

Overview on ISCC certified SAF

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As governments and the aviation industry commit to significantly reducing the sector's emissions, sustainable aviation fuels (SAF) are seen as a crucial pillar

	2020	2025	2030	2035	2040	2045	2050
Commuter » 9-50 seats » < 60 minute flights » <1% of industry CO ₂	SAF	Electric and/or SAF	Electric and/or SAF	Electric and/or SAF	Electric and/or SAF	Electric and/or SAF	Electric and/or SAF
Regional » 50-100 seats » 30-90 minute flights » ~3% of industry CO ₂	SAF	SAF	Electric or Hydrogen fuel cell and/or SAF	Electric or Hydrogen fuel cell and/or SAF	Electric or Hydrogen fuel cell and/or SAF	Electric or Hydrogen fuel cell and/or SAF	Electric or Hydrogen fuel cell and/or SAF
Short haul » 100-150 seats » 45-120 minute flights » ~24% of industry CO ₂	SAF	SAF	SAF	SAF	Electric or Hydrogen combustion and/or SAF	Electric or Hydrogen combustion and/or SAF	Electric or Hydrogen combustion and/or SAF
Medium haul » 100-250 seats » 60-150 minute flights » ~43% of industry CO ₂	SAF	SAF	SAF	SAF	SAF	SAF	SAF potentially some Hydrogen
Long haul » 250+ seats » 150 minute + flights » ~30% of industry CO ₂	SAF	SAF	SAF	SAF	SAF	SAF	SAF

Source: Air Transport Action Group – Waypoint 2050

Our Commitment to Fly Net Zero by 2050



Fly Net Zero is the commitment of airlines to achieve net zero carbon by 2050.

At the 77th IATA Annual General Meeting in Boston, USA, on 4 October 2021, a resolution was passed by IATA member airlines committing them to achieving net-zero carbon emissions from their operations by 2050. This pledge brings air transport in line with the objectives of the Paris agreement to limit global warming to 1.5°C.

To succeed, it will require the coordinated efforts of the entire industry (airlines, airports, air navigation service providers, manufacturers) and significant government support.

Read the press release: [IATA members' AGM resolution on Net Zero 2050](#)

International Air Transport Association (IATA),
representing more than 300 airlines worldwide

Ministers convene at ICAO to explore global aviation emissions reduction objectives to combat climate change



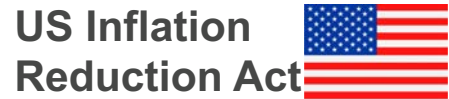
International Civil Aviation Organization (ICAO),
a UN agency with more than 193 Member States

Many policies prescribe certification to ensure the SAF mandated / incentivized meets defined sustainability criteria. ISCC covers most markets

Examples



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



- Tax credit of between \$1.25 and \$1.75 per gallon of SAF, depending on how much the SAF improves in GHG performance compared to standard fossil jet fuel (minimum threshold: 50%)
- CORSIA certification (e.g. via ISCC) one way to prove compliance of SAF with GHG threshold

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 recognized by UK authorities 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



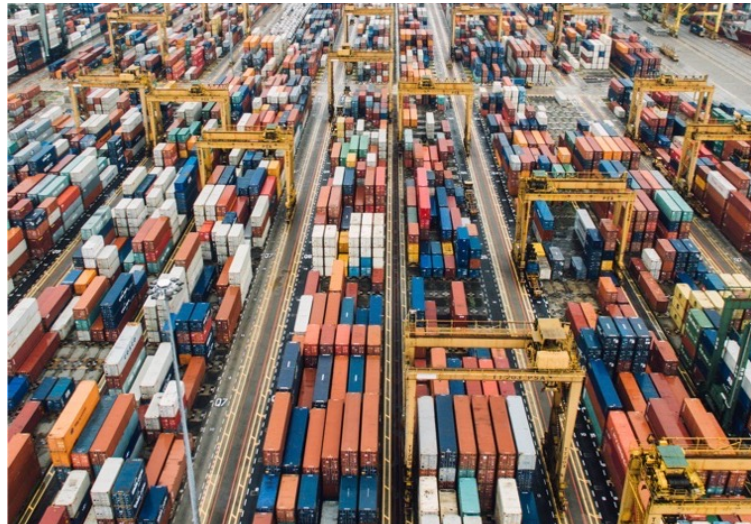
- Different individual countries have implemented SAF mandates (e.g. Norway, Sweden, France) or plan to do so (e.g. UK, the Netherlands)
- ISCC certification accepted under many of these mandates (e.g. France, Nordics)

Sustainability certification can play a key role in ensuring that SAF lives up to its promise

Sustainability certification such as ISCC ensures



Sustainability in feedstock production



Traceability of sustainable materials through the supply chain



Verified reduction of GHG emissions

ISCC is supporting the aviation industry on its journey towards a net-zero future

- Many **ISCC members and system users** are active in the field of SAF
- With American Airlines and Deutsche Post DHL, **major airlines** have joined the ISCC Association
- ISCC is an active member of the **CAEP Fuels Task Group within ICAO**, working on the further development of CORSIA eligible SAF and LCAF (lower carbon aviation fuels)
- ISCC actively drives the **development and piloting of certification solutions for innovative SAF pathways**, including for Power-to-liquid (PtL) SAF
- ISCC currently has 30 certified operators under its **CORSIA standards**, 13 certificates covering **co-processed SAF**, 15 covering **HEFA**, and 160+ covering **HVO**

Examples



Sustainable aviation fuels can be certified under all three ISCC standards.
Largely harmonized standards allow for 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 certified SAF** used for voluntary purposes

ISCC CORSIA

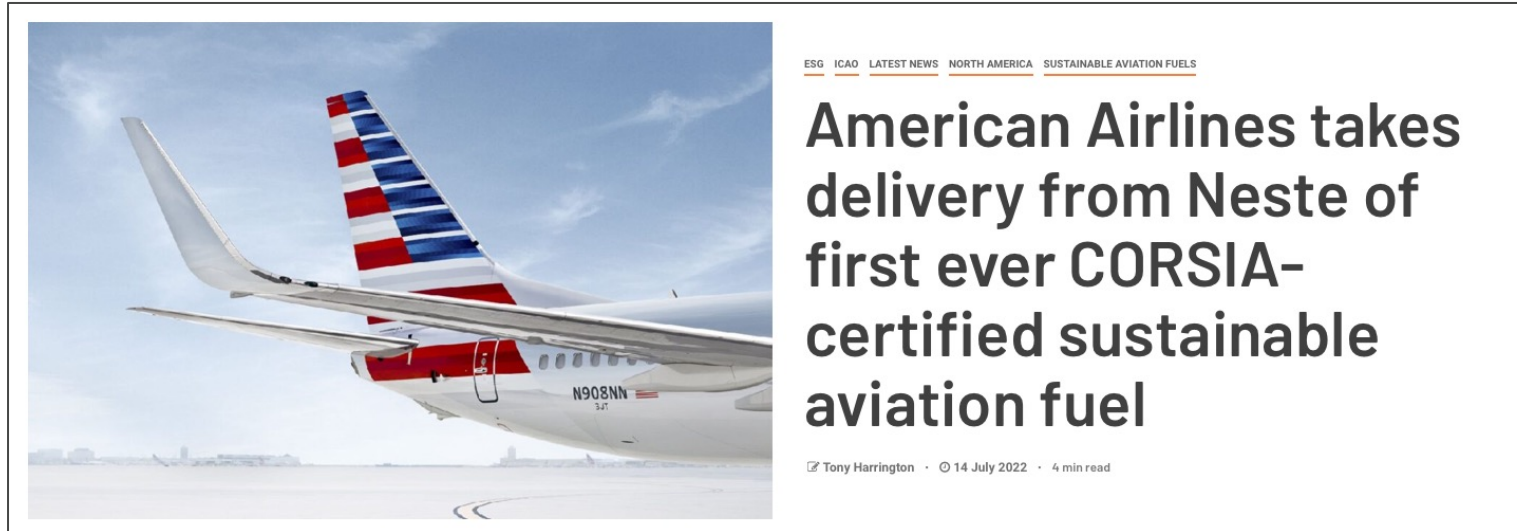


- Applicable for **SAF under the ICAO CORSIA scheme**
- Used to **demonstrate compliance** with ICAO's sustainability criteria for CORSIA eligible SAF
- First fully ISCC CORSIA certified SAF supply chains already established

SAF certification under ISCC – quick facts



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



NESTE

American Airlines 

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

*“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)

Upcoming: As part of a project commissioned by the Japanese Civil Aviation Bureau, ISCC will help prepare Japanese SAF producers for CORSIA certification



- With the project, the Civil Aviation Bureau (CAB) aims to **build capacities of SAF producers in Japan** to have their fuels certified as CORSIA eligible fuels
- **Project will start soon and run until Q1 2023**, to be facilitated by the Mitsubishi Research Institute (MRI)
- **ISCC will help**
 - provide clear and detailed **guidance on the certification process** for CORSIA eligible fuels under ISCC CORSIA
 - provide clear guidance on the **inclusion process of new feedstocks** under CORSIA, of interest to Japanese SAF producers
 - set up case studies to **showcase ISCC CORSIA certification in practice**



ISCC Technical Stakeholder Committee Sustainable Aviation Fuels

27 October 2022
2 pm – 5 pm CEST (UTC +2)
Virtual Meeting

Content:

Updates on Regulatory
Frameworks

Commercial Deployment of
Sustainable Aviation Fuels

SAF Sustainability Certification in
Practice

Stakeholder Discussions and Next
Steps

ISCC has set up a Technical Committee to enable regular stakeholder dialogue on SAF

- The next Committee meeting will take place on 27 October



Come and join us!
Registration [here](#)

- **Topics** on the agenda

- Regulatory developments (incl. CORSIA, harmonization of EU SAF policies, PtL policy)
- Supporting SAF market ramp-up, including PtL SAF
- Latest insights into SAF sustainability certification
- And much more ...

- **Speakers** will include

- Regulators (ICAO, European Civil Aviation Conference, national governments)
- Airlines
- SAF supply chain operators (such as SAF producers and suppliers)



Thank you for your attention!

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