

## By ICAO Secretariat

With the adoption of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) by the 2016 Assembly, ICAO has placed international aviation on the cutting edge of climate policy. CORSIA represents the first example of an international, sector-wide market-based approach to greenhouse gas emissions reductions. One of the most interesting aspects of the scheme is the use of emissions units to ensure carbon neutral growth from 2020 onwards in the international aviation sector, and that the Assembly requested the ICAO Council to determine eligible emissions units for use by airlines under CORSIA.

Under CORSIA, airlines will meet  $CO_2$  offsetting requirements with these eligible emissions units, making them an essential part of the ICAO Basket of Measures to achieve ICAO's global aspirational goal of carbon

neutral growth from 2020. While it is not possible to know beforehand how many emissions units will be needed to meet the carbon neutral growth goal, it could be on the order of 2.5 billion tonnes for the period from 2021 to 2035.

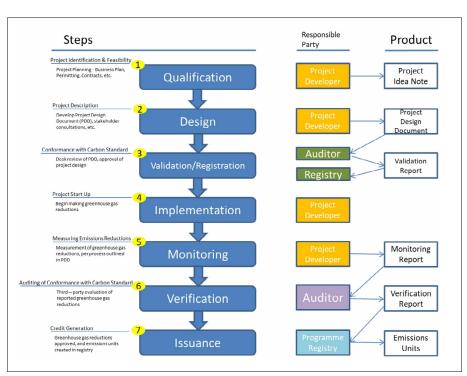
For decades, economists have recommended using emissions units, also known as carbon credits, as part of a market-based approach to address climate change. The United Nations Framework Convention on Climate Change (UNFCCC) Kyoto Protocol included a mechanism for some States to meet their emissions reductions commitments using emissions units. Similarly, the European Union Emissions Trading Scheme (EU ETS) has used emissions units for over a decade to achieve

the European Union's greenhouse gas reduction goals. Other jurisdictions, from the Republic of Korea to the State of California, now use emissions units to reach their greenhouse gas reduction goals.

Emissions units are generated when emissions from a specific project or programme are reduced, compared to a baseline (or business-as-usual scenario), through the implementation of emission reductions techniques/technologies. These projects or programmes can be implemented in various sectors, such as electricity generation, industrial processes, agriculture, forestry, and/or waste management.

There is a multi-step process to generate an emissions unit, as detailed in Figure 1.

FIGURE 1: Process to Generate an Emissions Unit





In general, emissions units are issued, or created, in a programme registry. A programme registry is akin to an online bank for emissions units. Emissions units can only exist within a registry, where they are also traded, tracked, and cancelled.

While emissions units exist within a registry, their owner may change. For example, a project developer may sell them to a compliance buyer, such as an airline registered in a State which participates in CORSIA. This transaction can occur through an exchange, a broker, or a direct bilateral contract between the seller and the buyer.

The compliance buyer will then use the emissions units to meet its obligations. In the context of CORSIA, this means that the airline will cancel the required number of emissions units in the registry.

Importantly, the emissions units which are cancelled must not be counted elsewhere, such as for compliance with another programme or Nationally Determined Contribution (NDC) under the UNFCCC Paris Agreement.

FIGURE 2: ICAO CORSIA Emissions Unit Eligibility Criteria



If the emissions units are counted for another emissions reduction programme, then they cannot also count for CORSIA. An emissions unit can only be counted once as a reduction.

In March 2019, the ICAO Council approved the Emissions Units Criteria (EUC), which will be used to undertake the assessment of emissions unit programmes and to determine eligible emissions units for use by airlines under CORSIA. The approved EUC is available at the ICAO CORSIA website<sup>1</sup>.

In order to inform its decisions on CORSIA eligible emissions units, the Council established the Technical Advisory Body (TAB), which will make recommendations on eligible emissions units for CORSIA. The 19 members of the TAB are experts nominated by their State and approved by the Council.

As the TAB's Terms of Reference indicates, the body's main tasks are to:

- undertake the assessment of emissions unit programmes against the emissions unit criteria; and
- develop recommendations on the list of eligible emissions unit programmes (and potentially project types) whose emissions unit would be eligible for use under the CORSIA, for consideration by the Council.

The TAB started its process by inviting emissions unit programmes to apply for the assessment by TAB. The public will also be invited to comment on the programme applications. This is an open and transparent process, allowing stakeholders to participate in and follow progress through the ICAO website. The TAB will review the programme applications and public comments, and assess whether the programmes meet the EUC, before making its recommendations to the Council on CORSIA eligible emissions units, by March 2020. The Council will take the TAB recommendations into consideration, and make its decisions on the CORSIA emissions units eligibility. More

 $<sup>1 \</sup>quad \text{https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Emissions-Units.aspx} \\$ 

2019 2020 Activities May June July August Sept Oct Nov. Dec. Jan. Feb. March April May 1.1 Initial TAB Activities Election of Chairperson & Vice 1.2 Chairperson Development of TAB work 1.3 programme and timeline evelopment of process for the 1.4 applications by emissions units programmes 2.1 Programme Applications ICAO invites programme 2.2 applications on CORSIA TAB website CAO updates website with 2.3 application status Programme requests clarifications 2.4 from ICAO CAO webinar on programme 2.5 applications ICAO conducts completeness eview of submitted applications 2.6 ICAO informs programmes that applications are complete 3.1 Programme Assessment TAB conducts initial screening of programme applications and ICAO 3.2 requests clarifications from programmes in writing ICAO publishes programme 3.3 applications on website, and starts 30 day public comment period Possible in-person meetings of TAB 3.4 with programme representatives TAB conducts assessment of programme applications against 3.5 emissions unit criteria, and makes ecommendations to Council

FIGURE 3: TAB Work Programme and Timeline (as of May 2019)

Note 1: The above TAB Work Programme and Timeline is subject to further changes.

Note 2: The TAB process above is iterative, and the second programme application period is foreseen to begin in March 2020.

information on the TAB process, including the TAB work programme and timeline is available on the ICAO website.<sup>2</sup>

The Council-approved list of CORSIA eligible emissions units will allow airlines to know which emissions units they can purchase for compliance with CORSIA. Such a list will also inform project developers who build and operate emissions reductions projects. These developers will know which projects will produce CORSIA eligible emissions units, and thus which kinds of projects they should develop to meet the demand for emissions units.

The implementation of CORSIA marks a transformation in aviation environmental protection efforts. Starting in 2021, international civil aviation will experience carbon neutral growth, in part thanks to the use of emissions units under CORSIA. This represents a positive example

of international cooperation in the efforts against climate change. The large number of States which will participate in CORSIA means that the atmosphere will see greenhouse gas reductions on the scale of billions of tonnes, compared to a business-as-usual scenario.

Now, the ICAO Council has approved the EUC, and the TAB has begun to assess emissions units programmes, and potentially project types. This will lead to a decision from the ICAO Council on which emissions units are eligible for compliance with CORSIA.

There is a clear timeline with concrete milestones that sets the way forward. ICAO and its Member States know what has to be done by when, and together with the invaluable support and contribution of the international aviation industry, are determined to make it happen.

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