ISCC Credit Transfer System

Version 1.0

Document Title: ISCC Credit Transfer System

Version 1.0

Content

1 Introduction

The aviation sector has set itself the ambitious goal of achieving net-zero emissions by 2050.[1] With aviation generally considered a 'hard-to-abate' sector, widespread adoption of sustainable aviation fuels (SAF) is recognised as a key lever to achieving ambitious emission reduction goals. To accelerate the aviation sector's transition towards net-zero, a rapid ramp-up of SAF deployment is needed. International agreements such as the International Civil Aviation Organization's (ICAO) CORSIA and regional SAF policies such as the EU's ReFuelEU Aviation Regulation will play a major role therein, in addition to voluntary SAF purchases beyond SAF emissions reduction trajectories already mandated by governmental policies.

SAF as key lever towards net-zero

ISCC certification aims to safeguard the sustainability of feedstock and SAF production and ensure that greenhouse gas (GHG) emissions along the SAF's life cycle are calculated in line with established methodologies (e.g., according to the EU's revised Renewable Energy Directive or CORSIA). ISCC certification covers the complete SAF production chain and allows for the traceability of sustainable material from feedstock production through various processing, storage, and trading steps until delivery of SAF to the point of uplift.

ISCC certification

There is, however, currently no established system that secures traceability of transactions and credibility of sustainability claims downstream of SAF delivery, i.e., for aircraft operators, logistics providers and end-customers. This poses challenges for organisations wanting to reduce their emissions footprint from air travel or freight, as the lack of robust tracking mechanisms for SAF transactions increases the risk of insufficient traceability and the potential for inaccurate sustainability claims.

Risk of incorrect claims

The ISCC Credit Transfer System provides a solution to this challenge. Extending the traceability of SAF transactions and sustainability claims downstream of SAF delivery, the system allows for the transfer of credible sustainability claims between SAF suppliers, aircraft operators, logistics providers, and end-customers. By making use of 'credits' as basic units of traceability within the system, participating organisations can transfer SAF claims via a standardised electronic registry operated by ISCC to partner organisations in their downstream value chain, allowing them to claim the SAF's sustainability benefits (e.g., the GHG emissions reduction) towards their voluntary climate disclosures.

ISCC Credit Transfer System

The ISCC Credit Transfer System closely follows the principles defined in widely recognised corporate GHG accounting standards by the Greenhouse

Following recognised principles

---

[1] Please see the International Civil Aviation Organization's (ICAO) communication on a net-zero 2050 global aspirational goal here, as well as the International Air Transport Association's (IATA) communication on net-zero carbon emissions by 2050 here.

Gas Protocol as well as established aviation sector guidance set by the Science Based Targets Initiative (SBTi). In practice, this involves closely following the physical flow of SAF up until its point of use (i.e., uplift and subsequent combustion by an aircraft), and keeping the related GHG reduction claims broadly within the same value chain. As such, organisations can credibly claim their contribution to in-sector GHG emissions reductions from SAF purchase and use.

In summary, the ISCC Credit Transfer System is governed by a clear and transparent set of rules, designed to secure traceability and credibility of SAF transactions and the resulting sustainability claims. The System is further comprised of an auditing framework, which utilises independent, third-party certification, in line with established ISCC auditing and verification principles.

Traceability and credibility of SAF claims

2   Scope and Normative References

This document specifies the requirements applicable to organisations, i.e., System Users, participating in the ISCC Credit Transfer System.

Applicable requirements

In addition, System Users are required to take note of and accept the Terms of Use for the ISCC Credit Transfer System.[2] The Terms of Use regulate the use of the ISCC Credit Transfer System by System Users and the resulting rights and duties of the involved parties.

Terms of Use

3   System Basics

3.1   Basic Functioning of the System

Supply chain certification systems establish SAF compliance with sustainability requirements and GHG emissions savings, as well as its traceability until delivery to an airport. The ISCC Credit Transfer System extends the traceability of SAF transactions and sustainability claims to additionally include organisations in the downstream value chain not covered by mass-balanced based certification systems. Namely, this includes aircraft operators, logistics providers (such as freight forwarders) and aviation end-customers (including organisations with carbon footprints in business travel and/or air freight).

Extension of traceability

---

[2] The Terms of Use for the ISCC Credit Transfer System can be found here on the ISCC website, and must be accepted by System Users upon account creation in the ISCC Registry.

Figure 1 provides an overview of how the ISCC Credit Transfer System builds on and interfaces with mass balance-based certification systems.
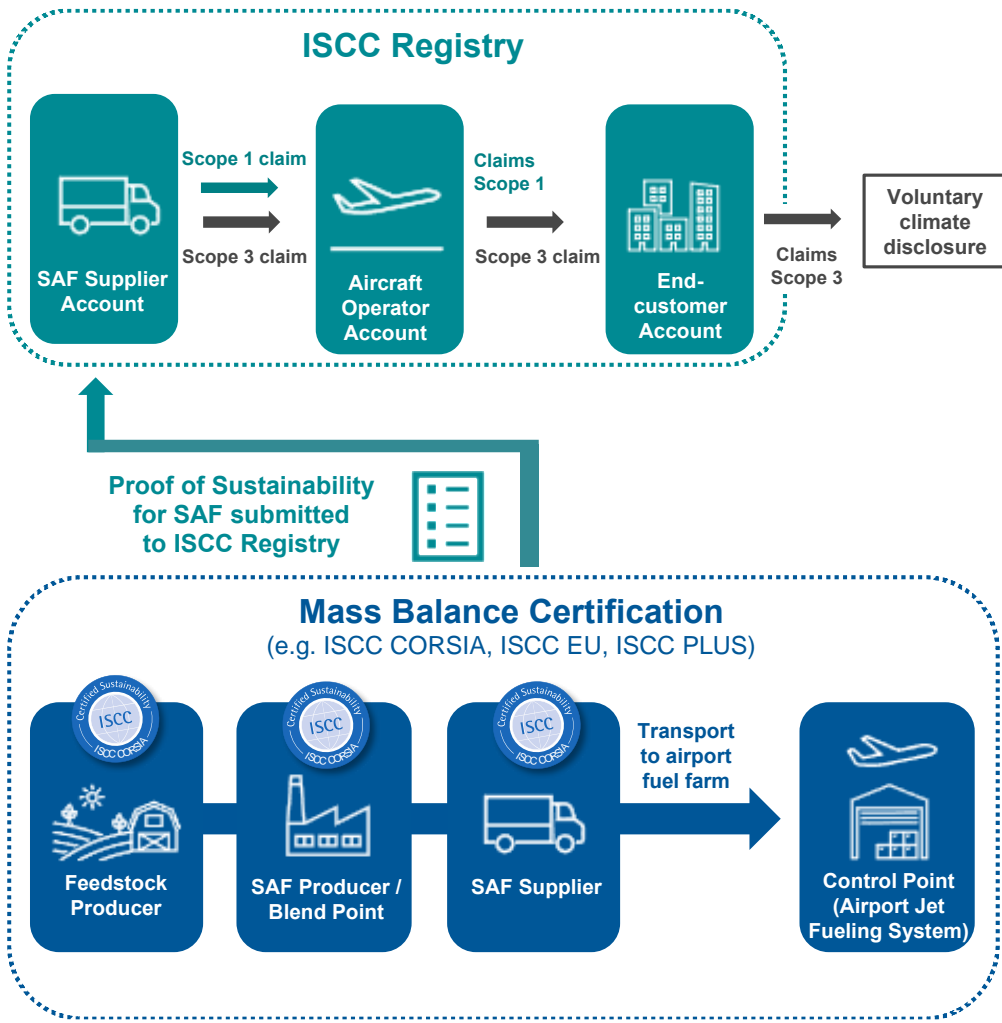
Figure 1: The ISCC Credit Transfer System builds on mass balance certification

The ISCC Credit Transfer System works as follows: The SAF supplier delivers sustainably certified SAF[3] on a mass balance basis to the 'control point'. The control point is defined as the point in the supply chain where SAF enters an airport jet fuelling system (e.g., the commingled storage or similar).

Once SAF has been delivered to the control point, and all other requirements for SAF credit registration (see section 6.1) are fulfilled, SAF suppliers may register credits corresponding to the delivered amount of neat (i.e., unblended)[4], certified SAF via its account in the ISCC Registry. This is done by submitting the Proof of Sustainability[5], or PoS, information for that SAF batch in the Registry.

---

[3] This includes SAF blends as well as co-processed SAF, provided they are certified to the respective ASTM Standards.

[4] Or bio-based share in the case of co-processed SAF.

[5] The Proof of Sustainability is a document specifying the sustainability characteristics for a specific quantity (batch) of SAF.

The basic unit of traceability within the ISCC Registry is a credit. Each metric ton (mt) of neat, certified SAF registered in the ISCC Registry results in the creation of both a Scope 1 and a Scope 3 credit.[6] To preserve data integrity, once registered, credits are immutable and may not be altered or edited.

Credit as unit of traceability

From their Registry account, SAF suppliers can transfer credits to the Registry accounts of organisations in its downstream value chain, including aircraft operators, logistics providers or aviation end-customers. These organisations, in turn, may then retire those credits or further transfer them to organisations within *their* downstream value chain. Alternatively, SAF suppliers may choose to immediately retire credits *on behalf of* organisations within their downstream supply chains (i.e., aircraft operators, logistics providers or aviation end-customers), without those organisations having to be System Users, and thus Registry users themselves.

Transfer of SAF credits

When credits are retired by a System User to allow for claims being made on the sustainability attributes associated with those credits, they are removed from the retiring System User's account, and from circulation in the ISCC Registry. Upon retirement of SAF credits, the ISCC Registry automatically issues a retirement declaration to the retiring party. This declaration includes the necessary information for the respective organisation (and/or their downstream partners on behalf of whom they retire) to claim the sustainability characteristics associated with the retired credits (e.g., the GHG emissions reduction) in their corporate emissions or broader sustainability reporting.

Retirement of SAF credits

Figure 2 illustrates the process of credit registration, transfer and retirement, in relation to the SAF value chain, in a simplified, exemplary scenario.

Credit transfers and physical value chain

---
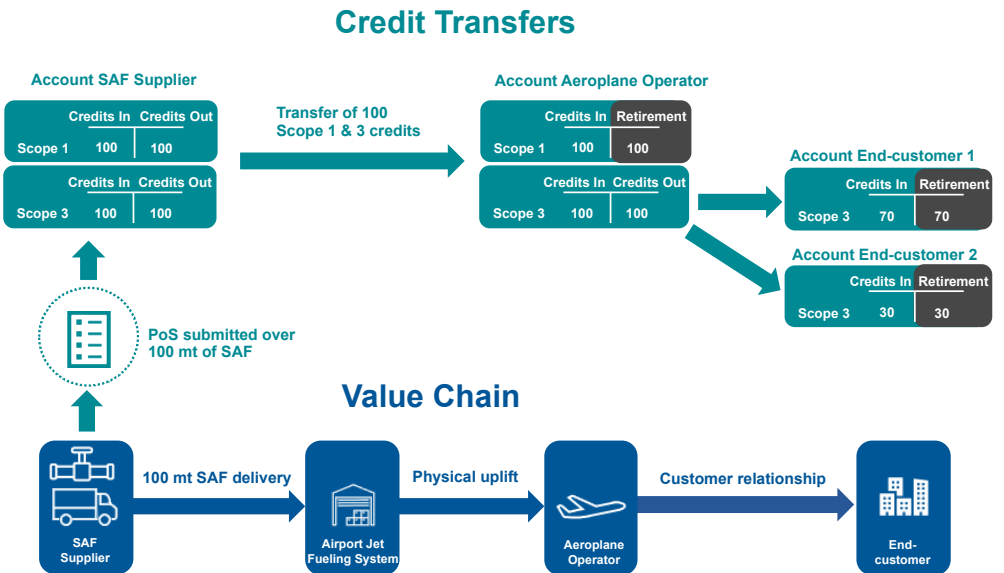
[6] In line with GHG Protocol standards, while only one organisation can claim Scope 1 emissions due to their direct nature, multiple companies can claim the same Scope 3 emissions, provided they occur at different points in the value chain. Please note that both a Scope 1 and Scope 3 credit feature sustainability attributes associated with one metric ton of neat, certified SAF (which includes, notably, its life cycle GHG emissions value).

Figure 2: Relationship of SAF value chain with the flow of Scope 1 and 3 credits in the ISCC Registry for an exemplary scenario

The ISCC Credit Transfer System features an auditing and verification framework. All credit transactions begin with the SAF supplier (i.e., the entity that initially registers credits), which is required to be certified under a recognised certification scheme, and is thus regularly audited by ISO-accredited, independent, third-party certification bodies.

Auditing and verification

Organisations in the downstream value chain, i.e., aircraft operators, logistics providers and aviation end-customers, do not require individual certification. However, if involved in credit handling (i.e., transferring and/or retiring credits), they need to be registered as account holders in the ISCC Registry, thereby contributing to the full traceability of their credit transfers and retirements. Chapter 7 'Auditing and Verification' provides further details on the auditing and verification framework for the ISCC Credit Transfer System.

Necessity of ISCC Registry account

3.2 System Elements

The ISCC Credit Transfer System consists of two elements, as described in the following:

System elements

> The ISCC Credit Transfer System Document

> The ISCC Registry

The **ISCC Credit Transfer System Document** (this document) explains the background and motivation for setting up the system, lays out its Guiding Principles, and details the general functioning of the system, including the handling of credits within the Registry (i.e., registration, transfer, and retirement of credits). Furthermore, it includes requirements for auditing and verification as part of the ISCC Credit Transfer System. Lastly, it features provisions and recommendations on how GHG emissions reductions from SAF credits retired through the ISCC Registry should be accounted for and claimed in companies' GHG inventories.

System Document

The **ISCC Registry** is a secure and standardised database in which the registration, transfer and retirement of credits is recorded.[7] In the Registry, movement of credits can be clearly tracked, helping to mitigate the risk of double counting of SAF volumes and the related GHG emissions reductions. Once credits are retired, the Registry will generate a retirement declaration for the retiring organisation to substantiate the emissions reductions claims associated with those credits. Featuring a public retirement table, key, non-confidential information on SAF credit retirements via the Registry is made publicly accessible. The Registry is designed to function in accordance with the requirements as set out in this system document.

Registry

---

[7] Please note that the ISCC Registry tracks transactions of credits related to sustainable product (i.e., SAF). It does not track money flows, contracts, or commercial documents underpinning the movement of those credits.

Figure 3 depicts the System Document and the Registry as the two key elements of the ISCC Credit Transfer System.
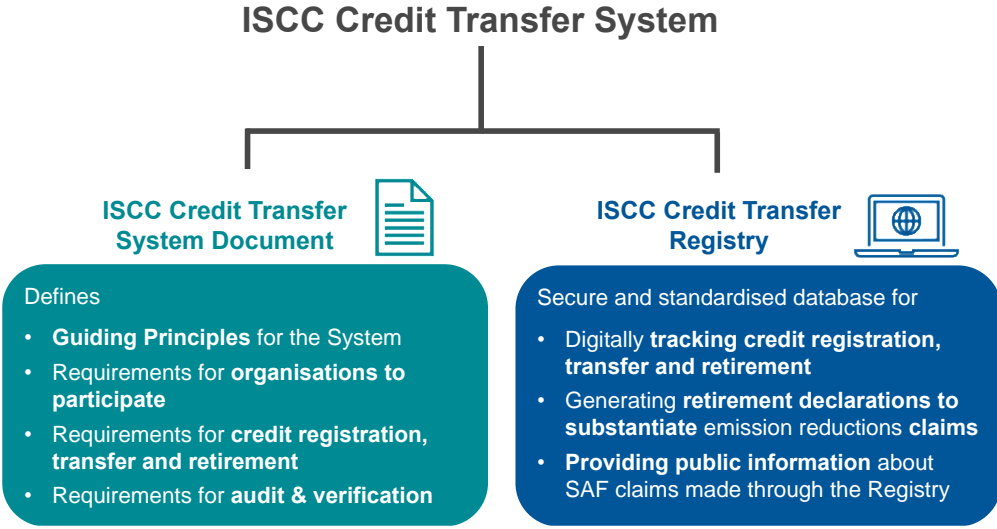
Key elements

ISCC Credit Transfer System

ISCC Credit Transfer System Document

Defines
- **Guiding Principles** for the System
- Requirements for **organisations to participate**
- Requirements for **credit registration, transfer and retirement**
- Requirements for **audit & verification**

ISCC Credit Transfer Registry

Secure and standardised database for
- Digitally **tracking credit registration, transfer and retirement**
- Generating **retirement declarations to substantiate** emission reductions **claims**
- **Providing public information** about SAF claims made through the Registry

Figure 3: The two key elements of the ISCC Credit Transfer System

4   Guiding Principles for the ISCC Credit Transfer System

To deliver on its intention of supporting the scale-up of SAF in a transparent and credible way, the ISCC Credit Transfer System follows a set of Guiding Principles, as laid out in the following. For any transaction under the ISCC Credit Transfer System, it must be guaranteed that these Guiding Principles are followed.

Guiding Principles

4.1   SAF Complies with Strict Sustainability Requirements

SAF can live up to its promise only if it delivers GHG emission reductions while avoiding detrimental environmental and social effects from production.

Sustainability of SAF

Comprehensive requirements for feedstock sustainability, life cycle GHG emissions savings and supply chain traceability have been put in place under the International Civil Aviation Organisation's (ICAO) CORSIA scheme and the EU's Renewable Energy Directive (EU RED II). Certification systems developed and recognised under CORSIA and the EU RED II allow for the verification of the SAF's sustainability performance along its entire production value chain.

Certification systems

To safeguard the sustainability of SAF based on which credit transfers are made, only SAF that is certified under recognised certification schemes is therefore eligible for entering the ISCC Credit Transfer System. This provides all participating organisations, including aircraft operators, logistics providers, and aviation end-customers, the assurance that they are making claims based on SAF that conforms to strict and internationally recognised sustainability standards.

Certification eligibility

4.2 Credit Transfers Follow Recognised Accounting Principles

The ISCC Credit Transfer System is set up to closely follow the principles defined in widely recognised corporate GHG accounting standards by the Greenhouse Gas Protocol (GHGP) as well as in established aviation sector guidance by the Science-Based Targets Initiative (SBTi).

Following GHGP & SBTi principles

The GHGP classifies GHG emissions for each reporting company into three categories, or 'scopes'. Scope 1 emissions are direct emissions from operations owned or controlled by the reporting company. Scope 2 emissions are indirect emissions from the generation of energy (primarily electricity) purchased by the reporting company. Scope 3 emissions are all indirect emissions that occur in the value chain of the reporting company (excluding those covered in scope 2).[8] Annex II provides more information on the different scopes as defined by the GHGP.

GHGP scopes

The GHGP requires that emissions accounted for in scope 1 are direct emissions from sources owned or controlled by the reporting company.[9] This includes fuels combusted in company owned/controlled mobile combustion sources (e.g., aircraft). In line with this principle, under the ISCC Credit Transfer System, aircraft operators can only account for scope 1 emissions reductions if they actually physically uplift the SAF.[10]

SAF use under scope 1

The GHGP further stipulates that GHG emissions accounted for in scope 3 pertain to all indirect emissions that occur in the value chain of the reporting company (excluding emissions accounted for in scope 2).[11] Consequently, a reduction in scope 3 emissions of a logistics provider or an aviation end-customer should generally be based on SAF use by an aircraft operator in that organisation's upstream value chain. In line with this logic, ISCC expresses a preference for SAF credit transactions to be structured so that an organisation (e.g., an end-customer) claiming a scope 3 emissions reduction sits in the downstream value chain of the organisation claiming the related scope 1 emissions reduction (i.e., the aircraft operator). Recognising the nascent stage of the SAF market, ISCC acknowledges the practical challenges associated with strict adherence to the 'same value chain' principle, and the necessity for a degree of flexibility in SAF credit transactions to facilitate the scale-up of SAF usage.

SAF use under scope 3

---

[8] Source: Greenhouse Gas Protocol 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard' (p. 28), accessible here.

[9] Greenhouse Gas Protocol 'Corporate Accounting and Reporting Standard' (p. 27), accessible here.

[10] In most cases, due to airport logistics, allocation of SAF molecules to individual aircraft of a specific aircraft operator is not practical or even impossible. In the ISCC Credit Transfer System, 'physical uplift' of SAF by an aircraft operator is therefore regarded as fulfilled if the SAF has been delivered to the airport jet fueling system the aircraft operator's aircraft is fueled from, followed by contractual allocation of the neat SAF volume to that operator.

[11] Source: Greenhouse Gas Protocol 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard' (p. 28), accessible here.

As the GHGP, in its current form[12], offers limited guidance applicable to the purchase and accounting of scope 3 emissions reductions from SAF, the ISCC Credit Transfer System also relies on requirements set by the Science-Based Targets Initiative (SBTi) in their Aviation Sector Guidance on how businesses should account for SAF use against their science-based (scope 3) targets.[13] These requirements include, but are not limited to, obtaining reasonable proof of SAF consumption/combustion, and proving a clear chain of custody for SAF consumption down the value chain. More information on how the ISCC Credit Transfer System aligns with SBTi requirements may be found within Annex III.

Additionality

Another core concept defined by the GHGP is that of additionality. The GHGP defines additionality as a criterion for assessing whether a project has resulted in GHG emissions reductions in addition to those that would have occurred in absence of the project.[14] While defined by the GHGP primarily in the context of carbon offsetting, additionality is also crucial when applied to sustainability and emissions reduction claims based on SAF.

As SAF is used by organisations to meet certain regulatory obligations (such as fuel suppliers under SAF mandates, or aircraft operators under GHG reduction schemes), additionality rules are required insofar as they help safeguard the integrity and real-world climate impact of voluntary purchases of emissions reductions from SAF use by aircraft operators, logistics providers and/or aviation end-customers. As the aim of the ISCC Credit Transfer System is to promote fast aviation decarbonisation via an accelerated uptake of SAF beyond policy-mandated emissions reduction trajectories, the principle of additionality is also applied for voluntary emissions reduction claims from SAF use under the ISCC Credit Transfer System.

Avoidance of double counting

Further, of critical importance is the avoidance of double counting. The GHGP defines double counting as two or more reporting companies claiming the same emissions or reductions in the same scope, or a single company reporting the same emissions in multiple scopes.[15] Broadly speaking, the risk of double counting is the potential for emissions reductions to be counted more than once towards a climate change mitigation effort. Double counting avoidance is essential for environmental integrity, as it would lead to actual GHG emissions being higher in than what individual organisations report them to be. The ISCC Credit Transfer System features a range of measures to mitigate the risk of double counting SAF emissions reductions. These include mandating the use of the ISCC Registry for recording all SAF credit transactions, providing key information on credit retirements publicly, and

---

[12] ISCC is aware of the ongoing stakeholder revision process around the GHG Protocol's suite of corporate GHG accounting standards and will closely follow the developments around the acceptance of market-based accounting approaches in a GHGP context.

[13] The Science Based Targets Initiative's (SBTi) 'Aviation Sector Guidance' (p. 32), accessible here.

[14] Greenhouse Gas Protocol 'A Corporate Accounting and Reporting Standard' (p. 96), accessible here.

[15] Greenhouse Gas Protocol 'GHG Protocol scope 2 Guidance' (p. 101), accessible here.

requiring independent third-party certification of SAF suppliers, while referencing internationally recognised accounting rules and standards.

Closely aligning with the principles set by the GHGP and SBTi where possible and reasonable, the ISCC Credit Transfer System aims to provide purchasers of emissions reduction benefits from SAF (e.g., businesses with significant carbon footprints in business travel or air freight) the opportunity to make reputable claims about these voluntary emissions reductions.

5   Participants in the ISCC Credit Transfer System

The ISCC Credit Transfer System features four types of System Users, representing four distinct types of air transport value chain entities that are typically involved in the supply and purchase of SAF and the related emissions reductions:

> SAF suppliers

> Aircraft operators

> Logistics providers

> Aviation end-customers

Table 1 details how each of the four System User types is defined under the ISCC Credit Transfer System.

System User type	Definition
SAF supplier	Entity that supplies SAF, on a mass balance basis, to the control point, i.e., the jet fuelling system of an airport. The SAF supplier has the SAF in its chain of custody system at the time of credit registration.
Aircraft operator	Entity that operates aircraft, consumes aviation fuel and provides air transport services for travelling passengers and freight. Aircraft operators include commercial airlines, freight carriers, and private aircraft.
Logistics provider	Entity that arranges transport services with aircraft operators on behalf of aviation end-customers. Includes freight forwarders and travel management companies. **Freight forwarders** are entities that arrange aviation transport services on behalf of end-users of freight transport, thereby acting as delegate between the company that makes the shipment (i.e., the shipper) and the carrier (i.e., the aircraft operator). **Travel management companies** are entities that arrange air transport services on behalf of business travellers.
Aviation end-customer	Includes business travellers, shippers and intermediaries. **Business travellers** are businesses with employees that are actively involved in business travel by air, in aircraft operated by aircraft operators. Business travellers may

	hire travel management companies to arrange air transport services on their behalf or may hire aircraft operators directly.
	Shippers are purchasers of freight transport services with freight that they require to be transported by air. Shippers may hire freight forwarders to arrange air transport services on their behalf or may hire aircraft operators directly.
	Intermediaries are entities acting as mediators between two or more organisations by facilitating the exchange of goods, services, or information. Under the ISCC Credit Transfer System, intermediaries may only act on behalf of third-party organisations (e.g., other aviation end-customers) in performing SAF credit transactions in line with the requirements laid out in this System Document.

Table 1: System User types in the ISCC Credit Transfer System

An organisation wishing to participate in the ISCC Credit Transfer System must complete the sign-up form and accept the Terms of Use on the ISCC Registry webpage.

Becoming an ISCC System User

A SAF supplier must be certified as trader under either ISCC or an alternate certification scheme benchmarked as equivalent by ISCC[16], to register credits in the ISCC Registry. If not yet certified, a SAF supplier will need to follow the standard registration and certification process under ISCC or another approved certification scheme.[17]

SAF suppliers

Aviation end-customers are not necessarily required to become System Users. If their upstream value chain partners (SAF suppliers, aircraft operators or logistics providers) are already System Users of the ISCC Credit Transfer System, they may retire credits on the end-customers' behalf.

Aviation end-customers

In selected scenarios, aircraft operators may not need to become a System User, either – if Scope 3 credits are sold directly by the SAF supplier to a logistics provider or aviation end-customer. In such a scenario, the SAF supplier needs to first retire Scope 1 credits *on behalf of* the aircraft operator, nullifying the need for the aircraft operator to have a Registry account.

Aircraft operators

Once confirmed as a System User, ISCC, as the Registry administrator, will create an account for the organisation in the ISCC Registry, corresponding to the System User type of that organisation. As part of the registration process, the organisation must indicate a Primary Contact Person. The Primary Contact Person is responsible for managing all processes (including registration, transfer, and retirement of credits) related to the organisation's Registry account and will be considered as focal point by ISCC for any communication or related tasks within the ISCC Credit Transfer System. The Primary Contact Person is allowed to provision access for to up to two (2) Further Contact Persons who may perform transactions within the ISCC Credit

Account creation

---

[16] Certification schemes that have been benchmarked positively against ISCC's trader certification will be listed publicly on ISCC's website.

[17] The process for obtaining ISCC certification is explained on the ISCC website here.

Transfer System. Primary Contact Persons remain responsible for all transactions that are performed within the System User account.

Each System User type is authorised to perform a clearly defined set of actions in the Registry, as detailed in Table 2.

System User type	Can register Scope 1 & 3 credits?	Can transfer Scope 1 credits?	Can transfer Scope 3 credits?	Can retire Scope 1 credits?	Can retire Scope 3 credits?
SAF supplier	Yes	Yes	Yes	Yes	Yes
Aircraft operator	No	No	Yes	Yes	Yes
Logistics provider	No	No	Yes	No	Yes
Aviation end-customer	No	No	No	No	Yes

Table 2: System User types and their options for handling credits in the Registry

Actions by the System User within the ISCC Registry – i.e., registration, transfer, and retirement of credits – will only be possible once the activation of the Registry account has been confirmed by ISCC as the Registry administrator.

6 Requirements of the ISCC Credit Transfer System

In the following, requirements are laid out in detail regarding the eligibility of SAF and the manner in which credits are to be registered, transferred, retired, and subsequently claimed.

6.1 Eligibility of SAF for Credit Registration

The Guiding Principles require that SAF subject to credit transfers complies with strict and internationally recognised sustainability requirements (see section 4.1). SAF is therefore only eligible to serve as basis for credit registration in the ISCC Registry if it is certified as sustainable under one of the following certification schemes:

> A sustainability certification scheme (SCS) recognised by ICAO under CORSIA, or

> A voluntary scheme (VS) recognised by the European Commission under the revised Renewable Energy Directive (RED II), or

> ISCC PLUS[18]

The Guiding Principles further require additionality of SAF that serves as basis for credit registration (see section 4.2). SAF credit transactions must therefore generate emissions reductions beyond those already mandated by compliance schemes.

The determination as to whether a GHG emissions reduction associated with a SAF volume qualifies as additional can be challenging in practice, given the rapidly evolving SAF regulatory landscape. For purposes of being claimed towards voluntary climate targets, an emissions reduction from SAF is considered non-additional, and thus non-eligible for use under the ISCC Credit Transfer System, if that emissions reduction (or the SAF volume through which it is generated) is also used under compliance schemes.

Therefore, the use of SAF under the following types of compliance schemes precludes the use of the associated scope 3 emissions reductions under the ISCC Credit Transfer System:

> SAF blending mandates (e.g., under the ReFuelEU Aviation Regulation)[19]

> SAF opt-in schemes (e.g., under the Netherlands Energy for Transport Regulation or United Kingdom Renewable Transport Fuel Obligation)[20]

> GHG reduction schemes for aircraft operators (e.g., CORSIA, EU ETS)[21]

ISCC provides a publicly available list of compliance schemes where SAF use is considered non-compliant with the additionality principle and which thus preclude the use of the associated scope 3 emissions reductions under the ISCC Credit Transfer System.[22] ISCC will continuously monitor the list of compliance schemes, evaluating whether updates to the list are required (i.e., adding or removing schemes). ISCC will remain actively engaged with relevant stakeholders and platforms to work towards a harmonised understanding and cohesive implementation of the additionality principle across the broader ecosystem. System Users are encouraged to contact

---

[18] ISCC PLUS certified SAF is eligible provided the SAF has been mass balanced throughout the supply chain, rather than having been subject to the 'multi-site credit transfer' mechanism possible under ISCC PLUS, as described in section 9.3.1 of the ISCC PLUS system document (available here).
Sustainability declarations issued under ISCC PLUS are required to state whether or not a 'multi-site credit transfer' has been conducted in the product's upstream supply chain.
In addition, it is required that the GHG add-on is applied throughout the supply chain, to allow for accurate calculation of life cycle emissions of ISCC PLUS certified SAF.

[19] Emissions reductions from a SAF volume produced to comply with a SAF blending mandate are considered non-additional as this volume would have been produced irrespective of additional voluntary demand.

[20] Emissions reductions from a SAF volume used under SAF opt-in schemes are considered non-additional as the end-customer would effectively be buying emissions reductions that were already required by that scheme.

[21] Emissions reductions from SAF used by aircraft operators under GHG reduction schemes are considered non-additional as the end-customer would effectively be buying emissions reductions that were already required by that scheme.

[22] This list is available on the ISCC website here.

ISCC to discuss additionality considerations in specific scenarios under the ISCC Credit Transfer System.

Additionality & credit registration

Importantly, if a GHG emissions reduction associated with a SAF volume is considered non-additional (i.e., it is used under one or more of the compliance schemes included in the list referenced above), no credits can be registered for that SAF volume in the ISCC Registry. Compliance with the additionality principle are checked both at SAF supplier level (during the SAF supplier's third-party certification audits) and aircraft operator level (via declarations in the ISCC Registry).

Availability of PoS

The registration of credits in the ISCC Registry requires that the PoS for a given batch of SAF is still available for submission (see also section 6.2). This provides a safeguard for additionality, as the PoS would no longer be available for submission to the Registry if the underlying SAF volume had already been used under a fuel supplier compliance scheme (e.g., a SAF blending mandate or opt-in scheme).

In some cases, the PoS for a batch of SAF may no longer be available due to having been submitted to competent authorities in the upstream value chain (e.g., under a fuel supplier incentive scheme). Provided the incentive scheme for which the PoS was used does not qualify the emissions reduction associated with the SAF volume as non-additional, a Proof of Compliance (PoC) document may be used as basis for credit registration in the ISCC Registry instead.

Following GHGP and SBTi

Aligning with the GHGP's logic for scope 1 and 3 emissions accounting requires closely following the physical flow of SAF, coupled with its associated life cycle emissions and sustainability characteristics. Similarly, SBTi requires organisations claiming scope 3 emissions reductions from SAF to obtain reasonable proof of fuel consumption/combustion and prove clear chain of custody for SAF consumption down, rather than across, the value chain.[23]

Mass balance until control point

The use of a mass balance chain of custody model[24] (i.e., with sustainability characteristics coupled to the physical SAF flow) is mandated until the control point. The control point is defined as the point in the supply chain where the SAF enters the jet fuelling system of an airport (e.g., the commingled storage or similar). While instead defining the SAF blend point as the control point may provide reasonable assurance that the SAF is consumed in aviation, depending on the individual supply chain set-up, a SAF blend point may be located in a different country than the airport where SAF is uplifted and consumed. In contrast, defining the airport jet fuelling system as the control point allows for establishing a clear link of the physical SAF flow to the point of uplift and direct consumption, in line with GHGP and SBTi principles.

---

[23] Please refer to the SBTi Aviation Sector Guidance, v1.0, p. 32 (here), for the SBTi's requirements on corporate use of SAF.

[24] Please refer to the ISCC EU System Document 203 or ISCC CORSIA System Document 203 for more information on mass balancing.

Accordingly, credits may only be registered by a SAF supplier for SAF volumes that have been delivered to the control point. To substantiate SAF delivery to the control point during the audit, the SAF supplier will need to provide respective documentation to the auditor, including proof of delivery (e.g., in the form of a delivery document and/or commercial documents such as invoice or proof of payment).

SAF delivery to control point

In most cases, due to airport logistics, allocation of SAF molecules to individual aircraft of a specific aircraft operator is not practical or even impossible. For the purposes of proving 'physical uplift' and SAF consumption/combustion by an aircraft operator, it is therefore sufficient if the aircraft operator's aircraft is fuelled from a given airport's jet fuel distribution system into which the SAF was physically delivered.

Proving SAF consumption

6.2   Registration of SAF Credits

Following the delivery of SAF to the control point, the registration of credits refers to the process of recording a SAF batch and its associated sustainability characteristics in the ISCC Registry, with the purpose of tracking the further allocation of these sustainability characteristics, including the scope 1 and 3 emissions reductions, to beneficiaries.

Credit registration

An organisation wishing to register SAF credits must

Organisational requirements

> Conform to the definition of SAF supplier as defined in chapter 5

> Hold valid trader certification under any ISCC certification scheme or an alternate CORSIA or EU RED-approved certification scheme (provided that scheme has been recognised by ISCC as equivalent to ISCC's trader certification).[25] The trader certification shall ensure auditing against the requirements for SAF suppliers set out in section 7.2 of this document. Under ISCC, SAF suppliers prove compliance with the requirements set out in this document by becoming certified under a dedicated add-on certification in addition to their trader certification.

> Have an individual account in the ISCC Registry, with one account per certified System User

Before registering credits, SAF suppliers are required to upload their valid trader and add-on certificates as part of their account master data in the ISCC Registry. Only after having uploaded the respective certificate(s) can SAF suppliers register credits for SAF certified under that respective scheme.

Upload valid trader certificates

SAF suppliers must register credits for a SAF batch in the ISCC Registry no later than 12 months after its production date. In line with the Smart Freight Centre's Market Based Measures Accounting Framework, the 'production date of SAF' is defined as the date of issuance of the fuel's Certificate of

SAF Registration

---

[25] Certification schemes that have been recognised by ISCC as equivalent to ISCC's trader certification are listed publicly on ISCC's website here.

Analysis (CoA), Certificate of Quality (CoQ), or Refinery Certificate of Quality (RCQ).[26]

SAF in chain of custody

The SAF supplier shall only register credits for SAF that is in its chain of custody system at the time of credit registration.

Submission of PoS info

Credits are registered by the SAF supplier in the ISCC Registry via submitting the PoS information for a batch of SAF with the respective sustainability characteristics in the PoS data mask in the ISCC Registry.

Registration of neat, certified SAF

Only the amount of neat, i.e., unblended[27], certified SAF can be registered as credits. Each metric ton (mt) of neat, certified SAF, submitted via the PoS data mask in the Registry, results in the creation of both a Scope 1 and a Scope 3 credit. Importantly, Scope 1 and Scope 3 credits both feature the sustainability characteristics associated with the metric ton of neat, certified SAF (which includes, notably, its life cycle GHG emissions value).

Withdrawing SAF from mass balance

In line with ISCC requirements, the submission of the PoS information in the Registry requires that the SAF supplier withdraws the respective volume of SAF, with the same sustainability characteristics, from its mass balance. During the SAF supplier's trader certification audit, the auditor will check and verify that the SAF supplier registered credits correctly in its account in the ISCC Registry, corresponding to the SAF volumes and related sustainability characteristics withdrawn from the mass balance.

Booking out of other databases

To help mitigate the risk of double claiming of fuel volumes and related emissions reductions, if a SAF volume is registered in traceability databases used for regulatory compliance purposes (e.g., the Union Database under the EU RED or the German Nabisy database), it will first need to be booked out of that database before credits for that volume can be registered in the ISCC Registry. During the audit, the SAF supplier shall provide evidence to the auditor that the concerned SAF volume had been booked out of the relevant database before having been registered as credits in the ISCC Registry.

Required PoS information

In submitting PoS information for a batch of SAF in the ISCC Registry, the SAF supplier shall provide the following information:

SAF supplier information

> Name of SAF supplier (i.e., name of legal entity)

> Airport to which SAF was delivered

> Date on which SAF was delivered to airport

> Name of aircraft operator uplifting the SAF (i.e., to which scope 1 emissions reductions are allocated)

---

[26] This definition can be found in the FAQ section on the Smart Freight Centre's website here.
[27] Or bio-based share in the case of co-processed SAF.

PoS / batch information

> Unique PoS (i.e., batch) identification number

> Date of submission of PoS information in the ISCC Registry

> Name of SAF producer (optional to provide)

> Location of SAF production (optional to provide)

> Date of SAF production (optional to provide)

> Name of SAF blender (optional to provide)

> Location of SAF blending (optional to provide)

> Date of SAF blending (optional to provide)

Product information

> Product type/SAF conversion pathway (e.g., SAF (HEFA))

> Quantity of neat, i.e., unblended, certified SAF (in mt)[28]

> Energy content of neat, certified SAF (in MJ)

> Lower heating value (in MJ/kg)

> Feedstock (e.g., used cooking oil)[29]

> Country of origin of feedstock

> Sustainability certification of SAF (e.g., EU RED II or CORSIA)

> Feedstock category (i.e., information on whether feedstock was certified as primary product/co-product or waste/residue/by-product)

> Total life cycle GHG emissions value (in g CO_2eq/MJ), as certified under the respective sustainability certification scheme (e.g., ISCC EU)

  o Life cycle GHG emissions per life cycle step (e.g., feedstock cultivation, processing, transport and distribution; optional to provide)

> Indication of whether the life cycle GHG emissions value has been determined via actual (i.e., individually calculated) values, default values or a combination of both

---

[28] A SAF volume expressed in cubic meters (m^3) shall be converted to metric tons (mt) by using a standard average density value of 0.8 (i.e., 1 m^3 = 0.8 mt) for that volume to be registered as credits in the ISCC Registry.

[29] Please note that feedstocks may be denominated differently under different regulatory frameworks and certification schemes. For ISCC certified SAF, feedstocks must follow the wording established in the respective lists of materials (e.g., ISCC EU certified SAF must follow the wording laid out in the ISCC EU list of materials).

> Information on eligible SAF incentives used[30]

Upon data entry in the PoS data mask, the ISCC Registry conducts a range of automated checks to help ensure the correctness and consistency of the entered data. The SAF supplier will also have to declare, in the PoS data mask, that the information submitted to the Registry via the data mask is accurate and complete in line with the abovementioned data requirements.

Following the registration of credits in the ISCC Registry, the physical SAF volume on which credit registration is based is then considered as non-sustainable, thus prohibiting that further sustainability claims related to that physical volume of SAF are made. During the audit, the SAF supplier shall make available all needed documentation for the auditor to verify that certified SAF volumes registered as credits in the ISCC Registry

> Have not been registered more than once in the ISCC Registry

> Have not been registered in other registries with a similar purpose[31]

> Have not otherwise been sold/claimed as sustainable by the SAF supplier (e.g., by issuing a PoS copy or similar to hand over to authorities, aircraft operators, logistics providers, aviation end-customers, or other third parties)

Once credits have been registered in the ISCC Registry, they appear as an entry in the SAF supplier's account. Credits will show as a batch of credits or 'credit batch' in the Registry account, corresponding to the SAF volume registered by the SAF supplier via the PoS data mask. Importantly, each entry will feature both Scope 1 and Scope 3 credits stemming from the registered SAF volume, alongside the associated sustainability information as required above.

Once registered by the SAF supplier in the ISCC Registry, both Scope 1 and 3 credits are valid for 24 months.[32]

Figure 4 provides an overview over how a SAF supplier registers credits for a given volume of SAF in the ISCC Registry.

---

[30] SAF may benefit from certain incentives that do not preclude additionality as defined in section 6.1. In such cases, the emissions reduction associated with that SAF volume is still considered as additional and eligible for being entered in the ISCC Registry. For transparency purposes, the SAF supplier is nonetheless required to disclose which incentive the SAF batch has benefitted from.

[31] Work is ongoing to facilitate coordination between different registries that cover renewable fuel claims in order to avoid double issuance of fuel volumes and claims.

[32] Please note that the date of credit registration (i.e., submission via PoS info) is embedded in the credit's sustainability characteristics. As an example, credits that are registered on 10 July 2023 in the ISCC Registry are valid until and must be retired no later than 09 July 2025.
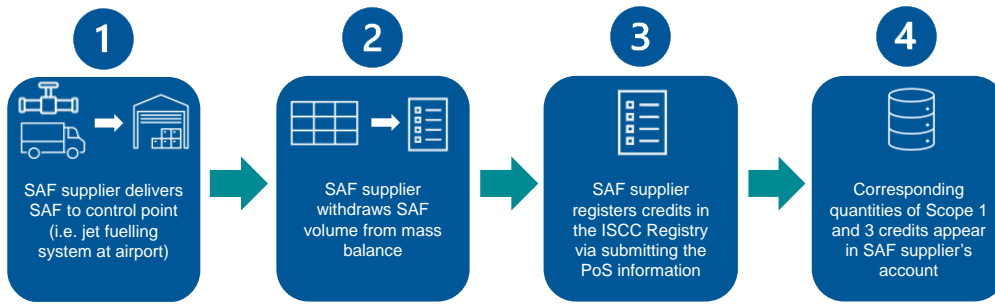
Figure 4: Process steps for registering credits in the ISCC Registry

The SAF supplier is required to maintain bookkeeping in line with the requirements applicable under the respective certification system it is certified under.[33] In addition to these requirements, the SAF supplier shall clearly document the SAF volumes registered as credits in the ISCC Registry.

Bookkeeping requirements

During the certification audit, the SAF supplier shall make available to the auditor transparent and complete documentation regarding those certified SAF volumes which were registered under the ISCC Credit Transfer System and those which were forwarded under other systems and for other purposes (e.g., for complying with SAF blending mandates), i.e., not used under the ISCC Credit Transfer System.

Transparency on SAF volumes

6.3 Transfer of SAF Credits

Once credits are registered in its account, the SAF supplier may transfer these credits to other System Users' active accounts in the ISCC Registry (e.g., to an aircraft operator's or logistic provider's account). These System Users, in turn, may further transfer credits to other active accounts in the ISCC Registry.

Transfer to other active accounts

Figure 5 provides an overview over how credits are transferred between two System Users' active accounts.

Process overview
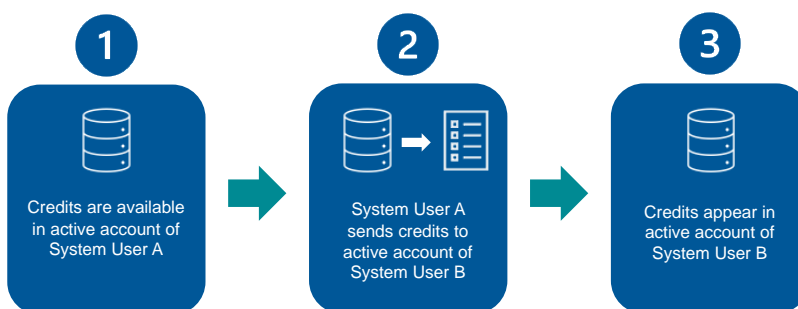
Figure 5: Process steps for transferring credits in the ISCC Registry

System Users shall only transfer SAF credits in the same form, i.e., with the same sustainability characteristics, as originally registered by the SAF supplier, thus preserving the immutability of credits. Credits originally

Split up of credit batches

---

[33] For certification under ISCC, please refer to the requirements for bookkeeping in line with ISCC EU System Document 203 and/or ISCC CORSIA System Document 203.

registered as one batch may be split and transferred in sub-batches, if required, to no smaller than 0,01 credits (10 kg of SAF).

In line with the principles defined by the GHG Protocol, a SAF supplier can transfer Scope 1 credits only to that aircraft operator which physically uplifted the SAF. As stated in section 6.1, for the purposes of proving 'physical uplift' by an aircraft operator, it is sufficient if the aircraft operator's aircraft is fuelled from the airport's jet fuelling distribution system into which the SAF was physically delivered.

Transfer of Scope 1 credits

For Scope 3 credits, the ISCC Credit Transfer System aligns with the SBTi requirements of proving clear chain of custody down, rather than across, the value chain.[34] Therefore, Scope 3 credits may only be transferred downstream in the value chain (e.g., from SAF supplier to aircraft operator to end-customer, or from SAF supplier directly to end-customer), never upstream (e.g., from end-customer back to aircraft operator) or across value chains (e.g., from aircraft operator to aircraft operator).

Transfer of Scope 3 credits

Table 3 details which System User type can send which type of credits (i.e., Scope 1 and/or Scope 3 credits) to which other System User type.

Options for transferring credits

System User type	Can transfer Scope 1 credits?	Can transfer Scope 3 credits?
SAF supplier	**Yes** (to aircraft operators uplifting the SAF)	**Yes** (to aircraft operators uplifting the SAF, logistics providers or end-customers)
Aircraft operator	**No**	**Yes** (to logistics providers or end-customers)
Logistics provider	**No**	**Yes** (to end-customers)
Aviation end-customer	**No**	**No**

Table 3: Options for System Users for transferring Scope 1 and Scope 3 credits

6.4   Retirement of SAF Credits

Retirement of SAF credits refers to the act of removing SAF credits from a System User's account (and therefore from circulation) within the ISCC Registry, with the intention of claiming the sustainability characteristics (e.g., the GHG emissions reduction) associated with those credits.

Removal of credits from circulation

Only organisations that are System Users of the ISCC Credit Transfer System and have an active account in the ISCC Registry can retire credits.

Account in Registry required

---

[34] Please refer to SBTI's Aviation Sector Guidance, p. 32.

System Users may only retire credits that are available within their account. It is not possible for System Users to retire credits that have not yet been transferred to their account, or that have already been transferred or retired from their account.

Retiring of credits is an irrevocable process, and retired credits cannot return to the System User's account.

Credits must be retired within 24 months following registration in the ISCC Registry.[35] This restriction is to safeguard the temporal correlation between SAF production, delivery, and combustion by an aircraft operator and the sustainability claims made based on that SAF.

Following GHGP logic, indirect value chain emissions (i.e., scope 3 emissions) for a reporting company occur as a result of direct emissions (i.e., scope 1 emissions) by another reporting company (see also section 4.2 and Annex II). A scope 1 emissions reduction for an aircraft operator (i.e., through the combustion of SAF) is thus a necessary precondition for scope 3 emissions reductions to occur for organisations in its downstream value chain. Accordingly, in the ISCC Registry, Scope 3 credits may only be retired at the same time, or after the related Scope 1 credits are retired.

The ISCC Credit Transfer System allows for flexibility insofar as System Users may retire credits for their own use (i.e., to claim the associated emissions reductions in their own GHG inventory) or on behalf of or for shared use with their downstream value chain partners.

Organisations at the end of the value chain (i.e., aviation end-customers) may choose to retire credits for themselves (by becoming ISCC System Users and opening a ISCC Registry account) or have credits retired on their behalf by a partner organisation in their upstream value chain (i.e., SAF suppliers, aircraft operators or logistics providers).[36] It is possible for Scope 3 credits retired by a logistics provider on behalf of an end-customer to be of shared use between the logistics provider and the end-customer. Both organisations will be named on the retirement declaration, providing each of them with a document to substantiate a scope 3 emissions reduction claim.

Importantly, System Users can only retire Scope 1 or Scope 3 credits for organisations in their downstream value chain.

---

[35] Please note that the date of credit registration (i.e., submission via PoS) is embedded in the credit's sustainability characteristics. As an example, credits that are registered on 10 July 2023 in the ISCC Registry are valid until and must be retired no later than 09 July 2025.

[36] An exception to this are intermediaries. Intermediaries, acting through their aviation end-customer account, may retire credits on behalf of other aviation end-customers.

Table 4 details the options for each System User type with regard to retiring credits in the ISCC Registry.

Retirement options

System User type	Can retire Scope 1 credits for own use?	Can retire Scope 1 credits for other organisations?	Can retire Scope 3 credits for own use?	Can retire Scope 3 credits for other organisations?
SAF supplier	No	Yes (for aircraft operators uplifting the SAF)	No	Yes (for end-customers)
Aircraft operator	Yes	No	No	Yes (for end-customers)
Logistics provider	No	No	Yes	Yes (for end-customers)
Aviation end-customer	No	No	Yes	No[37]

Table 4: Overview of System User types and their options for retiring credits

Once credits are retired by a System User, the ISCC Registry will issue a retirement declaration confirming that retirement to the System User.[38] The retirement declaration will contain the following information:

Retirement declaration

General information

> Unique retirement ID

> Date of issuance of retirement declaration

> Related unique credit batch ID(s) in ISCC Registry

> Name of System User retiring the credits

> Name of organisation on behalf of which the System User retires the credits

> Type of credits retired (i.e., Scope 1 or Scope 3)

> Quantity of credits retired

> Name of aircraft operator uplifting the SAF (i.e., to which scope 1 emissions reductions are allocated)

> Airport to which SAF was delivered

> Date on which SAF was delivered to airport

---

[37] An exception to this are intermediaries. Intermediaries, acting through their aviation end-customer account, may retire credits on behalf of other aviation end-customers.

[38] Please note that all retirement declarations will continue to be available for download in the retiring System User's Registry account.

PoS / batch information

> Name of SAF producer (if provided upon credit registration)

> Location of SAF production (if provided upon credit registration)

> Date of SAF production (if provided upon credit registration)

> Name of SAF blender (if provided upon credit registration)

> Location of SAF blending (if provided upon credit registration)

> Date of SAF blending (if provided upon credit registration)

Product information

> Product type/SAF conversion pathway (e.g., SAF (HEFA))

> Quantity of neat, i.e., unblended, certified SAF (in mt)

> Energy content of neat, certified SAF (in MJ)

> Feedstock

> Country of origin of the feedstock

> Sustainability certification of SAF

> Feedstock category

> Total life cycle GHG emissions value (in g CO_2eq/MJ), as certified under the respective sustainability certification scheme

  o Life cycle GHG emissions per life cycle step (if provided upon credit registration)

> Indication of whether the life cycle GHG emissions value has been determined via actual (i.e., individually calculated) values, default values or a combination of both

> Information on carbon reduction achieved (in mt of CO_2eq)

> % GHG emissions reductions achieved compared to relevant fossil reference values (EU RED II, CORSIA)[39]

> Information on eligible SAF incentives used

The retirement declaration as issued by the ISCC Registry includes a unique link and QR code, which lead to a secure page within the ISCC Registry. Through this, the authenticity of the retirement declaration may be validated (e.g., by an organisation's GHG inventory auditor). This secure page may only be accessed via the unique link or QR code included on the retirement declaration and is not publicly accessible.

Unique verification

---

[39] Under the EU RED II, the fossil reference value is 94 g CO_2eq/MJ (see EU RED II, p. 155). Under CORSIA, the fossil reference value is 89 g CO_2eq/MJ (see CORSIA Supporting Document, section 1.4.5).

Credits for SAF with differing sustainability characteristics may be merged and used for the purpose of a retirement declaration. In this case, the different credits' sustainability characteristics will be included on the retirement declaration to ensure full transparency.

Merging of sustainability characteristics

Certain aggregated information on retired credits will be made available publicly by the ISCC Registry via a public retirement table. This is to inform third parties, including regulators and civil society, thus enhancing overall stakeholder trust in the system. The following information may be made publicly available from each retirement declaration:

Public provision of retired credits

> Date of credit batch retirement

> Organisation that conducted the retirement (i.e., 'retired by')

> Organisation for which the retirement was conducted (i.e., 'retired for')[40]

> Type of credits retired (Scope 1 or Scope 3)

> Quantity of credits retired

> Product type/SAF conversion pathway

> GHG emissions reduction (in mt CO_2eq) compared to respective fossil reference value depending on sustainability certification of SAF[41]

> Information on eligible SAF incentives used

Figure 6 provides an overview of the credit retirement process in the ISCC Registry.
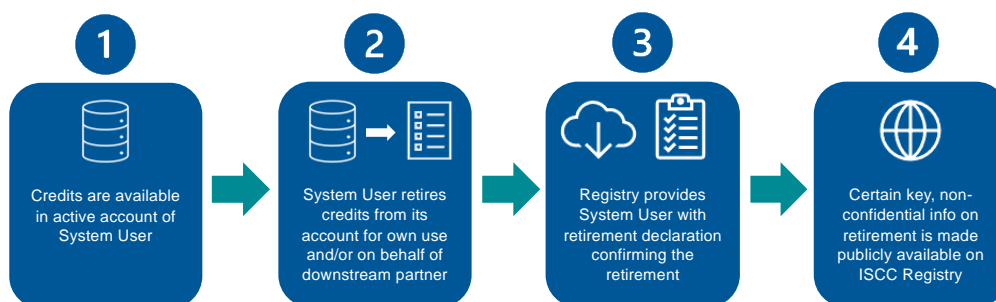
Process overview

Figure 6: Process steps for retiring credits in the ISCC Registry

6.5 Claiming of SAF Credits

Claiming SAF credits refers to the act of declaring information regarding the specified characteristics of SAF that is attributed to a particular organisation through the retirement of those credits from the ISCC Registry.[42]

Definition of claiming credits

---

[40] Aviation end-customers may request for their name to be anonymised in the public retirement table.

[41] Under the EU RED II, the fossil reference value is 94 g CO_2eq/MJ (see EU RED II, p. 155). Under CORSIA, the fossil reference value is 89 g CO_2eq/MJ (see CORSIA Supporting Document, section 1.4.5).

[42] Based on the definition of 'claim' under ISO 22095:2020 (accessible here).

An organisation is entitled to make claims related to credits only after those credits have been retired from the ISCC Registry. Only organisations referred to in the retirement declaration shall make claims related to the sustainability characteristics mentioned on that declaration.[43] Claims shall be limited to the information included on the retirement declaration.

Organisational claims

Claims made based on SAF credits retired from the ISCC Registry should follow best practice, established standards, and guidelines where possible, considering these standards and guidelines may be subject to amendments.[44] Notably, the following standards, guidelines and guidance documents should be taken into account and followed where appropriate:

Claims best practice

> The Greenhouse Gas Protocol's 'Corporate Accounting and Reporting Standard'[45] as well as 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard'[46]

> The Science Based Targets Initiative's (SBTi) 'Aviation Sector Guidance'[47]

> ISO 14083:2023 on the quantification and reporting of greenhouse gas emissions arising from transport chain operations[48]

> The Smart Freight Centre's 'Global Logistics Emissions Council (GLEC) Framework'[49]

> The Smart Freight Centre's 'Voluntary Market Based Measures Framework for Logistics Emissions Accounting and Reporting'[50]

> The World Economic Forum's (WEF) 'Sustainable Aviation Fuel Certificate (SAFc) Emissions Accounting and Reporting Guidelines'[51]

In general, claims based on SAF credits should be limited to those addressing emissions in the aviation sector, i.e., in-sector emissions, rather than out-of-sector emissions (which may include emissions from other transport sectors such as road transport). This ensures that organisations only report emissions reductions from SAF use for their actual air transportation activity and do not use the purchase of emissions reductions from SAF to offset emissions associated with other activities.

Addressing in-sector emissions

---

[43] In order to avoid double counting, aircraft operators must take care that emissions reductions allocated to specific downstream value chain partners (e.g., aviation end-customers) are not also included in the disclosure of reduced emissions to other downstream value chain partners.

[44] Organisations making claims based on credits retired from the ISCC Registry are advised to carefully examine and seek independent advice on the application of these claims under different frameworks (e.g., SBTi). Please note that ISCC cannot guarantee the applicability of claims or the acceptance by auditors under the SBTi or similar frameworks.

[45] Please find the GHGP Corporate Accounting and Reporting Standard here.

[46] Please find the GHGP Corporate Value Chain (Scope 3) Accounting and Reporting Standard here.

[47] Please find the SBTi Aviation Sector Guidance, v1.0, here.

[48] Please find the document for ISO 14083:2023 here.

[49] Please find the Smart Freight Centre's GLEC Framework here.

[50] Please find this Smart Freight Centre publication here.

[51] Please find the WEF SAFc Emissions Accounting and Reporting Guidelines here.

In addition, an organisation should only make claims for emissions reductions from SAF up to that organisation's total aviation emissions footprint in a given year.

Claims limited by aviation footprint

To best align with GHGP accounting rules, and where reasonably possible, claims based on SAF should be made within the same reporting year in which the SAF has been uplifted/consumed.

To help mitigate the risk of double counting, organisations should specify the exclusive ownership of emissions reductions from SAF use through contractual agreements. If the emissions reduction is a collective effort of multiple organisations, an organisation may claim that it is working jointly with partners to reduce emissions rather than taking exclusive credit for the emissions reduction.

Exclusive ownership

Finally, to ensure accuracy in the accounting of emissions reductions from SAF use in line with established GHG accounting and reporting principles (such as under the GHG Protocol and towards science-based targets), organisations should seek to have their GHG inventory and accounting methods audited and verified by independent third-party auditors.

Audit of GHG inventory

7 Audit and Verification

For all participating organisations to have confidence in its ability to secure real and credible GHG emissions reductions, the ISCC Credit Transfer System features an auditing and verification framework.

Auditing framework

All System Users of the ISCC Credit Transfer System (i.e., SAF suppliers, aircraft operators, logistics providers and aviation end-customers) that will be involved in the handling of SAF credits (i.e., registration, transfer and/or retirement of credits) are required to open their individual account and record all transactions in the ISCC Registry. This allows for the traceability of credit transactions and the related scope 1 and scope 3 claims.

Digital traceability of transactions

The SAF supplier is the last entity in the supply chain that is certified to one of the ISCC certification standards[52] – or a certification standard recognised as equivalent – by ISO-accredited, independent, third-party certification bodies. System Users in the downstream value chain, i.e., aircraft operators, logistics providers and aviation end-customers, are not required to become certified according to one of these certification standards.

ISCC certification of System Users

7.1 Certification Bodies and Auditors

The ISCC EU 103 Document lays down the requirements for Certification Bodies and auditors that perform certification services under ISCC.[53] Certification bodies conducting audits of SAF suppliers under the ISCC Credit

ISCC EU 103 as reference

---

[52] This means certification to one or more of the following certification standards: ISCC EU, ISCC PLUS or ISCC CORSIA.

[53] Please find the ISCC EU 103 System Document on the ISCC website here.

Transfer System must adhere to the requirements for conducting audits specified in the ISCC EU 103 Document.

A certification body that wishes to perform certification services under the ISCC Credit Transfer System needs to

> Be ISO 17065 accredited

> Have a valid cooperation agreement with ISCC

Requirements for certification bodies

The certification body shall designate a main contact person for the ISCC Credit Transfer System responsible for managing all processes around the certification body's activities in the ISCC Registry. The main contact person will be considered as focal points by ISCC for any communication related to the ISCC Credit Transfer System.

Main contact person

Auditors that perform certification services under the ISCC Credit Transfer System must be qualified accordingly, and meet requirements as stated in ISCC EU 103 Document section 5.1 and 5.2 (see 'Requirements for auditors').

Requirements for auditors

7.2   SAF Suppliers

SAF supplier compliance with the applicable requirements as set out in this document will be verified by the certification body as part of trader certification under an approved certification scheme (see section 6.2). Under ISCC, the audit requirements specific to the ISCC Credit Transfer System are verified via a dedicated add-on certification during the SAF supplier's regular ISCC certification audit cycle. ISCC provides audit procedures the certification body is required to use in their audit of SAF suppliers engaging in the ISCC Credit Transfer System.

Verification as part of regular audit cycle

Before using the system, SAF suppliers are required to undergo an initial audit to ensure they are in the position to comply with all relevant requirements as laid out in this document. This initial audit may be conducted remotely if the certification body determines that a remote audit provides the same level of assurance as an on-site audit (e.g., if the entity is already ISCC certified).

Initial auditing

As credit transfer, retirement and subsequent claims are dependent on the integrity of credits registered by the SAF supplier, it is crucial that credit registrations are done correctly and in line with the requirements laid out in sections 6.1 and 6.2.

Importance of SAF supplier audit

SAF delivery to the control point, i.e., the jet fuelling system of an airport, is a necessary precondition for the respective credits to be registered in the SAF supplier's account. During the ISCC certification audit, the auditor will therefore need to review the respective documentation provided by the SAF supplier to ensure the corresponding amount of SAF was indeed delivered to the control point. Substantiating documents could include delivery documents as well as further commercial documents such as invoices, where necessary. Adequate documentation to evidence that a given SAF volume was allocated

Verification of SAF delivery

to and uplifted by a specific aircraft operator could include invoices and proofs of payment for SAF delivery.

Furthermore, the auditor shall verify that credits have been registered correctly in the SAF supplier's Registry account. For this purpose, the auditor will receive access to the SAF supplier's account.

Verification of credit registration

The auditor will verify that the SAF volumes registered as credits were withdrawn from the SAF supplier's mass balance, in the same quantities and with the same sustainability characteristics.

Verification of bookkeeping

Following the registration of credits in the ISCC Registry, the physical SAF volumes on which credit registration is based must be considered non-sustainable, allowing no further sustainability claims related to that physical SAF. The auditor shall therefore review adequate documentation to ensure that certified SAF volumes registered as credits in the ISCC Registry

Verification of no double issuance

> Have not been registered more than once in the ISCC Registry

> Have not been registered in other registries with a similar purpose[54]

> Have not otherwise been sold/claimed as sustainable by the SAF supplier (e.g., by issuing another physical PoS copy or similar to hand over to authorities, aircraft operators, logistics providers, aviation end-customers or similar third parties)

In addition, the auditor shall review documentation on which certified SAF volumes were registered in the ISCC Credit Transfer System and those which were forwarded under other systems and for other purposes (e.g., ISCC certified SAF not registered in the Registry, or SAF certified to other schemes than ISCC), i.e., not handled as part of the ISCC Credit Transfer System.

Review of other systems

7.3   Aircraft Operators, Logistics Providers and End-customers

In contrast to SAF suppliers, System Users in the downstream value chain, i.e., aircraft operators, logistics providers, and aviation end-customers, do not become certified according to supply chain certification standards. They are, however, required to open their individual account and record all transactions (i.e., transfer and/or retirement of credits) in the ISCC Registry.

Necessity of Registry account

In addition, aircraft operators, logistics providers, and end-customers should be audited by independent, third-party auditors with regard to their GHG inventories (e.g., with regard to compliance with GHGP accounting and reporting standards). Provided the consent of the System User, ISCC may grant that System User's auditor access to the System User's account in the ISCC Registry. This will allow the auditor to cross-check credits retired through the ISCC Registry with the organisation's claims in their GHG inventory.

Registry access for external auditors

---

[54] Work is ongoing to facilitate coordination between different registries that cover renewable fuel claims in order to avoid double issuance of fuel volumes and claims.

7.4 Non-conformities and Sanctions

Non-conformities result from the non-fulfilment or violation of ISCC requirements. SAF suppliers are regularly audited under supply chain certification standards, including with respect to their compliance with the requirements under the ISCC Credit Transfer System. System Users in the downstream value chain, i.e., aircraft operators, logistics providers and aviation end-customers, do not become certified according to supply chain certification standards.

Types of non-conformities

In consequence, the provisions on non-conformities and sanctions as laid out in the following apply to SAF suppliers only. However, ISCC reserves the right to suspend a System User's Registry account (including those of aircraft operators, logistics providers and end-customers) should there be substantiated evidence that the System User has made fraudulent claims, including in relation to SAF emissions reductions claimed via the ISCC Registry.

Application of provisions

The following provisions on non-conformities under the ISCC Credit Transfer System are based on those provisions laid out in ISCC EU Document 102, chapter 10.[55]

ISCC EU 102 as reference

Non-conformities are classified according to their impact (please also see section 10.1 in the ISCC EU Document 102):

Types of non-conformities

> **Minor non-conformities** have no severe impact and can be corrected or have been corrected after detection. In the context of the ISCC Credit Transfer System, this may for instance include situations where credits have been incorrectly registered yet have *not* been further transferred from the SAF supplier's account.

> **Major non-conformities** have a severe impact but are not critical. They cannot always be corrected after detection. In the context of the ISCC Credit Transfer System, this may for instance include a situation where credits have been incorrectly registered as well as already been transferred from the SAF supplier's account to another account.

> **Critical non-conformities** have a severe impact on the integrity of the system and claims made thereunder, are systematic or intentional (e.g., fraud). In the context of the ISCC Credit Transfer System, this may for instance include registering double the amount of credits for a single batch of SAF by the SAF supplier, constituting double issuance.

In particular, non-conformities that concern the provision of incorrect GHG emissions values and thus misrepresent the emissions reduction impact of SAF and related credits shall be considered to have severe impact, i.e., are to be classified as major non-conformities at least.

Provision of incorrect GHG values

---

[55] Please find the ISCC EU 102 Document here.

It is the responsibility of the certification body to assess non-conformities as minor, major or critical. Certification bodies are encouraged to contact and clarify with ISCC should there be ambiguity in the evaluation of a specific scenario.

Responsibility of CBs

Minor non-conformities must be corrected immediately after detection. In each case, the SAF supplier must inform its certification body and ISCC, and implement appropriate corrective measures within a time frame specified by the certification body. In case of incorrect registration of credits that have not yet been further transferred to other Registry accounts, the certification body or SAF supplier may request ISCC, as the Registry administrator, to revoke credits that have been registered incorrectly. A warning may be accompanied by reasonable measures (e.g., additional training for employees at critical control points) to ensure future compliance with the ISCC requirements.

Sanctions for minor non-conformities

In case of major non-conformities by SAF suppliers the certification body must suspend the validity of the ISCC Credit Transfer System add-on certification with immediate effect for a period of 40 days and notify ISCC. Within this period, all non-conformities must be corrected by implementing appropriate corrective measures as determined by the certification body. The certification body shall end the suspension within or after this period if it confirms the successful implementation of corrective measures. Unless all major non-conformities are corrected within the period of suspension the certification body has to declare the ISCC Credit Transfer System add-on certification invalid with immediate effect. The certification body must inform ISCC immediately about any suspension, and/ or invalidity of certification. In case of the ISCC Credit Transfer System add-on certification being declared invalid by the certification body, ISCC may exclude the System User from recertification for up to 6 months in case of ordinary negligence of the System User with regard to the non-conformity and for up to 12 months in case of gross negligence.

Sanctions for major non-conformities

In the case of critical non-conformities, the certification body must declare the ISCC Credit Transfer System add-on certification invalid and inform ISCC immediately. ISCC may exclude the System User from recertification under the ISCC Credit Transfer System for a period of up to 60 months. System Users actively excluded from the ISCC Credit Transfer System will be published on the ISCC website. In addition, ISCC reserves the right to take measures with regard to the SAF supplier's certification status under ISCC EU, ISCC CORSIA and/or ISCC PLUS, in line with ISCC EU System Document 102, section 10.2.

Sanctions for critical non-conformities

8 ISCC Registry Data Security

The ISCC Registry places significant importance on safeguarding the security of data and user information, particularly concerning digital ownership rights and personalised data. To this end, the Registry incorporates a range of security measures.

Security of data

Hosted within a private cloud on Amazon Web Services in Germany, the Registry, and all data contained within, is encrypted with a secure key known only by the service provider. This ensures that the data is protected against unauthorised access and is secure even in the event of a breach.

Hosting of Server

Passwords utilised for System User access are required to be numerically and symbolically complex, including a minimum number of characters. This provides added security insofar as it makes it challenging for potential attackers to access via brute force methods. All passwords are encrypted and stored as hash values in the Registry, adding further against unauthorised access.

Password security

Multi-factor authentication is activated for all users by default, thereby enhancing security by necessitating a secondary authentication process.

Multi-factor authentication

Web connectivity is secured via a valid SSL certificate, ensuring that data transmitted between the System User and the server is encrypted and cannot be intercepted by unauthorised third parties. In addition, the web application is loaded in the background only after a user is successfully logged in, further reducing the risk of unauthorised access.

Web connection

Access to data is secured via an authentication and permissions concept based on System User and Registry account types. This means only authorised contact persons with the appropriate permissions can access sensitive data (see chapter 5).

Permissions based on System user

Full transparency of individual persons having access to a System User's Registry account is provided via an overview page accessible by Primary Contact Persons, which provides full details on users, settings, and subsequent data access permissions. Further, utilisation of automatic email notifications when a new user has been approved provides further clarity into user access permissions.

Transparency on account access

Annex I: Glossary

Term	Definition in the context of the ISCC Credit Transfer System
Aircraft Operator	Entity that operates aircraft, consumes aviation fuel and provides air transport services for travelling passengers and freight. Aircraft operators include commercial airlines, freight carriers, and private aircraft.
Aviation End-customer	Includes business travellers and shippers. **Business travellers** are businesses with employees that are actively involved in business travel by air, in aircraft operated by aircraft operators. Business travellers may travel management companies to arrange air transport services on their behalf or may hire aircraft operators directly. **Shippers** are purchasers of freight transport services with freight that they require to be transported by air. Shippers may hire freight forwarders to arrange air transport services on their behalf or may hire aircraft operators directly. **Intermediaries** are entities acting as mediators between two or more organisations by facilitating the exchange of goods, services, or information. Under the ISCC Credit Transfer System, intermediaries may only act on behalf of third-party organisations (e.g., other aviation end-customers) in performing SAF credit transactions in line with the requirements laid out in this System Document.
Claim	Declared information regarding the specified characteristics of SAF that is attributed to a particular organisation through the retirement of the associated SAF credits from the ISCC Registry (adapted from ISO 22095:2020).
Control Point	Point in the downstream SAF supply chain where the SAF enters the jet fuelling system of a given airport.
Credit Batch	A specified quantity of credits with a defined set of sustainability characteristics, registered based on an underlying batch of SAF with those sustainability characteristics.
Credit Registration	The registration of credits based on an underlying SAF volume delivered to the control point. SAF suppliers register credits in the ISCC Registry by entering the PoS information for a batch of SAF via a 'PoS data mask'.
Credit Retirement	Retirement of credits refers to the act of removing SAF credits from a System User's account (and therefore from circulation) within the ISCC Registry, with the intention of claiming the sustainability characteristics (e.g., the GHG emissions reduction) associated with those credits.

Credit Transfer	The transfer of credits from one System User's active Registry account to another System User's active Registry account.
Further Contact Person	A natural person who has been selected by the Primary Contact Person who has the ability to manage and perform transactions within an organisations Registry account.
ISCC Registry	Secure and standardised database, allowing for the registration, transfer and retirement of credits according to the rules of the ISCC Credit Transfer System.
Logistics Provider	Entity that arranges transport services with aircraft operators on behalf of end-customers. Includes freight forwarders and travel management companies. **Freight forwarders** are entities that arrange aviation transport services on behalf of end-users of freight transport, thereby acting as delegate between the company that makes the shipment (i.e., the shipper) and the carrier (i.e., the aircraft operator). **Travel management companies** are entities that arrange air transport services on behalf of business travellers.
Primary Contact Person	A natural person responsible for managing all processes (including registration, transfer, and retirement of credits) related to an organisation's Registry account. This individual will be considered as the focal point by ISCC for any communication or related tasks within the ISCC Credit Transfer System
Proof of Sustainability (PoS)	A document specifying the sustainability characteristics for a specific quantity (batch) of SAF. In the ISCC Registry, the PoS information for a batch of SAF is entered via a 'PoS data mask' by the SAF supplier.
SAF Supplier	Entity that supplies SAF, on a mass balance basis, to the control point, i.e., the jet fuelling system of an airport. The SAF supplier has the SAF in its chain of custody system at the time of credit registration.
Scope 1 Credit	Unit representing the scope 1 emissions reduction associated with one metric ton (mt) of neat, i.e., unblended, certified SAF.
Scope 3 Credit	Unit representing the scope 3 emissions reduction associated with one metric ton (mt) of neat, i.e., unblended, certified SAF.
Sustainability Characteristics	Set of sustainability information (including, but not limited to, the SAF's lifecycle emissions value) attached to and carried with a given amount of SAF and SAF Scope 1 and Scope 3 credits. This sustainability information is evaluated and confirmed through sustainability certification.

System User	A SAF supplier, aircraft operator, logistics provider or aviation end-customer participating in the ISCC Credit Transfer System. To become System Users, organisations will have to open an account in the ISCC Registry.

Annex II: GHG Protocol Emissions Scopes

The Greenhouse Gas Protocol classifies GHG emissions for each reporting company into three categories, or 'scopes', as shown in Figure 7 and described below.

GHGP scopes

> **Scope 1 emissions** are direct GHG emissions that occur from sources owned or controlled by the reporting company. This includes, for instance, emissions from combustion of fuels in owned or controlled equipment (e.g., aircraft).

> **Scope 2 emissions** are indirect emissions from the production and distribution of electricity, heat and steam by the reporting company.

> **Scope 3 emissions** are indirect emissions resulting from the reporting company's supply chain. These emissions are a consequence of the activities of a reporting company but occur from sources not owned or controlled by the company. Notably, scope 3 emissions include transportation emissions resulting from the movement of goods from suppliers to the reporting company as well as from the reporting company to the end-customer. Emissions resulting from the production and distribution of fuels combusted under scope 1 by the reporting company also fall under that company's scope 3 emissions.
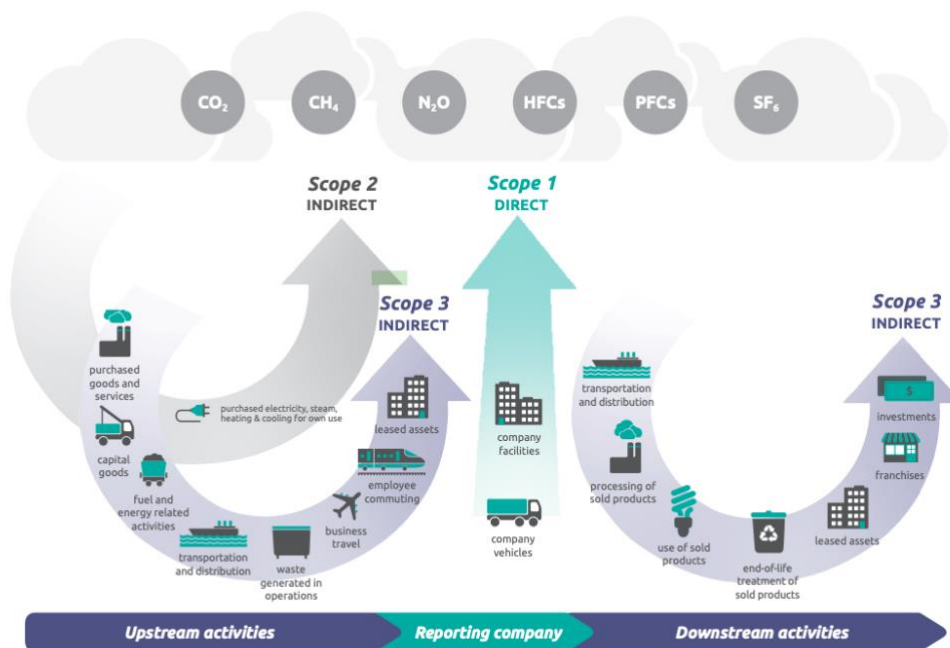

Figure 7: Classification of GHG emissions into three distinct scopes.[56]

---

[56] Source: Greenhouse Gas Protocol 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard' (p. 5), accessible here

Annex III: Alignment With SBTi Requirements

In its Aviation Sector Guidance, SBTi sets out requirements for the corporate use of SAF to meet SBTi scope 3 targets.[57] In addition to key principles defined by the Greenhouse Gas Protocol, these requirements were used as reference in the development of the ISCC Credit Transfer System.

SBTi as reference

Crucially, alignment with SBTi requirements will help organisations in the sourcing of emissions reductions from SAF use that can later be reported as progress towards their science-based targets. Please note that while ISCC has taken care to design the ISCC Credit Transfer System to follow the relevant SBTi requirements, ISCC cannot guarantee the acceptance of claims by auditors under the SBTi or similar frameworks.

Acceptance of claims

Requirements for corporate use of SAF to meet SBTi scope 3 targets	Implementation in ISCC Credit Transfer System
SAF procurement either via direct purchase from a fuel supplier or indirect purchase via an airline	The ISCC Credit Transfer System allows for both use cases – Scope 3 credits can be sourced directly from the SAF supplier or indirectly via the aircraft operator.
Obtain reasonable proof of fuel consumption / combustion	SAF is physically delivered to given airport (on mass balance basis). In most cases, due to airport logistics, allocation of SAF molecules to individual aircraft of a specific aircraft operator is not possible. Instead, it is required that an aircraft operator's aircraft is fuelled from a given airport's jet fuelling distribution system into which the SAF was physically delivered. Commercial documents such as invoices and proofs of payment will substantiate the use of the SAF volume by an aircraft operator.
Demonstrate environmental benefits associated with the SAF used (e.g., Certificate of Sustainability, including SAF lifecycle values)	Only SAF that is EU RED II, CORSIA or ISCC PLUS certified is eligible for entering the ISCC Credit Transfer System (Certificate/Proof of Sustainability information must be available for submission in the ISCC Registry). All three frameworks are set up to ensure that SAF leads to environmental benefits (including feedstock sustainability and GHG emissions savings). Only SAF that follows strict additionality rules is eligible for entering the ISCC Credit Transfer System. The retirement declaration generated upon retirement of credits from the ISCC Registry transparently lists relevant sustainability

---

[57] SBTi Aviation Sector Guidance, v1.0 (link), p. 26-27 and 32.

	characteristics / environmental benefits of the underlying SAF.
Prove clear chain of custody for the SAF consumption down, rather than across, the value chain	Only SAF that is EU RED II, CORSIA or ISCC PLUS certified is eligible for entering the ISCC Credit Transfer System. The mass-balance based certification systems recognised under EU RED II or CORSIA and ISCC PLUS cover the complete chain of custody from feedstock production to delivery of the SAF to the airport. Building on this, the ISCC Credit Transfer System extends the chain of custody for SAF transactions and claims. SAF credits and claims can only ever flow downstream (never upstream or across value chains) between value chain partners.
Include full accounting of Well-to-Wake emissions from all fuel consumption (SAF + fossil fuel) in a firm's scope 3 inventory	Only SAF that is EU RED II, CORSIA or ISCC PLUS certified is eligible for entering the ISCC Credit Transfer System. All three frameworks use a well-to-wake approach to emissions accounting.