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# Update on Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and its Implementation

*March 2023*





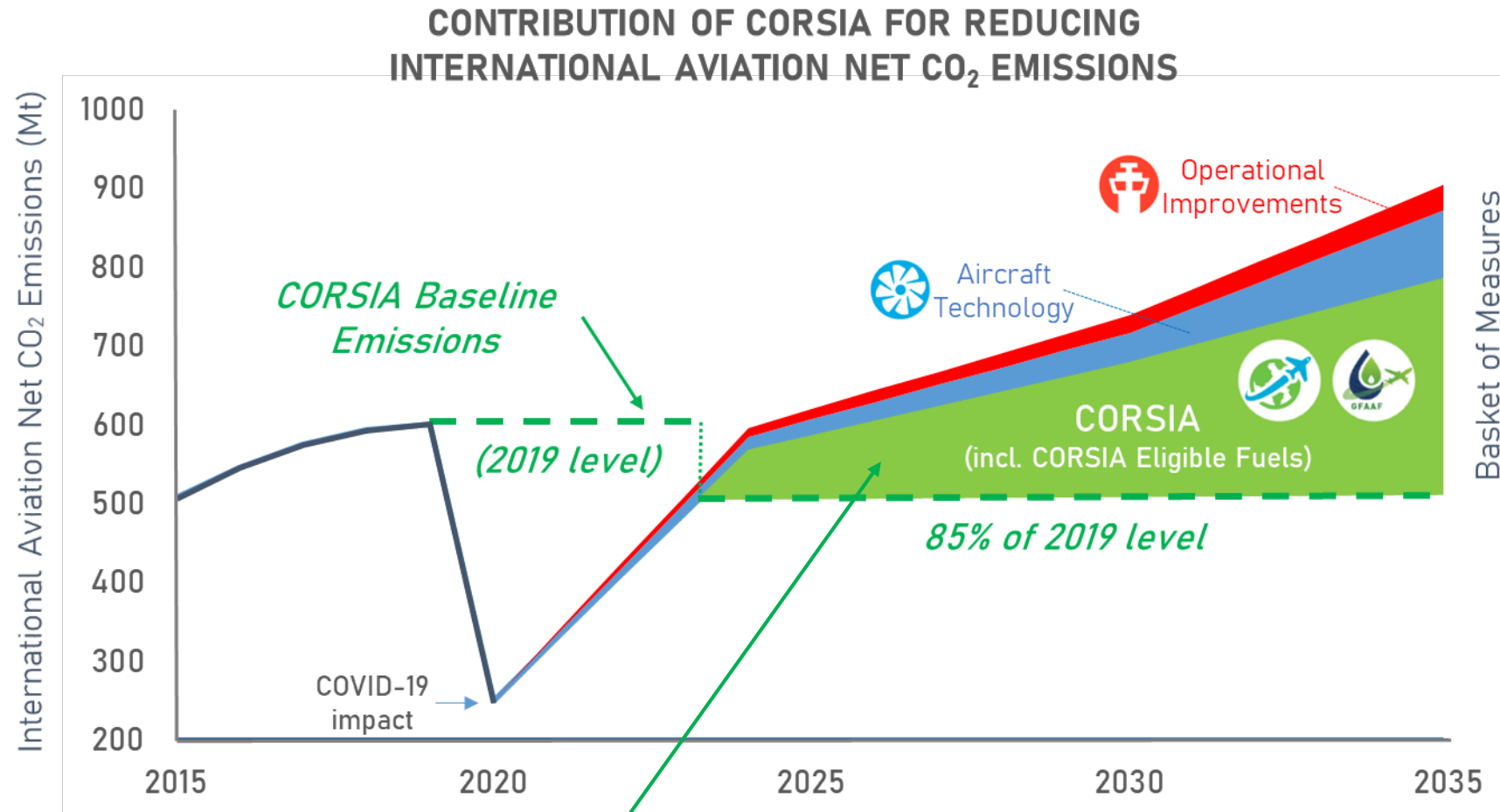
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**CORSIA overview**



**CORSIA addresses the remaining “emissions gap” to achieve Carbon Neutral Growth 2020**



Second phase participation criteria:

- Cumulative 90% of global 2018 RTK
- Individual 0.5% of 2018 RTK
- Voluntary participation

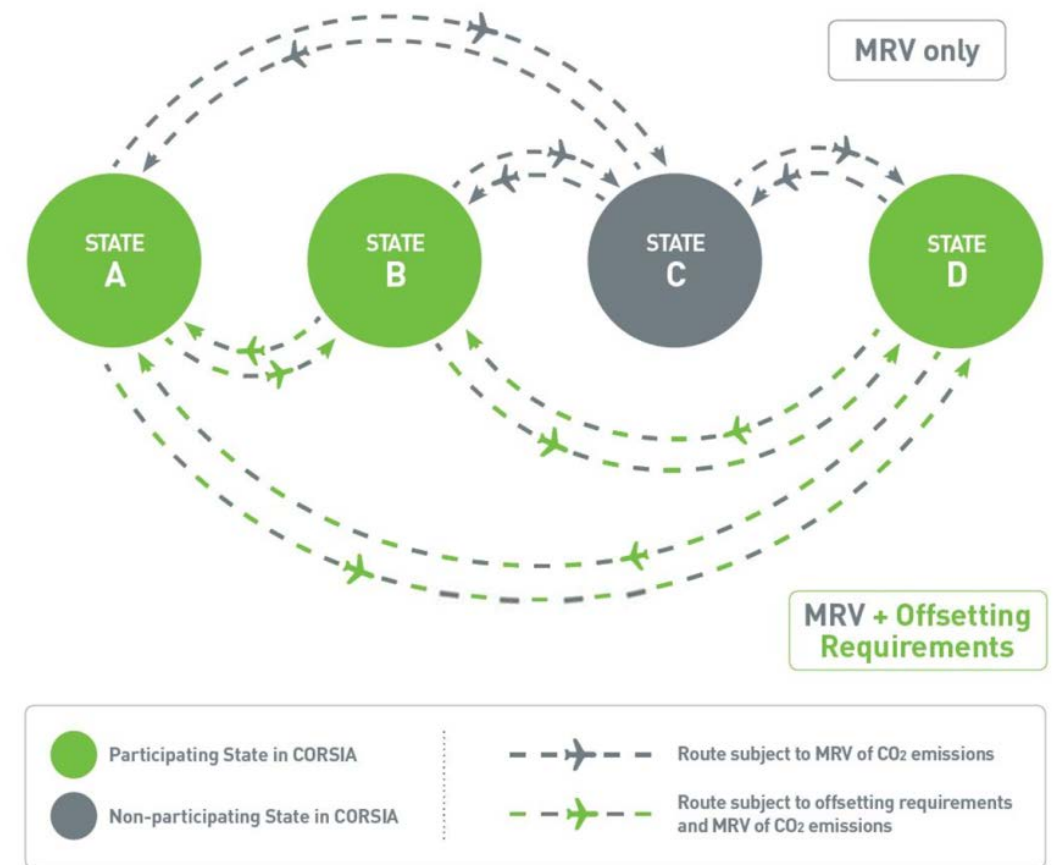
Exemptions:  
LDCs, LLDCs, SIDS



**From 1 January 2019, all States** with operators performing international flights have to establish a monitoring, reporting and verification (MRV) system for CO<sub>2</sub> emissions

**From 1 January 2019, all operators** performing international flights have to monitor CO<sub>2</sub> emissions  
- operators with emissions **more than 10,000 tonnes** annually have to verify CO<sub>2</sub> emissions and report to State

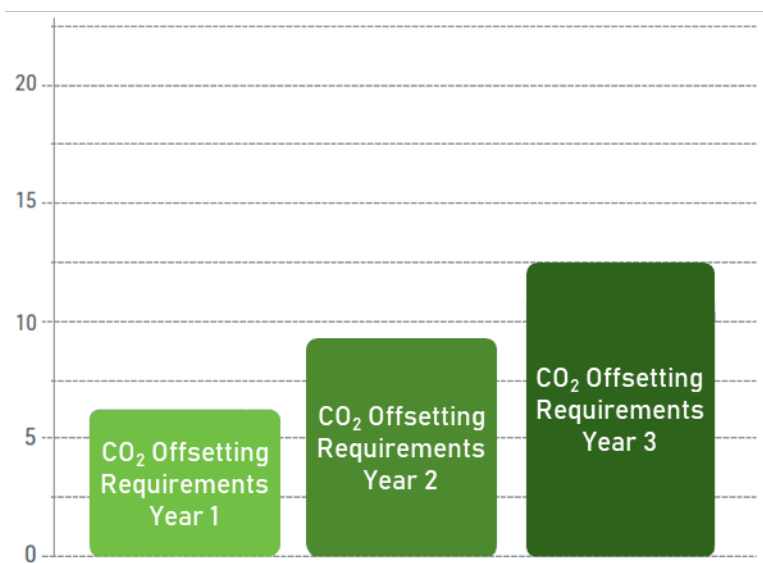
**All operators** performing international flights between States participating in CORSIA have to comply with the CORSIA offsetting requirements



An aeroplane operator can **reduce its CORSIA offsetting requirements** by claiming emissions reductions from the use of **CORSIA Eligible Fuels (CEF)**

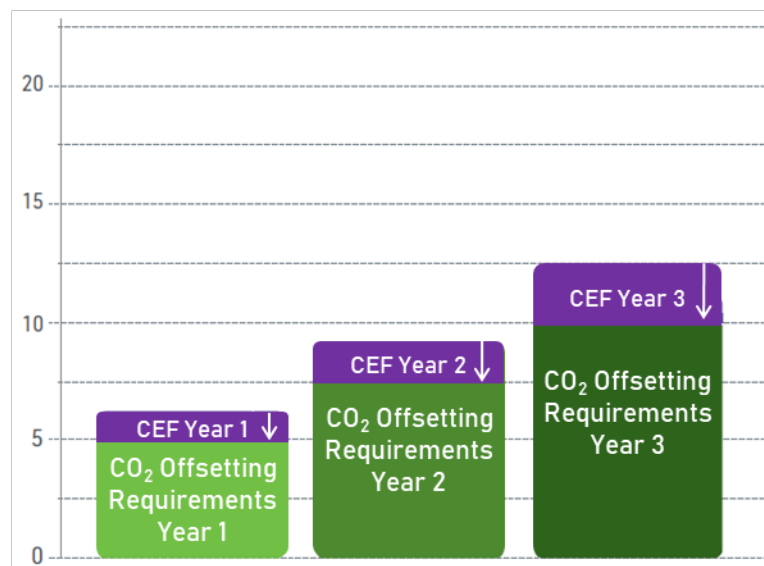
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**CO<sub>2</sub> Offsetting Requirements** calculated by the State for each year



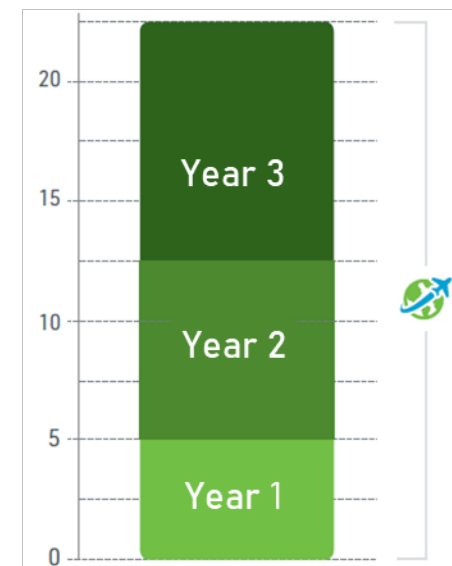
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Emissions reductions claimed from the use of **CORSIA Eligible Fuels (CEF)**



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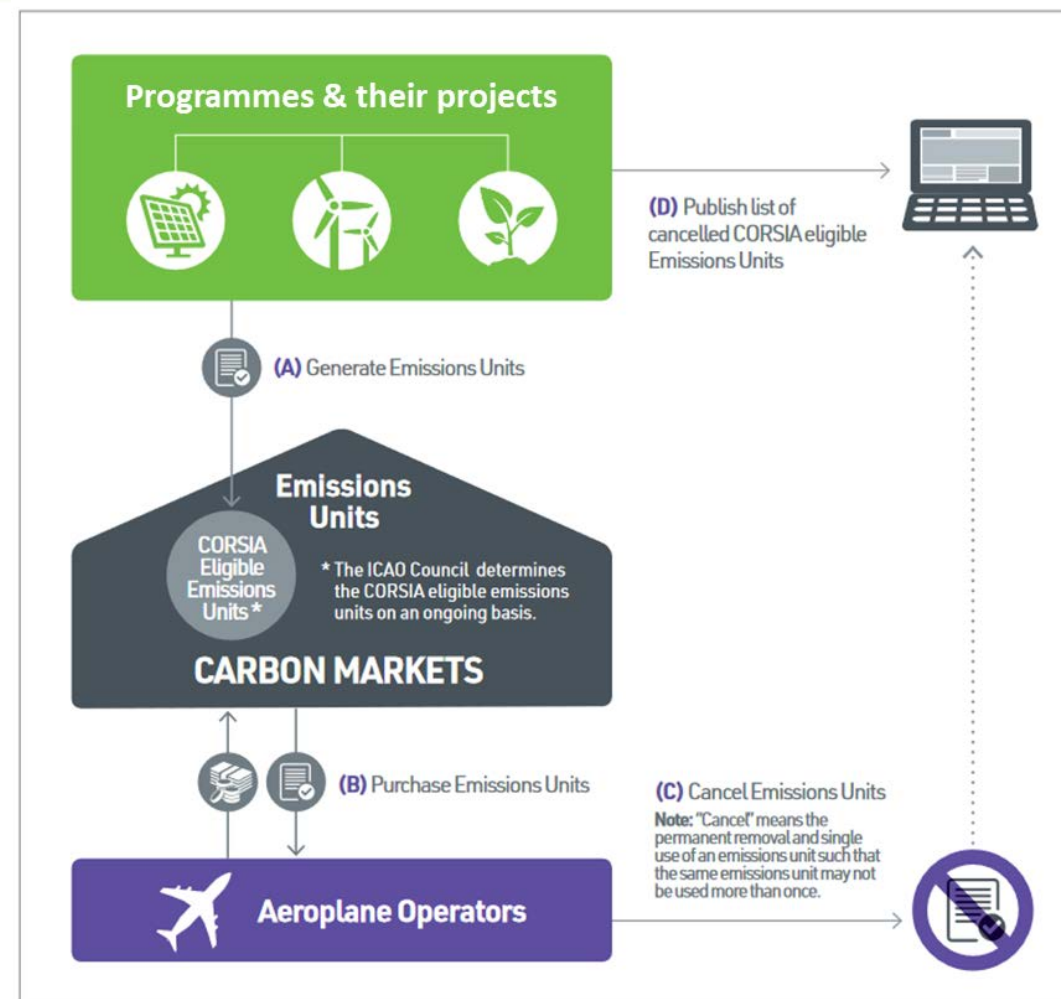
**Total Final CO<sub>2</sub> Offsetting Requirements** for a 3-year Compliance Period



# CORSIA Eligible Emissions Units and Offsetting Requirements

To fulfil its CORSIA offsetting requirements for a compliance period, an aeroplane operator must ***purchase and cancel*** CORSIA eligible emissions units (CEUs) equivalent to its **total final CO<sub>2</sub> offsetting requirements** (see previous slide):

- CEUs are generated by eligible CEU programmes that meet the CORSIA eligibility criteria **(A)**
- Operators purchase CEUs from the international carbon market **(B)**
- The cancellation of CEUs takes place within a registry designated by an eligible CEU programme **(C)**
- For transparency, cancellations are to be published on the registry's public website **(D)**

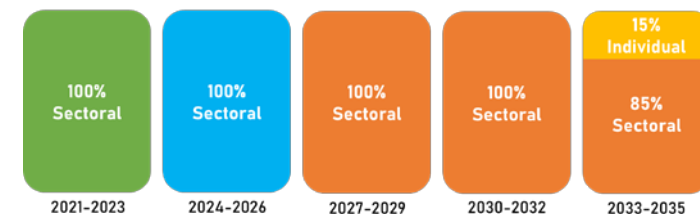


<https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Emissions-Units.aspx>



Based on the recommendations by the ICAO Council from the 2022 CORSIA review, the 41st Session of the ICAO Assembly adopted:

- Adjustments to CORSIA baseline emissions:
  - For pilot phase (2021 – 2023): 2019 CO<sub>2</sub> emissions (*as per Council decision in June 2020*)
  - From 2024 onwards: 85% of 2019 CO<sub>2</sub> emissions
- Changes to the percentage use of sectoral and individual operator's growth factors for the calculation of CORSIA offsetting requirements:
  - 100% sectoral and 0 % individual for 2021 – 2032
  - 85 % sectoral and 15% individual for 2033 – 2035
- Use of 2019 emissions to determine new entrants







- Periodic review of CORSIA every three years – **First 2022 review was completed prior to A41**
- Allows the Council to make informed decisions on whether it is necessary to make adjustments to the next phase(s) of the scheme
- Special review by end of 2032 on termination of the scheme, its extension or any other improvements of the scheme beyond 2035
- At the request of A41, the Council to develop a methodology and timeline for future reviews





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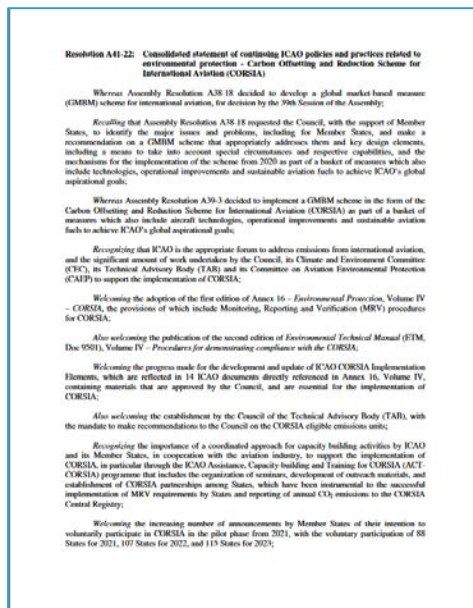


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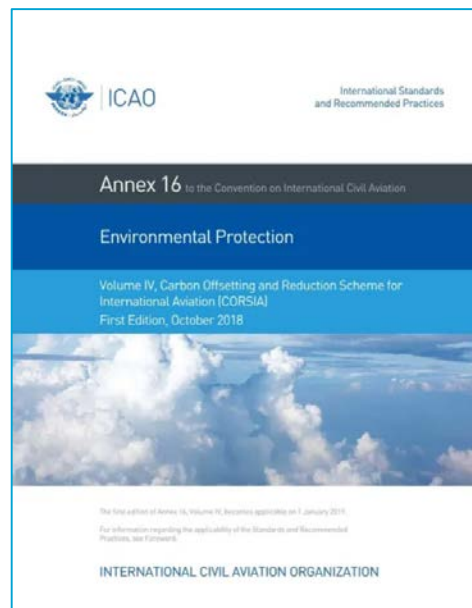
## CORSIA Implementation Updates

New

## Assembly Resolution A41-22



## Annex 16, Volume IV (1<sup>st</sup> edition)



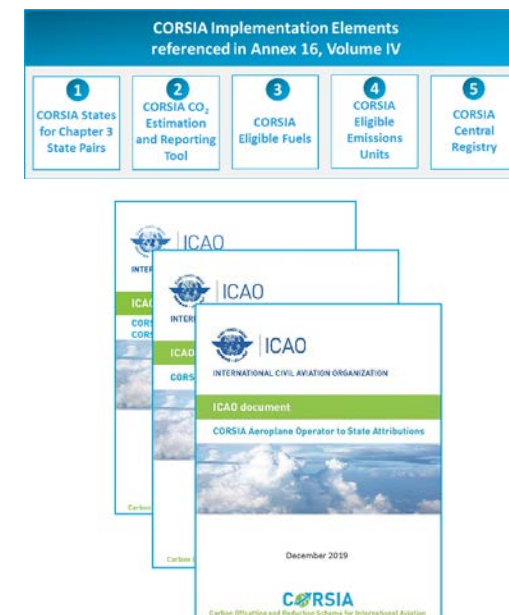
2<sup>nd</sup> edition expected in 2023

## Doc 9501 (ETM), Vol. IV (CORSIA) (2<sup>nd</sup> edition)



3<sup>rd</sup> edition expected in 2023

## CORSIA Implementation Elements and ICAO CORSIA documents



Regularly updated



### Total of 88 States for 2021

Afghanistan	El Salvador	Kenya	Republic of Korea
Albania	Equatorial Guinea	Latvia	Republic of Moldova
Armenia	Estonia	Lithuania	Romania
Australia	Finland	Luxembourg	Rwanda
Austria	France	Madagascar	San Marino
Azerbaijan	Gabon	Malaysia	Saudi Arabia
Belgium	Georgia	Malta	Serbia
Benin	Germany	Marshall Islands	Singapore
Bosnia and Herzegovina	Ghana	Mexico	Slovakia
Botswana	Greece	Monaco	Slovenia
Bulgaria	Guatemala	Montenegro	Spain
Burkina Faso	Guyana	Namibia	Sweden
Cameroon	Honduras	Netherlands	Switzerland
Canada	Hungary	New Zealand	Thailand
Costa Rica	Iceland	Nigeria	Turkey
Côte d'Ivoire	Indonesia	North Macedonia	Uganda
Croatia	Ireland	Norway	Ukraine
Cyprus	Israel	Papua New Guinea	United Arab Emirates
Czechia	Italy	Philippines	United Kingdom
Democratic Republic of the Congo	Jamaica	Poland	United Republic of Tanzania
Denmark	Japan	Portugal	United States
Dominican Republic	Kazakhstan	Qatar	Zambia

### Total of 107 States for 2022

Bahamas  
 Grenada  
 Palau  
 Trinidad and Tobago  
 Barbados  
 Kiribati  
 Saint Kitts and Nevis  
 Tuvalu  
 Belize  
 Mali  
 South Sudan  
 Vanuatu  
 Cook Islands  
 Nauru  
 Suriname  
 Gambia  
 Oman  
 Tonga  
 Uruguay

### Total of 115 States for 2023

Zimbabwe  
 Federated States of Micronesia  
 Maldives  
 Timor-Leste  
 Saint Vincent and the Grenadines  
 Cuba  
 Cambodia  
 Iraq

Available here: <https://www.icao.int/environmental-protection/CORSIA/Pages/state-pairs.aspx>





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## More CORSIA Volunteer States for First Phase

- The 41st ICAO Assembly strongly encouraged all States to voluntarily participate in the pilot phase and the first phase (A41-22, paragraph 9 c))
- Sierra Leone, Seychelles and Solomon Islands are the latest States to announce their voluntary participation in CORSIA from 2024, bringing the total number of volunteer States to 118
- More States **are expected** to join CORSIA from 1 January 2024:
  - Deadline for informing ICAO: 30 June 2023





### CORSIA Participation

**118**

Volunteer States

### CORSIA Eligible Emissions Units

**9**Eligible Emissions Units Programs<sup>1</sup>

### CORSIA Eligible Fuels

**43**

Feedstock Types

**9**

Conversion Processes

**14**Sustainability Themes<sup>2</sup>**2**Sustainability Certification Schemes<sup>1</sup>

### CORSIA Central Registry

**608**Mtonnes of 2019 CO<sub>2</sub> Emissions<sup>3</sup>**289**Mtonnes of 2021 CO<sub>2</sub> Emissions<sup>3</sup>**625**

Aeroplane Operators

**54**

Verification Bodies

<sup>1</sup> For the Pilot phase (2021-2023)

<sup>2</sup> From 2024 onwards (2 Sustainability Themes applicable for the Pilot phase)

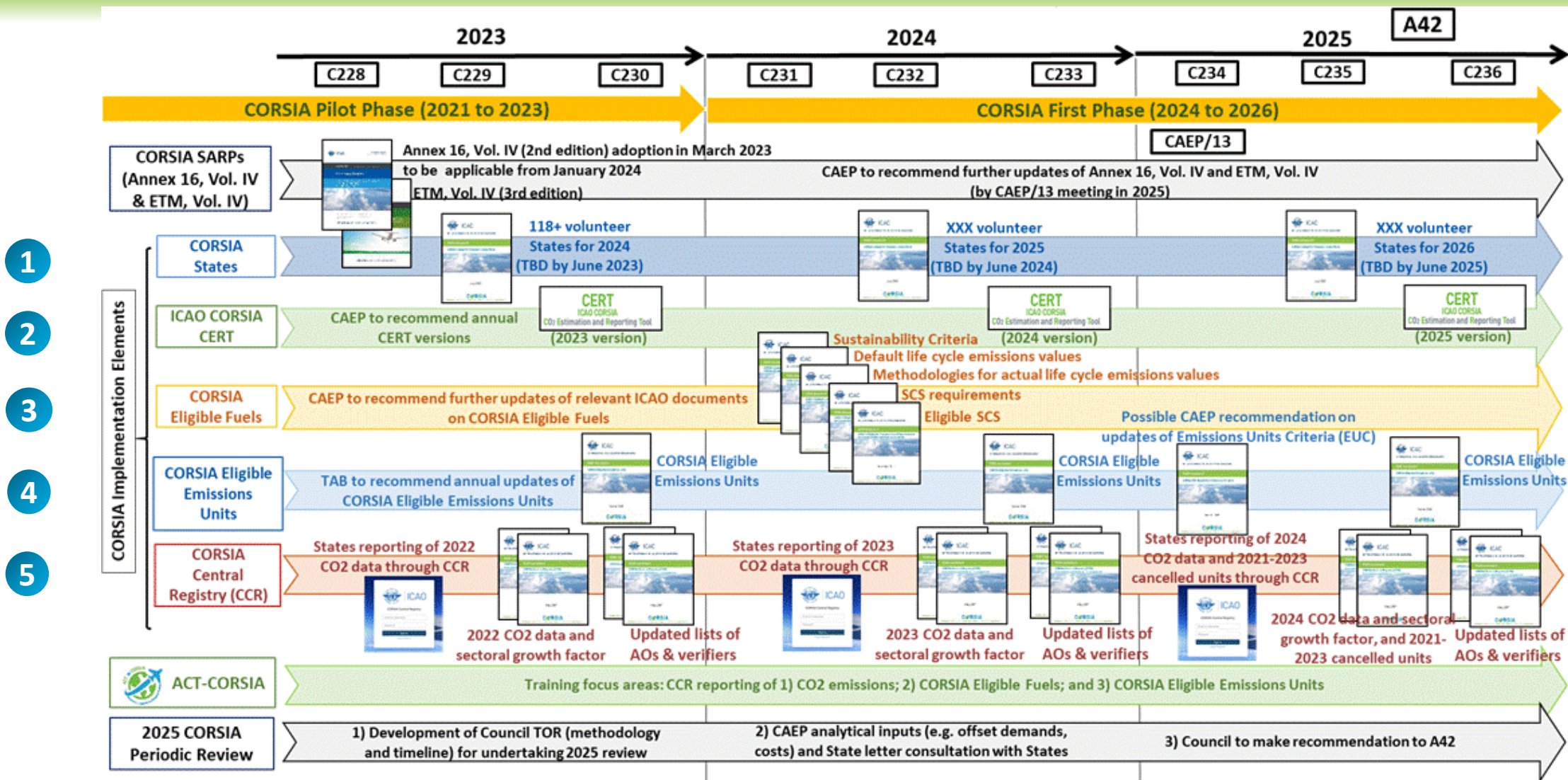
<sup>3</sup> Totals include CO<sub>2</sub> emissions submitted by States through the CCR and emissions provided by ICAO to fill the emissions gaps







# 2023 to 2025 CORSIA Roadmap







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## ACT-CORSIA Updates



- Since the launch in July 2018, the ICAO ACT-CORSIA (Assistance, Capacity-building and Training for CORSIA) Buddy Partnerships have proven to be an extremely successful modality
  - Training and assistance to support requesting States on various aspects of CORSIA implementation.
- ***Measure of success:*** More than 96% of global CORSIA CO<sub>2</sub> emissions having been submitted annually by States through the CORSIA Central Registry (CCR) for the period 2019-2021.

- In the context of ACT-CORSIA Buddy Partnerships, requesting States have benefited in different ways given the different levels of preparedness and readiness amongst them.
- Continue to consider and identify:
  - specific needs of requesting States;
  - appropriate measures to improve the effectiveness of the training activities; and
  - ways to adjust the delivery of training by offering **tailored solutions**, while maintaining the **overall coordinated approach** as per the request of the ICAO Assembly/Council.

## Different phases with specific focus areas in order to support necessary actions by States with different timelines

### *Phase I (Sep 2018 – Apr 2019): 15 supporting States and 98 requesting States*

- Development and approval of Emissions Monitoring Plans
- Establishment of national/regional regulatory frameworks

### *Phase II (May 2019 – Apr 2020): 16 supporting States and 114 requesting States*

- CO<sub>2</sub> Emissions reporting and verification

### *Phase III (Apr 2020 - 2023): 17 supporting States and 119 requesting States*

- Use of the CORSIA Central Registry (CCR)

The focus areas of each Phase can form the basis for checklist to assess the progress made and milestones achieved in order to determine the need for a tailored approach to training.

ACT >>> CORSIA <small>Phase II Assistance, Capacity-building and Training on CORSIA</small>	
<b>AUSTRALIA</b>	<b>KENYA / UNITED KINGDOM</b>
1. BRUNEI DARUSSALAM	1. ETHIOPIA
2. INDONESIA	2. RWANDA
3. NAURU	3. SEYCHELLES
4. PAPUA NEW GUINEA	4. SOUTH SUDAN
5. SRI LANKA	5. UGANDA
6. THAILAND	6. UNITED REPUBLIC OF TANZANIA
<b>BRAZIL</b>	<b>NEW ZEALAND</b>
1. ANGOLA	1. ELU
2. GAMBIA	2. SAMOA
3. MOZAMBIQUE	3. SOLOMON ISLANDS
4. SAO TOME AND PRINCIPE	4. VANUATU
<b>CANADA</b> <small>(Facilitated by CARRS)</small>	<b>NIGERIA</b>
1. ANTIGUA AND BARBUDA	1. GAMBIA
2. BARBADOS	2. GHANA
3. GUYANA	3. LIBERIA
4. HAITI	4. SIERRA LEONE
5. JAMAICA	5. SUDAN
6. SURINAME	<b>REPUBLIC OF KOREA</b>
7. TRINIDAD AND TOBAGO	1. LAO PEOPLE'S D. R.
<b>CANADA / FRANCE</b>	2. MONGOLIA
1. BENIN	3. PAKISTAN
2. BURKINA FASO	4. PHILIPPINES
3. BURUNDI	5. VIETNAM
4. CAMEROON	<b>QATAR</b>
5. CENTRAL AFRICAN REPUBLIC	1. BARBAIN
6. CHAD	2. BAN
7. COMOROS	3. IRAQ
8. CONGO	4. JORDAN
9. CÔTE D'IVOIRE	5. KUWAIT
10. EGYPT	6. LIBYA
11. D. R. OF CONGO	7. OMAN
12. GABON	<b>SINGAPORE</b>
13. GUINEA	1. COOK ISLANDS
14. MADAGASCAR	2. KIRIBATI
15. MALI	3. MARSHALL ISLANDS
16. MAURITANIA	4. PALAU
17. MALI	5. TONGA
18. NIGER	6. TUNISIA
19. SENEGAL	<b>SOUTH AFRICA</b>
20. TOGO	1. BOTSWANA
<b>FRANCE</b> <small>(Facilitated by ICAO)</small>	2. ESWATINI
1. ALGERIA	3. LESOTHO
2. MOROCCO	4. MALAWI
3. TUNISIA	5. NAMIBIA
<b>GERMANY</b>	6. ZAMBIA
1. ALBANIA	7. ZIMBABWE
2. ARMENIA	<b>SPAIN</b> <small>(Facilitated by CARRS)</small>
3. AZERBAIJAN	1. BELIZE *
4. BELARUS	2. BOLIVIA
5. GEORGIA	3. COLOMBIA
6. KAZAKHSTAN	4. COSTA RICA *
7. NORTH MACEDONIA	5. CUBA
8. REPUBLIC OF MOLDOVA	6. EL SALVADOR *
9. SAUDI ARABIA	7. EQUATORIAL GUINEA
10. SERBIA	8. GUATEMALA *
11. TAJIKISTAN	9. HONDURAS *
12. TURKMENISTAN	10. MEXICO
<b>ITALY / UNITED KINGDOM</b>	11. NICARAGUA *
1. BAHAMAS	12. PARAGUAY
2. ERITREA	13. PERU
3. SOMALIA	14. URUGUAY
<b>JAPAN</b>	<b>USA</b>
1. AFGHANISTAN	1. ARGENTINA
2. BANGLADESH	2. DOMINICAN REPUBLIC
3. BHUTAN	3. ECUADOR
4. CAMBODIA	4. PANAMA
5. HAITI	

**17 SUPPORTING STATES**  
**119 REQUESTING STATES**





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Mexico City

South American  
(SAM) Office  
Lima

ICAO  
Headquarters  
Montréal

Western and  
Central African  
(WACAF) Office  
Dakar

European and  
North Atlantic  
(EUR/NAT) Office  
Paris

Middle East  
(MID) Office  
Cairo

Eastern and  
Southern African  
(ESAF) Office  
Nairobi

Asia and Pacific  
(APAC) Sub-office  
Beijing

Asia and Pacific  
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THANK YOU

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