



## **COP23 Special event**

### **International aviation and maritime transport**

***Highlights on the recent actions and decisions taken by the ICAO  
to address emissions from international aviation***

#### ***Opening presentation***

Tetsuya Tanaka

Chief Climate Change, ICAO Secretariat

7 November 2017

Established by the “Chicago Convention” in 1944

UN specialized agency

191 Contracting States

Standards, policies & guidance on environmental protection since 1960’s



## Minimize the adverse effect of global civil aviation on the environment:

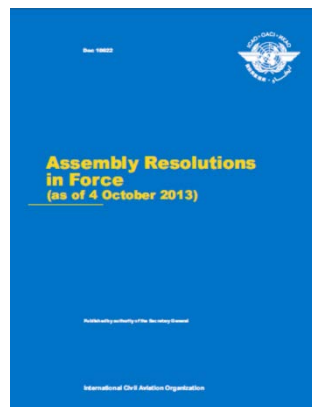
- ➔ limit or reduce the number of people affected by significant aircraft noise;
- ➔ limit or reduce the impact of aviation emissions on local air quality; and
- ➔ limit or reduce the impact of aviation greenhouse gas emissions on the global climate.

## Climate change adaptation and resilience

ICAO's environmental work contributes to  
14 out of the 17 United Nations SDGs



## ICAO Policies



### ICAO Assembly Resolutions A39-1, A39-2 and A39-3:

Consolidated statement of continuing ICAO policies and practices related to environmental protection

## ICAO Standards and Recommended Practices



### Annex 16 - Environmental Protection:

**Volume I**, Aircraft Noise

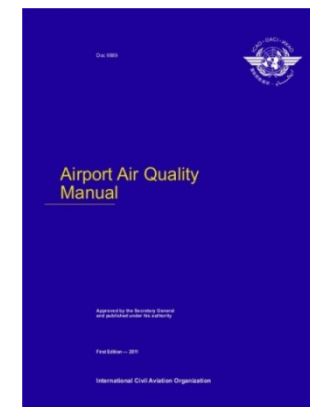
**Volume II**, Aircraft Engine Emissions

**Volume III**, Aeroplane CO<sub>2</sub> Emissions - *New*

**Volume IV**, CORSIA

- *Under Development*

## ICAO Guidance



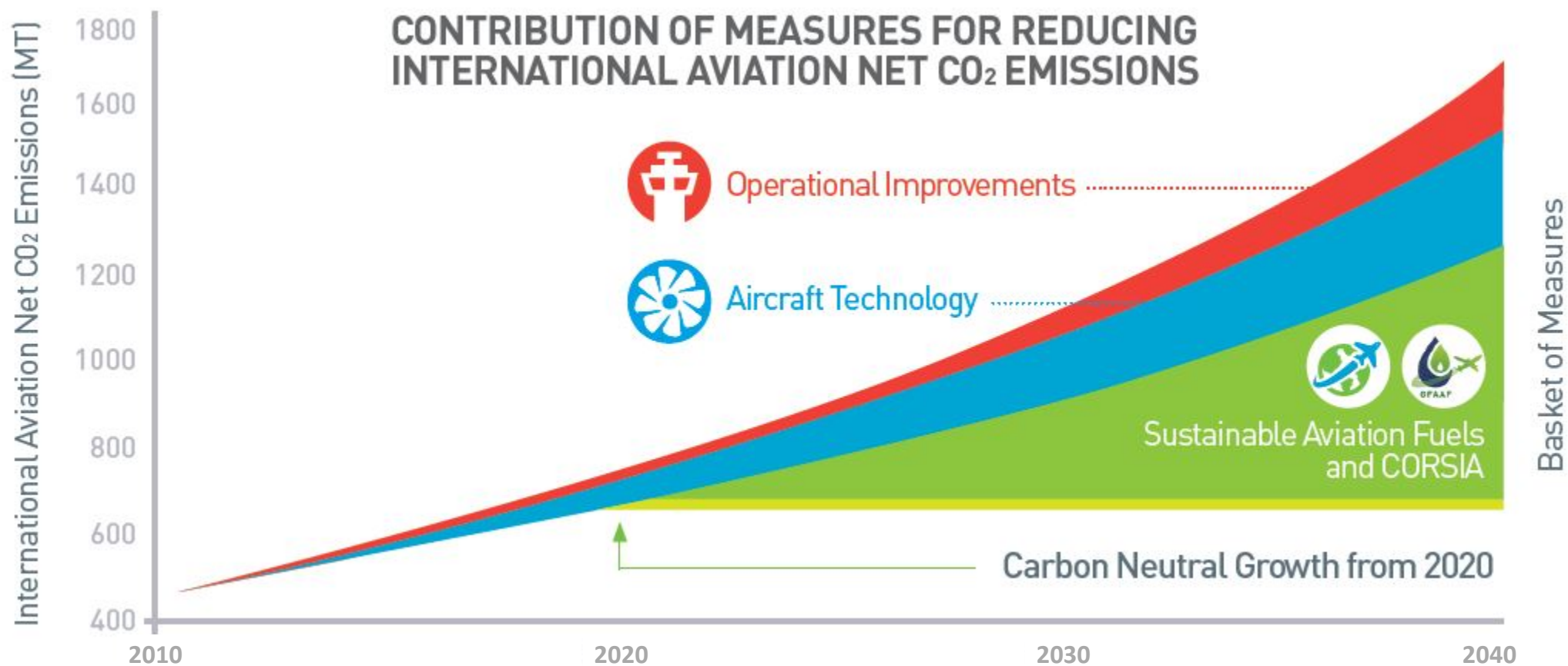
Various guidance on noise, LAQ and climate change, e.g.:

Airport Air Quality Manual (Doc 9889)

Environmental Assessment of Proposed ATM Operational Changes (Doc 10031)

# ICAO global aspirational goals

- 2% annual fuel efficiency improvement
- Carbon neutral growth from 2020 onwards



## Communication Tool between ICAO and States

- **104 States** with more than 90% of international aviation activity voluntarily submitted action plans
- Assembly encouraged States to submit **complete and robust data** in their action plans
- **Guidance and assistance** for States to develop and update their action plans, e.g.:



- ICAO Doc 9988: Guidance on the development of States' Action Plans
- ICAO tools, including: ICAO Carbon Emissions Calculator, ICAO Fuel Savings Estimation Tool (IFSET), ICAO Environmental Benefits Tool (EBT)
- More than 22 ICAO seminars since 2013 – 1171 experts from 132 States trained
- 2 capacity-building and assistance projects, 5 buddy partnerships

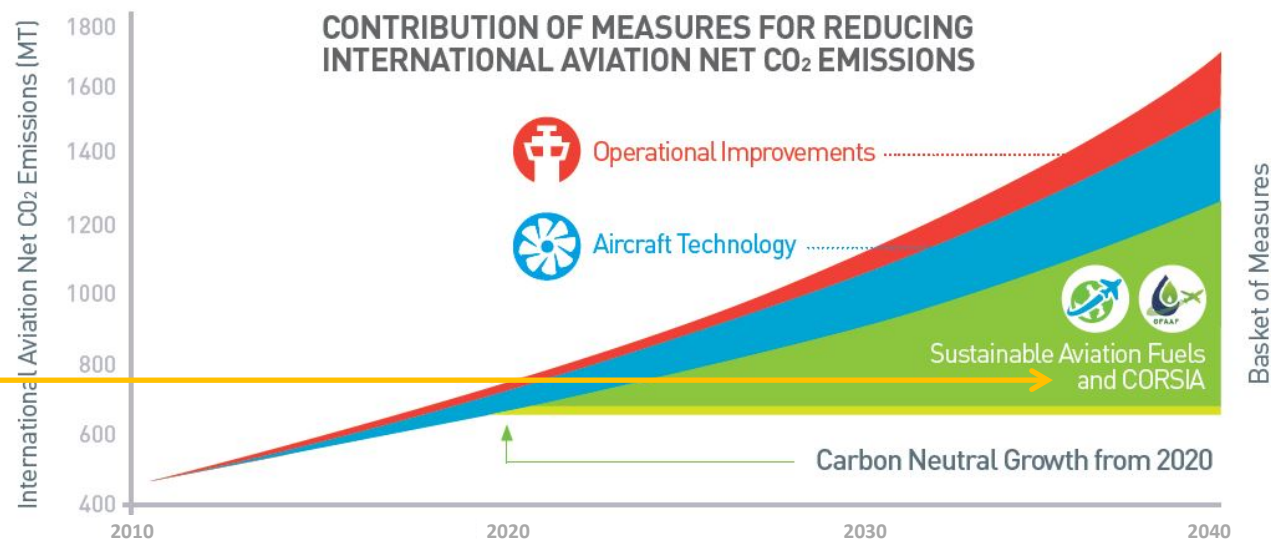
# ICAO basket of measures

- Aircraft technology
- Operational improvements
- Sustainable aviation fuels
- Global market-based measure

- First-ever **global CO<sub>2</sub> certification Standard** for new types and in-production aeroplanes
- Environmental benefits from **Aviation System Block Upgrade (ASBU) Strategy**; Update to **Doc 9184, Airport Planning Manual**
- More than **40,000 commercial flights** with sustainable drop-in alternative fuels; **5 certification pathways**; **four bio-jet hub airports**
- **Carbon Offsetting and Reduction Scheme for International Aviation**



*CORSIA addresses the remaining “emissions gap” to achieve CNG2020*



## Development and deployment of sustainable aviation fuels

→ ICAO Conference on Alternative Fuels in Mexico City (11 to 13 October 2017)

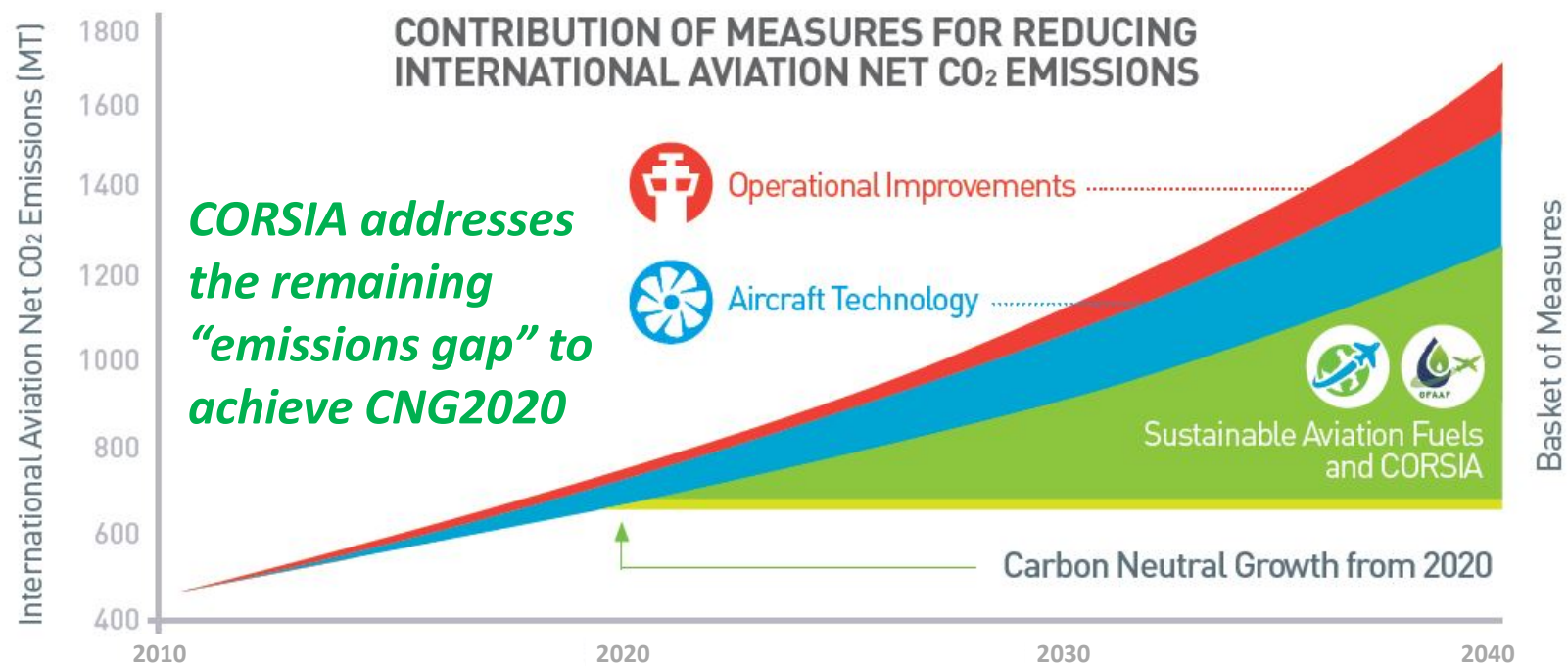
- The Conference endorsed the *2050 ICAO Vision for Sustainable Aviation Fuels*, which called for a significant proportion of conventional aviation fuels (CAF) to be substituted with sustainable aviation fuels (SAF) by 2050
- This vision is intended as a living inspirational path that will be periodically reviewed through a stocktaking process to continuously assess progress on the SAF development and deployment
- CAAF/3 will be held 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



# Carbon Offsetting and Reduction Scheme for International Aviation (CORSA)

CORSIA is the first global market-based measure scheme for any industry sector

- One element in the basket of measures to achieve ICAO's global aspirational goal of carbon neutral growth from 2020 (CNG 2020)
- Complementary measure to a broader package in the basket of measures
  - aircraft technology
  - operational improvements
  - sustainable aviation fuels



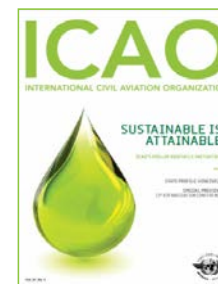
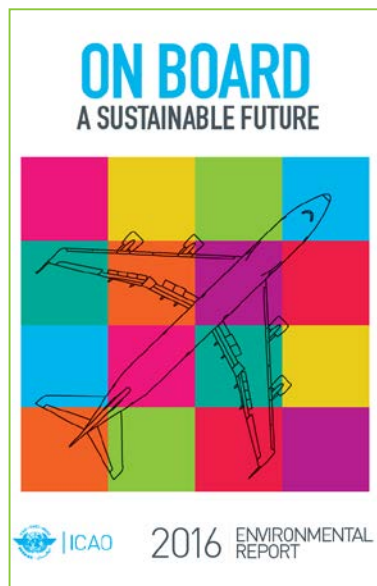




# Video - CORSIA implementation



# Thank you!



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