ISCC PLUS

Version 3.2
Copyright notice

© 2019 ISCC System GmbH

This ISCC document is protected by copyright. It is freely available from the ISCC website or upon request.

No part of this copyrighted document may be changed or amended. The document may not be duplicated or copied in any form or by any means for commercial purpose without permission of ISCC.

Document Title: ISCC PLUS
Version 3.2
Valid from: 19 December 2019
## Content

Summary of Changes ................................................................. V
   Addition: New Chapter “Type of Product” ................................ VI
   Several amendments in chapter 9.2: ....................................... VI

1 Introduction ........................................................................... 7

2 Scope and Normative References ......................................... 8

3 Governance .......................................................................... 9

4 Requirements for Certification Bodies and Auditors ............... 9

5 System Basics ...................................................................... 9
   5.1 Acceptance of other sustainability schemes under ISCC PLUS .... 10
   5.2 Material eligible for ISCC PLUS certification ....................... 10
   5.3 Voluntary add-ons under ISCC PLUS ................................ 11

6 Waste and Residues ............................................................. 12

7 Reuse and Recycling in the Circular Economy ....................... 12

8 Sustainability Requirements ................................................ 14

9 Traceability and Chain of Custody ........................................ 14
   9.1 Type of product ............................................................... 14
   9.2 Requirements for Sustainability Declarations ................... 15
   9.3 Self-declarations/ Self-assessment for Farms or Plantations .... 16
   9.4 Mass balance calculation ................................................ 17
      9.4.1 Credit transfer .......................................................... 18
      9.4.2 Co-processing ......................................................... 19
      9.4.3 Mass balancing approach under ISCC PLUS ............... 19
      9.4.4 Consideration of additives and non-sustainable organic content for mass balancing ..................... 21
   9.5 Multi-Component Products .............................................. 21

10 Audit Requirements and Risk Management .......................... 22
11 GHG Emissions .................................................................................................................. 22
11.1 Deviations with respect to emission factors ................................................................. 23
11.2 Calculation of regional GHG values for cultivation (\(e_{ec}\)) ..................................... 23
11.3 Calculation of individual GHG values for cultivation (\(e_{ec}\)) ................................. 23
11.4 Aggregation of different GHG values ............................................................................ 23
11.5 Allocation of GHG emissions ......................................................................................... 23
11.6 Life cycle coverage ...................................................................................................... 23

12 Group Certification .......................................................................................................... 24

13 ANNEX – ISCC EU and ISCC PLUS: Overview Differences ........................................ 24
13.1 General differences between ISCC EU and ISCC PLUS ................................................ 24
13.2 Differences between ISCC EU and ISCC PLUS with regard to traceability and chain of custody .................................................................................................................. 25
13.3 Differences between ISCC EU and ISCC PLUS with regard to GHG emission calculation .................................................................................................................. 26
Summary of Changes

The following is a summary of all content changes to the previous version of the document. Other changes, e.g. corrections of spelling mistakes, are not listed.

<table>
<thead>
<tr>
<th>Summary of changes made in version 3.2</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amendments:</td>
<td></td>
</tr>
<tr>
<td>• “more than 130 members (December 2019).”</td>
<td>1</td>
</tr>
<tr>
<td>• “such as the food, feed or energy markets and for diverse industrial applications”</td>
<td></td>
</tr>
<tr>
<td>Amendment: “to be allowed to conduct certifications under the ISCC standard, and thus duties of CBs</td>
<td>4</td>
</tr>
<tr>
<td>cooperating with ISCC and performing certification services according to ISCC.”</td>
<td></td>
</tr>
<tr>
<td>Amendment: “This means that all economic operators along the supply chain must demonstrate that the</td>
<td>5.1</td>
</tr>
<tr>
<td>relevant ISCC standard requirements have been fulfilled”</td>
<td></td>
</tr>
<tr>
<td>Addition: “and Austria”; “Please see chapter 9.2 for more information.”</td>
<td></td>
</tr>
<tr>
<td>Clarification: ISCC PLUS Material List</td>
<td>5.2</td>
</tr>
<tr>
<td>Deletion: “The only difference is”</td>
<td>6</td>
</tr>
<tr>
<td>Addition:</td>
<td>7</td>
</tr>
<tr>
<td>“This can also include inorganic waste materials entering the circular economy.”</td>
<td></td>
</tr>
<tr>
<td>“Post-consumer material is defined as material generated by households or by commercial, industrial,</td>
<td></td>
</tr>
<tr>
<td>and institutional facilities in their role as end-users of the product which can no longer be used for</td>
<td></td>
</tr>
<tr>
<td>its intended purpose. This includes returns of material from the distribution chain.”</td>
<td></td>
</tr>
<tr>
<td>Post-industrial materials that fall under the definition of „waste or processing residues“ according</td>
<td></td>
</tr>
<tr>
<td>to the &quot;ISCC Flow chart to determine whether the ISCC w/r process can be applied&quot; (see ISCC EU System</td>
<td></td>
</tr>
<tr>
<td>Document 201-01 „Waste and Residues“, chapter 4.4.1) can also be named as „circular material/ products“</td>
<td></td>
</tr>
<tr>
<td>under ISCC. Post-industrial material covers e.g. material derived from waste streams during the system</td>
<td></td>
</tr>
<tr>
<td>user’s manufacturing processes. Material that is reused in the same production process and/or can be</td>
<td></td>
</tr>
<tr>
<td>assigned to the categories of rework, regrind or scrap generated cannot be claimed as „circular“. With</td>
<td></td>
</tr>
<tr>
<td>respect to marketing, companies must claim their input materials and products as specific and transparent as</td>
<td></td>
</tr>
<tr>
<td>possible to internal and external stakeholders, e.g. referring to post-consumer and/or post-industrial</td>
<td></td>
</tr>
<tr>
<td>feedstock”</td>
<td></td>
</tr>
</tbody>
</table>
### Summary of changes made in version 3.2

<table>
<thead>
<tr>
<th>Addition: New Chapter “Type of Product”</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1</td>
<td></td>
</tr>
</tbody>
</table>

**Several amendments in chapter 9.2:**
- “If the material is received from an ISCC PLUS certified system user, then the material is automatically “ISCC Compliant” and the statement should not be included on the sustainability declaration.
- Information on:
  - chain of custody option applied: Statements “physical segregation” or “mass balance” are mandatory under ISCC PLUS.
  - differentiation if a raw material is a post-consumer or post-industrial waste
  - mass balance approach applied: see 9.3.2 for the available options.
  - multi-site credit transfer: Statement whether multi-site credit transfer is conducted at the respective site is mandatory.

**Several amendments in chapter 9.4:**
- “A mass balance must be site-and scope-specific, meaning a separate mass balance shall be set up for every production site, even if they are under the same legal entity.
- Raw material (for example, corn or rape/canola) including the type of product (e.g. bio-based)
- Differentiation if a raw material is a post-consumer or post-industrial waste”

**Deletion: “In the case of a gap of up to three months between two certification periods of a company, credits can be transferred from the last mass balance period of the previous certification period to the first mass balance period of the next certification period.”**

**Addition: New Chapter “Mass balancing approach under ISCC PLUS”**

**Addition: New Chapter “Consideration of additives and non-sustainable organic content for mass balancing”**

**Deletion: “Biograce”**
1 Introduction

ISCC – International Sustainability and Carbon Certification (ISCC) is a certification system that offers solutions for the implementation and certification of sustainable, deforestation-free and traceable supply chains of agricultural, forestry, waste and residue raw materials, non-bio renewables and recycled carbon materials and fuels. Independent third-party certification ensures compliance with high ecological and social sustainability requirements, greenhouse gas emissions savings (on a voluntary basis under ISCC PLUS) and traceability throughout the supply chain. ISCC can be applied globally in all markets including the food, feed, chemical and energy markets.

ISCC applies strict rules for the conservation of valuable landscapes as well as the environmentally friendly and socially responsible production of agricultural and forestry raw materials. ISCC does not accept any form of compensation or remuneration for breaches of system requirements.

Since 2006 ISCC has continued to develop through an open multi-stakeholder process involving representatives from agriculture, processing and refining industries, trade, and NGOs with ecological and social backgrounds. Today, ISCC is one of the world’s leading certification systems. The interests of the different stakeholders are represented in the ISCC Association (ISCC e.V.), consisting of more than 130 members (December 2019). At regular regional and technical stakeholder committees in Asia, Europe, North- and South America, experiences and improvements of the ISCC System are discussed, and – when possible – lead to continuous improvements of the ISCC system.

ISCC operates different certification systems for different markets. These systems are ISCC EU and ISCC PLUS. ISCC EU is a certification system to demonstrate compliance with the legal sustainability requirements specified in the Renewable Energy Directive (RED) and Fuel Quality Directive (FQD). ISCC PLUS is a certification system for all markets and sectors not regulated by the RED or FQD, such as the food, feed or energy markets and for diverse industrial applications. Under ISCC PLUS, all types of agricultural and forestry raw materials, waste and residues, non-bio renewables and recycled carbon materials and fuels are covered.

ISCC offers a “One-Stop-Shop” solution, as the ISCC EU and ISCC PLUS schemes are widely harmonized. With only one audit an operation can obtain both an ISCC PLUS and ISCC EU certification. The main criteria of the ISCC sustainability scheme are based on the RED and FQD sustainability requirements, with additional sustainability requirements on environmental and social issues, which go beyond legal requirements.

---

1 ISCC also operates ISCC DE, which is a certification system to demonstrate compliance with the German Sustainability Ordinances.
During the development of its systems, ISCC considers and complements best practice initiatives like ISEAL Alliance and international standards like ISAE 3000² and the International Organisation for Standardization (ISO). This facilitates and enables a consistent and reliable application of ISCC especially with respect to quality control, risk management, planning and conducting of audits as well as sampling processes, surveillance and reporting mechanisms. Furthermore, ISCC operates the ISCC Integrity Program, which is a tool used to continuously monitor the performance of the ISCC System Users and Certification Bodies (CBs) cooperating with ISCC to ensure and maintain the high-quality standard and credibility of ISCC.

2 Scope and Normative References

As the ISCC PLUS and ISCC EU certification schemes are widely harmonized, the ISCC EU System Documents also apply for ISCC PLUS. This means that the ISCC EU System Documents also serve as system documents for the ISCC PLUS scheme. The few differences and requirements that are specific to ISCC PLUS are described in this document, which is an additional compulsory source of information to the ISCC EU System Documents for a certification under ISCC PLUS. This approach should be a facilitation for companies, certification bodies and other interested parties as they only have to refer to one set of system documents and duplication of requirements is avoided.

The ISCC EU System Documents lay down the general ISCC system principles which are also valid under ISCC PLUS. Those include:

- ISCC EU 102 – Governance
- ISCC EU 103 – Requirements for Certification Bodies and Auditors
- ISCC EU 201 – System Basics
- ISCC EU 201-01 Waste and Residues
- ISCC EU 202 – Sustainability Requirements
- ISCC EU 203 – Traceability and Chain of Custody
- ISCC EU 204 – Audit Requirements and Risk Management
- ISCC EU 205 – GHG Emissions (on a voluntary basis under ISCC PLUS)
- ISCC EU 206 – Group Certification

References made within the ISCC EU System Documents with regard to the RED and FQD requirements for biofuels and bioliquids also apply under ISCC PLUS for all other products such as food, feed or biochemicals (e.g. “… to

fulfil the requirements of the RED and FQD” is meant comparably for “… to fulfil the requirements of the ISCC sustainability standard”). Any obligatory regulatory requirements that are specific to the EU biofuels sector such as the EU Reporting Obligation or the minimum GHG emission saving requirement do not apply under ISCC PLUS.

There are slightly different requirements between ISCC EU and ISCC PLUS, especially with regard to traceability, chain of custody, and GHG emission calculation which ISCC would like to emphasize in this document. This document serves as an additional compulsory source of information to the ISCC EU System Documents for a certification under ISCC PLUS.

3 Governance

The ISCC EU System Document 102 “Governance” lays down the general principles according to which the ISCC system is governed globally. It specifies the goals and internal structure of ISCC, as well as the relationship between ISCC and its stakeholders.

This System Document applies equally for ISCC EU and ISCC PLUS, with the exception that ISCC PLUS is not a certification scheme recognized by the European Commission and therefore the obligation to report to the European Commission on its activities and status does not exist.

4 Requirements for Certification Bodies and Auditors

The ISCC EU System Document 103 “Requirements for Certification Bodies and Auditors” specifies the requirements for Certification Bodies (CBs) to be allowed to conduct certifications under the ISCC standard, and thus duties of CBs cooperating with ISCC and performing certification services according to ISCC. Furthermore, it lays down the requirements and necessary qualifications for auditors conducting ISCC audits.

This System Document applies equally for ISCC EU and ISCC PLUS.

5 System Basics

The ISCC EU System Document 201 “System Basics” describes the fundamentals of the ISCC system. It outlines the basics with respect to the set-up of the ISCC system and the certification criteria regarding sustainability, traceability and the chain of custody, as well as greenhouse gas emissions (voluntary under ISCC PLUS). The description of participants in the supply chain who are subject to certification is also covered. Additionally, the registration, audit and certification processes are described as well as the requirements for the issue and validity of ISCC certificates.
This System Document applies equally for ISCC EU and ISCC PLUS, with some differing requirements under ISCC PLUS which are described in the following sub-chapters.

In order to satisfy certain market requirements, which may not have been covered within the ISCC PLUS system and existing add-ons3, ISCC will consider the development of further extensions of the system with respect to voluntary add-ons and scopes.

5.1 Acceptance of other sustainability schemes under ISCC PLUS

Within ISCC PLUS no certification schemes other than ISCC are currently accepted. This means that all economic operators along the supply chain must demonstrate that the relevant ISCC standard requirements have been fulfilled. Within ISCC PLUS, it must be guaranteed that the whole upstream supply chain up to the farm/plantation or point of origin is entirely ISCC certified (“ISCC Compliant”). Any material used in an “ISCC Compliant” supply chain must consist entirely of ISCC material.4 Material certified under any voluntary scheme other than ISCC cannot be accepted in ISCC PLUS supply chains. Sustainable material coming from ISCC EU or ISCC DE certified units which fulfils the above “ISCC Compliant” requirement, shall contain the statement “ISCC Compliant” on its sustainability declaration, in order to be accepted under ISCC PLUS. The recognition of voluntary schemes other than ISCC requires at least a positive equivalence benchmarking result. An exception exists for raw materials certified under other schemes, only if the country of origin of the raw material is Germany and Austria and if the certification proves compliance with SAI GOLD or SAI SILVER (i.e. the performance level GOLD or SILVER of the Sustainable Agriculture Initiative (SAI) is reached for the production of the biomass). Please see chapter 9.2 for more information.

ISCC was positively benchmarked by SAI against the FSA 2.0. ISCC (ISCC PLUS and ISCC EU) automatically achieves the FSA 2.0 Silver level. If the voluntary add-on “SAI Gold” is applied, the FSA 2.0 Gold Level is achieved (see chapter 5.3).

5.2 Material eligible for ISCC PLUS certification

Under ISCC PLUS, all types of agricultural and forestry raw materials, waste and residues, non-bio renewables and recycled carbon materials and fuels are covered.

ISCC keeps two lists of materials eligible for certification (available in the client section of the ISCC website) from which applicable input and output materials and the exact wording must be selected. Under ISCC PLUS, the ISCC EU list of materials and the ISCC PLUS list of materials are of relevance. The certification of materials and products not stated on one of these two lists is potentially possible after consultation with and confirmation by ISCC.

---

3 Add-ons are additional modules of ISCC, which can be used on top of the ISCC core-requirements
4 At least on a quantity bookkeeping basis (see chapter 5 on Traceability and Chain of Custody)
5.3 Voluntary add-ons under ISCC PLUS

In addition to the core requirements of ISCC PLUS, ISCC provides the option to adapt ISCC PLUS certificates to specific market requirements through voluntary add-ons. Add-ons are modules that can be applied either for the agricultural production area or for the entire supply chain on a voluntary basis. The modular approach ensures the fulfilment of different market requirements and continuous improvement.

The following add-ons are currently available:\(^5\):

- **Add-on 202-01: Environmental management and biodiversity**
  
  Supports farmers to conserve and improve the conditions of soil fertility, water and biodiversity and to reduce energy consumption. Applies only at farm level

- **Add-on 202-02: Classified chemicals**
  
  Sets a ban for extremely hazardous chemicals and provides requirements for the phase out of moderately hazardous chemicals. Applies only at farm level

- **Add-on 202-03: SAI Gold**
  
  ISCC has been deemed equivalent to the Sustainable Agriculture Initiative (SAI) FSA Silver level. To fulfil the requirements of the SAI FSA Gold level, a certain set of ISCC “minor must” criteria has to be fulfilled. Applies only at farm level

- **Add-on 205-01: GHG Emissions**
  
  Calculation methodology and verification of greenhouse gas emissions along the supply chain, including biomass production, conversion as well as transport and distribution. Applies at farm and supply chain level

- **Add-on 205-02: Consumables**
  
  Calculation methodology of the amount of all relevant consumables (e.g. water, fuels, electricity) along the supply chain, including biomass production, conversion as well as transport and distribution. Applies at farm and supply chain level

- **Add-on 205-03: Non-GMO food/ feed**
  
  Requirements for the certification of crops not containing genetically modified organisms or, downstream Non-GMO raw materials for the food and feed markets. Applies at farm and supply chain level

- **Add-on 205-04: Non-GMO technical markets**

---

\(^5\) The list of add-ons can be expanded and ISCC will consider the development of further add-ons if desired by system participants
Requirements for the certification of crops claiming to not contain genetically modified organisms for technical markets. Applies at farm and supply chain level

- **Add-on 205-06: Electricity and Heat from Biogas Plants**

Requirements for the production of sustainable electricity and heat from biogas plants under ISCC. Applies at supply chain level

### 6 Waste and Residues

The ISCC EU System Document 201-01 “Waste and Residues” provides the principles for the certification of raw materials and feedstocks qualifying as “waste” or “residue” as their supply chains and specific certification requirements may differ from those of the conventional crop-based materials.

This System Document applies equally for ISCC EU and ISCC PLUS.

### 7 Reuse and Recycling in the Circular Economy

ISCC supports the development of the circular economy and consequently reuse and recycling with its certification approach.

The concept of circular economy aims at transitioning the actual linear value chains in our economy into a circular form. This means, economic activity shall be decoupled from the use of finite resources leading to the idea of keeping materials and products in use. Ideally, no waste is generated but material is reused or recycled.

*Reuse* stands for an act or process of further, different or continued use. *Recycling* means “any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.”

The concept of recycling is part of the waste hierarchy approach introduced by the Waste Framework Directive 2008/98/EC which shall be taken into account in the framework of ISCC. The waste hierarchy approach aims to reduce and to manage waste according to a cascading use of resources. When possible, reuse should be favored over recycling. Recycling should only take place if the further use of the waste would have required an additional processing step. The use of recycled material (e.g. recycled plastic waste) decreases the extraction and use of additional carbon from finite sources. Reducing the exploitation of fossil resources implies also less associated extraction emissions and mitigates environmental pollution caused by waste

---

6 Waste Framework Directive 2008/98/EC, Article 3 (17)
incineration or waste disposal on landfill sites. In addition, it contributes to the development of a circular economy and reduces overall wastes.

The ISCC approach covers post-consumer and post-industrial waste. This can also include inorganic waste materials entering the circular economy. According to the Waste Framework Directive 2008/98/EC (Article 3) a “waste” can be understood as “any substance or object which the holder discards or intends or is required to discard”. The material has reached the end of its intended life cycle. This has to be proven by relevant documentation if the material shall be eligible for an ISCC certification. For example, the point of origin holds appropriate licenses and permits to act as a legal waste management company or is an entity that generates recovered material as defined in ISO 14021:2016. Recovered material is defined by this ISO norm as “material that would have otherwise been disposed of as waste or used for energy recovery but has instead been collected and recovered as a material input, in lieu of new primary material, for a recycling or manufacturing process”. This means, the material enters a supply chain again as a feedstock for further production, promoting in this way the circular economy. Hence, certified products from economic operators participating in supply chains of recycled material shall be named with the prefix “circular” on the certificate annex.

Post-consumer material is defined as material generated by households or by commercial, industrial, and institutional facilities in their role as end-users of the product which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.

Post-industrial materials that fall under the definition of „waste or processing residues” according to the "ISCC Flow chart to determine whether the ISCC w/r process can be applied" (see ISCC EU System Document 201-01 „Waste and Residues", chapter 4.4.1) can also be named as „circular material/products” under ISCC. Post-industrial material covers e.g. material derived from waste streams during the system user’s manufacturing processes. Material that is reused in the same production process and/or can be assigned to the categories of rework, regrind or scrap generated cannot be claimed as „circular”. With respect to marketing, companies must claim their input materials and products as specific and transparent as possible to internal and external stakeholders, e.g. referring to post-consumer and/or post-industrial feedstock.

Examples of a recyclable input material are plastic waste or industrial waste. “Mixed Plastic Waste (MPW)” originates for example at waste management companies where it is separated from other waste materials and can be recycled by further mechanical or chemical processing. This provides additional options to promote the circular economy if a direct reuse of the plastic waste is not possible. Material covered under “MPW” has to be essentially free of paper, biomass and/or used tyres. The Point of Origin has
to provide information on the applicable Resin Identification Code (RIC) categories on the self-declaration. Non-individually certified Points of Origin generating MPW have to sign the respective ISCC self-declaration confirming in this way that the material is a waste.

With regard to supply chains based on reuse and recycling of material all ISCC requirements regarding traceability and chain of custody and all other relevant ISCC requirements are fully applicable.

8 Sustainability Requirements

The ISCC EU System Document 202 “Sustainability Requirements” provides information on the sustainability requirements for farms/plantations, comprising of six sustainability principles:

1. Protection of land with high biodiversity value or high carbon stock
2. Environmentally responsible production to protect soil, water and air
3. Safe working conditions
4. Compliance with human, labour and land rights
5. Compliance with laws and international treaties
6. Good management practices and continuous improvement

This System Document applies equally for ISCC EU and ISCC PLUS.

9 Traceability and Chain of Custody

The ISCC EU System Document 203 “Traceability and Chain of Custody” covers the requirements for the traceability and chain of custody applicable to all elements of the supply chain of sustainable materials that have to be covered by certification. Within ISCC two chain of custody options exist: physical segregation and mass balance.

This System Document applies equally for ISCC EU and ISCC PLUS, with some differing requirements under ISCC PLUS which are described in the following sub-chapters. Any references in the ISCC EU System Document 203 to GHG emissions calculation and GHG emission value information only apply for ISCC PLUS if the voluntary add-on “GHG Emission” is applied. Otherwise, those requirements can be omitted under ISCC PLUS.

9.1 Type of product

ISCC PLUS certifies bio-based, circular (fossil-based), and renewable feedstocks:

- Bio-based feedstocks are derived from biomass, whereas biomass refers to the biodegradable fraction of products, waste and residues of biological origin from agriculture, forestry and related industries including fisheries.
and aquaculture, as well as the biodegradable fraction of industrial and municipal waste.

- Circular feedstocks include material derived from the mechanical and/or chemical processing of recyclable materials of non-biological origin (fossil-based). Circular means that a material considered as a waste/processing residue is not landfilled or energetically used, but instead re-used, further used or recycled in a loop without dropping out of the economy.

- Renewable feedstocks cover materials of non-biological origin, derived from a process using renewable energy sources other than biomass, in which the input feedstock must not contain usable energy.

9.2 Requirements for Sustainability Declarations

Under ISCC PLUS, specific information is required for sustainability declarations.

Statement “ISCC Compliant”: Within ISCC PLUS, it must be guaranteed that the whole upstream supply chain up to the farm/plantation or point of origin is entirely covered by ISCC certification ("ISCC Compliant"). Sustainable material coming from ISCC EU or ISCC DE certified units, which fulfil the above “ISCC Compliant” requirement, shall contain the statement “ISCC Compliant” on its sustainability declaration, in order to be accepted under ISCC PLUS.

The statement “ISCC Compliant” can only be made if the ISCC certified operator has received an equivalent amount of incoming material with the statement “ISCC Compliant” on the sustainability declaration. First Gathering Points can only make this statement for deliveries from farms or plantations that comply with the ISCC requirements. Collecting Points can only make this statement for materials collected from points of origin that comply with the ISCC requirements.

Incoming material with the statement “EU RED Compliant” cannot be accepted under ISCC PLUS. For outgoing materials, the claim “EU RED Compliant” cannot be applied.

SAI Gold Compliance: “ISCC Compliant” material including the add-on “SAI Gold” can be claimed as “Equivalent to FSA 2.0 Gold Level”. Alternatively, the claim “SAI Gold Compliance” can mean that the raw material was cultivated in Germany and was certified according to another certification scheme that proves compliance with the SAI Gold performance level (in this case the statement “ISCC Compliant” cannot be made on outgoing sustainability declarations).

SAI Silver Compliance: “ISCC Compliant” material can be claimed as “Equivalent to FSA 2.0 Silver”. Alternatively, the claim “SAI Silver Compliance” can mean that the raw material was cultivated in Germany and was certified according to another certification scheme that proves compliance with the SAI SILVER performance level (in this case the statement “ISCC Compliant” cannot be made on outgoing sustainability declarations).
• Information on: chain of custody option applied: Statements "physical segregation" or "mass balance" are mandatory under ISCC PLUS.

• mass balance approach applied: see 9.3.2 for the available options.

• multi-site credit transfer: Statement whether multi-site credit transfer is conducted at the respective site is mandatory.

Statement on applied add-ons (voluntary): In case of the application of add-ons under ISCC PLUS, the following additional product-related information can be stated on the sustainability declaration:

1) Name(s) of add-on(s), under which the equivalent amount of material has been certified or acquired (e.g. "add-on ‘Classified Chemicals’ applied")

2) For add-on 205-01 “GHG Emissions”:
   • Statement of GHG emissions of product in kg CO2eq emissions per ton of product (either use of disaggregated default value or individually calculated GHG value)
   • Means of transport and transporting distance (only in case the disaggregated default value for transport is not applied)

3) For add-on 202-03 “SAI Gold”:
   • "ISCC Compliant" material including the add-on “SAI Gold” can be claimed as “Equivalent to FSA 2.0 Gold Level”

4) For add-on 205-02 “Consumables”:
   • Relevant consumables, which are transferred (e.g. water consumption) and individual value in the respective unit per product (e.g. in litre water/ton product)

9.3 Self-declarations/ Self-assessment for Farms or Plantations

Farms/plantations covered under the certificate of a First Gathering Point or Central Office conduct an annual self-assessment and provide the signed self-declarations to the First Gathering Point or Central Office. If for farms/plantations voluntary add-ons are additionally certified, the respective farms/plantations additionally have to complete the “ISCC PLUS self-declaration for add-ons” and provide it to the First Gathering Point or Central Office. The templates of the self-declarations are available on the ISCC website.

During the audit, the First Gathering Point or Central Office has to provide a list of all farms/plantations with names and addresses of contact persons who signed the ISCC self-declaration within the past twelve months. If farmers...
apply one or more of the ISCC PLUS add-ons, this must be clearly indicated on the list.

9.4 **Mass balance calculation**

Under the mass balance system the sustainability characteristics remain assigned to batches of material on a bookkeeping basis while the physical mixing of material with different sustainability characteristics and the mixing of sustainable and non-sustainable material is allowed. Any kind of mass balance operation and calculation shall only be related to sustainable material. Under ISCC, the maximum timeframe for a mass balance calculation is three months. A mass balance must be site-and scope-specific, i.e. a separate mass balance shall be set up for every production site, even if they are under the same legal entity.

The following sustainability characteristics have to be distinguished in the bookkeeping:

- Raw material (for example corn or rapeseed/canola) including the type of product (e.g. bio-based)
- Country of origin of the raw material
- Waste/residue status of the raw material
- “ISCC Compliant”, “EU RED Compliant”, “SAI Silver Compliant” and “SAI Gold Compliant” material
- Information on GHG emissions (if add-on “GHG Emissions” is applied)
- Differentiation if a raw material is a post-consumer or post-industrial waste
- Add-on(s) applied (for every individual add-on or set of add-ons applied a separate bookkeeping has to be kept)

It is possible to downgrade sustainable material with a higher sustainability category (i.e. add-ons were covered by certification), for example to compensate a negative mass balance of sustainable material with a lower sustainability category (i.e. less or no add-ons applied) (see figure 1). However, this is only possible if all other sustainability characteristics are identical.
9.4.1 Credit transfer

If more sustainable material was received than dispatched within one mass balance period, the surplus of sustainable material in the bookkeeping is called “credit”. It is possible to transfer credits from one mass balance period to the next. This is possible regardless of the amount of material in stock (sustainable and unsustainable) at the end of the mass balance period. It should be ensured that a company is continuously certified, i.e. that no time gaps between certification periods occur.

Mass balances shall be kept strictly site-specific. Credits achieved within one site’s mass balance cannot be transferred to another site’s mass balance. An exception applies for processing units and storage facilities certified under ISCC PLUS. They can transfer credits between different sites under the following conditions:

- Supplier and recipient of credits must be part of the same company/corporate group/joint venture
- Sites must be located within national borders, or within neighbouring countries (sharing an inland border)
- Applicable only for the same kind of product
- Mass balances must be kept site-specific
- ISCC certification must be in place for all sites
• Certificates must be issued by the same certification body

Under ISCC PLUS it is also possible to transfer credits between sites that are part of the same or corporate group or joint venture. A corporate group is defined as a number of consolidated legal entities guided by a parent company. Precondition for the latter case is that the company transferring credits to another operational unit (being part of the JV) holds a majority share in the other company. This has to be proven accordingly to the auditor. The other additional requirements for multi-site credit transfer under ISCC as stated above remain unchanged and have to be equally fulfilled.

Operations that are both certified under ISCC EU and ISCC PLUS can transfer credits from ISCC EU to ISCC PLUS mass balances, if the material is “ISCC Compliant” and the other sustainable characteristics are identical. However, it is not possible to transfer credits from ISCC PLUS to ISCC EU mass balances.

9.4.2 Co-processing

Bio-based, circular, renewable and fossil-based feedstocks can be processed simultaneously. Processing means any modification causing a change in the molecular and/or mechanical structure of the raw material/product. Co-processing of different types of feedstocks results in mixed products with the same chemical properties. The system boundary for co-processing is limited to the site of the processing unit. Bio-based, circular and renewable feedstocks have to meet all applicable ISCC requirements (“ISCC Compliant” material) and only then can be claimed as “sustainable” under ISCC. Adding denaturants or other auxiliaries is not regarded as co-processing.

9.4.3 Mass balancing approach under ISCC PLUS

The mass balancing approach determines the sustainable share and the amount of the sustainable outgoing product being ISCC PLUS certified, based on the amount of ISCC PLUS certified input material. The sustainable share is the amount of sustainable input material multiplied with the respective conversion factor (CF) of the processing unit. The CF is the amount of all outputs divided by the amount of all inputs. The determination of the CF must be conducted based on the operational data of the processing unit. It is not allowed to determine the CF based on theoretical data.

There must be an equivalence between the “ISCC Compliant” input and the respectively claimed output (on a mass balance basis). If this 100% equivalence is not achieved, the percentage must be stated.

ISCC PLUS offers different options to conduct the mass balancing for a certified processing unit and to determine the sustainable output of co-processed products. In general, ISCC PLUS allows the free attribution for the determination of the sustainable share of input material to the output material. Free attribution means that the sustainable share can be attributed to one or several output materials.
The sustainable output can be determined using an “attributing approach” (Option 1 and 2, see Figure 3). In this case, the processing unit is considered to be a “black box”. The specific processes (e.g. chemical reactions) within the respective processing unit are not taken into account for the determination of the sustainable share, but are hidden in a “black box”. Thus, the focus of the analysis is exclusively on the relevant input, output and losses of the process. In order to calculate the sustainable share, the amount of sustainable input, output and the losses can be described based on their mass (Option 1, Mass Determination) or based on their energetic value (Option 2, Energetic Determination).

Alternatively, the Trace-the-Atom option (Option 3, see Figure 3) can be used to determine the conversion factor. The equation of the chemical reaction used for the production of the sustainable product is followed. Consequently, the conversion factor is based on the share of atoms that are part of the output molecule, derived from the sustainable input. Operational data of the processing unit must be used to take process losses into account and determine the sustainable output.

Using isotope measurements of the output, the share of the co-processed bio-based feedstocks can be determined in the final product. A $^{12}\text{C}/^{14}\text{C}$ isotope measurement (Option 4, see Figure 3) is used to determine the bio-based share in a product. In contrast to the option of calculating the process yield based on an analysis of in- and output materials, this option measures the “physical” bio-content in a product. Here, in contrast to Options 1-3, claims on the bio-based content can be made because it can be proven that the product physically contains a certain sustainable input. Further information on accepted methods, measurement and sampling regimes can be found in ISCC Guidance Document 203-01 “Co-Processing”.

<table>
<thead>
<tr>
<th>Option</th>
<th>Approach</th>
<th>Principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Attribution Approach</td>
<td>Free attribution to one or several outputs</td>
</tr>
<tr>
<td>2</td>
<td>Energetic Determination</td>
<td>Determination based on chemical reaction</td>
</tr>
<tr>
<td>3</td>
<td>Trace-the-Atom</td>
<td>Measurement of sustainable share</td>
</tr>
<tr>
<td>4</td>
<td>$^{12}\text{C}/^{14}\text{C}$ Analysis</td>
<td></td>
</tr>
</tbody>
</table>
For all options eligible under ISCC PLUS, the attribution/ determination is limited to:

- process outputs that can potentially contain parts (molecules/atoms) of the sustainable input after its processing/chemical reaction (no attribution to output, which cannot (chemically/ technically) include the sustainable input).
- physical output (sustainable and non-sustainable) produced in the respective mass balance period (no attribution to a quantity of output, which is not produced at the site within a mass balance period).

<table>
<thead>
<tr>
<th>Site specific</th>
<th>Process feasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass balancing must be site-specific.</td>
<td>It must be chemically/ technically possible, that the input molecular/ atoms are included in the attributed output.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operational data</th>
<th>Physical output</th>
</tr>
</thead>
<tbody>
<tr>
<td>The conversion factor is determined based on operational data.</td>
<td>Attributed sustainable output cannot be higher than the physical output in a mass balance period.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transparency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on the used option for MB (attribution) and on multi-site MB must be provided via sustainability declaration.</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4: Basic conditions for the ISCC PLUS mass balancing approach

9.4.4 Consideration of additives and non-sustainable organic content for mass balancing

Additives and other non-sustainable organic compounds of less than 1% of the total mass or energetic value of the final product can be neglected for mass balance calculation. In total, all additives and other non-sustainable organic compounds must be less than 3% of the total mass or energetic value of the final product, otherwise those have to be taken into account for mass balance calculation.

9.5 Multi-Component Products

Products derived from biochemicals can consist of multiple different bio-based components (so-called multi-component products), all having (one or more) individual sets of sustainability characteristics. These multi-component products may also contain certified sustainable components and non-certified components at the same time. Examples for multi-component products are paint and lacquer. Please note that a batch of a material (e.g. bioethanol) that consists of different individual sustainability characteristics is not considered as a multi-component product.

Particularly in case of such certified multi-component products, the documentation of the different sustainability characteristics on sustainability declarations and respective mass balancing calculations become increasingly complex. ISCC aims to provide a pragmatic certification approach for such multi-component products certified under ISCC PLUS. Therefore, the sustainability characteristics “type of raw material” and the “country of origin”
are voluntary for these chemical multi-component products. This means that the requirements on documentation are reduced and the recipient of a multi-component product receives a sustainability declaration with a reduced set of information. The sustainability requirements for ISCC certified raw materials (at the beginning of the supply chain) remain unchanged\(^8\).

This option may only be applied by ISCC PLUS certified economic operators producing or handling multi-component products in the biochemicals sector and operators receiving certified multi-component products from the biochemicals sector. The “type of raw material” and the “country of origin” remain mandatory sustainability characteristics in all other ISCC certified supply chains. This option does not apply to:

- Economic operators certified under ISCC EU as the “type of raw material” and the “country of origin” are mandatory in the framework of the Renewable Energy Directive (RED)

- ISCC PLUS certified economic operators producing or handling sustainable products that do not consist of multiple components (e.g. rapeseed or soybean, vegetable oils, bioethanol, etc.)

- ISCC PLUS certified economic operators that are not in the biochemicals sector

In case of questions regarding the practical implementation, ISCC may be contacted for further guidance.

10 Audit Requirements and Risk Management

The ISCC EU System Document 204 “Audit Requirements and Risk Management” covers the requirements of how ISCC audits are to be conducted at different elements of the supply chain, the risk management process under ISCC applicable to all activities of ISCC, and the implications of risks for ISCC audits.

This System Document applies equally for ISCC EU and ISCC PLUS.

11 GHG Emissions

The ISCC EU System Document 205 “Greenhouse Gas Emissions” explains the options of stating greenhouse gas (GHG) emissions along the supply chain and provides the methodology, rules and guidelines for calculating and verifying GHG emissions and emission reduction.

Within ISCC PLUS, the verification of GHG emissions is voluntary and can be added by applying the add-on 205-01 “GHG Emissions”. If the add-on is applied, this System Document applies equally for ISCC EU and ISCC PLUS,

\(^8\) Please see ISCC EU System Document 202 “Sustainability Requirements”
with some differing requirements under ISCC PLUS which are described in the following sub-chapters.

11.1 Deviations with respect to emission factors

Within ISCC PLUS, emission factors can be individually calculated or come from official sources like the Renewable Energy Directive (RED) or Annex I of the ISCC EU System Document 205 “GHG Emissions”. Furthermore, values based on Ecoinvent or other relevant databases or literature can be used, if applicable. Recognized methodologies for individual calculations are next to the RED or ISCC also ISO 14040/44 or ISO 14064/67. The methodology used must always be verifiable during the audit or alternatively the supplier must be ISCC or ISO certified.

11.2 Calculation of regional GHG values for cultivation (\(e_{ec}\))

Additionally, for regional averages for cultivation that can be calculated for countries outside the European Community, where no typical emission values for cultivation (NUTS2 values) exist, it is possible under ISCC PLUS for third parties (e.g. companies, plantation owners, associations) to calculate typical GHG emissions for cultivation. The methodology shall follow ISCC’s requirements and ISCC should be informed whenever such values are calculated. However, a submission to the European Commission is not required.

11.3 Calculation of individual GHG values for cultivation (\(e_{ec}\))

In case of individual GHG emission calculations for a group of farms or plantations, the averaging of input values and GHG emission values is accepted under ISCC PLUS.

11.4 Aggregation of different GHG values

Under ISCC PLUS, the aggregation of different incoming GHG values is possible for all input materials of the same kind.

11.5 Allocation of GHG emissions

Under ISCC PLUS, the allocation of emissions to main and co-products can be based on the energy content of both products (see 4.3.8.1 ISCC EU System Document 205 “GHG Emissions”), but other types of allocation (e.g. based on mass) are also possible. The most suitable allocation method should always be used, e.g. if the main product is used energetically an energetic allocation should be applied.
11.6 Life cycle coverage

Under ISCC PLUS, the GHG emission calculation can either cover the whole life cycle of the product (from cradle-to-grave), or only the emissions up to the factory gate (from cradle-to-gate). It must always be clearly highlighted on the sustainability declaration of the product if the cradle-to-gate approach is used. If required, further information on the additional emission to be included for the product must be provided to the recipient of the material.

Under ISCC PLUS, the calculation of GHG emission covering the whole life cycle of the product (Life cycle assessment, LCA) must be conducted according to the requirements of ISO 14040/ 14044/ 14067.

12 Group Certification

The ISCC EU System Document 206 “Group Certification” specifies requirements for the certification of groups, including the principles for sampling.

This System Document applies equally for ISCC EU and ISCC PLUS.

13 ANNEX – ISCC EU and ISCC PLUS: Overview Differences

13.1 General differences between ISCC EU and ISCC PLUS

<table>
<thead>
<tr>
<th>Issue</th>
<th>ISCC EU</th>
<th>ISCC PLUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognition and Accreditation</td>
<td>Recognised by the European Commission (EC) to demonstrate compliance with the legal requirements of the RED and FQD. Surveillance by German BLE. Surveillance and accreditation by ANSI</td>
<td>ISCC PLUS is a voluntary certification standard for non-regulated markets. Surveillance and accreditation by ANSI</td>
</tr>
<tr>
<td>Scope of application</td>
<td>Biofuel markets in the EU</td>
<td>Biofuel markets outside EU and bioenergy, food, feed, chemicals/technical applications</td>
</tr>
<tr>
<td>Acceptance of other certification schemes</td>
<td>Acceptance of all national and voluntary schemes that are recognized by the EC. For waste and residues, schemes are only accepted upon a product life cycle</td>
<td>Only ISCC (ISCC certification of the whole upstream supply chain required).* Acceptances of further schemes possible upon positive benchmarking</td>
</tr>
</tbody>
</table>
positive benchmark. So far, only RedCert EU, RSB and 2BSvs have been positively benchmarked

Materials currently covered

<table>
<thead>
<tr>
<th>ISCC EU</th>
<th>ISCC PLUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>All types of agricultural and forestry raw materials, waste and residues, biogas and algae</td>
<td>All types of agricultural and forestry raw materials, waste and residues, non-bio renewables and recycled carbon materials and fuels</td>
</tr>
</tbody>
</table>

Application of GHG emission requirements

<table>
<thead>
<tr>
<th>ISCC EU</th>
<th>ISCC PLUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory for all elements of the supply chain</td>
<td>Voluntary coverage (add-on “GHG Emissions”)</td>
</tr>
</tbody>
</table>

Reporting Requirements to the EC

<table>
<thead>
<tr>
<th>ISCC EU</th>
<th>ISCC PLUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes. Annually reporting of sustainable material for producer of final biofuel and certified elements at the beginning of the supply chain (e.g. FGP, CP)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

* Exception applicable for SAI compliant material cultivated in Germany

### 13.2 Differences between ISCC EU and ISCC PLUS with regard to traceability and chain of custody

<table>
<thead>
<tr>
<th>Issue</th>
<th>ISCC EU</th>
<th>ISCC PLUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer of positive credits to the next mass balance period</td>
<td>Only, if at least the equivalent amount of physical material (sustainable and unsustainable) is in stock. Transfer of credits between different sites not allowed</td>
<td>Positive credit transfer possible with no time limit even if no physical material is in stock. Transfer of credits to other sites of the same company, corporate group or joint venture possible for processing units and storage locations under certain conditions*</td>
</tr>
<tr>
<td>Mutual acceptance of ISCC EU and ISCC PLUS</td>
<td>Deliveries solely from ISCC PLUS certified companies not accepted</td>
<td>Deliveries from ISCC EU certified companies accepted (if material is “ISCC Compliant”)</td>
</tr>
<tr>
<td>Applicable claims</td>
<td>“ISCC Compliant” and “EU RED compliant”</td>
<td>“ISCC Compliant”. If applicable, claims for voluntary Add-ons used (ISCC claims and logos document)</td>
</tr>
</tbody>
</table>
GHG information on sustainability declaration

<table>
<thead>
<tr>
<th>Issue</th>
<th>ISCC EU</th>
<th>ISCC PLUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application of GHG requirements</td>
<td>Mandatory for all elements of the supply chain</td>
<td>Voluntary application of add-on “GHG Emissions”</td>
</tr>
<tr>
<td>Specific GHG requirements for final products</td>
<td>Yes. Producer of final biofuel and downstream supplier have to report GHG emissions of biofuel, relevant fossil fuel comparator, GHG emission savings (compared to relevant fossil fuel), and statement if processing unit of final biofuel* was in operation on or before 5 October 2015</td>
<td>No. Voluntary if requested by final customer/market. Application of add-on “GHG Emissions” along the supply chain is precondition</td>
</tr>
</tbody>
</table>

* Conditions for transfer of credits between sites under ISCC PLUS: Sites are part of same company and are located within national borders or sharing an inland border, applicable for same kind of product, site-specific mass balances are in place, sites are certified by the same certification body.

13.3 Differences between ISCC EU and ISCC PLUS with regard to GHG emission calculation

* According to the RED a processing unit shall be considered to be in operation if the physical production of biofuels has taken place