

ENVIRONMENT



August 2025



The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is the first global market-based scheme that applies to a sector. It complements other aviation in-sector emissions reduction efforts such as technological innovations, operational improvements and sustainable aviation fuels to meet the ICAO aspirational goal of carbon-neutral growth.

For more details on what CORSIA is click here

ICAO Assembly and CORSIA



The ICAO Council, with the technical support of the Committee on Aviation Environmental Protection (CAEP), completed its work on the **2025 CORSIA periodic review**, building on the 2022 review process. In the context of sustainable development of the international aviation sector and improving the effectiveness of the Scheme, the Council considered the impact of CORSIA on the growth of international aviation. The 2025 periodic review focused on **assessing the supply, demand, and price of CORSIA Eligible Fuels and CORSIA Eligible Emissions Units**, as well as the related impacts on the scheme's implementation.

The 235th Session of the ICAO Council considered <u>CAEP's final technical inputs on the 2025 CORSIA</u> <u>periodic review (C-WP/15730)</u>. The latest assessment by CAEP indicates that the future demands for CORSIA offsetting requirements and associated costs for the industry remain within the estimates of previous assessments, and that CORSIA implementation is on track and continues to proceed as anticipated. More information on the 2025 CORSIA periodic review is available <u>here</u>.

As a result, the Council will report to the **42nd Session of the ICAO Assembly (A42)** the substantial progress achieved by ICAO since the A41, including the robust implementation of CORSIA and its CO₂ emissions Monitoring, Reporting and Verification (MRV) by States and aeroplane operators, in accordance with Annex 16, Volume IV; development and updates of CORSIA implementation elements, including CORSIA eligible fuels, CORSIA eligible emissions units, and CORSIA Central Registry; and the continued success of the ICAO Assistance, Capacity-building and Training for CORSIA (ACT-CORSIA) programme, with the contributions and engagement of Member States. The Council also welcomed the **increasing number of States that voluntarily participate in CORSIA** and encouraged other States to do so as soon as possible.

The Council also decided to recommend the following actions to the Assembly, as contained in the Assembly Working Paper A42-WP/28, for consideration by the A42:

- encourage States and other relevant stakeholders to rapidly scale up the production and certification of CORSIA eligible fuels and to accelerate the certification and approval of the sustainability of feedstocks and pathways, to maximize scalability and increase opportunities for States in all regions for an inclusive decarbonization of the international aviation sector;
- recognize the critical importance of Letters of Authorization to facilitate the access and availability of CORSIA eligible emissions units to aeroplane operators, and encourage governments hosting activities that generate CORSIA eligible emissions units to issue such Letters:
- to continue to regularly assess and monitor the supply and demand of CORSIA eligible fuels
 and CORSIA eligible emissions units to allow aeroplane operators to meet their CORSIA
 offsetting requirements, while ensuring the quality and sustainability of CORSIA eligible fuels
 and CORSIA eligible emissions units;

In addition, the Council proposed the revisions of Resolution A41-22, in light of the developments since the last Assembly.

The **Assembly** will start on Tuesday, 23 September 2025 and is expected to complete its deliberations on Friday, 3 October 2025. More information, including the agenda, suggested schedule and relevant documents can be found on the <u>ICAO A42 website</u>. For specific documents relating to Environment, please check the ENV dedicated webpage <u>42nd Session of the ICAO Assembly - Environment</u>

CORSIA implementation remains on track, and the latest decision by the Council is the testimony that the periodic review process is an effective tool to provide an analysis of the progress achieved so far. ICAO will continue to work with all Member States to ensure that they have all the necessary means for continuous and effective implementation of CORSIA.

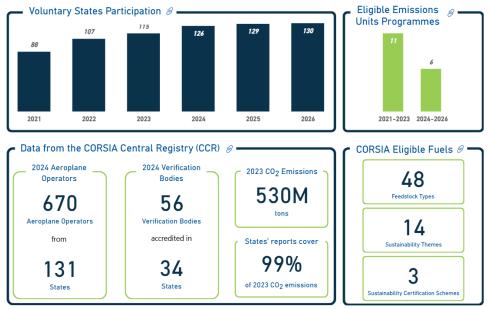
Status of the CORSIA Implementation Package

The ICAO Council successfully developed, and has been updating, all essential components of the CORSIA implementation package. Specifically:

- The **second edition of Annex 16, Volume IV** containing the Standards and Recommended Practices (SARPs) for CORSIA monitoring, reporting and verification (MRV) became effective on 31 July 2023 and became applicable on 1 January 2024.
 - In May 2025, the ICAO Council's Air Navigation Commission (ANC) conducted a preliminary review of the proposed amendments to Annex 16, IV arising from the CAEP/13 Meeting (Montréal, Canada, 17 28 February 2025). Following the ANC preliminary review, the proposed amendments were transmitted to States and relevant international organizations for comments through State letter 25/66, dated 15 July 2025, with a due date for replies of 15 October 2025. Information on the outcome of the State letter consultation will be considered by ANC in November 2025, with Council consideration likely in March 2026.
- The **third edition of ETM (doc 9501), Volume IV,** which provides technical guidance to support the implementation of SARPs, was published in 2023 to support implementation of the second edition of Annex 16, Volume IV, applicable from 1 January 2024.
- The **five CORSIA Implementation Elements**, as reflected in various ICAO documents directly referenced in Annex 16, Volume IV, contain materials that are essential for the implementation of CORSIA and approved by the Council for publication on the ICAO CORSIA webpage, as follows:
 - Participation in CORSIA: The ICAO document CORSIA States for Chapter 3 State Pairs, contains the list of States that participate in CORSIA in a given year from 2021 onwards. The ICAO Council has approved six annual editions covering the list of volunteer States for the pilot phase (2021-2024) and first phase (2024-2026). For 2021, 88 States volunteered to participate in CORSIA; the number increased to 129 States for 2025; and it increased further to 130 States for 2026.

- O ICAO CORSIA CO₂ Estimation and Reporting Tool (CERT): The CERT allows aeroplane operators to apply simplified MRV procedures under CORSIA as per Annex 16, Volume IV. The ICAO Council has approved seven versions of the tool for the period 2018-2024.
- CORSIA Eligible Fuels: Editions of the five ICAO documents related to CORSIA Eligible Fuels (CEF) (i.e., Sustainable Aviation Fuel (SAF) and Lower Carbon Aviation Fuel (LCAF)) were approved by the ICAO Council with a view to providing an incentive and means to reduce an aeroplane operator's CO₂ offsetting requirements under CORSIA. The ICAO document CORSIA Eligibility Framework and Requirements for Sustainability Certification Schemes (SCS) now includes clarifications on SCS roles and definition of "economic operator." The ICAO document CORSIA Methodology for Calculating Actual Life Cycle Emission Values now includes guidance on electricity sourcing, specifications for waste gases, methodologies for soil carbon accumulation (SCA) and geological carbon capture and storage (CCS), updated transport emission factors for LCAF, and a postponement of the temporal limitation for low-LUC-risk practices (LLRP) from 2030 to 2035. The ICAO document CORSIA Default Life Cycle Emissions Values for CEF introduce updated default ILUC values for pathways, updated Core LCA values for stand-alone ATJ-ethanol pathways, and new ILUC values for the corn-grain ATJ pathway (ethanol and isobutanol) while all the technical details are provided in the CORSIA supporting document "Life Cycle Assessment Methodology". Sample Calculations have been developed on Core LCA and DLUC, aiming to support the implementation of these methodologies. These updates further strengthen the robustness and clarity of the CORSIA eligible fuels framework.
- CORSIA Eligible Emissions Units: The ICAO Council approved the ICAO document CORSIA Emissions Unit Eligibility Criteria in 2019 and approved and frequently updated the ICAO document CORSIA Eligible Emissions Units on the basis of TAB's assessment work and recommendations. The Council approved eligible emissions units from eleven programmes for the pilot phase (2021-2023) and so far, from six programmes for the first phase (2024-2026). Aeroplane operators can use these documents to help them choose approved eligible emissions units for use under CORSIA.
- corsia Contral Registry (CCR): The CCR is an online database that was launched in May 2020 to facilitate the reporting by States under CORSIA. The reported data serves as the basis for the CCR-related ICAO documents, including information such as list of aeroplane operators attributed to States and list of accredited verification bodies in States, as well as total CO₂ emissions aggregated for all aeroplane operators on each State pair route. Data collected through the CCR will allow for the calculation of the CORSIA annual Sector's Growth Factor (the 2024 value will be made available by the end of October 2025).

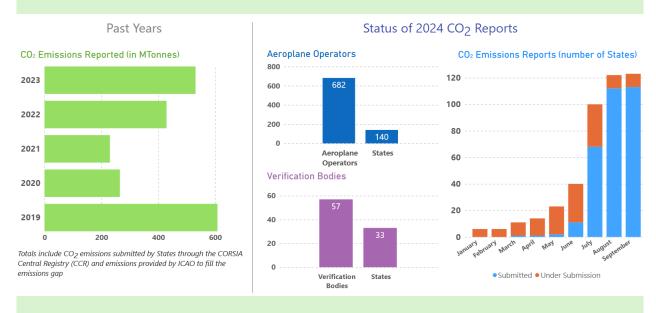
More information available on the CORSIA website.



The information presented here is based on the currently applicable editions of the ICAO documents for CORSIA implementation directly referenced in Annex 16, Volume IV and available

2024 CO₂ Emissions Reporting via the CORSIA Central Registry

As of 2 September 2025, 113 States had reported 2024 CO₂ emissions through the CORSIA Central Registry (CCR), as shown in the graph below (for a closer look, click the image):



In accordance with Annex 16, Volume IV, Part II, Chapter 2, 2.3.2, States are required to submit CO₂ emissions data for the year 2024. The deadline for submitting this information using the CORSIA Central Registry (CCR) was 31 July 2025. States should have submitted the list of aeroplane operators through

the ICAO CCR by 30 November 2024, and this list can be updated - if necessary - before reporting 2024 CO₂ emissions.

For the first time, the **Sector Growth Factor** (SGF) for 2024 CO₂ emissions is expected to be greater than zero since the start of CORSIA implementation; this has made the accurate and timely reporting of 2024 CO₂ emissions by States through the CORSIA Central Registry (CCR) particularly important. Therefore, to ensure the timely publication of the 2024 SGF, it is essential that States accurately submit their 2024 CO₂ emissions to ICAO, in accordance with the timeline in Annex 16, Volume IV, Appendix 1. The ICAO Secretariat will start the gap-filling process for those States that have not reported on CO₂ emissions through the CCR by the deadline. ICAO continues to support all States cooperating under the ACT-CORSIA programme in the spirit of ICAO's *No Country Left Behind* initiative.

All CCR-related information is available on the CCR website

2025 Key CORSIA Central Registry deadlines for States

In accordance with Appendix 1 to Annex 16, Volume IV, States are required to report annual CORSIA-related information and data through the CCR. These are the upcoming CORSIA implementation deadlines for States:

- → 31 October 2025: The Secretariat to publish on the ICAO website the ICAO document entitled "CORSIA Sector's Growth Factor (SGF)" containing the 2024 SGF value; the 2024 SGF will be used by States to calculate the 2024 offsetting requirements of the operators attributed to them
- → **30 November 2025**: States to calculate and inform the operators of their total final offsetting requirements for 2024.
- → **30 November 2025**: Using the CCR, States to upload their 2025 list of aeroplane operators that are attributed to them, and (if applicable) the list of verification bodies accredited in them
- → **31 December 2025**: States to obtain from the ICAO website and use the ICAO document entitled "CORSIA Aeroplane Operator to State Attributions" summarizing a list of operators and the State to which they have been attributed.

SCS Reporting of CORSIA Eligible Fuels

ICAO has published the **2024 Sustainability Certification Scheme** (SCS) reports for CORSIA Eligible Fuels (CEF). **In 2024, 98 batches of CEF** were produced worldwide (up from 30 batches in 2023), totaling **188 kT** (around **20% of annual global SAF production)** with all reported production based on the **HEFA** pathway. The number of certified economic operators rose from **98 in 2023 to 367 in 2024**.

These results mark an important milestone in scaling up CEF deployment and reflect the growing role of SCSs in ensuring integrity and transparency across the supply chain. All reports are available on the ICAO website.

New Learning Resources:

The **ACT-SAF Series** recently aired a dedicated episode on the CORSIA updates for SAF to support States, SCS providers and industry in understanding the latest changes related to CEF. The session is available on ICAO TV.

In addition, ICAO has published **new sample calculation cases** to illustrate consistent application of CORSIA methodologies: a <u>Core LCA walk-through</u> showing how default and actual values are calculated, and two <u>DLUC case studies</u> aligned with Chapter 8 of the "CORSIA Methodology for Calculating Actual Life Cycle Emissions Values"—conversion of sparsely forested land to canola (2011) and to palm (2015) for SAF production.

CORSIA Capacity Building



ACT-CORSIA is the ICAO **A**ssistance, **C**apacity Building and **T**raining programme on **CORSIA** to provide States with CORSIA implementation support. It was established in July 2018 and encompasses the **CORSIA Buddy Partnerships**, examples of good practices for CORSIA implementation, frequently asked questions, publications, videos and more. For a complete list of activities click <u>here</u>.

The ACT-CORSIA Buddy Partnerships are a cornerstone of ICAO's plan to support States to prepare for CORSIA implementation. The ACT-CORSIA Buddy Partnerships rely on individual training of CORSIA Focal Points and constitute the core of capacity building activities. The ACT-CORSIA Buddy Partnerships have been proven to be an extremely successful modality to provide training and assistance to support-requesting States on various aspects of CORSIA implementation and to date, 136 States participate in the programme.

Under the partnerships, technical experts supplied by supporting States work together with the CORSIA focal points of requesting States to provide on-site training, and to closely follow-up on the preparation and implementation of the requesting States' CORSIA MRV (Monitoring, Reporting and Verification) system. The results of the training activities thus far have been remarkable, with 99.0% of global 2023 CO₂ emissions submitted by States through the CCR.

In 2025, the focus of the training under the ACT-CORSIA Buddy Partnership will be the MRV tasks and deadlines in light of lessons learned from the past six years of the MRV implementation, as well as the developments regarding CORSIA Eligible Fuels and CORSIA Eligible Emissions Units.

More information can be found here.

The <u>Leaflet for CORSIA Focal Points</u>, provides information and useful links that will assist State's focal points in the implementation of CORSIA.



The CORSIA Verification Course offered by ICAO's Global Aviation Training (GAT) Office provides training on how to verify CO2 Emissions Reports that have been prepared by aeroplane operators, in accordance with the provisions of the CORSIA Standards and Recommended Practices (SARPs) contained in Annex 16, Volume IV.

The CORSIA Verification Course has been updated to provide information on verification requirements as per the upcoming second edition of Annex 16, Volume IV, applicable from 1 January 2024.

<u>Click here</u> for more information and registration.

In 2025, three additional CORSIA Training Courses are being developed and will be made available through ICAO training, covering the following topics:

- CORSIA Overview
- CORSIA Eligible Fuels
- CORSIA Eligible Emissions Units

More information on these courses will be provided in future issues of the CORSIA Newsletter

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