

# CORSIA Eligible Fuels Certification: Processes and Progress

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## Sustainability Certification Scheme role under CORSIA

Aeroplane operators can reduce their offsetting requirements under CORSIA through the use of CORSIA Eligible Fuels (CEF), which includes CORSIA sustainable aviation fuels (SAF) and CORSIA lower carbon aviation fuels (LCAF).

Annex 16, Volume IV provides the following definitions relating to CEF:

- *CORSIA eligible fuel*. A CORSIA sustainable aviation fuel or a CORSIA lower carbon aviation fuel, which an operator may use to reduce their offsetting requirements.
- *CORSIA lower carbon aviation fuel*. A fossil-based aviation fuel that meets the CORSIA Sustainability Criteria under this Volume.

- *CORSIA sustainable aviation fuel*. A renewable or waste-derived aviation fuel that meets the CORSIA Sustainability Criteria under this Volume.

To be claimed under CORSIA, all CEF must be certified by a CORSIA-approved Sustainability Certification Scheme (SCS). An SCS is an organization that defines a set of sustainability guidelines that are used to demonstrate compliance with specific regulatory or voluntary frameworks. The SCS develops a set of system documents that define the programme scope that is being certified, which in this case matches the CORSIA requirements.

Under CORSIA, the SCS verifies that the CEF production supply chain participants from feedstock through to fuel production and blending (which under CORSIA are called economic operators) comply with the specific CEF production criteria for CORSIA. Beyond the blend point, chain of custody is tracked by the standard CORSIA Monitoring, Reporting and Verification process defined in Annex 16, Volume IV (see Figure 1).

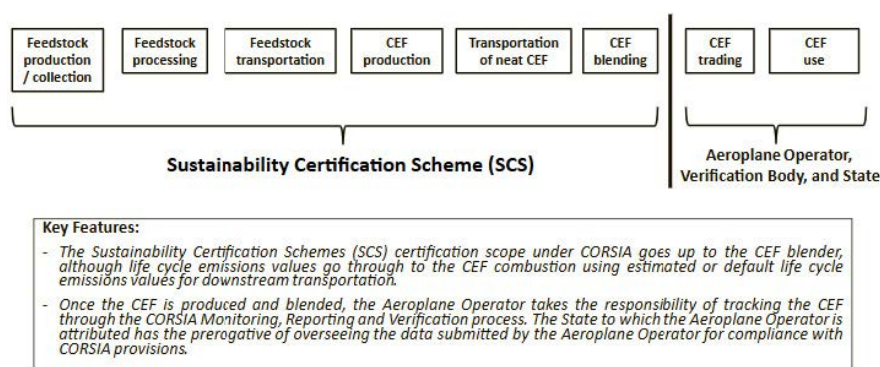
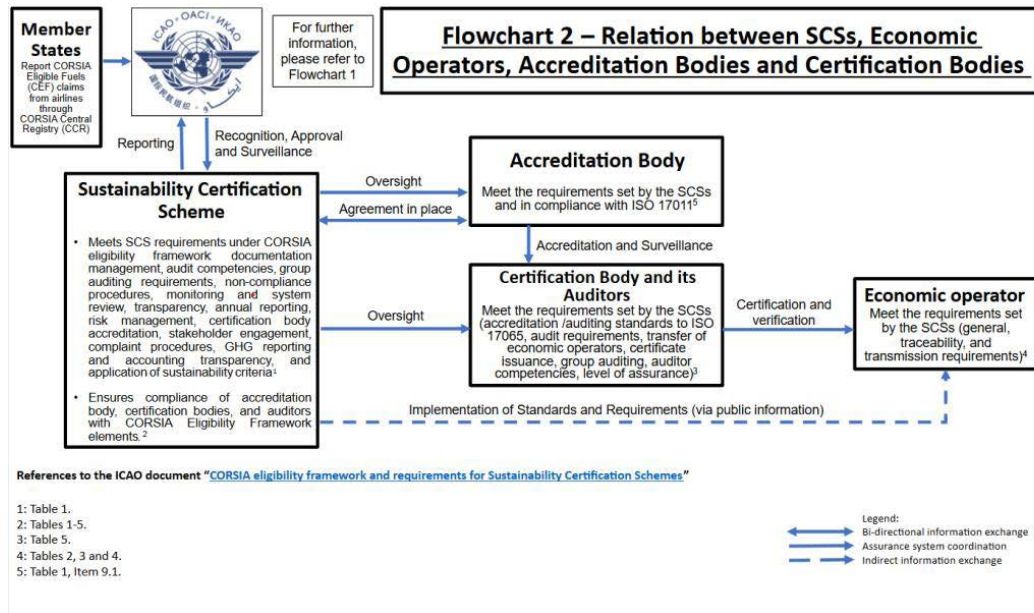


FIGURE 1: The SCS certification requirements along the CEF production supply chain.

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**FIGURE 2:** The relationship between Sustainability Certification Schemes (SCSs), certification bodies and auditors, accreditation bodies, and economic operators.

The SCS oversees certification bodies and their auditors, who execute the verification of compliance with the SCS programme by the economic operators. The SCS also ensures appropriate accreditation of their Certification Bodies. The relationships among these entities is described in the flow chart in Figure 2, also posted on the [ICAO website](#).

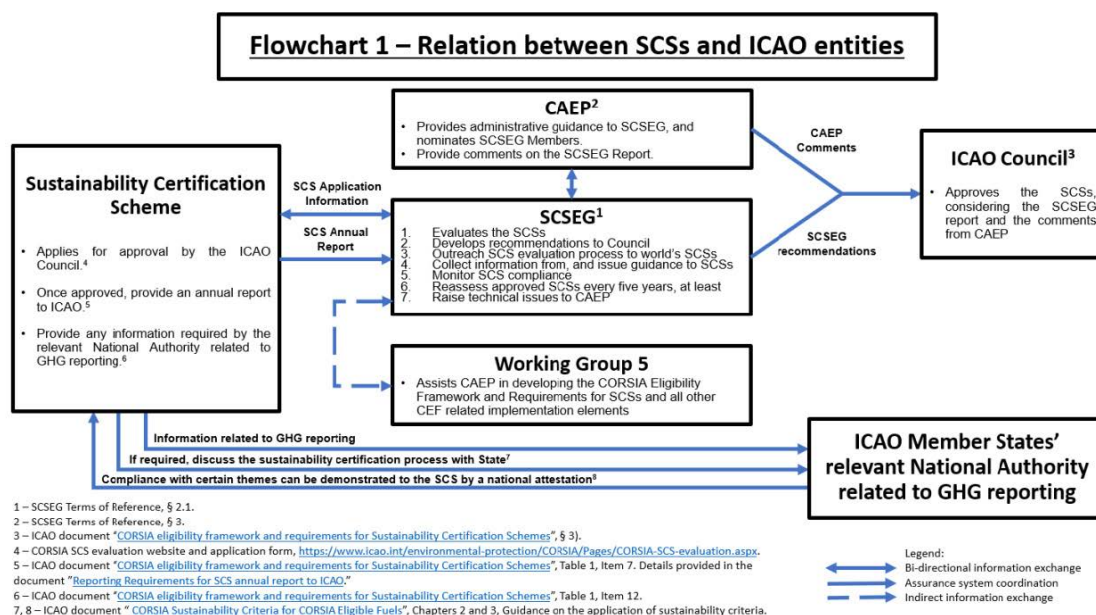
Economic operator certification involves on-site and/or desk audits, depending on the type of facility and whether it is a first audit or not. Auditing occurs at facility and batch level. Group auditing may be undertaken under specific conditions, which reduces the overall auditing burden associated with the certification process while ensuring an appropriate level of assurance. Auditors ensure that the CEF production meets the definitions of the feedstock or conversion process defined in the CORSIA documents, that the life cycle emissions value is appropriately applied, and that all CORSIA-related requirements are met, including compliance with all the CORSIA sustainability criteria.

## SCS Approval Under CORSIA

Only SCSs that have met the requirements in the *CORSIA Eligibility Framework and Requirements for Sustainability Certification Schemes* (Eligibility Framework) are able to certify CEF economic operators. The Eligibility Framework

includes requirements the SCS itself must meet relating to governance, transparency, system scope, etc., as well as requirements the SCS must apply to economic operators, including compliance with the *CORSIA Sustainability Criteria for CORSIA Eligible Fuels*, the *CORSIA Default Life Cycle Emissions Values for CORSIA Eligible Fuels*, and the *CORSIA Methodology for Calculating Actual Life Cycle Emissions Values*, as well as traceability, information transmission, governance and other requirements in the Eligibility Framework. Furthermore, the SCS must apply a set of requirements to Certification Bodies that execute the auditing and certification. The requirements on SCSs and economic operators are set by Working Group 5 (formerly Fuels Task Group) of the ICAO Committee on Aviation Environmental Protection (CAEP).

To determine if an SCS complies with the requirements in the Eligibility Framework and is capable of reliably performing CEF certifications, SCSs are evaluated by a separate ICAO technical working group, the Sustainability Certification Scheme Evaluation Group (SCSEG), which reviews the SCS application form, system documents, programme governance, competencies, requirements on their auditors and certification bodies, and requirements they apply to the economic operators (supply chain participants leading to the production of CEF). The SCSEG evaluates both public and business confidential documents submitted by the SCS and solicits additional information as needed.



**FIGURE 3:** The relationship between Sustainability Certification Schemes (SCSs) and ICAO entities.

If the SCSEG determines that an SCS applicant is sufficiently rigorous and compliant with the CORSIA requirements, the SCSEG drafts a recommendation for the ICAO Council. The SCSEG then submits the report to CAEP for a comment period of 30 days to add their perspective, although the CAEP does not approve the SCSEG recommendations. Once the CAEP comment period is complete, the SCSEG submits the recommendation report to the ICAO Council. The Council assesses the recommendation and determines whether to approve the SCS. If approved, the SCS can then be added to the list of CORSIA Approved Sustainability Certification Schemes.

The relationship among SCSs and ICAO entities is shown in the flow chart in Figure 3, also posted on the ICAO website.

As of October 2024, three SCSs have been approved to certify CEF:

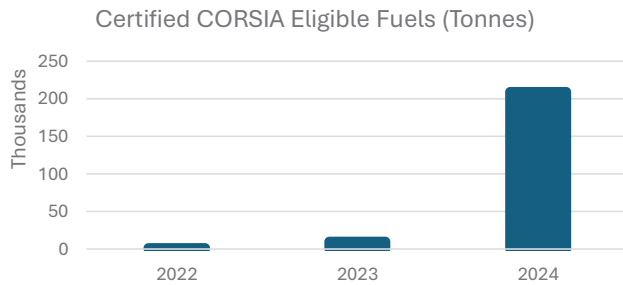
- International Sustainability and Carbon Certification (ISCC)
- Roundtable on Sustainable Biomaterials (RSB)
- ClassNK
- The SCSEG provides implementation guidance to the SCSs on an ongoing basis.

ICAO welcomes applications from SCSs from private sector, non-governmental organizations, or State organizations. Moving forward, SCSEG plans to accept applications on an ongoing basis through March 15, 2026, after which new applications would be accepted from February 1-March 15 annually. More information on the application process can be found on ICAO's website.

## CORSIA Eligible Fuels Certification Progress

The approved SCSs provide annual reports to ICAO indicating the economic operators that have been certified as well as individual batches of CEF that have been certified. Economic operator certifications have expanded since the first year of reporting, while batch certification by each SCS has varied. Total CEF volume has greatly increased since the first certifications were undertaken. In 2022, nine batches of CEF were certified totaling 1,542 tonnes of fuel. In 2023, an additional 30 batches of CEF were certified totaling 9,740 tonnes of fuel. In 2024<sup>2</sup>, an additional 112 batches of CEF were certified, totaling 209,178 tonnes of fuel.

2 These figures reflect what has been submitted to the SCSEG in the annual reports. At time of publication, the SCSEG is in the process of approving these figures.



CEF production is expected to continue to expand as aviation sector growth leads to further need for emissions reduction via low carbon fuels.

The SCS annual reports also provide insight into potential future CORSIA emissions reductions claims and provide a mechanism to check that claims that are submitted to ICAO match the certified batches.

## Conclusion

As aviation continues to rebound and grow, the need for emissions reduction options will increase. Therefore, ICAO anticipates a growing demand for CORSIA Eligible Fuels in the future which will need to be certified for use. CORSIA approved SCSs are facilitating more expedient CEF certification, reducing barriers to CEF production expansion and market entry. ICAO anticipates expanded SCS participation and welcomes additional applications from private sector, non-governmental organizations, or State organizations.