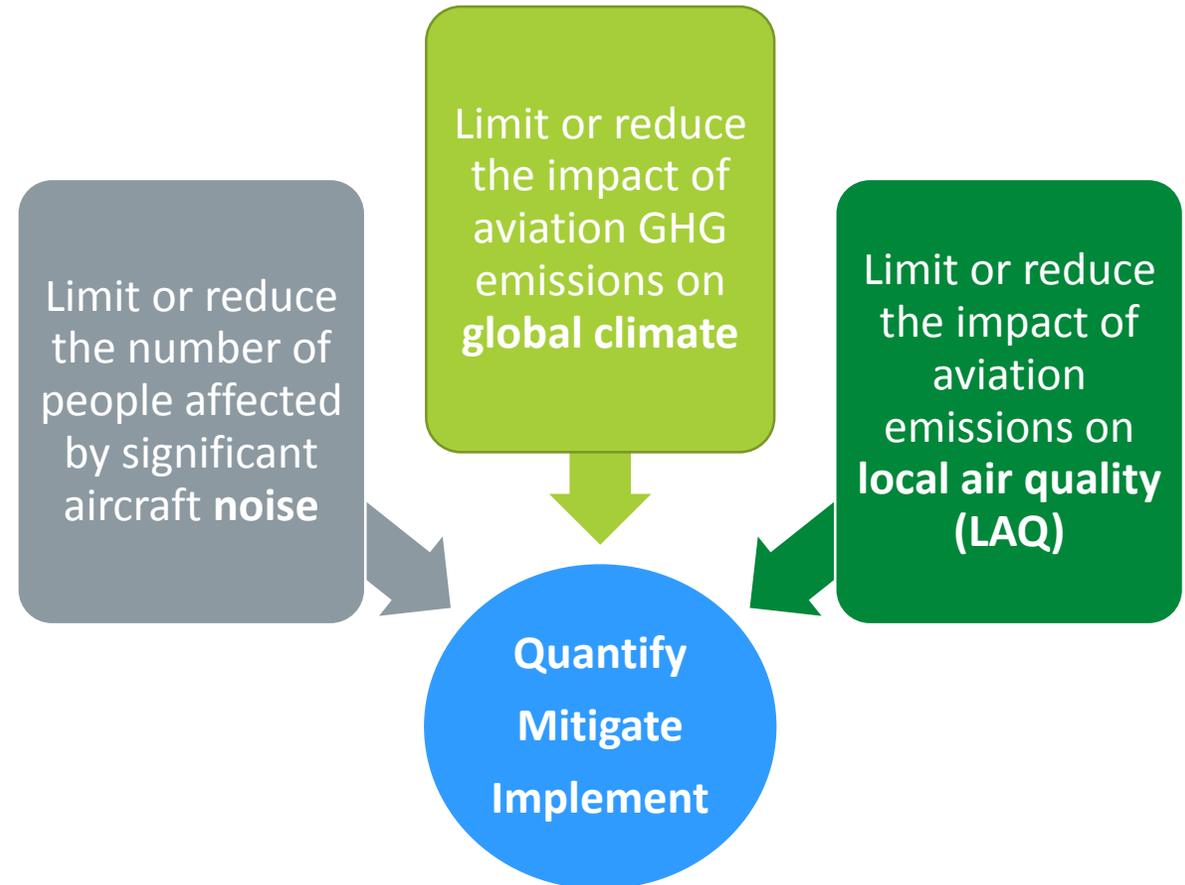


ICAO STRATEGIC OBJECTIVE

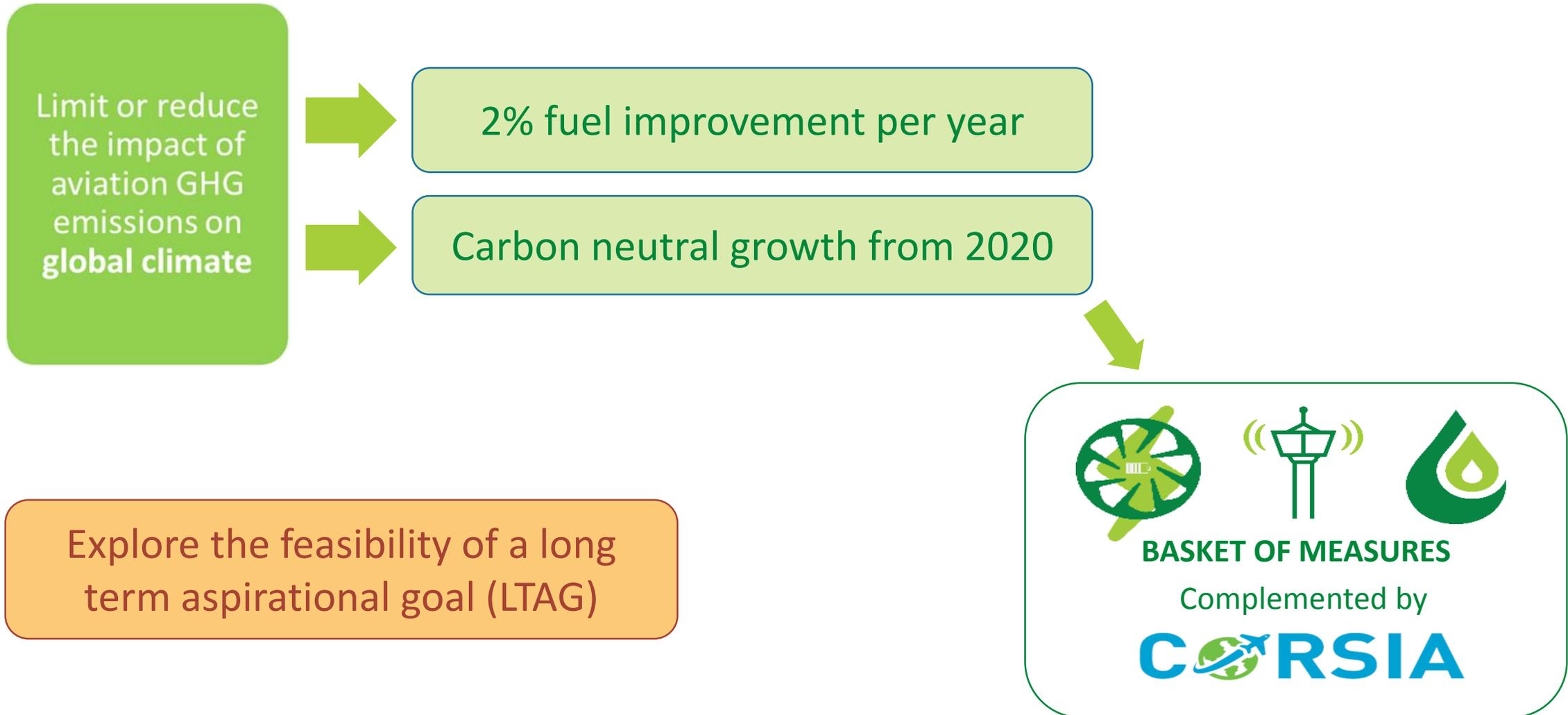
Minimize the adverse effect of global civil aviation on the environment



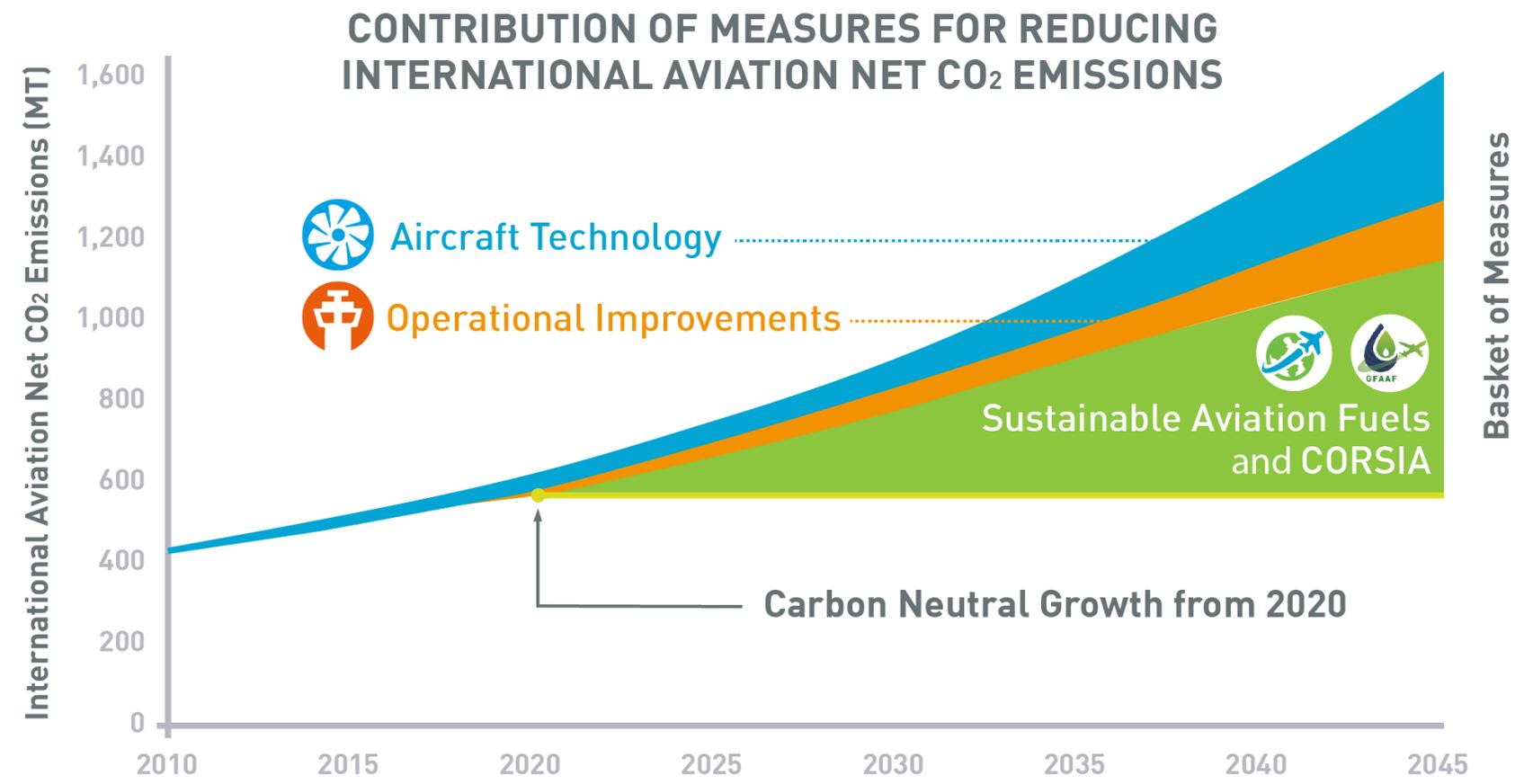
ICAO ENVIRONMENTAL GOALS



ICAO GLOBAL ASPIRATIONAL GOALS ON CLIMATE CHANGE



ICAO'S BASKET OF CO₂ MITIGATION MEASURES



Based on CAEP/11 Analysis (Feb/2019)

ICAO'S BASKET OF CO₂ MITIGATION MEASURES

PROGRESS TO DATE

Aircraft technology	First-ever global CO₂ certification Standard for new types and in-production aeroplanes. Fast-paced innovation (new designs, composite materials, hybrid-electric aircraft, renewable energy sources, etc.).	
Operational improvements	CO₂ benefits from air traffic management; air navigation; green airports; etc.	
Sustainable aviation fuels	Around 250,000 commercial flights with drop-in aviation fuels; 8 conversion processes; 9 airports distributing drop-in aviation fuels	
Market-based measures	Carbon Offsetting and Reduction Scheme for International Aviation (CORSA)	

ICAO STATE ACTION PLANS



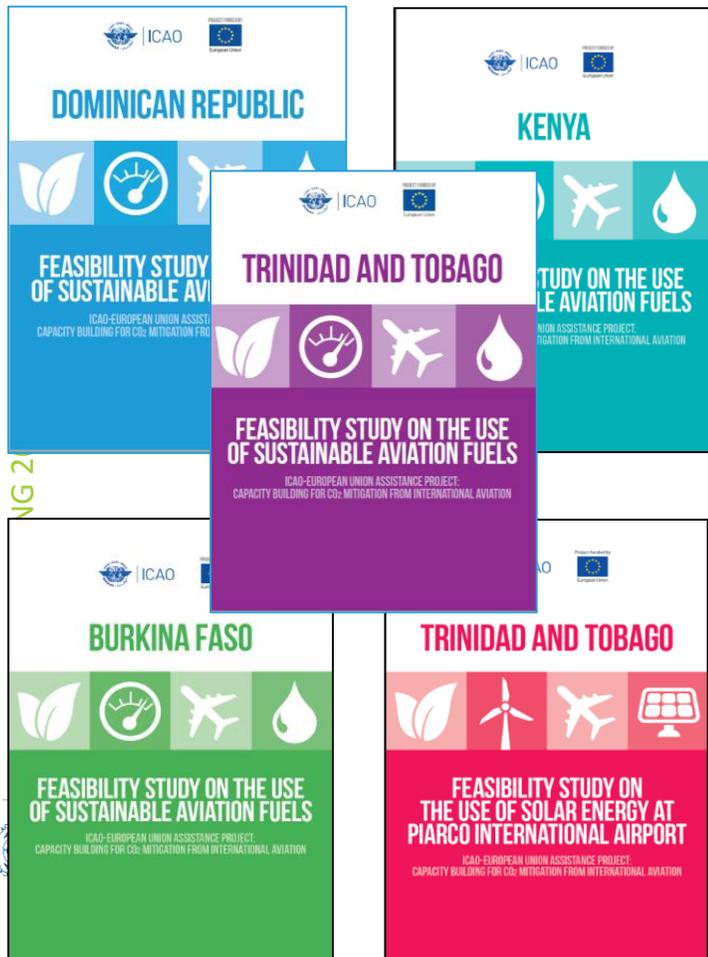
119 States

representing 97.39% of global RTK have **voluntarily** submitted a State Action Plan to ICAO

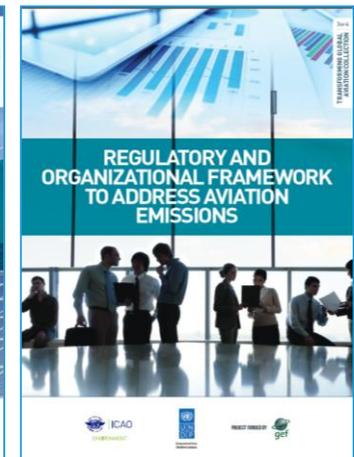
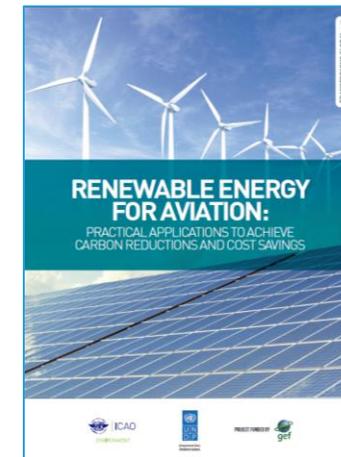
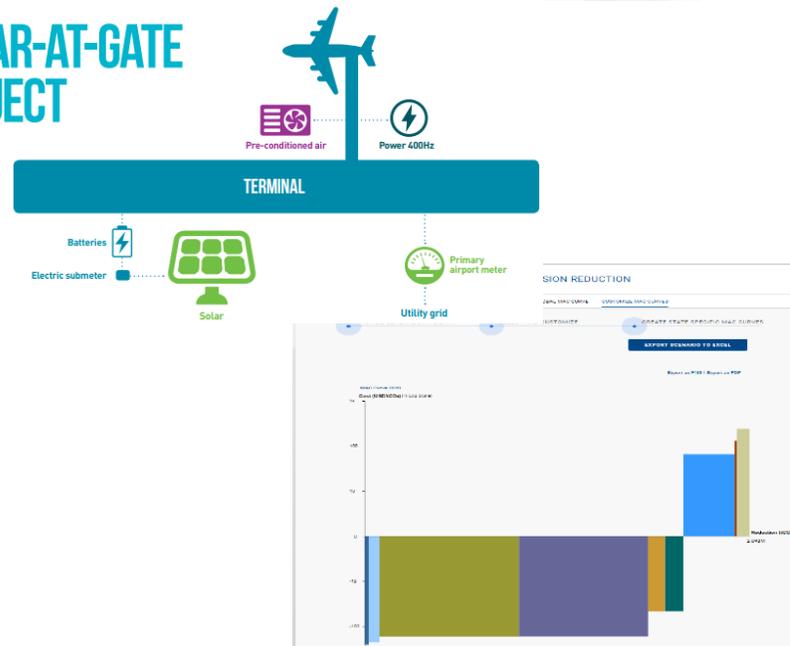
SEPTEMBER 2020

10 YEARS ANNIVERSARY

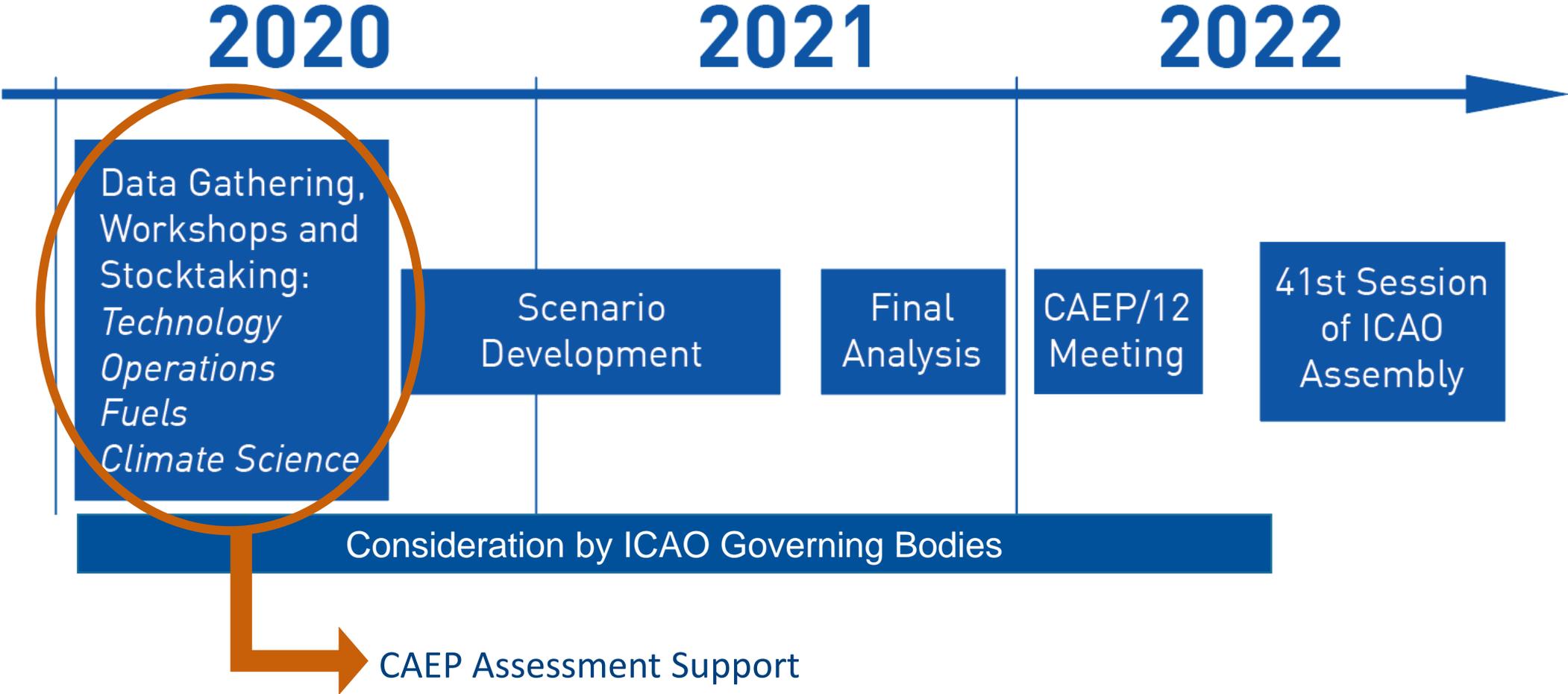
ICAO ASSISTANCE PROJECTS – BRINGING INNOVATION TO ACTION



SOLAR-AT-GATE PROJECT

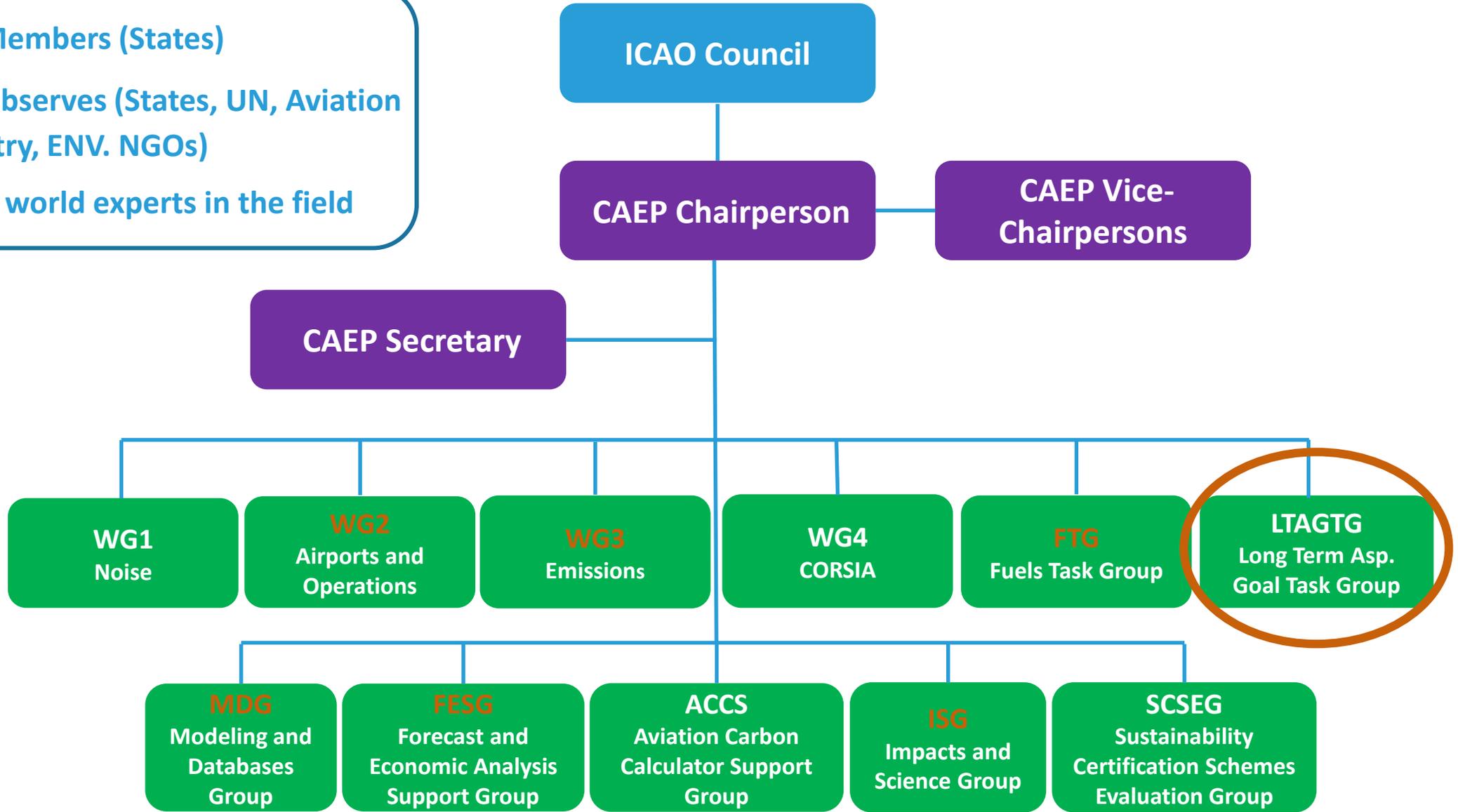


GENERAL LONG TERM ASPIRATIONAL GOAL (LTAG) WORK TIMELINE

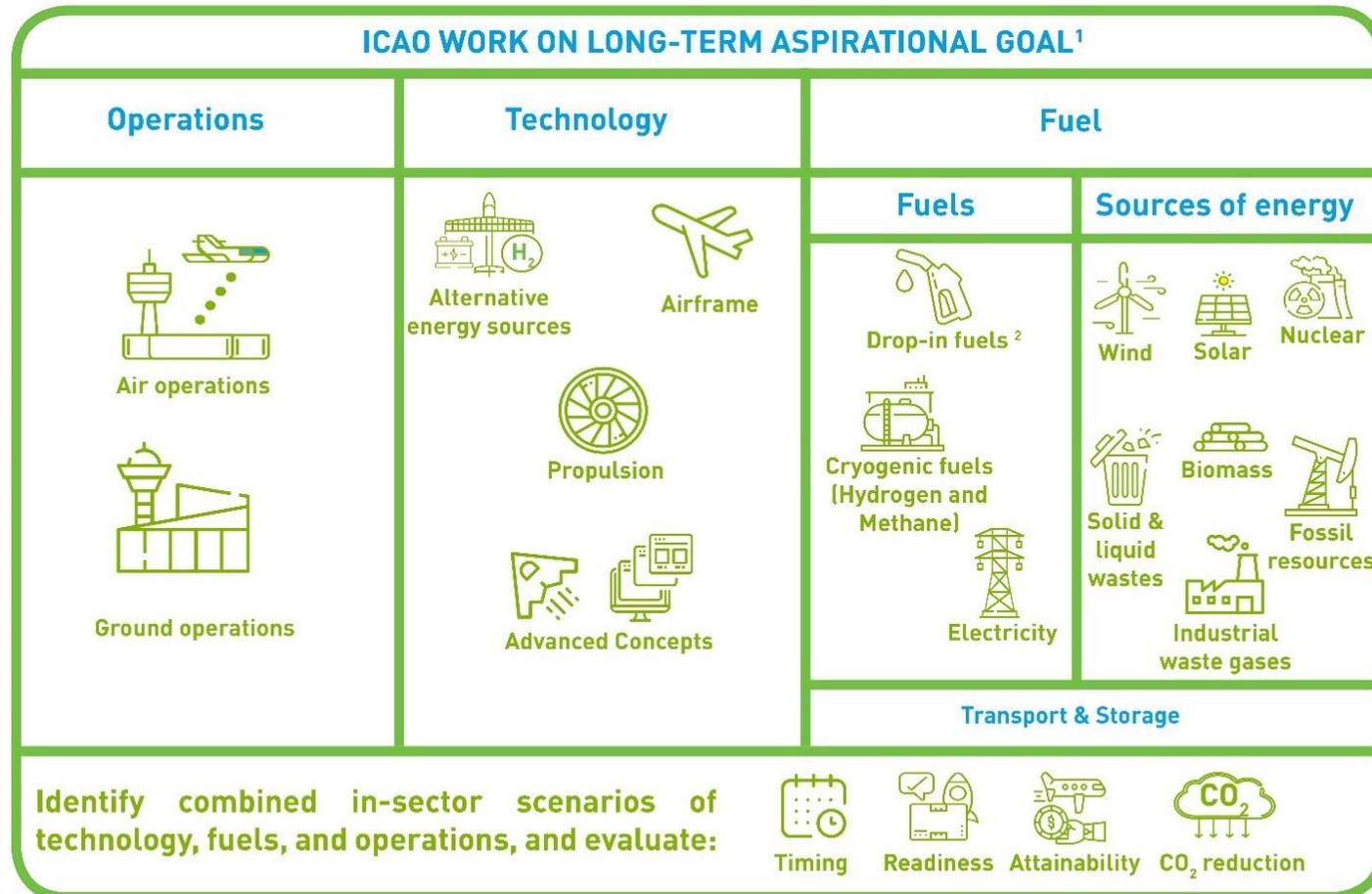


COMMITTEE ON AVIATION ENVIRONMENTAL PROTECTION - CAEP

29 Members (States)
18 Observes (States, UN, Aviation Industry, ENV. NGOs)
600 world experts in the field



LONG TERM ASPIRATIONAL GOAL (LTAG)



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

- **ICAO 40th Assembly (2019)** – Exploration of the feasibility of a Long-Term Global Aspirational Goal (LTAG) for international aviation
- **Open & Inclusive**
- Existing, foreseen and innovative measures.
- **New activities** are arising which could further reduce aviation emissions
- Focused on **in-sector measures**

ICAO STOCKTAKING PROCESS – MAIN GOALS

- “Take stock” of Member States’ and stakeholders’ progress on aviation **in-sector CO₂ emissions reductions**

- Collecting data on:

Technology



Operations



Sustainable Aviation
Fuels



- Solutions, innovations, visions, roadmaps
- Questionnaires - **CLOSE TO 100 QUESTIONNAIRES !!!!**

- Support the ICAO work on the feasibility of a long-term global aspirational goal (LTAG) for international aviation

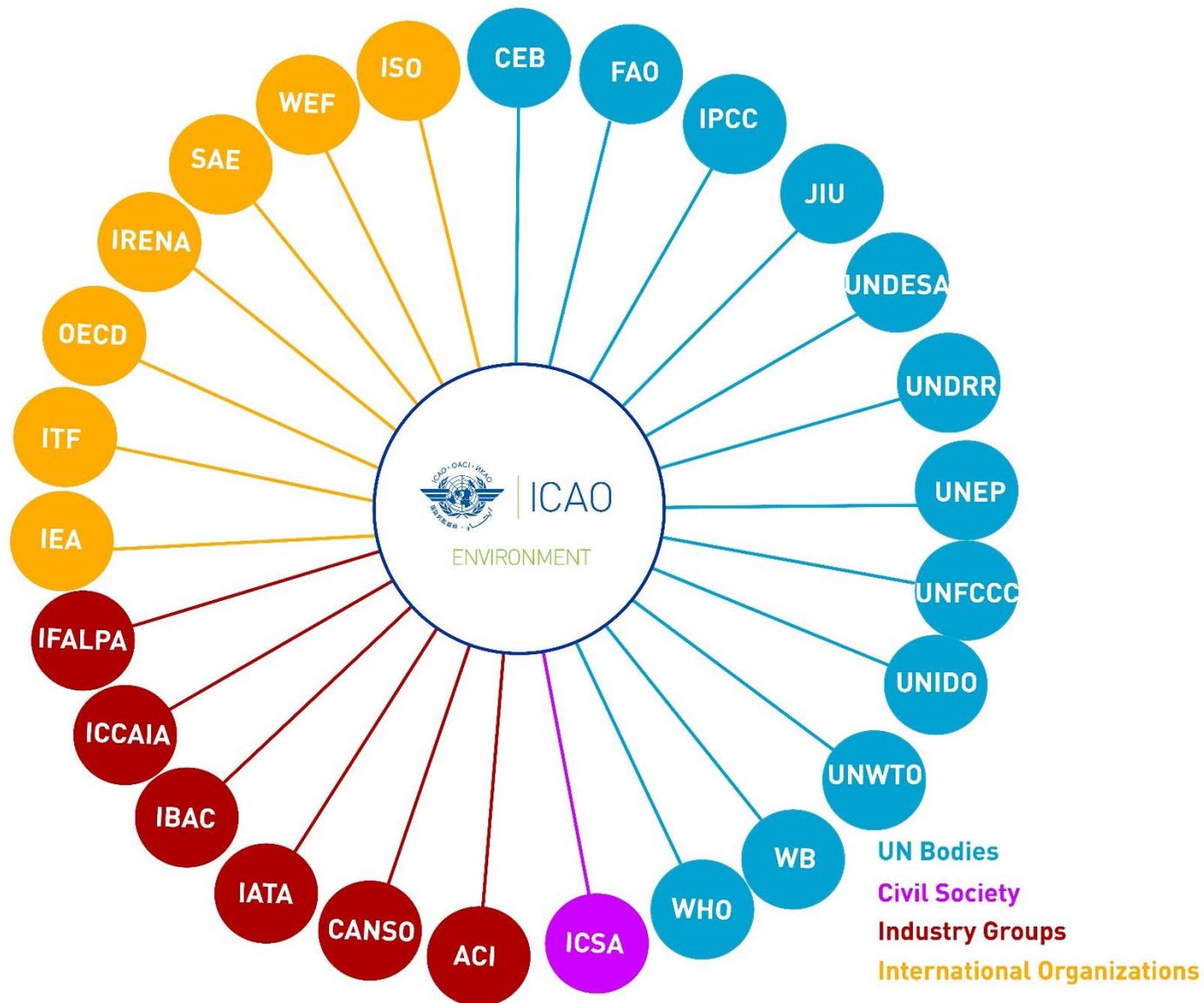


GLOBAL COALITION FOR SUSTAINABLE AVIATION



- Progress on in-sector aviation CO₂ emissions reduction initiatives is continuously monitored through the Tracker tool
- ICAO public website www.icao.int/ENV

COOPERATION WITH UN BODIES AND INTERNATIONAL ORGANIZATIONS



UNITED NATIONS FRAMEWORK



ICAO's work on Environment addresses **14** of the 17 UN 2030 SDGs



UNITED NATIONS SECRETARY GENERAL

Six Climate-related Actions to Shape COVID-19 Recovery

1. As we spend huge amounts of money to recover from the coronavirus, we must deliver new jobs and businesses through a **clean, green transition**.
2. Where taxpayers' money is used to rescue businesses, it needs to be tied to achieving **green jobs** and **sustainable growth**.
3. Fiscal firepower must drive a shift from the grey to **green economy** and make societies and people more **resilient**.
4. Public funds should be used to **invest in the future**, not the past, and flow to sustainable sectors and projects that help the environment and the climate. Fossil fuel subsidies must end and polluters must start paying for their pollution.
5. Climate **risks and opportunities** must be incorporated into the financial system, as well as all aspects of public policymaking and infrastructure.
6. We need to **work together** as an international community.



SUSTAINABLE AVIATION FUELS



STATE ACTION PLANS



CAEP



TOOLS



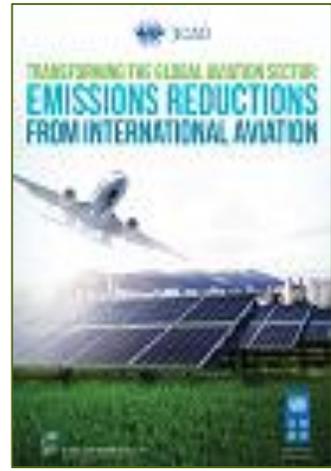
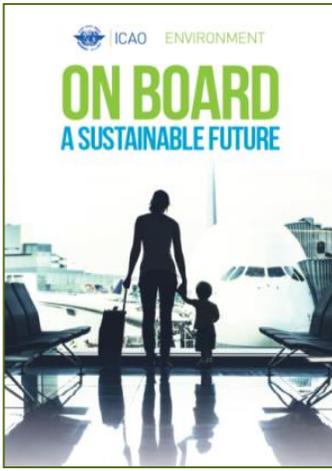
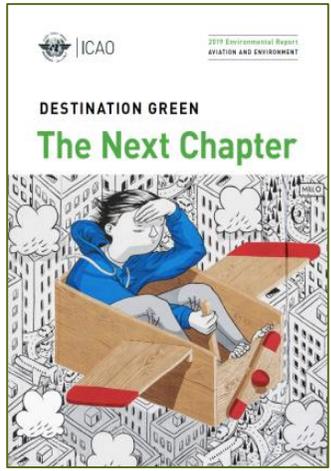
KNOWLEDGE SHARING PLATFORM



CORSIA



ACT-CORSIA



***SAVE THE DATE: ICAO Aviation Green Recovery Seminar - Time to build back better (23 -25 Nov.)**

For more information, please visit our website: <http://www.icao.int/env>

Thank You

