



ISCC certification solutions for Sustainable Aviation Fuels

The SAF policy landscape is dynamic. Many SAF policies are planned, in the process of being drafted or already in force

Example Europe

The recast of the **European Renewable Energy Directive (RED II)** sets an incentive for the share of RED II compliant fuels supplied in the aviation sector to be considered with 1.2 times their energy content

The **EU Emissions Trading System (EU ETS)** allows airlines to account for RED II compliant SAF as having zero GHG emissions

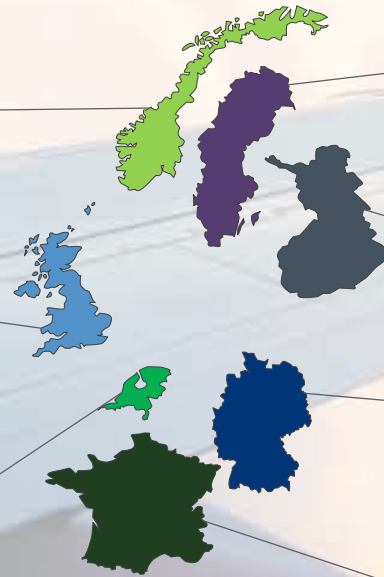
The **UK Emissions Trading System (UK ETS)** allows airlines to account for RTFO compliant SAF as having zero GHG emissions

The EU Commission proposes an EU-wide SAF blending obligation within **ReFuelEU Aviation**

Norway: SAF blending mandate since 2020.
A 30% target is set for 2030

UK: SAF production incentivized through Renewable Transport Fuel Credits (“opt-in”); SAF mandate in planning (up to 10% in 2030)

The Netherlands: Currently “opt-in” for SAF; target of 14% SAF blending level for 2030



Sweden: GHG reduction mandate since 2021 (0.8%). Gradually increasing to 27% in 2030

Finland: Mandate expected in near future, 30% blending level envisaged for 2030

Germany: Introduction of a SAF energetic sub-quota of 2% in 2030 (PtL only) as part of its RED II transposition

France: SAF mandate of 1% from 2022, 2% in 2025 and 5% in 2030

Regulations have set comprehensive sustainability frameworks for SAF and enforce their application through certification. Examples EU RED II and CORSIA



EU Renewable Energy Directive (RED II)

- Sets sustainability criteria for biomass production
- Provides GHG methodology and sets minimum GHG saving thresholds for (bio)fuels to be eligible under RED II
- Sets basic rules for traceability and mass balancing
- RED II sustainability framework is basis for RED II SAF opt-in schemes, EU ETS and ReFuel EU regulation



- Sets sustainability criteria for biomass production
- Provides GHG methodology and sets minimum GHG saving threshold for SAF to be eligible under CORSIA
- Sets basic rules for traceability and mass balancing
- Incorporated learnings from EU RED II sustainability certification in its CORSIA eligible SAF certification design



ISCC EU

- Incorporates sustainability rules into comprehensive certification standard “on-the-ground”
- Goes beyond legal requirements in sustainability ambition
- 10+ years experience and 40,000+ issued certificates



ISCC CORSIA

- Incorporates sustainability rules into comprehensive certification standard “on-the-ground”
- Goes beyond legal requirements in sustainability ambition
- Builds on experience gained under ISCC EU and the RED

Coverage of SAF under different regulations is rapidly growing. With many policies prescribing certification for compliance, ISCC covers most markets

Examples

CORSIA

- SAF that is CORSIA eligible can be used to reduce airline operators' offsetting requirements
- ISCC CORSIA certification system recognized under ICAO CORSIA

EU RED II



- SAF can be counted towards RED II targets in EU Member States under opt-in schemes
- ISCC EU certification system recognized under RED II by EU Commission

EU ETS



- RED II compliant SAF is attributed zero emissions in airlines' emissions reporting
- EU RED II framework applicable, thus ISCC EU certification system can be used

UK ETS



- Zero emissions can be attributed to RTFO compliant SAF
- ISCC EU certification system accepted under RTFO

ReFuel EU



- EU Commission proposal to introduce SAF blending mandate starting from 2025
- EU RED II framework will be applicable, thus ISCC EU certification system can be used

National mandates

- Different individual countries have implemented SAF mandates (e.g. Norway, Sweden, France) or plan to do so (e.g. UK, the Netherlands)
- ISCC certification accepted under many of these mandates (e.g. France, Nordics)

SAF can be certified under all three ISCC certification standards.
Broad harmonization of standards allows combined audits at lower effort and cost

ISCC EU



- Applicable for **biofuels, bioliquids and biomass fuels brought into the EU market**
- Used to **demonstrate compliance** with the EU's sustainability criteria set out in the RED II
- **ISCC EU compliance necessary** for SAF to be eligible under EU ETS, UK ETS and likely under ReFuelEU

ISCC PLUS



- Applicable for **voluntary** and certain **regulated markets**
 - Energy and biofuels outside the European Union (e.g. Japan, Australia)
 - Industrial applications
 - Food and feed markets
- **ISCC PLUS compliant SAF** sometimes used for voluntary purposes

ISCC CORSIA



- Applicable for **sustainable aviation fuels under the ICAO CORSIA scheme**
- Used to **demonstrate compliance** with ICAO's sustainability criteria for CORSIA eligible SAF
- First fully ISCC CORSIA certified SAF supply chains already established

In May 2022, Neste delivered the world's first (ISCC) CORSIA certified SAF batch to American Airlines



Source: [GreenAir News](#), July 2022

NESTE

American Airlines 

*“American is proud [...] to demonstrate how SAF can meet the **robust sustainability standards that ICAO has established for CORSIA**. Our work together will also help to demonstrate to American customers that **SAF can meet these high standards.**”*

(Jill Blickstein, Head of ESG, American Airlines)

*“**Cooperation with American, ISCC and all others involved was absolutely critical in achieving this important milestone**”*

(Thorsten Lange, Executive Vice President, Renewable Aviation, Neste)

CORSIA: Many feedstocks relevant for SEA are eligible and can be certified. For crops, ISCC offers an ICAO-approved low LUC risk certification approach

Examples



Oil palm fresh fruit bunches (FFB)



Palm oil mill effluent (POME)



Palm fatty acid distillate (PFAD)



Empty palm fruit bunches (EFB)

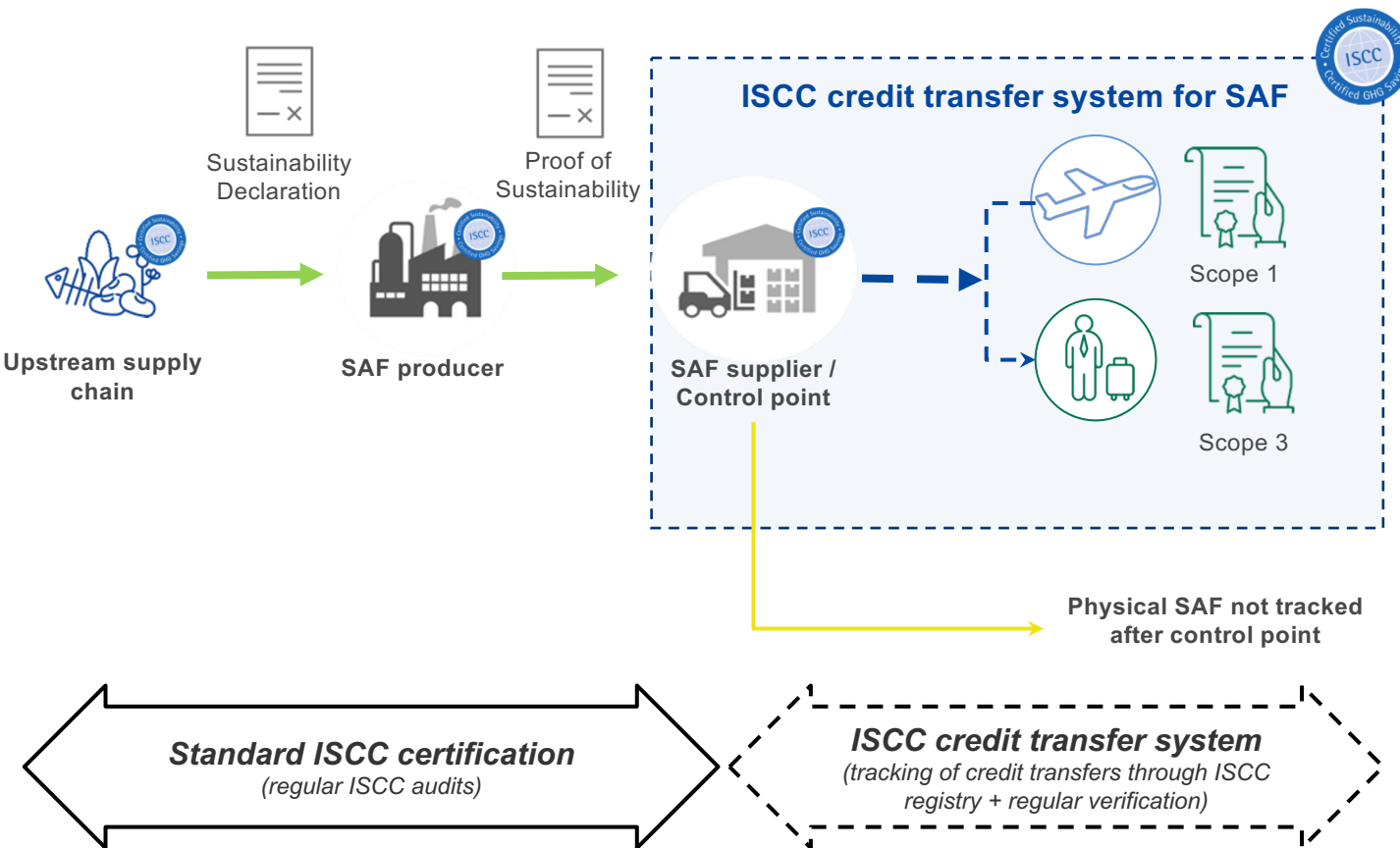


Used cooking oil (UCO)



Crude glycerine

New: ISCC is currently developing a “credit transfer system” to allow full end-to-end tracking and verification of SAF claims, including for aviation end-customers



What is the opportunity?

- Enable and access additional demand for SAF
- Enable credible tracking of SAF volumes and claims
- Positively shape an emerging SAF market

Value-add for ISCC credit transfer system

ISCC as leading scheme with most major suppliers certified uniquely positioned to offer end-to-end solution

Robust end-to-end approach by combining credit transfer system with tried-and-true upstream ISCC certification

SAF credit transfers are based on fuel actually consumed in the aviation sector, **thus guaranteeing a reduction of the sector's GHG emissions**

SAF transferred and claimed as credits **fulfils stringent sustainability criteria** (i.e. is ISCC certified)

Sustainability attributes claimed via credits can be **claimed in accordance with industry-accepted standards** (e.g. science-based targets for the voluntary market)

Transaction and claiming process is governed by **clear and robust rules**, subject to **credible verification** and handled in the **ISCC registry** (currently in development)



Thank you for your attention!

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