



ICAO

ENVIRONMENT

ICAO Regional Seminar on CORSIA

Session 1: Overview

Introduction to CORSIA and Resolution A39-3

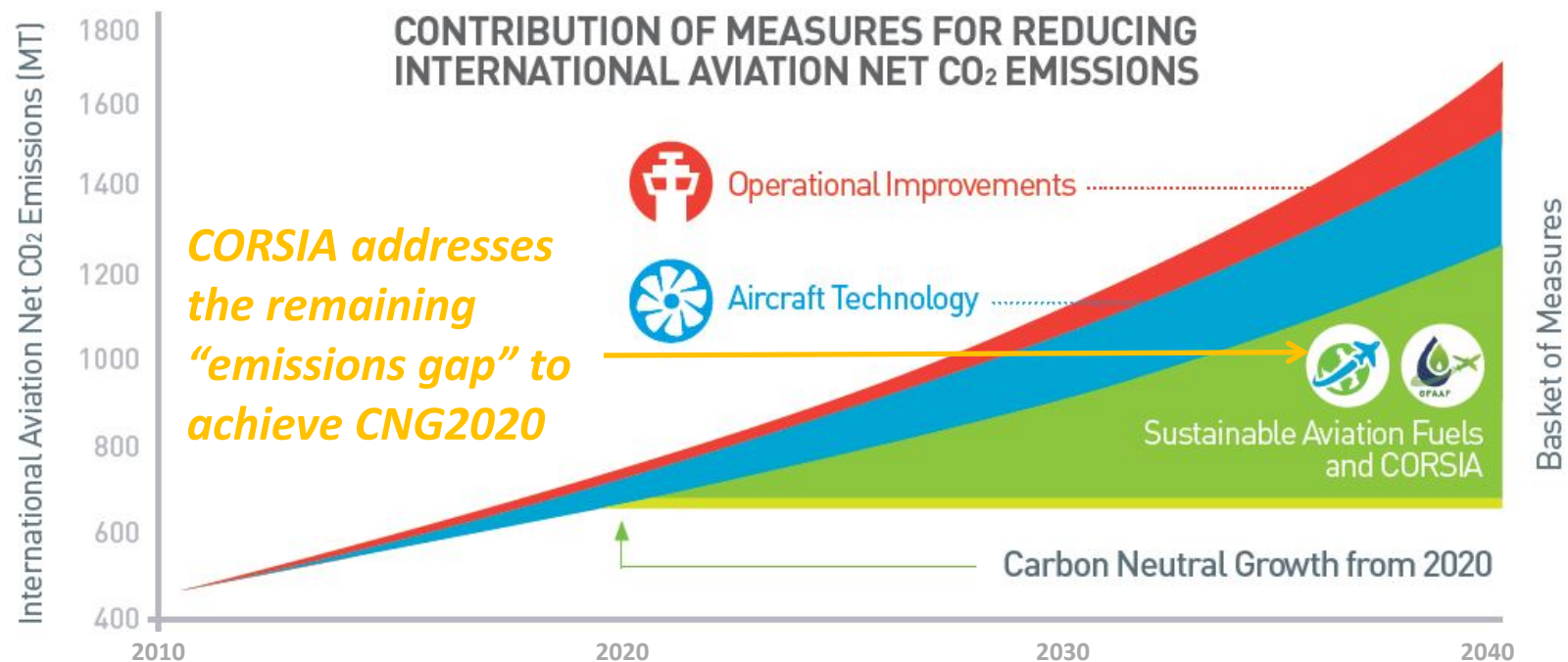
ICAO Secretariat



- To share information on the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIА) implementation requirements, focusing on the Monitoring, Reporting and Verification aspects
- To ensure that participants have a clear understanding of the procedures as well as required actions and related responsibilities of stakeholders involved in the CORSIA implementation
 - The presented information is based on the CORSIA-related Standards and Recommended Practices (SARPs), as shared with States through the corresponding consultation State letter AN 1/17.14-17/129, which was issued 5 December 2017.

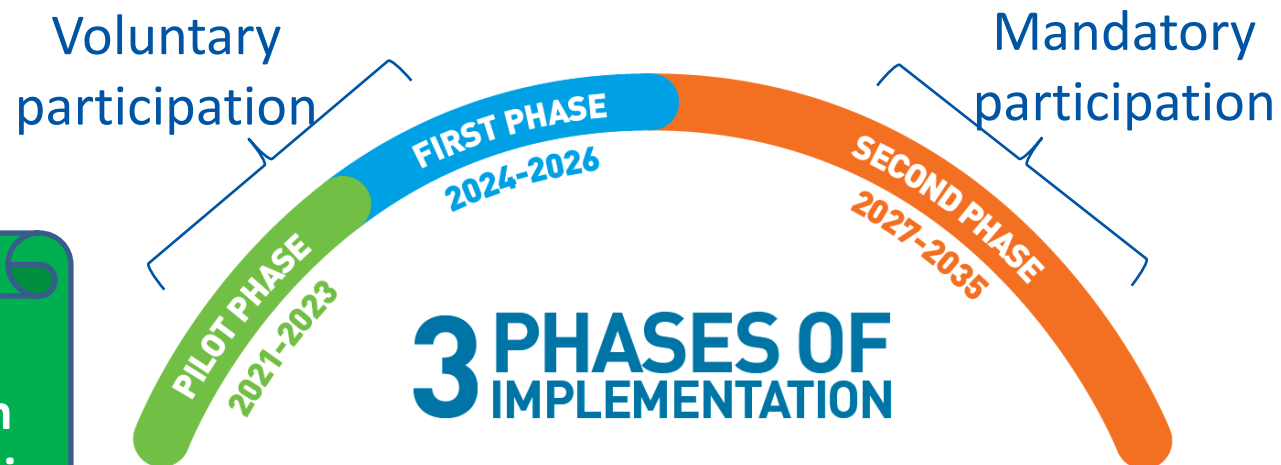
Adopted through Assembly Resolution 39-3 and is the **first global MBM scheme** for any industry sector

- ➔ To achieve ICAO’s global aspirational goal of carbon neutral growth from 2020 (CNG 2020), CORSIA is **one complementary element in the basket of measures** to
 - aircraft technology
 - operational improvements
 - sustainable aviation fuels



- Key design features of CORSIA:
 - Phased implementation (paragraph 9)
 - Emissions coverage: route-based approach (paragraph 10)
 - Offsetting requirements (paragraph 11)
 - New entrants (paragraph 12)
 - Technical exemptions (paragraph 13)
 - Review mechanism (paragraphs 9g and 18)
- Implementation features:
 - Monitoring, Reporting and Verification (paragraphs 15, 20a and 20b)

Participation of ICAO States in the CORSIA

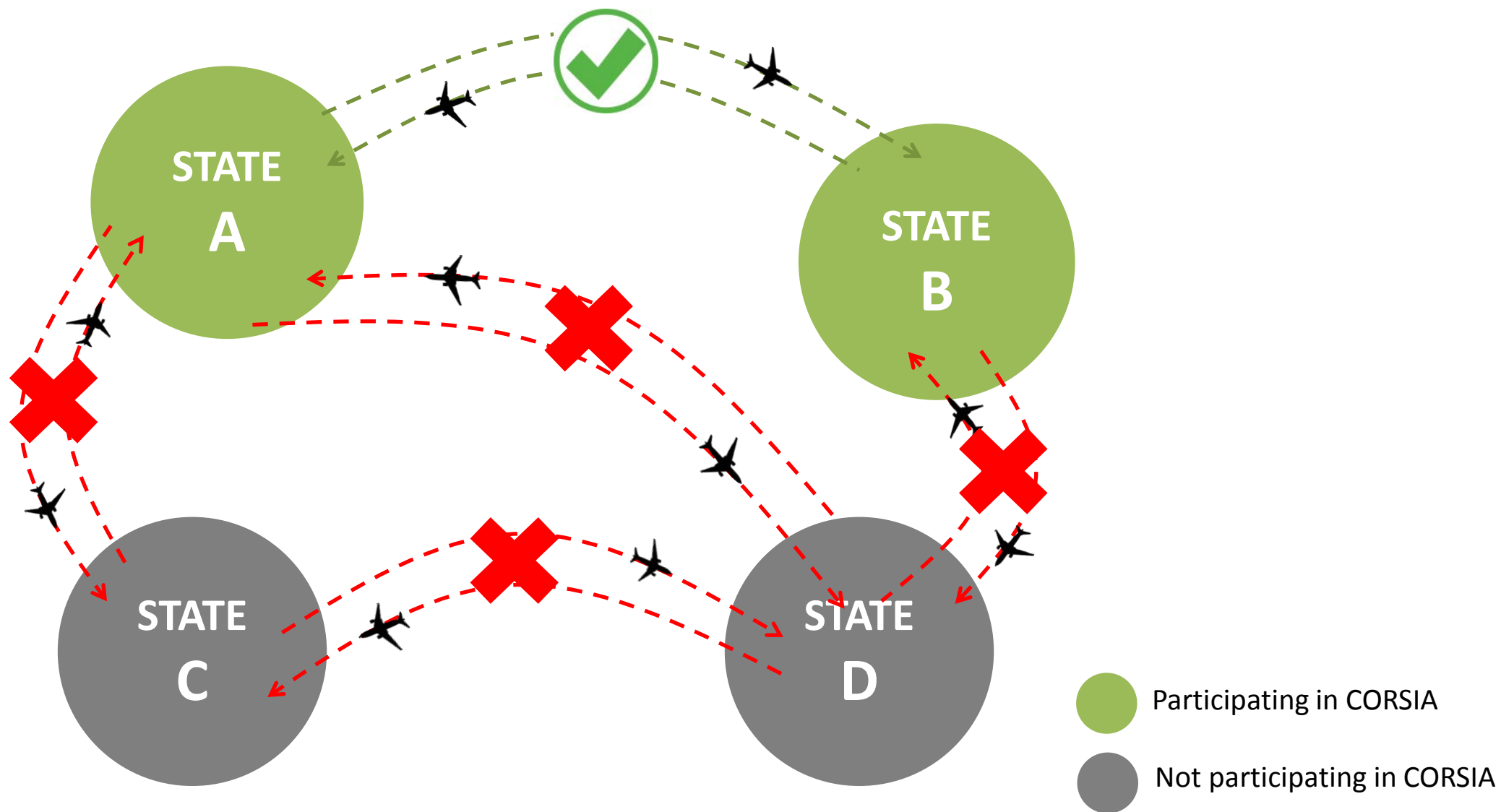


73 States (87.7% of international aviation activity) to participate in pilot phase

(As of 11 January 2018)

All Member States are encouraged to participate in the pilot and first phase of CORSIA

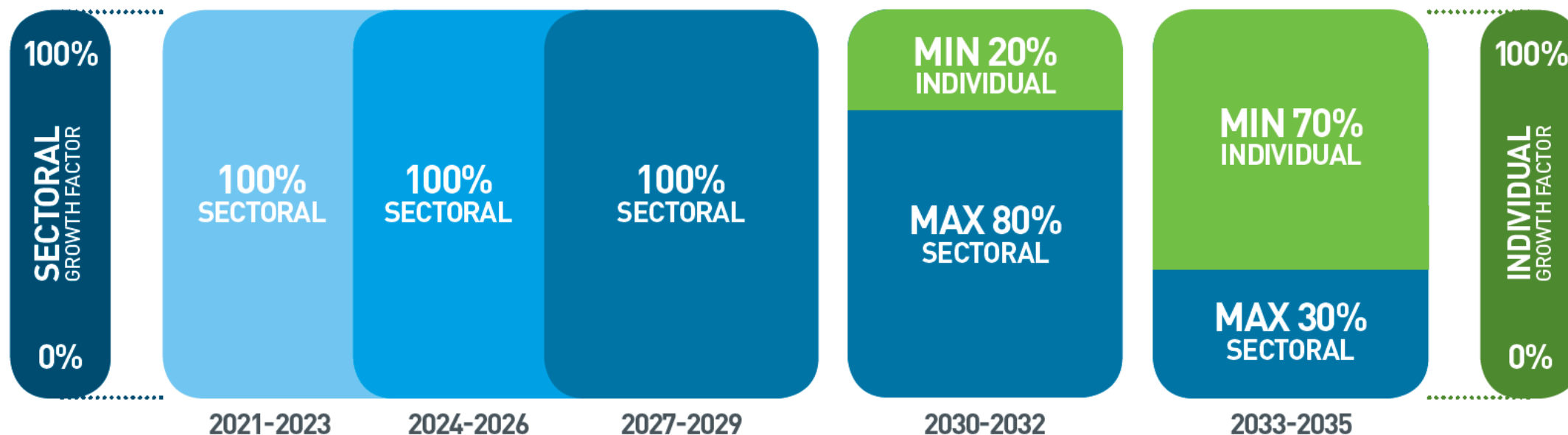
Emissions Coverage: Route-based Approach



Offsetting Requirements

Operator's annual emissions X Growth Factor = CO₂ offset requirements

The Growth Factor changes every year taking into account both the sectoral and the individual operator's emissions growth. The Growth Factor is the percent increase in the amount of emissions from the baseline to a given future year, and is calculated by ICAO.



More information on the calculation of offsetting requirements during Session #5

- New entrant (aeroplane operator) is exempted from CORSIA offsetting requirements for the first 3 years or until its annual emissions exceed 0.1% of total 2020 CO₂ emissions from international flights, whichever comes first.
- Example: Operators A and B start operations in year 2022 as shown in the table below. According to the paragraph above, Operator A will have offsetting requirements in 2025, and Operator B in 2024.

Operator	Emissions (% of total emissions in 2020)			
	2022	2023	2024	2025
A	0.02	0.04	0.06	0.08
B	0.06	0.11	0.16	0.21



- Emissions from aeroplane operators emitting less than 10 000 metric tonnes of CO₂ emissions from international aviation per year
- Emissions from aircraft with less than 5 700 kg of Maximum Take Off Mass (MTOM)
- Emissions from humanitarian, medical and firefighting operations

Review Mechanism

- Review will allow the Council to make informed recommendations to the Assembly on whether it is necessary to make adjustments to the next phases of the scheme
 - Periodic review of the CORSIA every three years starting in 2022
 - Special review by the end of 2032 on termination of the scheme, its extension or any other improvements of the scheme beyond 2035

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Phases	Pilot Phase (voluntary, 3 years)			First Phase (voluntary, 3 years)			Second Phase (all non-exempted States, 9 years)								
Compliance cycles	Cycle 1 (3 years)			Cycle 2 (3 years)			Cycle 3 (3 years)			Cycle 4 (3 years)			Cycle 5 (3 years)		
Periodic reviews		Review 1			Review 2			Review 3			Review 4	Special			Review 5
Assemblies		A41			A42			A43			A44				A45



Video - CORSIA Implementation



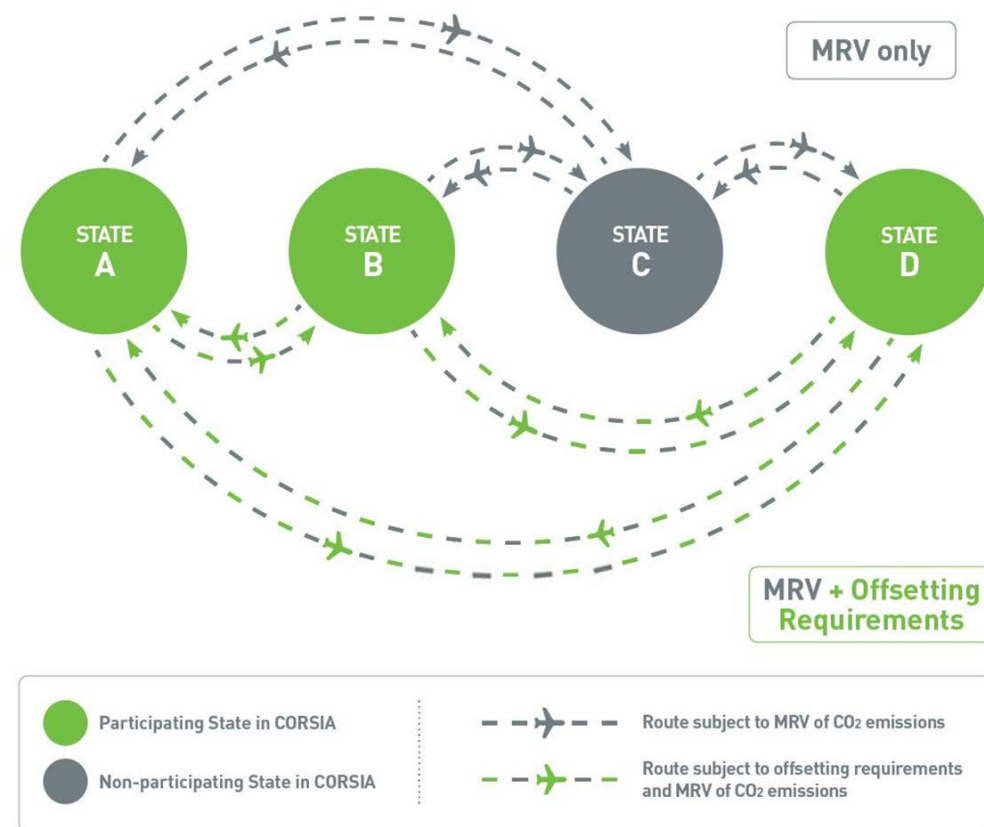
<https://www.youtube.com/watch?v=D0tAy0apYII>

Monitoring, Reporting and Verification (MRV) is the backbone for the successful implementation of CORSIA, which requires:

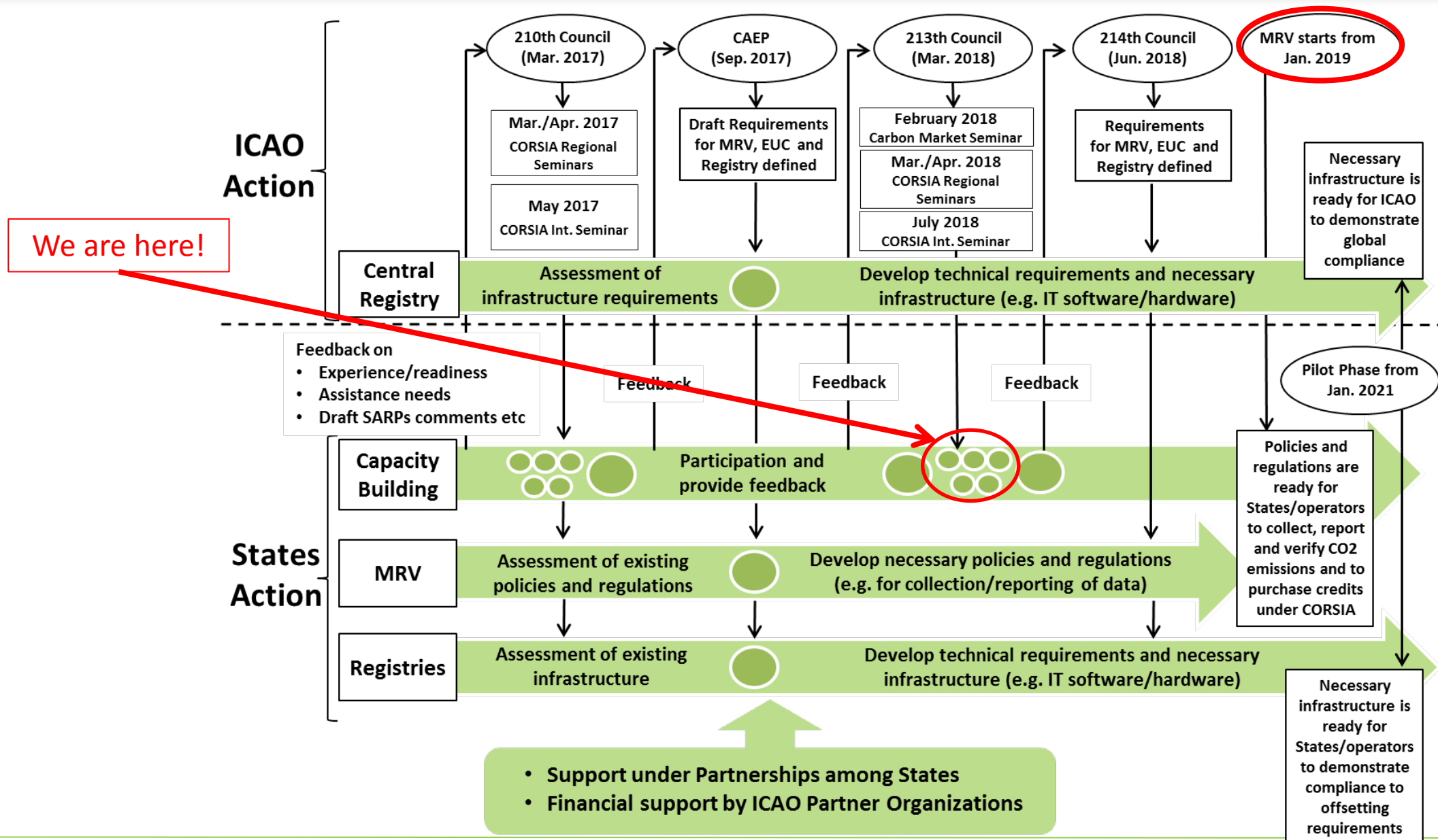
- Reliable information on CO₂ emissions, and on compliance with offsetting requirements

ALL ICAO MEMBER STATES with aeroplane operators conducting international flights are required to monitor, report and verify CO₂ emissions from these flights every year from 2019, independent of their participation in CORSIA.

ICAO MEMBER STATES PARTICIPATING IN CORSIA need to ensure that their aeroplane operators comply with the CORSIA offsetting requirements every three years (starting in 2021), in addition to annual CO₂ MRV.



CORSIA Capacity Building and Assistance



- Facilitate the understanding, and encourage the engagement, of participants in the discussion on the CORSIA's implementation aspects:
 - Presentations to bring all participants to a common level of understanding on CORSIA and the latest developments in ICAO (8 Secretariat presentations plus Q&A)
 - Small group exercises and feedback (3 exercises moderated by facilitators)
 - Practical demonstrations (3 demonstrations)
 - Country experiences

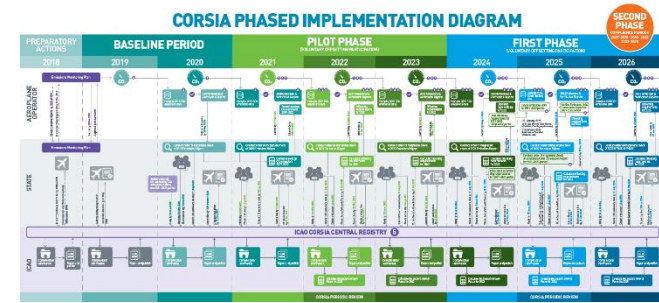
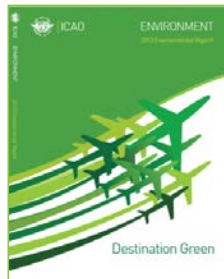
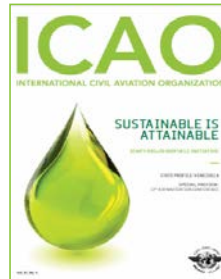
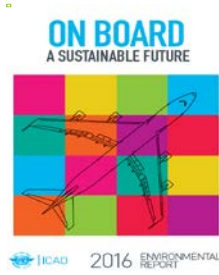


Day 1	
08:30 – 09:00	Seminar registration
09:00 – 09:30	Opening ceremony; welcome session and seminar objectives
09:30 – 10:45	Session #1: Overview of CORSIA: Introduction to the CORSIA and Resolution A39-3; CORSIA Package; CORSIA administrative aspects and timelines – Presentation
10:45 – 11:15	Coffee Break
11:15 – 12:30	Session #2: CORSIA MRV System: Monitoring of CO ₂ emissions – Presentation
12:30 – 13:30	Lunch Break
13:30 – 14:45	Session #2: CORSIA MRV System: Monitoring of CO ₂ emissions – Small group exercise
14:45 – 15:15	Coffee Break
15:15 – 16:00	Session #2: CORSIA MRV System: Monitoring of CO ₂ emissions – Small group exercise feedback
16:00 – 17:00	Session #2: CORSIA MRV System: Monitoring of CO ₂ emissions – Experiences from the Small Scale Implementation project on monitoring of CO ₂ emissions

Day 2	
09:00 – 09:15	Recap of Day 1
09:15 – 10:00	Session #2: CORSIA MRV System: Monitoring of CO ₂ emissions – Practical demonstration of the ICAO CORSIA CO ₂ Estimation and Reporting Tool (CERT)
10:00 – 10:45	Session #3: CORSIA MRV System: Reporting and verification of CO ₂ emissions – Presentation
10:45 – 11:15	Coffee Break
11:15 – 12:30	Session #3: CORSIA MRV System: Reporting and verification of CO ₂ emissions – Small group exercise
12:30 – 13:30	Lunch Break
13:30 – 14:15	Session #3: CORSIA MRV System: Reporting and verification of CO ₂ emissions – Small group exercise feedback
14:15 – 14:45	Session #3: CORSIA MRV System: Reporting and verification of CO ₂ emissions – Experiences from the Small Scale Implementation project on reporting and verification of CO ₂ emissions
14:45 – 15:15	Coffee Break
15:15 – 17:00	Session #4: CORSIA CO ₂ information flow and Registry system – Presentation

Day 3	
09:00 – 09:15	Recap of Day 2
09:15 – 10:45	Session #4: CORSIA CO ₂ information flow and Registry system – Practical demonstration on actions and timelines to prepare for CORSIA implementation
10:45 – 11:15	Coffee Break
11:15 – 11:45	Session #4: CORSIA CO ₂ information flow and Registry system – Small group exercise
11:45 – 12:30	Session #4: CORSIA CO ₂ information flow and Registry system – Small group exercise feedback
12:30 – 13:30	Lunch Break
13:30 – 14:15	Session #5: CORSIA calculation of offsetting requirements – Presentation
14:15 – 14:45	Session #5: CORSIA offsetting requirements – Practical demonstration on actions and timelines to comply with CORSIA offsetting requirements
14:45 – 15:15	Coffee Break
15:15 – 17:00	Session #6: Capacity building activities and next steps towards CORSIA implementation – Presentation

Thank you!



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