

# CORSIA Emissions Units: Key updates, the role of the Technical Advisory Body and Future Direction

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## Introduction

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is part of the International Civil Aviation Organization's (ICAO) comprehensive measures to achieve carbon-neutral growth for international aviation from 2020 onwards. The landmark agreement on the adoption of the CORSIA was reached during the 39th Session of the ICAO Assembly in 2016. Since then, ICAO and its Member States have successfully implemented the scheme as the only global market-based measure (MBM) addressing CO<sub>2</sub> emissions from international aviation. ICAO continues to work closely with all Member States to ensure that they have the means and capacity to implement CORSIA.

One of the key components of the scheme is the CORSIA Eligible Emissions Units. To operationalize this crucial element of CORSIA, in 2019, the ICAO Council approved the CORSIA Emissions Unit Eligibility Criteria (EUC) and established the Council's Technical Advisory Body (TAB). The TAB assesses a variety of carbon offset programmes against the EUC and makes recommendations to the Council on which units should be CORSIA-eligible. Aeroplane operators are required to cancel CORSIA Eligible Emissions Units to fulfill their CO<sub>2</sub> offsetting requirements under the scheme.

Information about the eligibility of emissions units is presented in the ICAO document *CORSIA Eligible Emissions Units*. This ICAO document, available in the ICAO website<sup>2</sup>, is updated regularly by the ICAO Council based on recommendations by the TAB.

## Overview

TAB launched the first call for applications for assessment against the EUC in June 2019 and delivered its first recommendations to Council in January 2020. Since then, TAB continues to undertake assessments on an annual basis and recently launched its seventh assessment cycle in early 2025.

TAB's recommendations to the Council arising from its assessment of programmes between 2019 and 2024 have led to the Council's approval of emission units from the following programmes<sup>3</sup>:

### ***Pilot Phase (2021-2023 compliance period)***

1. American Carbon Registry
2. Architecture for REDD+ Transactions
3. BioCarbon Fund for Sustainable Forest Landscapes
4. China GHG Voluntary Emission Reduction Program

1 Grégoire Baribeau served as Chairperson of the Technical Advisory Body (TAB) of the ICAO Council until March 2025. Rachid Rahim is TAB's Vice-Chairperson.

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

3 Not all units from these programmes are eligible for use in CORSIA. Certain emissions units from these programmes are not eligible (see each programme's Scope of Eligibility in the ICAO document *CORSIA Eligible Emissions Units*)

5. Clean Development Mechanism
6. Climate Action Reserve
7. Forest Carbon Partnership Facility
8. Global Carbon Council
9. The Gold Standard
10. Socialcarbon
11. Verified Carbon Standard

### ***First Phase (2024-2026 compliance period)***

1. American Carbon Registry
2. Architecture for REDD+ Transactions
3. Climate Action Reserve
4. Global Carbon Council
5. The Gold Standard
6. Verified Carbon Standard

The latest information on eligible programmes and their respective scopes of eligibility is contained in the 12th edition (October 2024) of the ICAO document titled *CORSIA Eligible Emissions Units*. All CORSIA Eligible Emissions Units must be generated from activities that started their first crediting periods in January 2016 or later and meet specific eligibility parameters set out for each programme in the ICAO document.

For the pilot phase (2021–2023 compliance period), eligible units from most programmes must represent greenhouse gas (GHG) mitigation that occurred from 2016 to 2020. Council further approved five programmes to also supply emissions units issued that represent ‘post-2020’ mitigation for the pilot phase, namely with unit dates from 2021 to 2023.

For the CORSIA first phase (2024–2026 compliance period), in addition to the existing 2016 crediting start date parameter mentioned above, CORSIA Eligible Emissions Units must represent mitigation that occurred between 2021 and 2026.

## **Technical Criteria**

The CORSIA Emissions Unit Eligibility Criteria (EUC) cover a variety of best practices that are broadly recognized across both regulatory and voluntary offset credit programs, in respect of both program design elements and carbon offset

credit integrity. This helps ensure that the emissions units are environmentally sound and contribute to sustainable development.

Key technical aspects include, but are not limited to: Programme Governance; Additionality and conservative baselines; Permanence and leakage; Quantification and verification; Avoidance of Double Counting; Sustainable development and Environmental and social safeguards. TAB’s application of the EUC is further informed by the *Guidelines for Criteria Interpretation*, last updated in March 2024, which outline detailed expectations for many criteria.

## **Role of the Technical Advisory Body (TAB)**

The TAB’s mandate is to make recommendations to the ICAO Council on which emissions units should be CORSIA-eligible. TAB comprises experts from 19 States, reflecting a regional balance, who are highly qualified in the topics of global carbon markets, carbon offsetting, emissions quantification and climate policy.

TAB’s assessment process involves a thorough review of the programmes’ procedures, standards and unit registries, which follows a step-by-step approach to ensure that the technical assessment and related recommendations are robust and evidence-based. These recommendations are crucial for ensuring that only high-quality emissions units are approved for use by aeroplane operators.

The process starts with submissions of detailed applications by candidate emissions unit programmes. Then, TAB reviews the design elements of these programmes and evaluates the integrity of the carbon offset credits to ensure they meet the EUC. This process results in recommendations on the eligibility of the emissions units, which are then presented to the ICAO Council. The Council decides eligibility on the basis of TAB’s recommendations. The final step is the publication of the ICAO document *CORSIA Eligible Emissions Units*, which sets out the scope of eligibility of each approved programme.

TAB’s assessment cycles demand considerable expertise and time commitment from TAB members. Each member undertakes extensive desk work processing programme

applications and supporting documentation to prepare a thorough assessment. TAB meets formally three times per year and holds informal videoconferences between meetings to continue advancing the work.

TAB ensures transparency by interacting with programmes during the assessment cycle, both in writing and via videoconference. TAB also allows public participation through annual calls for public comments, a webinar at the start of each new assessment cycle, as well as participation in different events to engage with interested stakeholders.

To help illustrate the ICAO document titled *CORSIA Eligible Emissions Units*, TAB now publishes a summary table (available on the ICAO website) listing programmes that have been fully or conditionally approved by the Council to supply units for the different CORSIA phases. This informal table is a valuable resource for stakeholders to understand the status of eligible programmes.

**SUMMARY OF THE STATUS OF PROGRAMME ELIGIBILITY FOR THE PROVISION OF CORSIA ELIGIBLE EMISSIONS UNITS (AS OF NOVEMBER 2024)**

Programme	2021 - 2023 Compliance Period (Pilot Phase)	2024 - 2026 Compliance Period (First Phase)	2027 - 2029 Compliance Period (in Second Phase)
American Carbon Registry	2016 – 2023 units <sup>1,2</sup>	2021 – 2026 units <sup>1,2</sup>	Starting in 2025, TAB will make recommendations to Council on eligibility beyond the CORSIA First Phase.
Architecture for REDD+ Transactions	2016 – 2023 units <sup>1,2</sup>	2021 – 2026 units <sup>1,2</sup>	
BioCarbon Fund Initiative for Sust. Forest Landscapes	2016 – 2020 units <sup>1</sup>	Conditionally eligible <sup>3</sup>	
Cercarbano		Conditionally eligible <sup>3</sup>	
China Certified Emission Reduction	2016 – 2020 units <sup>1</sup>		
Clean Development Mechanism	2016 – 2020 units <sup>1</sup>		
Climate Action Reserve	2016 – 2023 units <sup>1,2</sup>	2021 – 2026 units <sup>1,2</sup>	
Forest Carbon Partnership Facility	2016 – 2020 units <sup>1</sup>	Conditionally eligible <sup>3</sup>	
Global Carbon Council	2016 – 2020 units <sup>1</sup>	2021 – 2026 units <sup>1,2</sup>	
Gold Standard	2016 – 2023 units <sup>1,2</sup>	2021 – 2026 units <sup>1,2</sup>	
Isometric		Conditionally eligible <sup>3</sup>	
Joint Crediting Mechanism between Japan and Mongolia	Conditionally eligible <sup>3</sup>		
SOCIALCARBON	2016 – 2020 units <sup>1</sup>		
Thailand Voluntary Emission Reduction Programme		Conditionally eligible <sup>3</sup>	
Verra Verified Carbon Standard / Jurisdictional Nested REDD Programme	2016 – 2023 units <sup>1,2</sup>	2021 – 2026 units <sup>1,2</sup>	

Note: All Eligible Emissions Units must be generated from an activity that started its first crediting periods in 2016 or later.  
<sup>1</sup> Subject to various exclusions as set out in the relevant section of the ICAO document titled "CORSIA Eligible Emissions Units".  
<sup>2</sup> Units with vintages from 2021 onward have specific requirements relating to host-Party attestations.  
<sup>3</sup> Pending further actions by the Programme.

TAB's annual work programme aligns with the Council's meeting cycle to deliver timely recommendations. In 2025, TAB will conduct the re-assessment of emissions unit programmes seeking eligibility beyond the first phase. This process aims to ensure that the programmes continue to meet the criteria for supplying CORSIA Eligible Emissions Units for 2027-2029 (first compliance period of the Second Phase).

TAB will also undertake an assessment of the Paris Agreement Crediting Mechanism (PACM), including the provisions relating to the transition of the Clean Development Mechanism (CDM), as soon as it is operational.

## Supply of CORSIA Eligible Emissions Units

At the request of ICAO Council, TAB conducts an annual supply survey of CORSIA Eligible Emissions Units, including information on geographic distribution of activities. The purpose of this survey is to provide the Council with regular updates on potential supply of CORSIA Eligible Emissions Units and to show the supply implications of TAB's recommendations.

TAB's latest supply analysis presented in October 2024 estimated that the potential total supply of CORSIA Eligible Emissions Units for CORSIA's pilot phase (2021-2023 compliance period) was around 550 million – 1.9 billion units. It is important to note that no offsetting requirements have accrued for CORSIA's pilot phase; thus, airlines do not need to purchase and cancel emissions units for that phase.

Regarding the potential supply for CORSIA's first phase (2024-2026 compliance period), TAB's latest estimates range from around 900 million up to more than 2 billion units from the six programmes approved to supply units for the first phase, if such units were to obtain host country attestation (roughly half of these units would also have been eligible for the pilot phase). These figures do not yet reflect the specific eligibility parameters of each programme, which would adjust such estimates. TAB will introduce programme-specific eligibility parameters in future updates of its supply analysis.

It is important to highlight that TAB's supply survey is for information purposes and does not affect a programme's eligibility. Rather, TAB recommendations are based on the assessment of programmes against the Emissions Unit Eligibility Criteria and do not aim to pre-determine the supply of units.

## Market availability of CORSIA Eligible Emissions Units

The demand for high-quality emissions units in the aviation sector is expected to grow as aeroplane operators strive to meet CORSIA's carbon-neutral growth targets. The development of new carbon offset projects, including in sectors such as energy efficiency, forestry, agriculture, waste management and renewable energy, will play a crucial role in supplying eligible emissions units. Emerging innovations in carbon capture, utilization and storage (CCUS) and negative emissions technologies (NET) are also anticipated to contribute to the availability of emissions units.

Besides the development of new projects, TAB also recognizes another crucial factor that is linked to the availability of CORSIA Eligible Emissions Units: the host country attestation.

The host country attestation<sup>4</sup> is a key step to prevent double claiming of units used in CORSIA, in particular units representing GHG mitigation that occurred from 2021 onward. Through the attestation, the host country confirms that any CORSIA Eligible Emissions Units used by aeroplane operators will not also be counted towards a country's Nationally Determined Contribution (NDC), in accordance with the relevant accounting guidance under Article 6 of the Paris Agreement.

Based on the information compiled by TAB, activities under programmes approved to supply CORSIA Eligible Emissions Units for the first phase (2024-2026 compliance period) have obtained host country attestations for up to 18.4 million of units with vintage years 2021-2023.

While programmes are accountable for the integrity and transparency of CORSIA Eligible Emissions Units, the decision to issue attestation letters is ultimately the responsibility of the host countries to GHG mitigation activities. Therefore, to ensure availability of CORSIA Eligible Emissions Units with mitigation years 2021-2026, ICAO Member States are encouraged to finalize their authorization letters well in advance of the January 2028 deadline for aeroplane operators to cancel emissions units for the first phase.

In addition to the above, market dynamics, including the price of carbon credits and the demand from other sectors, will also influence the future supply of CORSIA Eligible Emissions Units.

## Future of CORSIA Eligible Emissions Units and TAB assessment

The recent updates on CORSIA Eligible Emissions Units and the role of the TAB underscore the ongoing efforts to ensure the environmental integrity and effectiveness of carbon offsetting in international aviation.

The assessment process and the continuous work of TAB are essential for maintaining the high standards required for CORSIA's success. TAB's thorough assessments ensure that only those emissions units demonstrating high environmental integrity, social safeguards and sustainable development contributions are eligible for use under CORSIA. As the aviation industry strives for carbon-neutral growth, the role of CORSIA and the TAB remains pivotal in achieving ICAO's climate goals.

Future projections indicate growth in both supply and demand for CORSIA Eligible Emissions Units, starting from the first phase of CORSIA (2024-2026). However, the availability of high-quality emissions units for the international aviation sector will depend on the continued support of ICAO Member States and their national focal points under the Paris Agreement, the ICAO Council and TAB, as well as carbon market participants (e.g., programmes, project developers, retailers and brokers). These stakeholders must work collaboratively to establish the necessary conditions for generating high-quality emissions units suitable for use in CORSIA through the next decade.

4 Also known as host country authorization under the Article 6 of the UNFCCC Paris Agreement