



Update on ISCC solutions for SAF

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ISCC Technical Stakeholder Meeting Sustainable Aviation Fuels
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ISCC at a Glance

11900+

Valid certificates



131

Total
Countries



10900+

Total current system
users



1900+

Total ISCC
Auditors
trained



240+

ISCC training
courses
conducted



68

Currently cooperating
Certification Bodies



ISCC is working together with major players in the aviation and SAF space.
New members very welcome!



Examples



A wide range of regulatory frameworks make use of certification schemes to ensure the sustainability of SAF

Examples

ICAO CORSIA

- Offsetting scheme to ensure carbon-neutral growth of international aviation from 2020
- Airlines can use SAF to reduce their offsetting obligations under CORSIA
- Airlines can only reduce their offsetting obligations under CORSIA through SAF that is **certified under an ICAO-approved certification scheme (e.g. ISCC CORSIA)**

ReFuelEU Aviation Regulation

- Sets a mandate on fuel suppliers to supply a defined percentage of SAF to EU airports, starting 2025
- 2% of SAF in 2025, increasing to 70% by 2050
- Fuel suppliers obligated under ReFuelEU must supply SAF that is **certified under an EU RED II-approved certification scheme (e.g. ISCC EU)**

UK SAF Mandate (in development)

- SAF mandate set to start in 2025, requiring 10% SAF blend by 2030
- Under the SAF mandate, UK foresees **use of certification schemes** similarly to those currently accepted under the UK RTFO

SAF blender's tax credit under the US IRA*

- Grants tax credits for SAF that achieves a life cycle emissions reduction of at least 50%
- Mention of **ICAO-approved certification schemes** under CORSIA for demonstrating compliance of SAF (e.g. **ISCC CORSIA**)

EU Emissions Trading System

- Requires airlines to buy and surrender allowances for each metric ton of CO₂ emitted on intra-EU flights
- Airlines can use SAF to reduce the allowances they will need to buy and surrender
- Airlines can only account for the use of SAF with zero emissions if it is **certified under an EU RED II-approved certification scheme (e.g. ISCC EU)**

UK Emissions Trading System

- Under the UK ETS, similarly to the EU ETS, airlines can use SAF to reduce the allowances they will need to buy and surrender
- Airlines can only account for the use of SAF with zero emissions if it is **certified under an RTFO-approved certification scheme (e.g. ISCC EU)**

*US IRA = US Inflation Reduction Act

There is growing demand for SAF from the voluntary market, too



- A growing number of corporations commit to ambitious climate targets
- **The Science Based Targets initiative (SBTi)** has become the industry-leading platform for corporate climate action
- Currently, almost **6,000 companies are working with SBTi**
- **SBTi recognizes that SAF can be a key lever** in reducing corporations' Scope 3 air transport-related GHG emissions
- **To report the use of biofuels, and SAF in particular, as progress** against science-based targets, SBTi has established a stringent set of sustainability criteria that must be fulfilled
- **ISCC certification is explicitly recognized by SBTi** as ensuring compliance with these criteria for SAF*

*Please refer to: SBTi Aviation Sector Guidance, v1.0, August 2021, available via: https://sciencebasedtargets.org/resources/files/SBTi_AviationGuidanceAug2021.pdf

Why sustainability certification? Certification can play a key role in ensuring that SAF production is sustainable and leads to GHG emission reductions

Sustainability certification aims to ensure



Sustainability in feedstock production

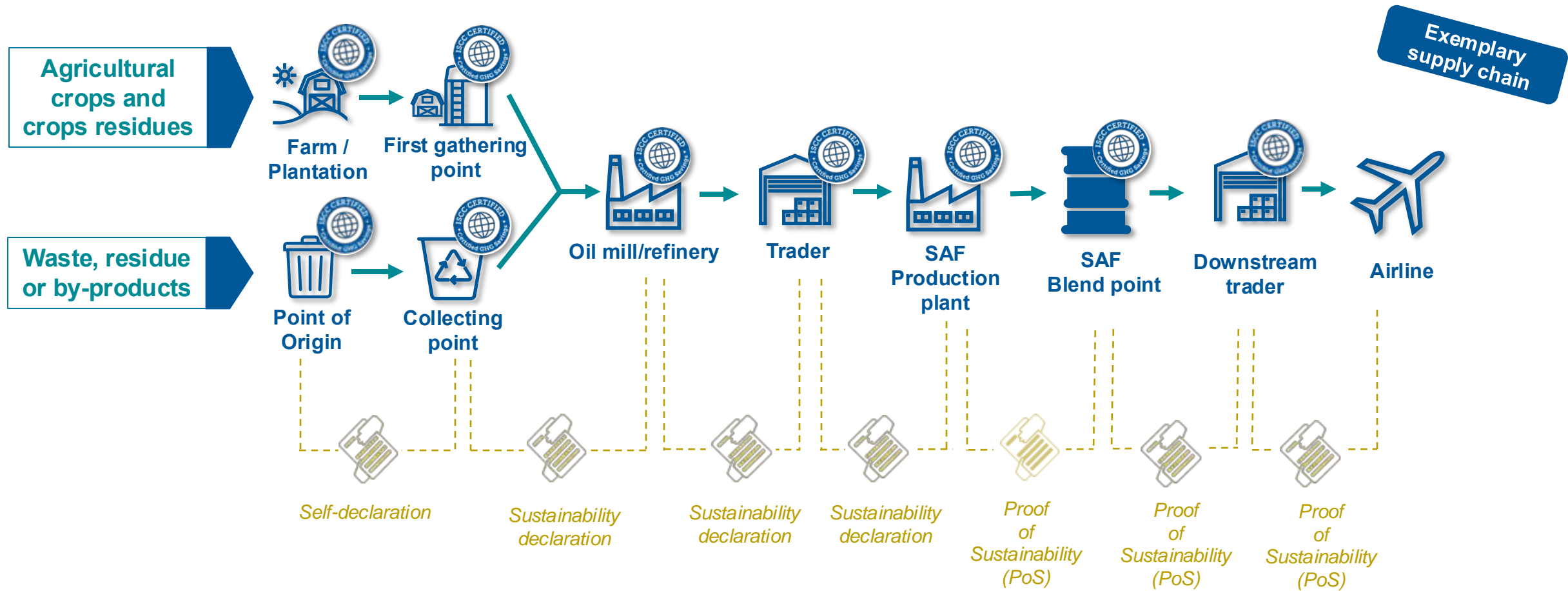


Traceability of sustainable materials through the supply chain

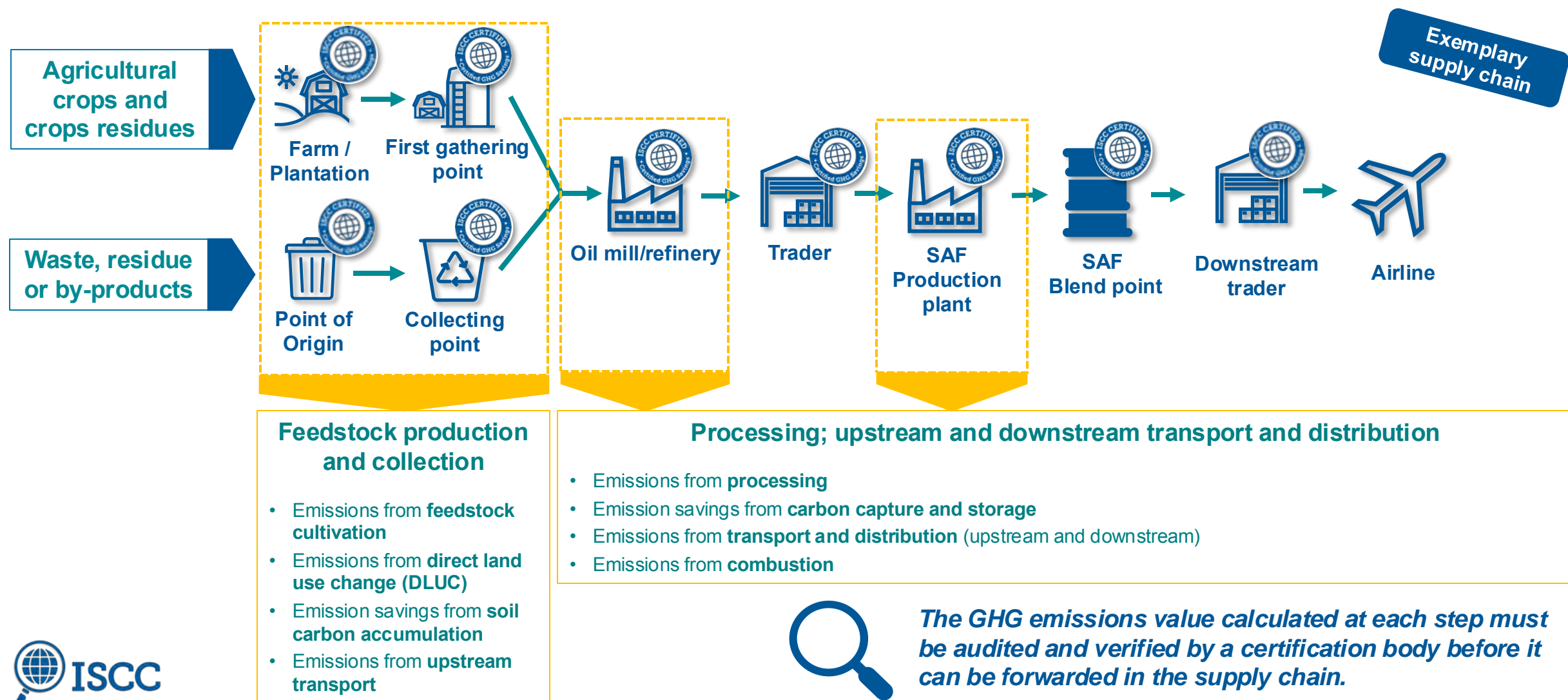


Verified reduction in life cycle emissions

Every supply chain element is certified to ensure full traceability. Information is forwarded through the chain via sustainability declarations



GHG emissions from each life cycle step are calculated and added up along the supply chain to determine the SAF's carbon intensity



SAF can be (and is!) certified under all three ISCC certification systems. System choice depends on regulatory compliance and/or customer needs

ISCC EU



- Officially approved by the EU Commission
- Used to demonstrate compliance with the **EU RED II sustainability criteria**
- ISCC EU certified SAF can be claimed under **EU ETS, UK ETS and**, once in effect, **ReFuelEU Aviation**

ISCC PLUS



- Applicable for mostly **voluntary markets**
 - Energy and renewable fuels outside the EU RED II market
 - Industrial applications
 - Food and feed markets
- Oftentimes used for SAF claims in **non-regulated markets**

ISCC CORSIA



- Officially approved by ICAO
- Used to demonstrate compliance with the **ICAO CORSIA sustainability criteria**
- ISCC CORSIA certified SAF can be claimed under **CORSIA**
- ISCC CORSIA is referred to in the IRS guidance for the **US IRA's SAF blender's tax credit**
- ISCC CORSIA certified SAF explicitly recognized by the **Science-Based Targets Initiative (SBTi)**

All three ISCC systems are largely harmonized. Combined audits allow for easier access to different markets

ISCC EU



ISCC PLUS



ISCC CORSIA



Multi-stakeholder
driven



Quality and risk
management



Integrity Program



Requirements for
certification bodies



Requirements for
conducting audits



Registration and
certification process

A steep increase of certificates has been registered under ISCC CORSIA



A **steep increase of ISCC CORSIA certificates** has been registered in the last few months.



As of Sept 12th: **194 valid certificates!**



AMERICAS

29 Certified entities



EMEA

26 Certified entities



APAC

139 Certified entities



Feedstocks certified for SAF thus far include mostly wastes (e.g. UCO, POME, PFAD, animal fats). Recently, sugarcane and corn grain have been certified.



Two **low LUC risk certificates for crops** under ISCC CORSIA have been issued.



Current majority of SAF supply chain operators certified under ISCC are **trading units - with 18 SAF producers certified** (HEFA, co-processing, Alcohol-to-Jet).



The **first Alcohol-to-Jet processing unit** has been certified under ISCC CORSIA.

As the SAF market begins to develop, more and more companies choose ISCC for SAF certification

Examples of recent press releases

FS 1st Ethanol Producer to Receive ISCC CORSIA Low LUC Risk Certification for SAF Production

Monday, 04 March 2024



REM

FS is the first Brazilian corn ethanol industry to receive the ISCC international certification (International Sustainability & Carbon Certification), attesting that its production process meets international requirements for the production and supply of ethanol and corn oil for the production of SAF (Sustainable Aviation Fuel). Furthermore, FS is the first ethanol producer in the world to obtain Low LUC Risk certification in collaboration with one of its second-crop corn suppliers, GGF Group.

Source: Renewable Energy Magazine

HD Hyundai Oilbank to produce biofuels using co-processing method

2024.05.29 08:23:13



The company's biofuels produced through this method have already received three types of International Sustainability & Carbon Certifications (ISCC): ISCC EU, ISCC CORSIA, and ISCC PLUS.

Source: Pulse



S-Oil to produce sustainable aviation fuel after acquiring 5 global certifications

The certifications include the International Sustainability & Carbon Certification (ISCC) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), the ISCC EU and the ISCC PLUS.

Source: The Korea Times

Montana Renewables Achieves ISCC CORSIA Certification For SAF

BY CALUMET SPECIALTY PRODUCTS PARTNERS L.P.

Montana Renewables LLC, the largest producer of sustainable aviation fuel (SAF) in North America, announced today that it received its Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) certificate via the International Sustainability and Carbon Certification (ISCC) and as developed by the International Civil Aviation Organization (ICAO). The ISCC CORSIA certification is another step in the transformation of the Great Falls facility into a premier SAF producer in North America.

"Montana Renewables is the SAF leader in North America and this certification further cements our first mover status in this business," said Bruce Fleming, CEO, Montana Renewables. "The ISCC CORSIA designation is another milestone on our journey as we continue on the path to reduce the carbon footprint of the aviation industry."

Source: Biodiesel Magazine



68 certification bodies cooperating with ISCC provide auditor capacities all over the world, including for SAF

America-based certification bodies



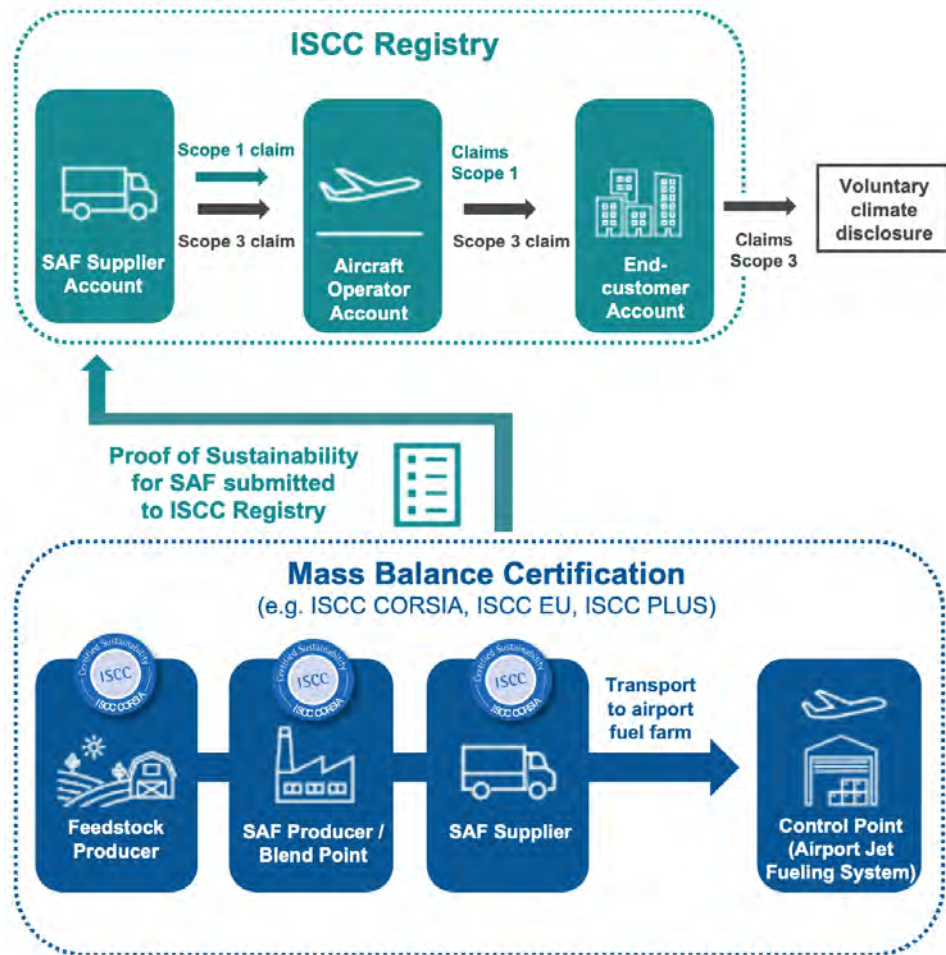
Europe-based certification bodies



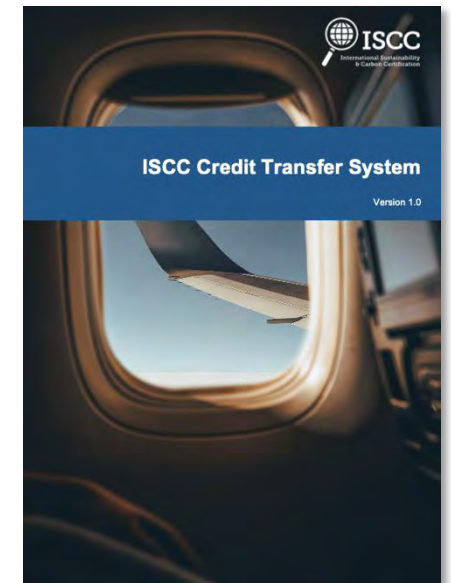
Asia-based certification bodies



The ISCC Credit Transfer System is a newly developed system to ensure transparent and credible SAF claims



- The ISCC Credit Transfer System, including the ISCC Registry, went live on 30 April
- The ISCC Credit Transfer System allows certified SAF to be uploaded, tracked and allocated via a secure **registry**
- Example: SAF suppliers can transfer and/or retire **Scope 1** and Scope 3 credits from SAF for their customers
- ISCC is currently in the process of onboarding the first fuel suppliers, airlines, freight forwards and end-customers to the system – first transactions occurred!
- Discussions on potential application scenarios for regulated markets (e.g., under ICAO CORSIA) are still in an initial stage



ISCC is continuously developing its certification approach for Power-to-Liquids

- Integration of **electricity as a feedstock** is gaining importance, including for SAF production
- **ISCC is in the position to certify PtX**, ensuring that key sustainability parameters are met along global supply chains
- Under **ISCC PLUS**, several companies have been certified for renewable electricity as feedstock to date
- Under the EU RED, **ISCC has applied for the recognition of RFNBOs*** – positive technical assessment achieved
- ISCC supports the **ongoing work at ICAO to integrate PtL under CORSIA (HEI CEF)**
- ISCC has set up a dedicated **Stakeholder Committee on RFNBOs** and delivered two **ISCC RFNBOs Trainings**



Understanding SAF Sustainability Certification

Guidance document on requirements and criteria for sustainability certification

June 2024

This document aims to provide clear guidance on the requirements and criteria for SAF sustainability certification, in the interest of promoting consistency in the interpretation and application of sustainability standards across different stakeholders and facilitating the certification process.

This document was developed in collaboration with the following organizations:



Jointly with IATA and RSB, ISCC is has developed a guidance document on SAF certification

- Goal: promote consistency in **understanding around SAF certification processes**
- Work includes (but not limited to):
 - Promote consistent **definitions of certification concepts**
 - Explain **applicability of different certification standards** under different regulatory (and voluntary) frameworks
 - Explain **supply chain certification** and important **concepts around mass balancing** and **life cycle emissions**
 - **Clarify documentation flow** between SAF producers/suppliers and airlines
 - Extensive Q&A
- The document can be downloaded at [this](#) link



Thank you!

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