



ICAO

ENVIRONMENT

CORSIA Newsletter

November 2021

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 reductions efforts such as technological innovations, operational improvements and sustainable aviation fuels to meet the ICAO aspirational goal of carbon neutral growth.

Carbon Market Data



This edition of the CORSIA newsletter marks the first publishing of data on carbon market transactions of CORSIA-eligible emissions units, following the [August 2021 announcement](#) on the ICAO-EM partnership (Ecosystem Marketplace (EM) is a non-profit initiative of Forest Trends). The information presented by EM here aims to enhance States' and stakeholders' understanding of the development of carbon markets, and to help States to better understand the effects of CORSIA on the international aviation sector.



EM has aggregated and anonymized reported carbon market transactions of CORSIA-eligible emissions units for 2020 and 2021 YTD. Information encompasses transactions as of 5 November 2021 from American Carbon Registry (ACR), Clean Development Mechanism (CDM), Climate Action Reserve (CAR), Gold Standard (GS), and Verra. In the table below, EM has provided annual summaries and totals for project categories derived from projects located in 17 countries in the geographic regions of Africa, Asia, Europe, Latin America and Caribbean, and North America.

Carbon Market Prices of CORSIA-eligible Emissions Units Transactions by Project Category¹

Project Category ³	2020 ² Prices (in USD/tCO ₂ eq)		2021 ² Prices (in USD/tCO ₂ eq)	
	Weighted Average	Spread Between Min & Max	Weighted Average	Spread Between Min & Max
Energy Efficiency /Fuel Switching	See Other ³	See Other ³	2.52	14.01
Forestry and Land Use	9.35	17.70	11.76	16.00
Renewable Energy	1.28	18.94	1.19	18.06
Waste Disposal	See Other ³	See Other ³	20.67	45.40
Other ⁴	4.25	44.79	18.92	15.32
All Categories	4.89	46.94	3.08	46.94

¹ Transactions included here must have had a unique Project ID assigned by the corresponding carbon standard's registry

² For 2020: 1 January – 31 December; for 2021: 1 January – 5 November

³ EM Data on specific Project Categories is published only if there are at least three EM Respondents per category; otherwise, data is included under Other.

⁴ Other includes Agriculture and Household Devices (for 2020 it also includes Energy Efficiency/Fuel Switching and Waste Disposal) - details on each Project Category definition are available on the EM website.

When comparing the transaction periods of 2020 (1 January – 31 December) and 2021 YTD (1 January – 5 November), buyers have paid significantly different prices for CORSIA-eligible units ranging from less than USD 0.50/tCO₂eq to more than USD 45.00/tCO₂eq. The weighted average price for All Categories has dropped from USD 4.89/tCO₂eq in 2020 to USD 3.08/tCO₂eq in 2021 YTD. This drop is mostly attributed to an increased numbers of transactions of lower priced Renewable Energy units in 2021 YTD. The weighted average price of CORSIA eligible Forestry and Land Use units has increased by about 26% between 2020 and 2021 YTD. This group of projects includes Improved Forest Management, Afforestation and Reforestation. The shift in price was mostly driven by Improved Forest Management, the average price of which jumped by about 53%. More details can be found on the [EM website](#).

As EM Respondents continue to report trade data to Ecosystem Marketplace, updated prices will be included in future editions of this newsletter.

CORSIA Eligible Emissions Units

The ICAO Council in November 2021 considered the recommendations of the Technical Advisory Body (TAB) from its 2021 assessment cycle, and approved the amendment of ICAO document “CORSIA Eligible Emissions Units”. In particular, the Council approved:

- The update of the *Scope of Eligibility* for **Verified Carbon Standard (VCS)** to include two Agriculture, Forestry, and Other Land Use (AFOLU) methodologies, and
- The extension of the *Eligible Unit Dates* for **Architecture for REDD+ Transactions (ART)** from current “through 31 December 2020” to “through 31 December 2023”.

More details including the TAB’s recommendation and the updated ICAO document “CORSIA Eligible Emissions Units” will become available soon on the ICAO [website](#).

Internationally Applied Sustainability Criteria for CORSIA Eligible Fuels



The ICAO Council in November 2021 approved new Sustainability Criteria for sustainable aviation fuels (SAF) for application after the CORSIA pilot phase (2024 onwards).

The new set of criteria are included under 12 Sustainability Themes that comprise environmental and socio-economic aspects, making it the first global approach to sustainability for an industry sector.

Associated with that decision, the Council approved related guidance to the application of CORSIA Sustainability Themes 3 to 7.

The Council also approved new default life-cycle emission values for SAF produced from waste gases (ETJ conversion process), and for SAF produced from tallow, soybean oil, and used cooking oil co-processed at petroleum refineries.

More details on these decisions, including the updated ICAO documents will become available soon on the ICAO [website](#).

CORSIA Sustainability Themes

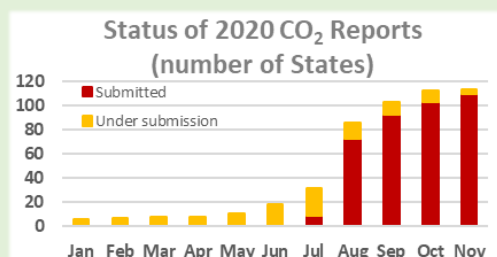
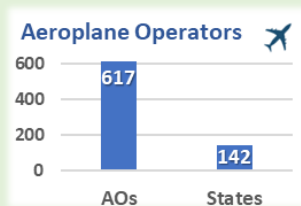
1. Greenhouse Gases
2. Carbon stock
3. Water
4. Soil
5. Air
6. Conservation
7. Waste and Chemicals
8. Human and labour rights
9. Land use rights and land use
10. Water use rights
11. Local and social development
12. Food security

CORSIA in Numbers (as of 30 November 2021)

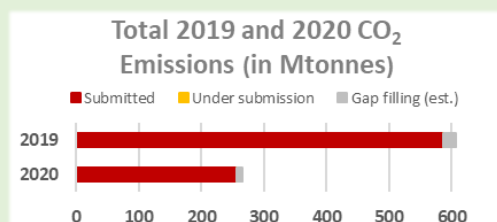
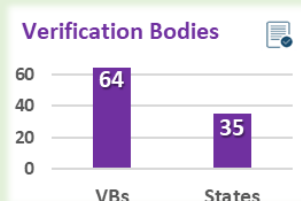
Under CORSIA, aeroplane operators with international flights are subject to [monitoring, reporting and verification \(MRV\) requirements](#). As of 1 January 2019, operators are required to monitor their annual CO₂ emissions, have them verified through a third-party verification process, and submit them to the States to which they are attributed. States collect emissions data from all their operators and submit consolidated information to ICAO.

In addition to CO₂ emissions, States are required to submit information on aeroplane operators attributed to them, and on verification bodies accredited in them. The [latest lists of aeroplane operators and verification bodies](#) can be found in the fifth edition of ICAO document “*CORSIA Aeroplane Operator to State Attributions*” and in the eighth edition of ICAO document “*CORSIA Central Registry (CCR): Information and Data for Transparency*”, respectively.

175
CCR States
Accounts



253
CCR Users
Accounts

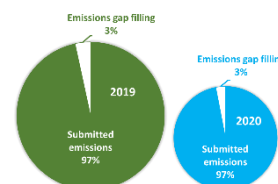


CCR: CORSIA Central Registry

Reporting CO₂ Emissions through the CORSIA Central Registry (CCR)

In accordance with the provisions of Annex 16, Volume IV, every year, States have to submit to ICAO CO₂ emissions data, through the CORSIA Central Registry (CCR), starting with the year 2019. A summary of the emissions data for the years 2019 and 2020 is provided in the table below.

	2019	2020
Number of States that submitted data	117	110
Number of States for which ICAO provided data ¹	22	22
Number of States with no reporting requirement ²	54	61
Total aggregated CO ₂ emissions (in Mtonnes)	606	265



¹ In accordance with Annex 16, Volume IV, Part II, Chapter 2, 2.5.2.2. The methodology for ICAO-level gap filling can be found [here](#).

² States without operators, and States with operators with international flights that emit less than 10,000 tonnes of CO₂ per year.

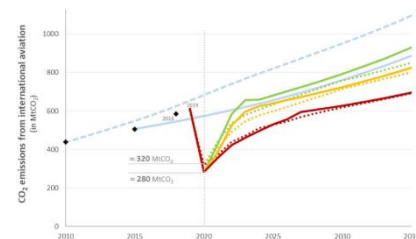
The CORSIA baseline CO₂ emissions (taking into account the relevant decisions by the Council in June 2020) were aggregated for all aeroplane operators on each State pair in **Part II of the ICAO document “CORSIA Central Registry (CCR): Information and Data for Transparency”**. In addition, the ICAO document “**CORSIA 2020 Emissions**” was prepared containing emissions data for 2020 that can be used by States to determine new entrants. Both ICAO CORSIA documents will become available soon on the ICAO [website](#).

2022 CORSIA Periodic Review

In accordance with paragraphs 9 g) and 17 of ICAO Assembly Resolution [A40-19](#), the ICAO Council has been tasked with undertaking a periodic review of the implementation of CORSIA every three years, starting 2022. In the context of sustainable development of the international aviation sector and improving the effectiveness of the Scheme, the Council is to consider the impact of CORSIA on the growth of international aviation, and to recommend, as necessary, adjustments to the next phase or compliance cycle of CORSIA.

More details on the ICAO Council agreement in March 2021 on the process and methodology for the 2022 CORSIA periodic review can be found on [C-DEC 222/12](#) Paragraphs 9 to 10, including the consideration of inputs from its subsidiary bodies (such as the CAEP and the TAB) and timeline. Any recommendations by the Council will be forwarded for consideration by the 41st ICAO Assembly scheduled for 2022.

In November 2021, CAEP's analyses in support of the 2022 CORSIA periodic were presented to the 224th Session of the ICAO Council, including an **update of the CAEP analyses of COVID-19 impacts on CORSIA and CAEP's initial assessment on the implementation of CORSIA, in particular the functioning of MRV provisions.** The [analyses](#) and its [executive summary](#) are now available on the ICAO website.



ICAO at UNFCCC COP26

The UNFCCC [COP26 conference](#) took place in Glasgow, UK, from 31 October to 13 November 2021. Parties were called upon to accelerate action towards the achievement of the Paris Agreement goals, including the finalization of the Paris Agreement rulebook on the implementation of international carbon markets under Article 6 of the Agreement. All the ICAO outreach activities at COP26 are available at the [dedicated ICAO webpage](#), and summarized below:



- On 31 October 2021 during the opening plenary meeting of the Subsidiary Body on Scientific and Technological Advice (SBSTA), ICAO provided a [statement](#) and a [submission](#);
- On 4 November 2021, ICAO held a side event, [Inspiring a Green Flying Future](#), with the participation of panellists from States, aviation industry and carbon markets;
- On 9 November 2021, ICAO provided a statement at the side event organized by Air Transport Action Group (ATAG);
- On 10 November 2021 during the COP26 Transport Day, the President of the ICAO Council provided a statement at the [“International Aviation Climate Ambition Coalition”](#) launch event organized by the UK government;
- On 10 November 2021 during the COP26 Transport Day, the ICAO Secretary General provided a statement at the [side event organized by the Marrakesh Partnership Global Climate Action \(MPGCA\)](#) and the COP Climate Champions;

- On 12 November 2021, ICAO participated in the [EU side event](#) that focused on the sustainable aviation fuels; and
- ICAO produced COP26 [video](#) and two publications ([ICAO COP26 Publication and Innovation Driving Sustainable Aviation](#)) to highlight the recent activities and progress.

CORSIA Capacity Building



ACT-CORSIA is the ICAO Assistance, Capacity Building and Training programme on **CORSIA**. It was established in June 2018 and encompasses the CORSIA Buddy Partnerships and all other ICAO outreach initiatives including [sample model regulations for CORSIA](#), frequently asked questions (FAQs), [brochure and leaflets](#), [videos](#) as well as CORSIA [seminars/webinars and online tutorials](#).

CORSIA Frequently Asked Questions (FAQs): An updated version of the frequently asked questions (FAQs) on CORSIA, including the interactive-interface version, is available [here](#).

ACT-CORSIA Buddy Partnerships are the core of capacity building activities. They rely on individual training of CORSIA Focal Points and involves experts from 134 States. During November 2021, **Angola, Mozambique, Sao Tome and Principe, and Suriname** received training under Phase III. More information can be found [here](#).

For 2022, the focus of the training under the ACT-CORSIA Buddy Partnerships will be on the use of the CCR and, in particular, the new reporting requirements as relating to CO₂ emissions and CORSIA eligible fuels

Upcoming CORSIA Implementation Deadlines (2022)

In accordance with Appendix 1 to [Annex 16, Volume IV](#), the following deadlines apply to 2022:

1 January 2022 to 31 December 2022: Aeroplane operators to monitor 2022 CO₂ emissions from international flights.

1 January 2022 to 30 April 2022: Aeroplane operators to compile 2021 CO₂ emissions data to be verified by verification bodies.

30 April 2022: Aeroplane operators and verification bodies to submit to States the verified Emissions Reports and associated Verification Reports for 2021 CO₂ emissions.

1 May 2022 to 31 July 2022: States to conduct an order of magnitude check of the verified 2021 Emissions Reports, including any filling of data gaps in case of non-reporting by aeroplane operators.

30 June 2022: States to notify ICAO of any change in their decision to voluntarily participate in CORSIA from 1 January 2023.

31 July 2022: Using the CCR, States to submit to ICAO aggregate 2021 CO₂ emissions.

31 October 2022: States to use the 2021 Sector's Growth Factor and calculate the 2021 offsetting requirements for the aeroplane operators attributed to them.

30 November 2022: Using the CCR, States to update their list of aeroplane operators that are attributed to them, and the list of verification bodies accredited in them.

Navigating CORSIA - A guide to the scheme's design & implementation



Since the adoption of the CORSIA-related [Standards and Recommended Practices \(SARPs\)](#) in 2018, ICAO has developed the remaining elements needed for the CORSIA implementation.

Click [here](#) to watch on the ICAO TV the **Navigating CORSIA** series of pre-recorded presentations that focus on the status of implementation of CORSIA and provide information on its key design elements.

Click [here](#) for an infographic on the status of all implementation elements.



The CORSIA Verification Course 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).

> [Click here](#) for more information and registration

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For more information, visit the ICAO website: www.icao.int/corsia