

INTERNATIONAL CIVIL AVIATION ORGANIZATION

ICAO document

CORSIA Sustainability Criteria for CORSIA Eligible Fuels



November 2021



This ICAO document is referenced in Annex 16 — *Environmental Protection*, Volume IV — *Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)*. This ICAO document is material approved by the ICAO Council for publication by ICAO to support Annex 16, Volume IV and is essential for the implementation of the CORSIA. This ICAO document is available on the ICAO CORSIA website and may only be amended by the Council.

Table A shows the origin of amendments to this ICAO document over time, together with a list of the principal subjects involved and the dates on which the amendments were approved by the Council.

Table A. Amendments to the ICAO document "CORSIA Sustainability Criteria For CORSIA Eligible Fuels"

Amendment	Source(s)	Subject(s)	Approved
1st Edition	Eleventh Meeting of the Committee on Aviation Environmental Protection	First edition of the document, which applies until December 31st, 2023 (end of the CORSIA pilot phase).	7 Jun 2019
2nd Edition	2019 Steering Group meeting of the Committee on Aviation Environmental Protection	Inclusion of Sustainability Criteria applicable for batches of CORSIA Sustainable Aviation Fuel (SAF) produced by a certified fuel producer on or after 1 January 2024	10 November 2021

CORSIA SUSTAINABILITY CRITERIA FOR CORSIA ELIGIBLE FUELS

Chapter 1: CORSIA SUSTAINABILITY CRITERIA APPLICABLE FOR BATCHES OF CORSIA ELIGIBLE FUEL PRODUCED BY A CERTIFIED FUEL PRODUCER BEFORE 1 JANUARY 2024

Theme	Principle	Criteria
1. Greenhouse Gases (GHG)	Principle: CORSIA eligible fuel should generate lower carbon emissions on a life cycle basis.	Criterion 1.1: CORSIA eligible fuel will achieve net greenhouse gas emissions reductions of at least 10% compared to the baseline life cycle emissions values for aviation fuel on a life cycle basis.
	Principle: CORSIA eligible fuel should not be made from biomass obtained from land with high carbon stock.	Criterion 2.1: CORSIA eligible fuel will not be made from biomass obtained from land converted after 1 January 2008 that was primary forest, wetlands, or peat lands and/or contributes to degradation of the carbon stock in primary forests, wetlands, or peat lands as these lands all have high carbon stocks.
2. Carbon stock		Criterion 2.2: In the event of land use conversion after 1 January 2008, as defined based on the Intergovernmental Panel on Climate Change (IPCC) land categories, direct land use change (DLUC) emissions will be calculated. If DLUC greenhouse gas emissions exceed the default induced land use change (ILUC) value, the DLUC value will replace the default ILUC value.

Guidance on the application of sustainability criteria

- a) Compliance with Themes 1 and 2 is granted on the basis of independent attestation by Sustainability Certification Schemes included in the ICAO document "CORSIA Approved Sustainability Certification Schemes" which is available on the ICAO CORSIA website.
- b) A fuel producer can produce batches of CORSIA eligible fuels for 365 calendar days after it has been certified by an SCS for compliance with the CORSIA Sustainability Criteria, after which the fuel producer shall be re-certified for compliance with the sustainability criteria applicable at the time of re-certification.
- c) CORSIA Sustainability Criteria for CORSIA Eligible Fuels does not set a precedent for, or prejudge the outcome of negotiations in other fora.

Chapter 2: CORSIA SUSTAINABILITY CRITERIA APPLICABLE FOR BATCHES OF CORSIA SUSTAINABLE AVIATION FUEL PRODUCED BY A CERTIFIED FUEL PRODUCER ON OR AFTER 1 JANUARY 2024

Theme	Principle	Criteria
1. Greenhouse Gases (GHG)	Principle: CORSIA SAF should generate lower carbon emissions on a life cycle basis.	Criterion 1.1: CORSIA SAF will achieve net greenhouse gas emissions reductions of at least 10% compared to the baseline life cycle emissions values for aviation fuel on a life cycle basis.
	Principle: CORSIA SAF	Criterion 2.1: CORSIA SAF will not be made from biomass obtained from land converted after 1 January 2008 that was primary forests, wetlands, or peat lands and/or contributes to degradation of the carbon stock in primary forests, wetlands, or peat lands as these lands all have high carbon stocks.
2. Carbon stock	should not be made from biomass obtained from land with high carbon stock.	Criterion 2.2: In the event of land use conversion after 1 January 2008, as defined based on the Intergovernmental Panel on Climate Change (IPCC) land categories, direct land use change (DLUC) emissions will be calculated. If DLUC greenhouse gas emissions exceed the default induced land use change (ILUC) value, the DLUC value will replace the default ILUC value.
	Principle: Production of CORSIA SAF should maintain or enhance water quality and availability.	Criterion 3.1: Operational practices will be implemented to maintain or enhance water quality.
3. Water		Criterion 3.2: Operational practices will be implemented to use water efficiently and to avoid the depletion of surface or groundwater resources beyond replenishment capacities.
4. Soil	Principle: Production of CORSIA SAFs should maintain or enhance soil health.	Criterion 4.1: Agricultural and forestry best management practices for feedstock production or residue collection will be implemented to maintain or enhance soil health, such as physical, chemical and biological conditions.
5. Air	Principle: Production of CORSIA SAF should minimize negative effects on air quality.	Criterion 5.1: Air pollution emissions will be limited.

6. Conservation	Principle: Production of CORSIA SAF should maintain biodiversity, conservation value and ecosystem services.	Criterion 6.1: CORSIA SAF will not be made from biomass obtained from areas that, due to their biodiversity, conservation value, or ecosystem services, are protected by the State having jurisdiction over that area, unless evidence is provided that shows the activity does not interfere with the protection purposes. Criterion 6.2: Low invasive-risk feedstock will be selected for cultivation and appropriate controls will be adopted with the intention of preventing the uncontrolled spread of cultivated alien species and modified microorganisms. Criterion 6.3: Operational practices will be
		implemented to avoid adverse effects on areas that, due to their biodiversity, conservation value, or ecosystem services, are protected by the State having jurisdiction over that area.
7. Waste and Chemicals	Principle: Production of CORSIA SAF should promote responsible management of	Criterion 7.1: Operational practices will be implemented to ensure that waste arising from production processes as well as chemicals used are stored, handled and disposed of responsibly.
	waste and use of chemicals.	Criterion 7.2: Responsible and science-based operational practices will be implemented to limit or reduce pesticide use.
8. Human and labour rights Principle: Production of CORSIA SAF should respect human and labour rights.		Criterion 8.1: CORSIA SAF production will respect human and labour rights.
9. Land use rights and land use	Principle: Production of CORSIA SAF should respect land rights and land use rights including indigenous and/or customary rights.	Criterion 9.1: CORSIA SAF production will respect existing land rights and land use rights including indigenous peoples' rights, both formal and informal.
10. Water use rights	Principle: Production of CORSIA SAF should respect prior formal or customary water use rights.	Criterion 10.1: CORSIA SAF production will respect the existing water use rights of local and indigenous communities.
11. Local and social development	Principle: Production of CORSIA SAF should contribute to social and economic development in regions of poverty.	Criterion 11.1: CORSIA SAF production will strive to, in regions of poverty, improve the socioeconomic conditions of the communities affected by the operation.
12. Food security	Principle: Production of CORSIA SAF should promote food security in food insecure regions.	Criterion 12.1: CORSIA SAF production will, in food insecure regions, strive to enhance the local food security of directly affected stakeholders.

Guidance on the application of sustainability criteria

- a) compliance with the sustainability criteria will be certified by an approved Sustainability Certification Scheme (SCS) included in the ICAO document "CORSIA Approved Sustainability Certification Schemes" which is available on the ICAO CORSIA website. An aeroplane operator seeking to claim emissions reductions from the use of CORSIA Sustainable Aviation Fuel (SAF) will provide evidence of the SCS' certification in its emissions reporting in accordance with Annex 16, Volume IV;
- b) in assessing compliance with the sustainability criteria, an SCS will apply only ICAO-approved sustainability criteria for the certification of CORSIA SAF, on the following basis:
 - i. compliance with Themes 1 and 2 will be assessed by the SCS;
 - ii. compliance with Themes 3 to 7 will be assessed by SCS taking into account the guidance approved by the Council¹ and in accordance with the following procedure:
 - a) prior to an SCS conducting an assessment in a State in which it never operated before, the SCS will consult with the competent authority of the State concerned, if required, in order to discuss the detailed process of assessment and for the SCS to be fully aware of the national and local requirements applying to the production of SAF. In the case of States that establish such requirement, the assessment by SCS will only take place after such consultations and common understanding between the competent authority and SCS on the detailed process of assessment by the SCS. With a view to implementing this consultation process, Member States which require consultation will notify ICAO which competent authority should be contacted by the SCS; and
 - b) in the case of diverging approaches between the competent authority and the SCS, the Member State concerned may refer the matter to the ICAO Council to review the disagreement relating to the interpretation and application of the guidance for Themes 3 to 7. The review may include the support of relevant UN domain experts, as appropriate, on the request of the Member State. The Member State concerned will participate in this review process;
 - iii. compliance with Themes 8, 9 and 10 can be demonstrated to the SCS by a national attestation from the State in whose territory the SAF is produced, without further assessment by the SCS;
 - iv. compliance with Themes 11 and 12 will be demonstrated to the SCS by the economic operator reporting to the SCS the actions being taken to meet the related criteria, without further judgement of those actions by the SCS.
- c) CORSIA sustainability criteria for CORSIA SAF does not set a precedent for, or prejudge the outcome of negotiations in other fora.

¹ Guidance on the application of Sustainability Criteria, Themes 3 to 7, is available on the "CORSIA eligible fuels" website.

Chapter 3: CORSIA SUSTAINABILITY CRITERIA APPLICABLE FOR BATCHES OF CORSIA LOWER CARBON AVIATION FUEL PRODUCED BY A CERTIFIED FUEL PRODUCER ON OR AFTER 1 JANUARY 2024

Note.— The development of sustainability criteria for these batches of CORSIA Lower Carbon Aviation Fuel is ongoing under the Committee on Aviation Environmental Protection (CAEP) and will be subject to approval by the Council.

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