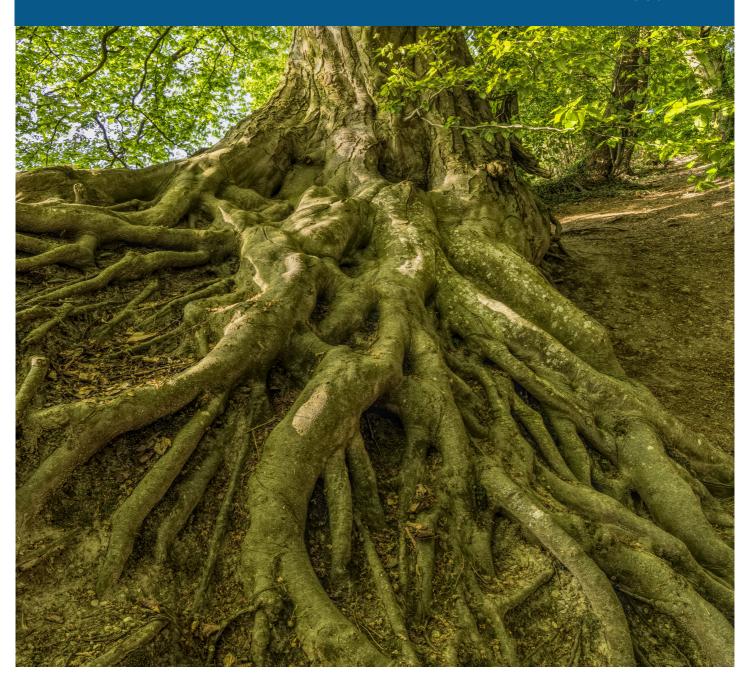


# ISCC CORSIA 201 SYSTEM BASICS

Version 1.1



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Document Title: ISCC CORSIA 201 System Basics

Version 1.1

This version becomes valid after approval by ICAO

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## **Summary of Changes**

The following is a summary of all content changes to the previous version of the document. Minor amendments which do not affect the content, e.g. corrections of phrasings, marginal notes, amendments of graphics, etc. are not listed.

Summary of changes made in version 1.1	Chapter
Amendment: Differentiations between ISCC CORSIA and ISCC CORSIA PLUS requirements were added where necessary.	1, 2, 3.2.1, 3.3
Addition: "The CORSIA sustainability principles are further specified in the Sustainability Criteria for CORSIA Eligible Fuels. CEF shall achieve net GHG emissions reductions of at least 10% compared to the baseline life cycle emissions values for aviation fuel on a life cycle basis. Furthermore, no biomass for CEF production shall be 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. In the event of land conversion after 1 January 2008, as defined based on IPCC land categories, direct land use change (DLUC) emissions shall be calculated. If DLUC greenhouse gas emissions exceed the default induced land use change (ILUC) value, the DLUC value shall replace the default ILUC value.  Certification under ISCC CORSIA ensures compliance with the CORSIA Sustainability Criteria for CORSIA Eligible Fuels. Certification under ISCC CORSIA PLUS ensures compliance with the CORSIA Sustainability Criteria for CORSIA Eligible Fuels and addresses additional sustainability requirements for biomass production. The sustainability requirements under ISCC CORSIA PLUS are divided into the six ISCC CORSIA PLUS Principles."	1
Addition: "The system basics as well as registration and certification procedure are largely the same for ISCC CORSIA and ISCC CORSIA PLUS. Therefore, as a basic principle, all references made to ISCC CORSIA in this document apply to ISCC CORSIA PLUS as well. Whenever requirements differ between the two systems, this is explicitly stated."	2
Addition: "Economic operators that produce sustainable biomass according to ISCC CORSIA must comply with the applicable CORSIA Sustainability Criteria for CORSIA Eligible Fuels as laid down in ISCC CORSIA Document 202 "Sustainability Requirements"."	3.2.1

#### 1 Introduction

One of the greatest challenges of our time is the fight against climate change. The urgent need to lower greenhouse gas emissions has also been recognised by the International Civil Aviation Organization (ICAO) and the aviation industry. ICAO Member States have set ambitious targets to mitigate greenhouse gas emissions from air transportation, including carbon-neutral growth from 2020 and beyond. Sustainable aviation fuels play an important role in achieving this goal. Nevertheless, it is important to verify the sustainable production of those fuels in order to avoid negative environmental or social repercussions. As a well-experienced sustainability certification scheme, ISCC addresses this need and enhances traceability through site-specific audits.

Mitigating emissions through sustainable aviation fuels

ISCC – International Sustainability and Carbon Certification – is an independent multi-stakeholder organisation that provides a globally applicable certification system for the sustainability of feedstocks and products, traceability through the supply chain and the determination of greenhouse gas (GHG) emissions and savings. ISCC is a multi-feedstock system and covers agricultural, forestry and alternative raw materials. The ISCC certification system ensures the sustainability of raw materials and products for various markets, including bioenergy (liquid and gaseous biofuels). Renewable and recycled raw materials are increasingly regarded as a feasible and climate friendly alternative to fossil feedstocks. If fossil feedstocks are replaced with renewable feedstocks of biological origin or recycled feedstocks of fossil origin the sustainability of these raw materials should be ensured.

Sustainability, traceability and GHG emissions

ISCC has been developed and is being continuously improved under the involvement of stakeholders. The ISCC system is governed by the legally registered ISCC Association (ISCC e.V.). ISCC operates different certification systems for different markets. These systems are ISCC CORSIA, ISCC CORSIA PLUS, ISCC EU, and ISCC PLUS.<sup>1</sup>

Multi-stakeholder initiative

ICAO and the aviation industry have committed themselves to carbon neutrality under the framework of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). To contribute to this pioneering endeavour, ISCC developed ISCC CORSIA and ISCC CORSIA PLUS as certification systems which demonstrate compliance with the CORSIA requirements for sustainable aviation fuels. The sustainability principles determined by ICAO for CORSIA Eligible Fuels are:

CORSIA

**1 Greenhouse Gases:** CORSIA Eligible Fuel should generate lower carbon emissions on a life cycle basis.

CORSIA sustainability principles

**2 Carbon Stock:** CORSIA Eligible Fuel should not be made from biomass obtained from land with high carbon stock.

<sup>&</sup>lt;sup>1</sup> Additional systems operated by ISCC are for example ISCC Solid Biomass NL, which can be used by system users to comply with the Dutch legal sustainability requirements for solid biomass for energy applications, or ISCC PLUS for deliveries of biofuels to Japan.

The CORSIA sustainability principles are further specified in the Sustainability Criteria for CORSIA Eligible Fuels.<sup>2</sup> CEF shall achieve net GHG emissions reductions of at least 10% compared to the baseline life cycle emissions values for aviation fuel on a life cycle basis. Furthermore, no biomass for CEF production shall be 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. In the event of land conversion after 1 January 2008, as defined based on IPCC land categories, direct land use change (DLUC) emissions shall be calculated. If DLUC greenhouse gas emissions exceed the default induced land use change (ILUC) value, the DLUC value shall replace the default ILUC value.

Sustainability Criteria for CORSIA Eligible Fuels

Certification under ISCC CORSIA ensures compliance with the CORSIA Sustainability Criteria for CORSIA Eligible Fuels. Certification under ISCC CORSIA PLUS ensures compliance with the CORSIA Sustainability Criteria for CORSIA Eligible Fuels and addresses additional sustainability requirements for biomass production. The sustainability requirements under ISCC CORSIA PLUS are divided into the six ISCC CORSIA PLUS Principles (see also ISCC CORSIA Document 202 "Sustainability Requirements").

ISCC CORSIA and ISCC CORSIA PLUS

ISCC certification is globally applicable and covers all types of agricultural, forestry and recycled raw materials. This includes waste and residues, and other feedstocks of biological or non-biological origin (e.g. ligno-cellulosic material, non-food cellulosic material, mixed plastic waste and algae). The production of fuels derived from simultaneous co-processing of conventional (fossil) fuels and sustainable fuels can be covered under the ISCC system.

Global application for numerous materials

ISCC certification audits are conducted by independent third-party Certification Bodies.

Independent third parties

Essential characteristics and features of ISCC CORSIA and ISCC CORSIA PLUS are:

Essential features of ISCC CORSIA and ISCC CORSIA PLUS

- > Global application
- > Continuous global and regional stakeholder dialogue
- Coverage of all types of agricultural raw materials and forestry raw materials (ligno-cellulosic material and non-food cellulosic material sourced from forests and forest-based industry) and the respective supply chains
- Coverage of alternative raw materials such as waste, residues and byproducts, biogas and algae
- > Proof of ecological, social and economic sustainability
- Traceability of sustainable material through mass balance or physical segregation

<sup>&</sup>lt;sup>2</sup> In accordance with ICAO document 05 CORSIA Sustainability Criteria for CORSIA Eligible Fuels

- Continuous improvement of the processes, sustainability criteria, certification requirements, scopes and coverage implemented
- > Transparency through freely accessible System Documents and information about certificate holders
- > Certification audits by competent, independent and impartial auditors
- > Extensive training programmes for Auditors, System Users and other interested parties
- > Support for System Users in place

Analogous to the ISCC System Document 201, which describes the scope and normative references of the ISCC EU and PLUS systems, this ISCC CORSIA Document 201 describes the scope and normative references of the ISCC CORSIA and ISCC CORSIA PLUS systems. This includes a table with an overview of the ISCC CORSIA System Documents and Reference Documents from the ICAO Council. The ISCC CORSIA System Documents are subdivided into general System Documents and technical System Documents. The general System Documents include a description of the governance, quality and risk management of ISCC and requirements for Certification Bodies and Auditors. The technical System Documents include the sustainability requirements for the production of biomass, traceability, the chain of custody and greenhouse gas - i.e. life cycle - emissions, as well as guidance on the certification of waste, residues and by-products etc.

Structure of the ISCC System Documents

Chapter 3 outlines the basics with respect to the set-up of the ISCC CORSIA and ISCC CORSIA PLUS system and the certification criteria regarding sustainability, traceability and the chain of custody, as well as life cycle emissions. The description of participants in the supply chain who are subject to certification is also covered in this chapter.

Basics of the system and certification criteria

Chapter 4 introduces the registration and certification process. Registration requirements for both System Users (i.e. economic operators registered and certified under ISCC) and Certification Bodies cooperating with ISCC are explained. This chapter also gives a brief overview of the audit and certification process and states basic requirements for the issuance and validity of ISCC certificates.

Registration and certification process

## 2 Scope, Normative References and ISCC Documents

The ISCC CORSIA System Basics described in this document are effective for the certification of sustainable aviation fuels based on agricultural and forestry raw materials, as well as alternative raw materials.

Material and product scope

The requirements described in ISCC CORSIA System Basics and all further ISCC CORSIA System Documents must be applied by all participants in the

Scope of application

certification systems, i.e. System Users and Certification Bodies cooperating with ISCC.

The system basics as well as registration and certification procedure are largely the same for ISCC CORSIA and ISCC CORSIA PLUS. Therefore, as a basic principle, all references made to ISCC CORSIA in this document apply to ISCC CORSIA PLUS as well. Whenever requirements differ between the two systems, this is explicitly stated.

Table 1 provides an overview of the normative ISCC CORSIA System

Documents, the five ICAO documents relevant for the implementation of
CORSIA, as well as further ISCC forms and checklists based on the
requirements defined in the ISCC CORSIA System Documents, and that are
provided by ISCC to facilitate the ISCC CORSIA process.

Table 1: Overview of ISCC CORSIA System Documents, Reference Documents and supporting ISCC Forms and Checklists

# Documents and normative references

References

#### ICAO Documents relevant for the Implementation

CORSIA Eligibility Framework and Requirements for Sustainability Certification Schemes

**CORSIA Approved Sustainability Certification Schemes** 

CORSIA Sustainability Criteria for CORSIA Eligible Fuels

CORSIA Default Life Cycle Emissions Values for CORSIA Eligible Fuels

CORSIA Methodology for Calculating Actual Life Cycle Emissions Values

#### **ISCC CORSIA System Documents (normative)**

#### 102 Governance

Multi-Stakeholder Organisation and Processes of ISCC CORSIA, Quality and Risk Management, Integrity Program, Complaints, Appeals, and Arbitration

#### 103 Requirements for Certification Bodies and Auditors

General Requirements, Duties and Responsibilities of Certification Bodies, Requirements and Qualifications for Auditors conducting ISCC Audits

#### 201 System Basics

Key Features of ISCC, Overview of Certification Criteria, Participants in the Supply Chain, Registration and Certification Processes and Issuance of Certificates and Processes of the ISCC CORSIA System

#### 201-1 Waste, Residues and By-products

Definitions, Positive List, specific Requirements for the Certification Process

#### 202 Sustainability Requirements

ISCC CORSIA Sustainability Criteria and ISCC CORSIA PLUS Principles 1-6 on the Protection of Land, Good Agricultural Practice, Safe Working Conditions, Compliance with Human and Labour Rights and Health and Safety, Compliance with Applicable Laws and Relevant International Treaties, Good Management Practice

#### 203 Traceability and Chain of Custody

Requirements for Management Systems, Audit and Information Requirements for Sustainability Declarations, Chain of Custody Options (Physical Segregation and Mass Balance)

#### 204 Audit Requirements and Risk Management

Risk Assessment and Management for Certification Bodies and System Users, Audit Requirements for Certification Bodies

#### 205 Life Cycle Emissions

Life Cycle Emissions Reduction Requirement, Application, Calculation and Verification Methodology of Life Cycle Emissions

#### 206 Group Certification

General Requirements, Internal and External Audits, Sample Size, Smallholders

ISCC Forms and Checklists based on the ISCC (CORSIA) System Documents to Facilitate Registration and Certification Process

ISCC Terms of Use

**ISCC Fees** 

Audit Procedures for all relevant Elements of the Supply Chain

Self-declarations for Farms or Plantations and Points of Origin

Template for Proofs of Sustainability (Sustainability Declaration) of Final Biofuels

The latest versions of all normative documents and ISCC CORSIA Documents are available on the ISCC website and must be applied. The original ISCC CORSIA System Documents are in English. ISCC CORSIA Documents can be identified by a unique document number, version number and date.

Documents available on the ISCC Website

Any updates to the ISCC CORSIA system are published in the ISCC System Updates. These System Updates are sent to all System Users registered with ISCC as well as all Certification Bodies cooperating with ISCC. It is the responsibility of the System Users and Certification Bodies to take the system updates into account and inform all relevant members of staff about such updates. An archive of all System Updates is available on the ISCC Website. If required, ISCC may also develop guidelines to further specify certification requirements.

ISCC System Updates and guidelines

#### 3 The ISCC CORSIA Certification System

#### 3.1 Basics

The ISCC CORSIA certification system is globally applicable to all types of biological and non-biological sustainable raw materials. The terminology and procedures in the system reflect a focus on the global application of the systems. The simultaneous co-processing of fossil fuels and sustainable aviation fuels can also be covered under ISCC CORSIA.

Coverage of the ISCC CORSIA system

The legally registered ISCC Association (ISCC e.V.) is the organisation responsible for governing all ISCC systems. Stakeholders that can become members of the Association include economic operators (producers, processors, traders and logistics), Non-Governmental Organisations (NGOs), scientific institutions, research and other organisations or individuals. Further information on the framework of the governance of ISCC regarding organisational structure and multi-stakeholder involvement are laid down in ISCC CORSIA Document 102 "Governance".

Stakeholder involvement

ISCC cooperates with independent Certification Bodies. The requirements to become a cooperating Certification Body and conduct audits under ISCC are laid down in ISCC CORSIA Document 103 "Requirements for Certification Bodies and Auditors". ISCC CORSIA certificates are issued by Certification Bodies upon the successful completion of a certification audit. ISCC CORSIA certificates are documents that confirm compliance of the certificate holder with the requirements of CORSIA and the ISCC system.

Cooperation with independent certification bodies

All relevant elements of the supply chain must obtain a certificate in order to handle sustainable materials. Farms or plantations and points of origin, first gathering points or central offices and collecting points, processing units, as well as traders with storage facilities are relevant elements of the supply chain and are subject to certification. Under this standard the elements of the supply chain relevant for certification are also referred to as economic operators. ISCC certificates are site specific. A certificate can only be issued for one geographical site based on a successful audit. Group certification may be possible for farms or plantations, points of origins of waste, residues and byproducts and storage facilities (see ISCC CORSIA Document 206 "Group Certification"). The transport of sustainable material between the different elements of the supply chain does not need to be covered by individual certification. All relevant information regarding transport (e.g. delivery documents, means of transport, transport distance, respective life cycle emissions) is covered by the certification of the above-mentioned elements of the supply chain.

Obligation for certification

All certificates, as issued by the cooperating Certification Bodies, are published on the ISCC website, and can be freely accessed by any interested party. Any recipient of sustainable material is obliged to verify the validity of the supplier's ISCC CORSIA certificate at the date of the physical dispatch of the sustainable material. In case of uncertainty, ISCC must be contacted for clarification. Furthermore, the recipient of the sustainable material has to

Free access

check if all relevant information is included in the delivery documents ("sustainability declarations") and if it is complete and consistent. If this diligence (duty of care) obligation has been respected, a recipient can accept material as sustainable, complying with the CORSIA requirements and ISCC (see also ISCC CORSIA Document 203 "Traceability and Chain of Custody").

ISCC CORSIA may accept other sustainability certification schemes that are recognised by the ICAO council in the context of CORSIA. ISCC reserves the right to withdraw the acceptance of schemes in case of, for example, bankruptcy or indication of fraud of an accepted scheme. An up-to-date list with the sustainability certification schemes accepted by ISCC CORSIA is published on the ISCC website.

Acceptance of sustainability certification schemes

Certified ISCC System Users may use the ISCC logo and claims for company relevant communication and documentation upon written request to ISCC. The ISCC seal must not be used for any application other than the ISCC certificate. The requirements for the use of claims and logos are laid down in ISCC Document 208 "Claims and Logo Use". Document 208 applies not only to ISCC CORSIA, but also to the other ISCC standards (ISCC EU and ISCC PLUS).

ISCC logo and ISCC seal

ISCC is obligated and entitled to request and record the relevant data of cooperating Certification Bodies and System Users in the framework of CORSIA and the ISCC System. This includes, but is not limited to, addresses, contact details, scopes of certification, amounts and types of incoming and outgoing sustainable materials, life cycle emissions values, etc. Any data provided to ISCC will be treated, processed and used confidentially. The data collected by ISCC will not be forwarded to third parties. Data may only be forwarded to third parties insofar as ISCC is legally obligated to disclose data or the user has explicitly given the consent to ISCC or as part of the System User Agreement or the cooperation agreement respectively. In order to facilitate the transparency of the ISCC system and fulfil the requirements of ICAO, ISCC is entitled to publish the relevant data of cooperating Certification Bodies and certified System Users on the ISCC Website.

Data protection

Risk management is an integral part of all operations and decisions in the ISCC CORSIA system. In order to securely fulfil the requirements of the certification systems in a highly credible and reliable way, ISCC defines procedures and specific indicators for risk assessment and management. These procedures and risk indicators are monitored continuously and adjusted if necessary. The risk assessment and management procedures take into account the different levels where risks may occur: the ISCC system, cooperating Certification Bodies and ISCC System Users. Four layers are in place to ensure the security and integrity of ISCC: the overall ISCC quality and risk management, the ISCC Integrity Program to assess the performance of Certification Bodies and Auditors, self-declarations and self-assessments of System Users, and external third-party audits. Further information is outlined in ISCC CORSIA Document 102 "Governance".

Risk management

#### 3.2 Certification Criteria

The ISCC CORSIA certification systems cover three categories of criteria:

Categories

- 1 Sustainability requirements for feedstocks
- 2 Requirements for traceability and chain of custody
- **3** Requirements for life cycle emission savings and the calculation methodology

In the ISCC CORSIA System Documents these certification criteria and respective processes are outlined in detail. No change of the requirements set in the ICAO documents is allowed.

Certification criteria in the system documents

#### 3.2.1 Sustainability Requirements for the Cultivation of Biomass

Economic operators that produce sustainable biomass according to ISCC CORSIA must comply with the applicable CORSIA Sustainability Criteria for CORSIA Eligible Fuels as laid down in ISCC CORSIA Document 202 "Sustainability Requirements".

Sustainability criteria under ISCC CORSIA

Economic operators that produce sustainable biomass according to ISCC CORSIA PLUS must comply with the ISCC CORSIA PLUS Principles 1-6 as laid down in ISCC CORSIA Document 202 "Sustainability Requirements". The ISCC CORSIA PLUS Principles 1-6 are the following:

Sustainability criteria under ISCC CORSIA PLUS

- Principle 1: Protection of land with high biodiversity value or high carbon stock. This includes primary forests and other wooded land of native species, highly biodiverse grassland, peatland, wetland, continuously forested areas, areas designated for the protection of rare, threatened or endangered ecosystems or species, as well as high conservation value (HCV) areas
- Principle 2: Environmentally responsible production to protect soil, water and air
- Principle 3: Safe working conditions
- Principle 4: Compliance with human, labour and land rights and responsible community relations
- Principle 5: Compliance with applicable laws and relevant international treaties
- Principle 6: Good management practices and commitment to continuous improvement

The cut-off date for land use change is 1 January 2008. This means that, under ISCC CORSIA, every economic operator where biomass for CEF production was taken from land with high carbon stock after 1 January 2008 is excluded from ISCC CORSIA certification. Analogously, under ISCC CORSIA PLUS, every economic operator where biomass was taken from land with high carbon stock or high biodiversity value after 1 January 2008 is excluded from ISCC CORSIA PLUS certification, in line with ISCC CORSIA

Cut-off date

PLUS Principle 1. The entire land (agricultural land, pasture, forest, any other land) is subject to certification.

Raw materials based on wastes or residues derived from agriculture, aquaculture, fisheries and forestry must comply with the sustainability requirements stated above. Raw materials based on other waste and residues do not have to comply with the land-related sustainability requirements stated above.

Waste and residues

Basic

requirements

Traceability

#### 3.2.2 Traceability and Chain of Custody

Traceability and chain of custody cover two basic requirements:

- **1** The possibility of tracing sustainable aviation fuels back and forth throughout the supply chain from origin to final delivery
- **2** The possibility of assigning product specific information to consignments (batches) of sustainable materials and aviation fuels

Traceability describes the information and documentation requirements of the relevant amounts and properties of sustainable materials (so-called sustainability characteristics). Sustainability characteristics according to this standard include, but are not limited to, the raw material, country of origin of the raw material, quantities and information on life cycle emissions.

Mass balance and physical

segregation

To correctly assign all relevant information to the physical material according to this standard, two chain of custody methods can be applied: mass balance or physical segregation. Under the mass balance method physical mixing of sustainable and non-sustainable material is allowed. Under physical segregation, sustainable material has to be kept separated from non-sustainable material. Economic operators shall use a mass balance system that allows batches of raw material with different sustainability characteristics to be mixed. Documentation about the sustainability characteristics and sizes of these batches have to remain assigned to the mixture.

**Documents** 

Specific requirements are laid down in ISCC CORSIA Document 203 "Traceability and Chain of Custody". Document 203 also includes requirements for a company's management system to ensure the implementation of all necessary requirements.

Requirements apply equally

The requirements for traceability and chain of custody apply equally to all types of raw materials and their respective supply chains.

#### 3.2.3 Life Cycle Emissions

ISCC CORSIA provides a methodology to calculate life cycle emissions for all elements of the supply chain and to determine savings of life cycle emissions. This can be applied to supply chains in all markets.

Document 205

Methodology

The requirements on life cycle emissions apply to all relevant supply chain elements from raw materials production to the distribution of the final product, including cultivation, collection and conversion processes, as well as the transport and distribution of intermediate and final products. All requirements

to apply, calculate and verify the life cycle emissions and emission savings are specified in ISCC CORSIA Document 205 "Life Cycle Emissions".

#### 3.3 Relevant Participants in the Certification Systems

Economic operators that receive or trade sustainable material, so-called operational units, are subject to certification. Under ISCC, the term "operational unit" refers to a specific site (spatial entity) of a company where sustainable material is handled. A company may have more than one operating site, and in this case every single operational unit, i.e. operating site, handling sustainable material, is subject to certification.

Definition of operational units

Supply chains for agricultural raw material

For sustainable aviation fuels produced from agricultural crops or agricultural crop residues the relevant supply chain starts at the farm or plantation. The first element that must be individually certified is the first gathering point (see figure 1). Farms or plantations may receive an individual certification on a voluntary basis. Under ISCC CORSIA, the applicable CORSIA sustainability criteria as laid down in ISCC CORSIA Document 202 "Sustainability Requirements" must be fulfilled by economic operators delivering biomass as sustainable. Under ISCC CORSIA PLUS, the ISCC CORSIA PLUS Principles 1-6 as laid down in ISCC CORSIA Document 202 "Sustainability Requirements" must be complied with by farms or plantations delivering biomass as sustainable.

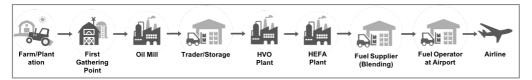


Figure 1: Example of a simplified supply chain for crops and agricultural crop residues

For sustainable aviation fuels derived from alternative raw materials, such as wastes, residues or by-products, the first two relevant elements of the supply chain are the point of origin and the collecting point (see figure 2). The land-related sustainability requirements of ISCC CORSIA Document 202 do not apply to points of origins of alternative raw materials. A particular focus has to be put on the determination of the raw materials and on the determination of the point of origin. The first element that must be individually certified is the collecting point. Points of origin may receive a certification on a voluntary basis. ISCC CORSIA Document 202-1 "Waste, Residues and By-Products" describes these requirements for waste and residues in detail.

Supply chains for alternative materials

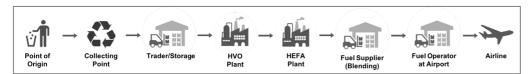


Figure 2: Example of a simplified supply chain for waste, residue or by-product feedstocks (non-agricultural/forestry/fishery)

The elements of the supply chain downstream of the first gathering point or collecting point do not differ in description and certification requirements.

Downstream supply chain elements

The elements of the supply chain can receive and supply sustainable material only after the receipt of a certificate. First gathering points may accept crops or agricultural crop residues from the harvest of the current or the previous year as sustainable up to three months prior to the start of the certificate's validity. Collecting points for waste and residues may also collect material as sustainable up to three months prior to the start of validity of the certificate. In both cases the relevant self-declarations have to be in place, chain of custody requirements have to be fulfilled and the dispatch of material as sustainable is only possible after the start the certificate's validity. Any further requirements, as laid down in ISCC CORSIA Document 203 "Traceability and Chain of Custody", must be applied for first gathering points and collecting points.

Acceptance of sustainable material prior to certification

The relevant elements of the supply chain are:

1 Farms or plantations: Farms or plantations under this standard are agricultural operations where crops are cultivated sustainably, or where agricultural crop residues from sustainable cultivation occur. A farm or plantation is either defined as distinct legal entity or as an organisation managing an agricultural operation, and having control regarding the compliance with the ISCC CORSIA requirements. The entire land (agricultural land, pasture, forest, any other land) of the farm or plantation, including any owned, leased or rented land is subject to certification.

Entire land of farms and plantations is subject to an audit

Under ISCC CORSIA farms or plantations have three options: they can receive an individual certification, they can become certified as part of a group (with a central office as representative body) or they can be audited as a group supplying raw material to a first gathering point. In the latter two cases farms or plantations have to conduct an annual self-assessment, provide a signed self-declaration/self-assessment form to the central office or the first gathering point respectively, and a sample of these farms or plantations is subject to an audit.

Options for certification

Farms or plantations are audited with respect to the applicable CORSIA sustainability criteria (under ISCC CORSIA) or the ISCC CORSIA PLUS Principles 1-6 (under ISCC CORSIA PLUS) for the cultivation of biomass, as stated in ISCC CORSIA Document 202. Under ISCC CORSIA PLUS and for farms within EU Member States that have fully implemented Cross Compliance only the first of the six ISCC CORSIA PLUS Principles for the sustainable cultivation of biomass has to be checked during the audit. Should comparable laws and review mechanisms exist in other countries, similar regulations can also be implemented for these countries after examination by ISCC. For countries that have ratified the respective ILO conventions, it may be assumed that the social requirements (Principle 4) are fulfilled. However, the verification is subject to the auditor's risk assessment. If farms or plantations calculate their individual life cycle emissions, the calculation needs to be included in the audit.

Audit requirements

2 Central office: A central office is the representative body of at least one group of farms or plantations that have been certified as a group of agricultural producers, and that are independent from a first gathering point. To become certified as a group, the farms or plantations must be located in the same area and must be homogenous in terms of size, types of crop and production processes.

Representative body of group of farms

Tasks and audit requirements

A central office does not receive ownership of the sustainable materials. The central office is responsible for management of the group, for carrying out internal audits of the group members, and for the calculation of the group's life cycle emissions. A central office is audited with respect to the management system, traceability and chain of custody, as well as life cycle emissions. A sample of all farms or plantations that are members of the group is subject to an audit. For further information on the group certification of farms and plantations and the calculation of the sample size, see ISCC CORSIA Document 206 "Group Certification".

First gathering points hold contracts with farm or plantations

3 First gathering points: First gathering points are economic operators that receive or buy sustainable biomass or agricultural crop residues directly from farms or plantations. First gathering points distribute, trade or further process this raw material. First gathering points conclude contracts with the supplying farms or plantations for the delivery of biomass or agricultural crop residues. First gathering points operate as head of the group of the farms or plantations that deliver the raw material. An important characteristic of a first gathering point is the task of the correct declaration and documentation of the incoming biomass according to origin, quality, amount, and life cycle emissions for cultivation.

Task and audit requirements

First gathering points have to conduct internal audits at their supplying farms or plantations. First Gathering Points are audited with regard to management system, traceability, chain of custody and life cycle requirements. A sample of all farms or plantations supplying sustainable biomass or agricultural crop residues is subject to an audit. At least one farm has to be audited for the certification of a first gathering point. Collecting facilities used by farms or plantations during harvesting periods, and which are equipped, for example, with mobile weighbridges are not regarded as first gathering points. The same applies for storage facilities, which do not hold contracts and selfdeclarations from farms or plantations, but store material on demand of a first gathering point. A sample of these dependent warehouses is subject to an audit within the framework of the certification of the first gathering point. The requirements to calculate the sample size for farms or plantations and storage facilities according to ISCC CORSIA Document 206 "Group Certification" apply. A first gathering point may use the service of so-called local agents who facilitate contracts for the delivery of sustainable biomass or agricultural crop residues between

farms or plantations and first gathering points. In any case, the first gathering point has to comply with all relevant requirements. If the local agents are acting on behalf of the first gathering point, they are not considered first gathering points themselves and thus do not require certification.

4 Points of origin for waste, residues or by-products: Points of origin for waste, residues or by-products are operations where the waste, residue or by-product occurs or is generated. Points of origin provide a signed self-declaration to the certified collecting point. A sample of points of origin generating 10 or more metric tons of a specific waste or residue per month on average (or 120 or more metric tons per year) is subject to an audit within the framework of the audit of the collecting point. Points of origin may obtain individual or group certification on a voluntary basis. The audit includes an assessment of the materials and the verification of the traceability. ISCC CORSIA Document 201-1 "Waste, Residues and By-Products" contains a detailed description of points of origin and the respective audit and certification requirements. ISCC CORSIA Document 206 "Group Certification" contains information on the certification of points of origin as a group and the calculation of the sample size.

Signed selfdeclarations from points of

origin

Options and audit

requirements

5 Collecting points of waste, residues or by-products: Collecting points of waste and residues are economic operators that collect or receive waste, residue or by-product material directly from the points of origin. Collecting points trade, distribute or further process the collected waste, residues or by-products. Collecting points must get a signed self-declaration from each (not individually certified) point of origin to receive waste, residues or by-products as sustainable. The collecting point is responsible for the correct declaration and documentation of the types and amounts of materials collected.

Audit of sample of points of origin

Collecting points receive a certificate upon a successful audit. They are audited with regard to management system, traceability, chain of custody and life cycle emissions requirements. A sample of (not individually certified) points of origin generating 10 or more metric tons per months of a specific waste or residue on average (or 120 or more metric tons per year) is subject to an on-site audit. Economic operators that only collect waste, residues and by-products on behalf of a collecting point are regarded as dependent collecting points and do not need to be certified individually. However, they have to be audited on a sample basis within the framework of the collecting point's audit. The same applies for storage facilities that only store material by demand of the collecting point. A sample of such storage facilities has to be audited within the framework of the certification of the collecting point. ISCC CORSIA Document 201-1 "Waste, Residues and By-Products" contains further information on the specific relationships between collecting points and points of origin. The requirements to calculate the

sample size for points of origin and storage facilities according to ISCC CORSIA Document 206 "Group Certification" apply.

6 Traders and storage facilities: Traders and storage facilities are economic operators that trade and store sustainable material (i.e. raw materials, intermediary products or final products). Storage facilities include warehouses, silos, tanks etc. Logistics centres are economic operators that operate and manage groups of storage facilities under one legal entity at different geographical sites but with one corporate management system. Storage facilities can own sustainable material or act by demand of the owner of the material.

Group certification for storage facilities possible

Audit requirements

Economic operators trading and/or storing sustainable material must be covered by certification. For storage facilities three options can be applied: individual certification as storage facility, certification as part of a logistics centre or coverage by the certification of a third party (e.g. first gathering points, processing units or traders with storage). Individually certified storage facilities and logistics centres receive a certificate upon a successful audit. Traders and storage facilities are audited with regard to the management system, traceability and chain of custody requirements. A sample of the storage facilities of a logistics centre and the (non-certified) storage facilities used by traders or other third parties is subject to an audit. See also ISCC CORSIA Document 206 "Group Certification for further information on the certification of logistics centres and the calculation of the sample size.

Processing units: Processing units are facilities that convert input materials by changing their physical and/or chemical properties. Processing units can be oil mills, refineries, FT plants, HVO plants, ethanol plants, HEFA plants, ATJ plants, and others. Collection points or storage facilities carrying out a mechanical filtration or sedimentation (e.g. of used cooking oil with the aim of removing contaminants such as bones, cutlery etc. or reducing the water content of the used cooking oil) are not regarded as processing units. Facilities that only blend biofuels are not regarded as processing units. They are certified according to the audit requirements for traders and storage facilities.

Mechanical treatment is not regarded as processing

Group certification or sampling is not allowed for either processing units or blending facilities. Processing units are audited with regard to the management system, traceability, chain of custody and life cycle emissions requirements.

Group certification is not possible

8 Transport: Transport includes all modes such as road, rail, air, river or sea transportation of sustainable materials between the aforementioned elements of the supply chain. Under this standard, transport operators are not subject to certification. All relevant information regarding transport (e.g. delivery documents, means of

Transport not subject to certification transport, transport distance, respective life cycle emissions) is covered by the certification of the elements of the supply chain.

#### 3.4 Certification Bodies

Independent third-party Certification Bodies issue ISCC CORSIA certificates based upon the successful audit of an operational unit. Auditors conduct certification audits on behalf of a Certification Body. Before a Certification Body is allowed to conduct audits and issue certificates under ISCC CORSIA, the Certification Body has to sign a cooperation agreement with ISCC. Names and contact details of all Certification Bodies that cooperate with ISCC are published on the ISCC website.

Cooperation agreement required

Certification Bodies and auditors must be impartial and free from conflict of interest. Preconditions necessary for Certification Bodies to cooperate with ISCC include ISO/IEC 17065 accreditation. Processes for setting up and conducting audits should be in line with the principles of relevant ISO standards. The auditors appointed by cooperating Certification Bodies to conduct audits under ISCC CORSIA have to demonstrate relevant qualifications, minimum work and audit experiences and participation in one of ISCC's Basic Trainings (see ISCC CORSIA Document 103 "Requirements for Certification Bodies and Auditors").

Impartial, free from conflict of interest, and qualified

#### 4 Registration and Certification Procedure

All operational units as described in chapter 3.3 that would like to receive an ISCC CORSIA certificate are subject to an audit conducted by a Certification Body. ISCC CORSIA certification can be received in four steps:

Four steps to certification

- 1 System User registers with ISCC
- 2 System User prepares for the audit
- 3 Certification Body conducts the audit
- 4 Certification Body issues the certificate

Certification Bodies can only conduct audits and issue certificates under ISCC CORSIA if they fulfil the respective requirements and have signed a cooperation agreement with ISCC. ISCC CORSIA Document 103 "Requirements for Certification Bodies and Auditors" outlines the requirements and duties that must be fulfilled by Certification Bodies in order to conclude a cooperation agreement with ISCC and for auditors to conduct audits under ISCC CORSIA.

Cooperation agreement

#### 4.1 Registration

The operational units that are registered with ISCC are referred to as "System Users". A certification audit can only be conducted at the site of a System User after a system usage agreement has been concluded with ISCC. The conclusion of the system usage agreement between the System User and

ISCC registration number

ISCC is confirmed by ISCC with the provision of an ISCC registration number. The receipt of the ISCC registration number does not entitle the System User to handle material as sustainable, this is only allowed after the receipt of a certificate. An ISCC registration number is obtained in two steps:

The economic operator signs a contract with one of the Certification Bodies cooperating with ISCC. A list of all cooperation Certification Bodies with contact details is available on the ISCC website. The Certification Body can be chosen freely.

Contract with certification body

The economic operator files a registration form with ISCC. This form can only be filed after the signing of a contract with a chosen Certification Body (both pieces of information are mandatory in the registration form). With the registration form the economic operator is filing an application to conclude a system usage agreement with ISCC. Only when ISCC sends out an email confirming the conclusion of a system usage agreement between ISCC and the economic operator, the economic operator can be regarded as registered ISCC System User. With the confirmation email, ISCC sends out a unique and site-specific ISCC registration number. Once the System User has received the ISCC registration number the selected Certification Body can carry out the audit.

System usage agreement with ISCC

For registration, the economic operator must use the registration form provided on the ISCC website and must complete this form completely and truthfully. The registration form includes information on the use and/or expulsion of any other certification schemes recognised under CORSIA in the previous certification period. When filing the registration, the economic operator agrees to accept the ISCC Terms of Use in force at the time being (available on the ISCC website).

Acceptance of ISCC Terms of Use

Among other information, the economic operator must name at least one member of staff who can be contacted by ISCC for all matters regarding the registration or certification. These contact persons also receive any official communications ISCC sends out to Certification Bodies and System Users (e.g. ISCC System Updates), and is responsible for internally distributing any ISCC communication to all relevant members of staff. ISCC must be informed immediately about any changes in the contact persons. Furthermore, ISCC must be informed immediately about any changes in the registration that may occur. This can include a change of the Certification Body for the recertification audit, an adjustment of the scope of the certification, etc.

Adjustments to ISCC registrations

It is not possible to register the same operational unit and the same scope with different Certification Bodies. It is possible to register different operational units with different Certification Bodies.

Different certification bodies

#### 4.2 Audit and Certification Procedure

ISCC System Users receive a certificate upon the successful completion of a certification audit by an eligible auditor as appointed by the Certification Body.

Certificate upon successful audit These audits are referred to as certification audits. Since ISCC CORSIA certificates are valid for 12 months, a certification audit is conducted once a year.

In case of reasonable suspicion Certification Bodies are entitled to conduct announced or unannounced surveillance audits at any time during the certificate's period of validity. If necessary, ISCC is entitled to request Certification Bodies to conduct surveillance audits at any time during the certificate's period of validity. In high-risk supply chains surveillance audits during the first year after initial certification are mandatory. A high risk applies to such economic operators that are collecting, processing, storing or trading materials, which are or may be eligible for extra legislative incentives (e.g. double-counting), such as waste and residues or waste and residue-based products (see ISCC CORSIA Document 204 "Audit Requirements and Risk Management").

Surveillance audits

With the certification the compliance of the System User with ISCC CORSIA requirements is proven. The certification criteria relevant for each element of the supply chain are stated in Chapter 3.3, and are laid down in ISCC CORSIA Documents 202, 203 and 205. Furthermore, ISCC CORSIA Documents 204 "Risk Management and Audit Requirements" and 206 "Group Certification" have to be taken into account for audit preparation and conduction.

Compliance

ISCC provides audit checklists (so-called audit procedures) for each element of the supply chain. The auditor must complete the audit procedures that are based on the requirements laid down in the ISCC CORSIA Documents, to prove evidence of compliance of a System User with the requirements. These procedures are available on the ISCC website and should also be used by System Users to prepare for the audit as well as for mandatory internal audits.

Mandatory audit checklists

If during the audit non-conformities are detected they can be corrected within 40 days of the date of the audit. The auditor has to verify if and what corrective measures are implemented by the audited System User, and if all ISCC CORSIA requirements are fulfilled before a certificate can be issued. If non-conformities cannot be corrected within 40 days of the audit, no certificate can be issued to the System User. In this case the audit is deemed to be as failed. The Certification Body has to inform ISCC immediately about failed audits and has to provide the respective audit documents to ISCC.

40 days to correct non-conformities

The auditor has to get access to any audit reports from previous audits under this standard. Economic operators have to declare the names of all certification schemes they participate in and have to provide the auditor with all relevant information, including the audit reports and chain of custody information, such as mass balances, for verification. Transparency on other schemes used

Certification audits have to be conducted on the site of the operational unit, and this site has to be stated on the ISCC certificate. Risk assessments conducted prior to audits have implications on the scope and execution of audits. New technologies and tools should be considered and used if applicable.

Risk based audits

Certification Bodies should follow the flow process for preparing and conducting audit activities as described in ISO 19011:2011 (see figure 3).

Process flow to conduct audits



Figure 3: Overview of typical audit activities according to ISO 19011:2011

#### 4.3 ISCC Certificates

The Certification Body, that has a contract with the System User to conduct the audit, issues the ISCC CORSIA certificate on the basis of a successful certification audit. Certification upon successful audit

Timely issuance

Certificates have to be issued no later than 60 calendar days after the certification audit took place, including the 40-day period to implement corrective measures. The Certification Body can issue a certificate up to seven calendar days prior to the starting date of the validity period. This allows the Certification Body to issue a certificate, for example, prior to a public holiday or non-workday and to ensure that no gap between or overlap of two certificates occurs. The period of validity is not permitted to start prior to the date of issuance of the certificate.

Validity of certificates

Certificates are valid over a period of twelve months as stated on the certificate. The beginning and end of the period of validity are clearly indicated on the certificate. The validity of a certificate starts on the date as indicated on the certificate (and not the date of publication on the ISCC website).

Valid, expired, withdrawn and fake certificates

ISCC publishes information of all certificates on the ISCC website, including copies of the certificates themselves. Certification Bodies are obliged to forward a copy of the certificate and certification documents to ISCC immediately after the issuance of the certificate. These documents include the audit procedures completed by the auditor and, if applicable, lists of farms or plantations and storage facilities used. If necessary, ISCC can make further provisions to the Certification Bodies with regard to necessary certification documents. If the documents provided by the Certification Body are complete and consistent, ISCC publishes the certificates on their website in a timely manner. ISCC may reserve the right to withhold publication in case of incomplete or inconsistent documentation provided by the Certification Body or unpaid invoices of the System User to ISCC until all open issues have been solved. In case of doubt any interested party has to contact ISCC for clarification of the validity of a given certificate. ISCC also publishes all expired and withdrawn certificates, operational units suspended or excluded from ISCC certification, as well as a list of fake certificates as indicated to ISCC without delay.

> ed Certificates are site specific

> > Scope

ISCC CORSIA certificates are site-specific. The address of the audited operational unit has to be stated on the certificate.

A certificate can be issued for more than one scope (type of operational unit). The Certification Body can adjust the scope of a certificate during the period of validity of a certificate. The adjusted certificate has to be provided to ISCC together with the audit procedures confirming the compliance of the System

User with the respective requirements.

Certificates must be issued on the templates as provided by ISCC and must include the following information. ISCC can make further provisions for necessary information on certificates and appendices.

Content of certificates

- 1 A unique certificate number composed of the code of the certification system, the identifier of the Certification Body and a unique sequence of numbers (preferably eight digits)
- 2 The ISCC seal and the logo of the issuing Certification Body
- 3 (Legal) name and address of the certificate holder (operational unit)
- 4 Name and address of the Certification Body issuing the certificate
- 5 Start and end date of the period of validity
- **6** Scope of certification, i.e. type(s) of certified operation
- 7 Place and date of issuance of the certificate
- **8** Stamp and signature of the issuing party
- 9 Appendices to the certificate, if applicable
- 10 Version number and date of version (relevant in case of any adjustments to the certificate or appendices during the period of validity)

Two types of appendices may have to be issued for a certificate. The first appendix contains information on sustainable input and output materials. This appendix has to be issued for all types of certified scopes except for traders and storage facilities. This appendix contains information regarding relevant sustainable input and output materials, the type(s) of life cycle emissions values (use of default or calculation of actual values) used to determine the respective life cycle emissions, and statement of the type of certification process applied for a respective material (statement if the ISCC process for waste, residues and by-products was applied). Indication that the ISCC CORSIA waste, residue and by-product process was applied means that no land-related criteria according to ISCC CORSIA Document 202 were covered by the certification of the upstream supply chain.

Appendices to the certificate

ISCC keeps a list of materials eligible for ISCC CORSIA certification (available in the client section of the ISCC website) from which applicable input and output materials and the exact wording have to be selected. Materials that are not included in this material list cannot be stated on the appendix to the certificate. ISCC may extend the list by further materials after approval and inclusion by ICAO. The appendix with sustainable materials should reflect the state of operation as verified by the auditor during the audit. This means that only those input and respective output materials should be included in the appendix for which the auditor was able to verify eligible suppliers of materials. The Certification Body can amend the appendix of sustainable materials during the period of validity if operations with further materials occur.

ISCC CORSIA and ISCC CORSIA PLUS list of materials

The second appendix is relevant for System Users certified as group (central offices, groups of points of origin for waste, residues and by-products or logistics centres). This appendix contains a list with names and addresses of all group members that are covered by the respective certificate. For central

List of group members

offices the appendix contains information about all farms or plantations that are part of the group and are thus covered by the certificate. For logistics centres the appendix includes all storage facilities that are part of the logistics network and are thus covered by the certificate. For groups of points of origins of waste, residues and by-products the appendix includes all points of origin that are covered by the certificate.

Both types of appendices have to be kept up to date by the Certification Body. In case of any amendments the amended appendices have to be sent to ISCC and are published on the ISCC website. Further guidance on the issuance of certificates and appendices is available for Certification Bodies.

Appendices to be kept up to date

The certificate holder can resign from participation in the ISCC system at any time by giving notice to the certification body.

Termination and withdrawal of certificates
Serious violations

In the event of serious violations of applicable requirements, the Certification Body may withdraw the certificate at any time during the period of validity.

Notification of certificate withdrawal

ISCC has to be immediately (on the same day) notified by the Certification Body of any resignation or withdrawal of certificates in order to update the lists of certificates on the ISCC website accordingly.