

Recent developments on CORSIA Eligible Emissions Units

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Introduction

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) is a way to manage emissions from the international aviation industry, as part of the International Civil Aviation Organization's (ICAO)'s basket of measures for working towards carbon neutral growth for international aviation from 2020 onwards. Since the adoption of the CORSIA by the ICAO Assembly in October 2016, officials from the Member States, the Secretariat, aeroplane operators, and emissions unit programmes, have all been working diligently on its implementation.

The CORSIA requires participating aeroplane operators need to meet their CO₂ offsetting requirements by cancelling CORSIA eligible emissions units that meet the CORSIA Emissions Units Criteria (EUC).² In 2019, the ICAO Council approved the EUC and established the Technical Advisory Body (TAB) and its process of work. TAB is mandated to assess emissions unit programmes against the EUCs and make recommendations to Council on the programmes whose emissions units should be eligible for use toward compliance with the CORSIA.

TAB's 19 members are technical experts nominated by their respective member States and approved by the Council. TAB launched the first call for applications in June 2019 and delivered its first recommendations to Council in

early 2020. To date, TAB has processed 25 applications for assessment against the EUC and 15 notifications of material changes to previously assessed programmes. TAB continues to undertake assessments on an annual basis and recently launched its fourth assessment cycle earlier this year.

On the basis of these assessments, TAB has made a series of recommendations to Council, which in turn has approved eight CORSIA eligible emissions unit programmes³ for the 2021–2023 pilot phase:

1. American Carbon Registry
2. Architecture for REDD+ Transactions
3. China GHG Voluntary Emission Reduction Program
4. Clean Development Mechanism
5. Climate Action Reserve
6. Global Carbon Council
7. The Gold Standard
8. Verified Carbon Standard

For most of these programmes, the emissions units eligible for the pilot phase are issued to activities that started their first crediting periods in January 2016 or later, and in respect of greenhouse gas (GHG) mitigation (emission reductions or removals) that occurred from 2016 to 2020. Council has further approved two programmes⁴ to also supply emissions units issued that represent 'post-2020' mitigation, namely with unit dates from 2021 to 2023. Going forward,

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2 See Assembly Resolution and CORSIA-related SARPs (Annex 16, Volume IV) adopted by the ICAO Council in June 2018

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*)

4 American Carbon Registry (ACR) and Architecture for REDD+ Transactions (ART).

TAB will continue to make further recommendations on eligible emissions units based on the ongoing and future assessments.

CORSIA Eligible Emissions Units and TAB assessment

TAB's work has been fundamental to the progress achieved to date in implementing the EUCs and determining CORSIA Eligible Emission Units. ICAO follows a step-by-step approach to ensure that the TAB's technical assessment and related recommendations are robust, and evidence based. Each annual assessment cycle contains five main steps: A) application by emission unit programmes; B) assessment by TAB; C) recommendation by TAB to the ICAO Council; D) decision by ICAO Council; and finally, E) publication of CORSIA eligible emissions units in the ICAO document⁵.

The Emissions Unit Criteria (EUC), published on the ICAO website⁶, address a variety of concepts that have been broadly applied across both regulatory and voluntary offset credit programs to address environmental and social integrity. The EUC cover programme-level design elements, procedures and other provisions which, when taken together, serve to ensure the integrity of eligible units issued by each programme. Key issues include but are not limited to: programme governance; quantification; additionality; baseline-setting; permanence and carbon leakage; validation and verification; monitoring and reporting; issuance, tracking and retirement; legal and property aspects; transparency and public participation; sustainable development; environmental and social safeguards; and the avoidance of double-counting. TAB's application of the EUC is further informed by Guidelines for Criteria Interpretation, which outline detailed expectations for some criteria.



FIGURE 1: Process to determine CORSIA Eligible Emissions Units

5 https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/ICAO%20Document%2008%20_%20CORSIA%20Eligible%20Emissions%20Units_November%202021.pdf

6 https://www.icao.int/environmental-protection/CORSIA/Documents/ICAO_Document_09.pdf

Each TAB assessment cycle demands considerable expertise and time commitment from TAB members. The TAB typically holds three formal meetings per year, interspersed by teleconferences that bring together all members or smaller ‘sub-groups’ focused on specific technical topics. Each TAB member also undertakes extensive desk work, processing many hundreds of pages of programme applications, supporting documentation and public comments every year. The TAB’s annual work programme is scheduled to align with the Council’s annual meeting cycle, in order to deliver timely recommendations at the relevant Council sessions.

In early 2022, in addition to the annual call for new applications, the TAB initiated a re-assessment of currently eligible emissions unit programmes to consider recommendations on their eligibility beyond the pilot phase (*i.e.*, from 2024 onwards). While potentially offering more clarity to the market looking forward, this re-assessment of CORSIA-eligible programmes is not intended to revoke the eligibility status of emissions units that the ICAO Council has already approved for use during the CORSIA’s pilot phase (from 2021 to 2023).

Transparency and public participation are key to the TAB’s success. After each call for applications or notification of material changes submitted by an emissions unit programme, the TAB posts the application packages on the ICAO website for a 30-day public comment period.

TAB members are grateful for the many helpful comments they have received since 2019, which are also published for transparency following each assessment cycle. The TAB also conducts public webinars at the start of each new assessment cycle, as well as periodic public events, to engage stakeholders and introduce potential applicants to the CORSIA, the EUC, the TAB’s procedures and the application processes.

To follow the TAB’s work, a dedicated page on the ICAO website⁷ contains up-to-date information, including governance-related documents (membership, Terms of Reference and Procedures); annual work programmes; application forms and materials; registry attestations of eligible programmes; recommendation to ICAO Council; outcomes of the Council decisions; public comments; and Frequent Asked Questions (FAQs) reflecting recurring inquiries submitted by programmes and the public.

Supply of CORSIA Eligible Emissions Units

CORSIA Eligible Emissions Units serve to offset the greenhouse gas footprint of international civil aviation by undertaking different activities that reduce or avoid GHG emissions. While there are dozens of different activity types and many methodologies to quantify them, most emissions

CORSIA Eligible Emissions Units: Projected volume by region and activity type, 2016-2020 vintages

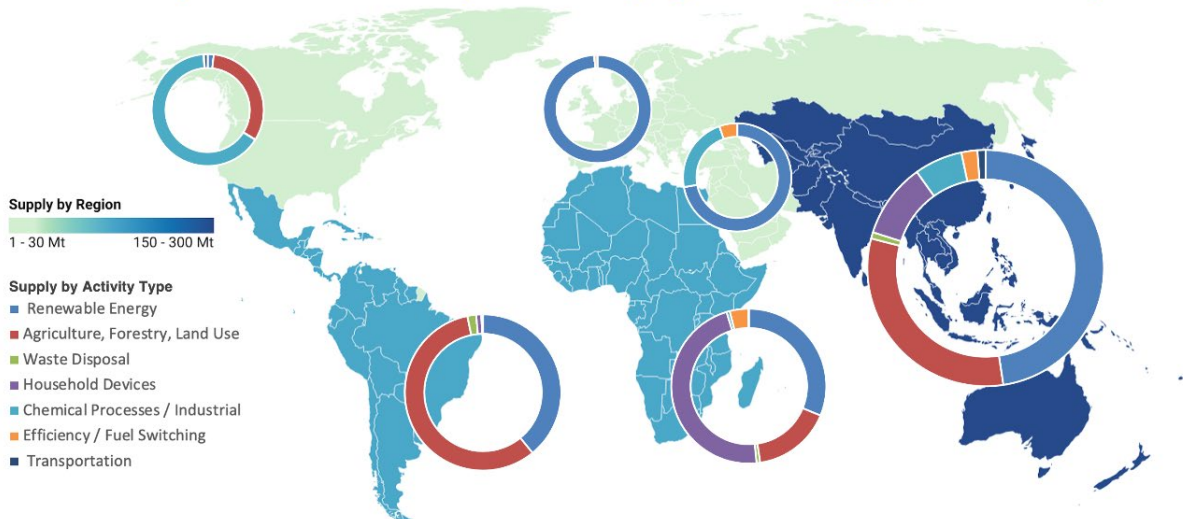


FIGURE 2: Regional distribution of CORSIA eligible emissions units

7 <https://www.icao.int/environmental-protection/CORSA/Pages/TAB.aspx>

unit activities can be sorted into six broad categories: (1) renewable energy; (2) agriculture, forestry and land use (AFOLU); (3) waste disposal; (4) household devices; (5) chemical processes and industrial manufacturing; (6) energy efficiency and fuel switching; and (6) transportation.

In 2021, at the request of ICAO Council, TAB conducted an analysis of the supply of CORSIA Eligible Emissions Units, including with respect to the sectoral and geographic distribution of programme activities. Based on the data collected in a survey of Eligible Emissions Unit programmes, TAB estimated that these programmes are likely to issue around 300 to 350 million units representing GHG mitigation that occurred between 2016 and 2020. Each of these units would currently be eligible for use toward CORSIA offsetting requirements in the 2021-2023 pilot phase, or alternatively, could be used in other voluntary and compliance offset markets, where applicable. The analysis also indicated that, given the extension of Eligible Unit Dates through 2023 for two programmes, another 150 to 180 million units could be issued for GHG mitigation that occurs in 2021-2023. However, it is not currently known how many of these units would obtain authorization by the host country attesting to their intention and steps taken to avoid double-claiming against national greenhouse gas targets (see next section).

Figure 2 below shows the projected volume of CORSIA eligible emissions units by region and activity type. Based on 2021 data, eligible emissions units are mainly from activities relating to renewable energy (90 – 210 million units), AFOLU (110 – 140 million units) and household devices (25 – 60 million units). The leading region generating CORSIA eligible emissions units is Asia-Pacific (140 – 270 million units), followed by Latin America & the Caribbean (60 – 100 million units), Africa (30 – 65 million units), North America (14 – 15 million units), Europe (2.5 – 5.5 million units) and Middle East (0.6 – 1.5 million units).

Future of CORSIA Eligible Emissions Units and TAB assessment

At the Glasgow Climate Conference (COP26) in November 2021, Parties to the Paris Agreement adopted substantive

outcomes relating to its article 6, including accounting guidance for internationally transferred mitigation outcomes (ITMOs) and rules, modalities and procedures for a new international offset programme (“the Article 6.4 mechanism”). To prevent double claiming, the new guidance requires Parties to adjust to their reported emissions levels to account for any ITMOs they have authorized and transferred for use toward another country’s national target (“NDC”), or towards other international mitigation purposes such as CORSIA. It also contains new expectations relating to additionality, tracking, and reporting, including on social and environmental safeguards, among others. Some programmes may update their procedures in light of COP26, particularly as they pertain to post-2020 mitigation. TAB will also consider possible implications of the relevant Article 6 outcomes in its ongoing (re-)assessments as well as in future assessments going forward.

Due to COVID-19 pandemic, the international aviation sector had a major reduction in air traffic, resulting in lower sectoral CO₂ emissions than anticipated at the time CORSIA was adopted. As a result, aeroplane operators have so far not needed to purchase many eligible emissions units in order to comply with their offsetting obligations for the CORSIA pilot phase. Nevertheless, the EUCs and the TAB have exerted a positive influence on international carbon markets more broadly. The EUCs have helped sensitize market actors and stakeholders to key features of high-integrity carbon offset programmes, while the TAB assessment process has further clarified how emissions unit programmes can apply these concepts in practice. This experience has helped raise the bar for quality in international offset markets, while also reducing information barriers for new market entrants.

Together with the new policy clarity achieved at COP26, the CORSIA is helping to build a robust foundation for high-integrity international carbon markets in this critical decade for climate action. As the international airline industry continues to recover from the pandemic, driving new growth in the demand for Eligible Emissions Units, we expect the CORSIA to continue to play an important role in scaling up international carbon markets going forward.