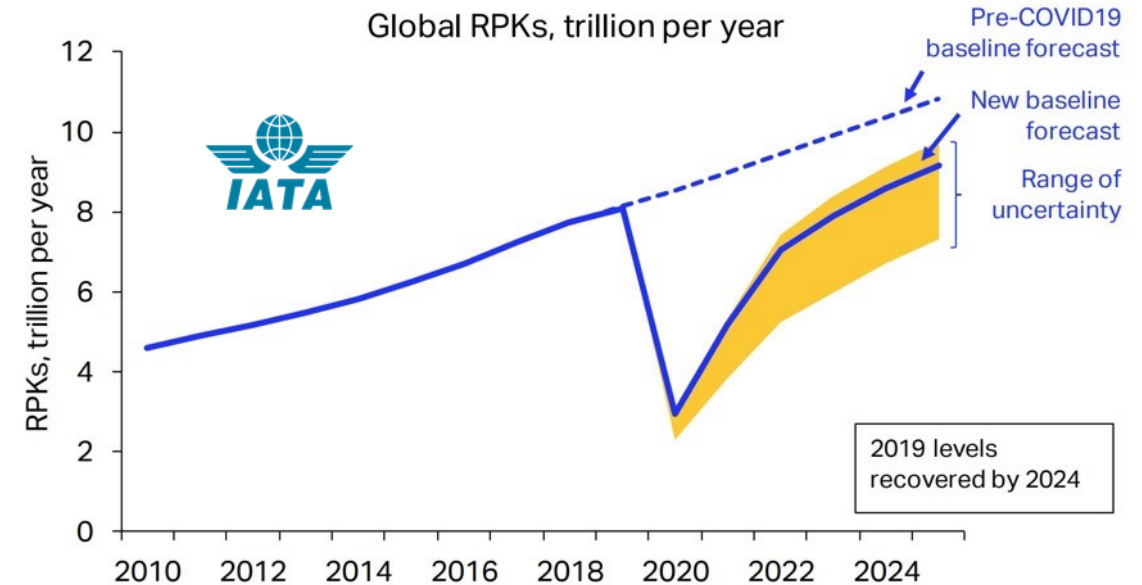# A sustainable solution for a worldwide problem

Due to Covid, a **sharp decline** of passengers occurred in 2020

The recovery of passenger traffic will most likely **reach pre-Covid level after 2024**

Global RPKs, trillion per year

Pre-COVID19 baseline forecast

New baseline forecast

Range of uncertainty

2019 levels recovered by 2024

Source: IATA/ Tourism Economics Air Passenger Forecasts

"Sustainable Aviation Fuels (SAF) is our biggest emissions reduction opportunity. The time is right to push it forward so that, together, we can achieve major carbon reductions on the way towards fossil fuel-free flight."

Alexandre de Juniac, Director General and CEO, International Air Transport Association (IATA)

SAF: What? Why? How?

Sustainable Aviation Fuel is a **renewable fuel used to power aircraft.**

SAF can be **produced from alternative raw materials**, such as crops or biogenic wastes and residues.

SAF can achieve **significant GHG emissions savings** compared to conventional jet fuel.

SAF is a "**drop-in" fuel technology**: It can be used in existing infrastructure and aircaft without the need for major alterations.

ISCC is committed to supporting the SAF space

- Many frontrunner organizations active in the field of SAF are **ISCC Association members and system users**

- ISCC is part of the **CAEP Fuels Task Group within ICAO** that is working on the further development of CORSIA eligible fuels

- ISCC is an active partner of **ICAO's "ACT-SAF" programme**

- With its members, ISCC is conducting pilot projects on a variety of topics, including for **Power-to-Liquid SAF** and **innovative feedstocks**

ISCC certification aims to ensure that SAF is produced in accordance with strict sustainability requirements

Sustainability in feedstock

Traceability of sustainable materials through the supply chain

Verified reduction of GHG emissions

ISCC certification represents a key tool in the pathway towards aviation decarbonization

Why?

ISCC certification is based on long-term experience in the certification of renewable fuels. Currently, more than 4,000 companies in the renewable fuels space are ISCC certified, with a growing focus on SAF.

How?

ISCC operates three flagship certification schemes to support the fulfilment of legal and voluntary sustainability requirements in the aviation sector.
Compliance is ensured through regular audits by ISO-accredited and ISCC-approved third-party certification bodies.

Where?

ISCC certification standards, including for SAF, can be applied on a global basis. They certify a fuel's compliance along oftentimes complex and globally-spanning supply chains.

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International Sustainability
& Carbon Certification

SAF can be certified under all ISCC standards. Choice of certification depends on regulatory and customer requirements
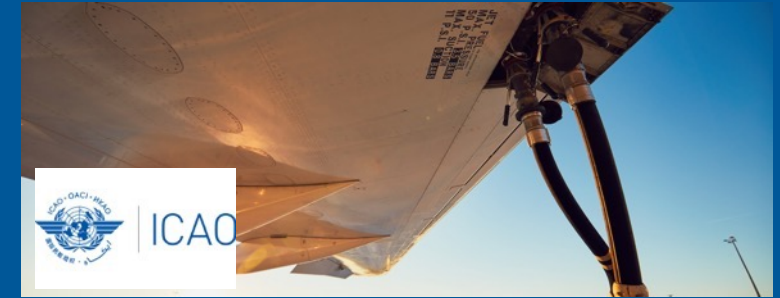
ISCC EU

- Officially recognized 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 **ReFuelEU Aviation**

ISCC PLUS

- Applicable for mostly **voluntary markets**
- Oftentimes used for making SAF claims in **non-regulated markets**

ISCC CORSIA

- Officially recognized 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**

Vast harmonization of the different ISCC standards allows for multiple certifications at reduced effort and cost

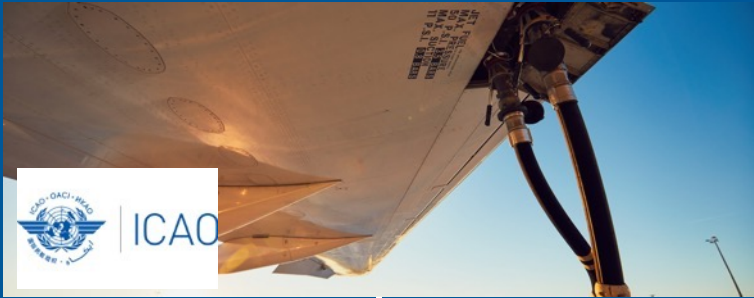| ISCC EU	ISCC PLUS	ISCC CORSIA

Multi-stakeholder organization

Quality and risk management

Integrity Program

Requirements for certification bodies

Requirements for conducting audits

Registration and certification process

The certification "ecosystem" in regulated markets
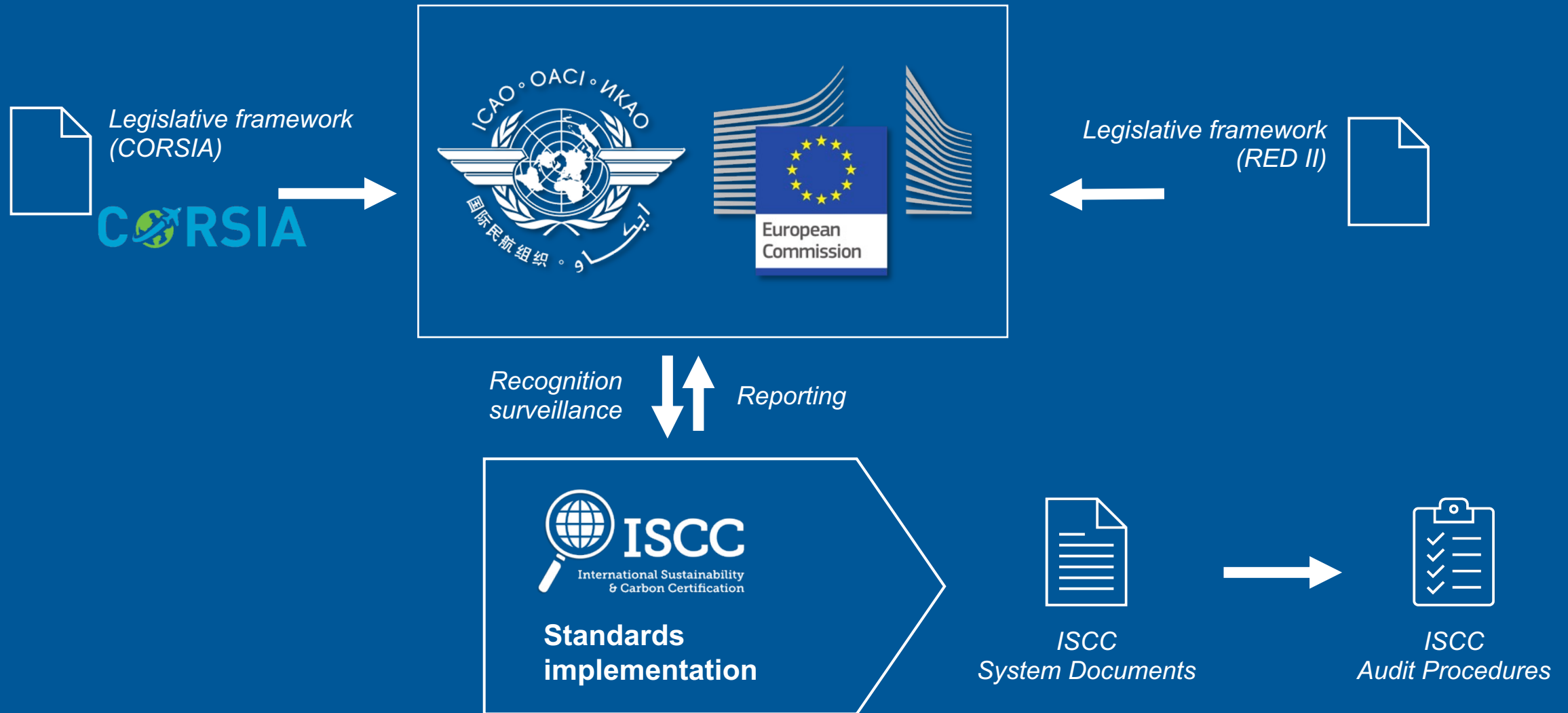
Traceability is ensured through the certification of every supply chain element

Farm / Plantation, Point of Origin	First Gathering Point, Collecting Point	Oil Mill Refinery	Trader / Storage	Processing Unit	SAF Blend point*	Downstream Trader*	Airline
Self-Declaration	Sustainability Declaration	Sustainability Declaration	Sustainability Declaration	CORSIA Eligible fuel information + PoS	CORSIA Eligible fuel information + PoS	CORSIA Eligible fuel information + PoS	

*ISCC is in the position to certify up to the Airport fuel operator should this be necessary (e.g. to enable full traceability)

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ISCC virtually certifies all kinds of renewable feedstocks, as well as genuine waste, residues, and by-products

Food and feed crops	Energy and short-rotation woody crops	Agricultural and forestry residues	Wastes	By-products	Processing residues
Rapeseed	Miscanthus	Cobs	Used cooking oil	Palm fatty acid distillate	Empty palm fruit bunches
Soybean	Switchgrass	Bark	Municipal solid waste	Tallow	Tall oil
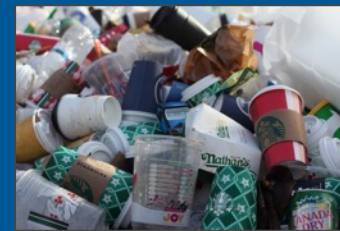
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The ISCC System Documents build the basis of the ISCC certification system

EXAMPLES

The ISCC System Documents contain

- Basic information on ISCC systems
- Sustainability requirements
- Detailed info on the GHG calculation methodologies
- Chain of custody options
- Audit Requirements and risk management

The various ISCC System Documents are on our dedicated page on the ISCC website.

ISCC offers two options for SAF certification under CORSIA

ISCC CORSIA

- **ISCC CORSIA** certification always covers the currently ICAO-approved CORSIA sustainability criteria for CEF
  - During CORSIA's pilot phase (until end of 2023), this mainly includes a net GHG emissions reduction and ensuring no biomass from high carbon stock
  - Starting with CORSIA's next phase (from 2024), this will additionally cover aspects regarding water, air, soil, conversation etc.

ISCC CORSIA PLUS

- **ISCC CORSIA PLUS** certification covers
  - the currently ICAO-approved CORSIA sustainability criteria for SAF certification
  - *plus* additional sustainability requirements set by ISCC (e.g. for social sustainability)
- Sustainability requirements under ISCC CORSIA PLUS are divided into the **six ISCC Principles**

Typical steps of an ISCC certification process. Re-certification occurs every 12 months

Registration process

1 The **system user** selects a Certification Body (CB) and registers with **ISCC**

2 The **CB** conducts a risk assessment of the specific supply chain set-up and draws up a verification plan

Risk assessment & conducting the audit

3 The **system user** sets up its management system, traceability system and life cycle emissions calculation

4 **CB** conducts up-front desk check (including mass balance, employee handbook, life cycle emissions calculation etc.)

Audit date

After the audit date

5 **CB** conducts on-site audit (including verification of results from desk check, interviews of personnel etc.)

6 If corrective measures were determined, these must be implemented by the **system user** at the latest 40 days after the audit date
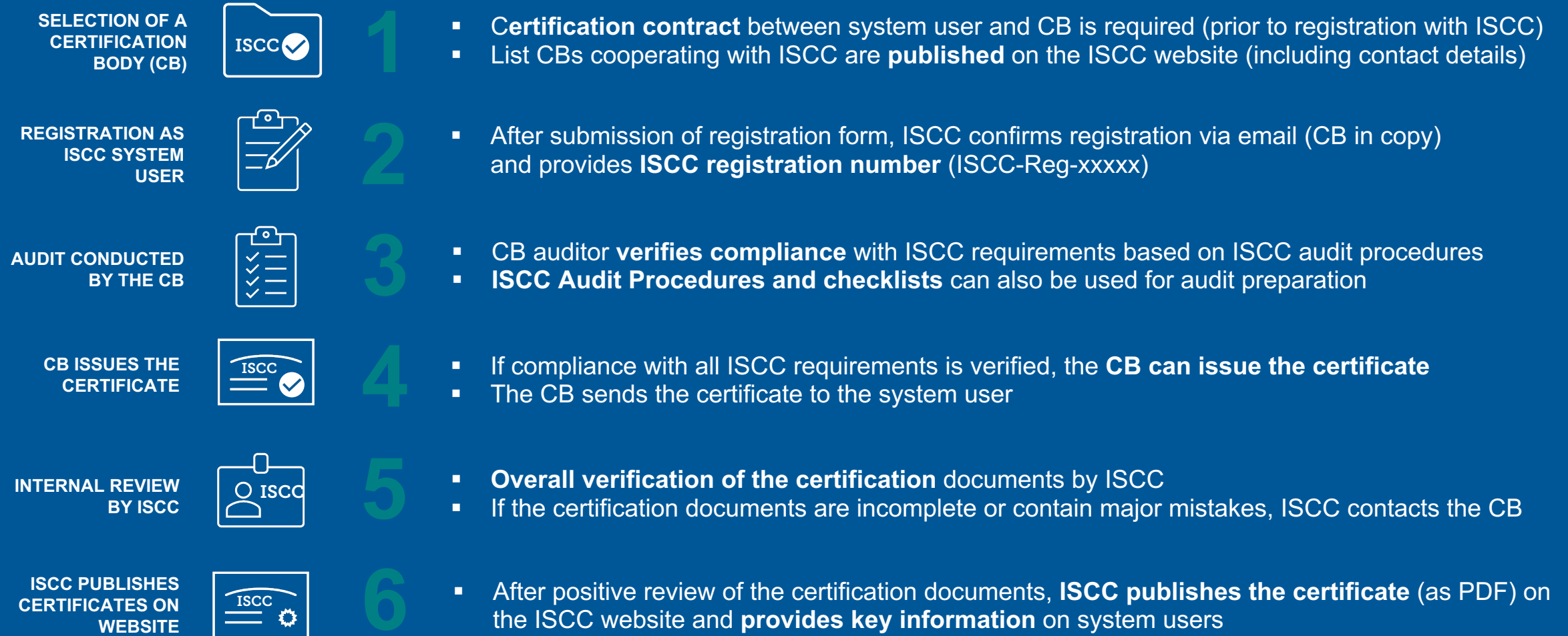
Certificate is issued

7 If audit successful, **CB** issues certificate to the system user, which can start handling sustainable material

8 **ISCC** publishes certificate on ISCC website for third parties to check

ISCC
International Sustainability & Carbon Certification

ISCC CORSIA certification process is straightforward

SELECTION OF A CERTIFICATION BODY (CB)

1
- **Certification contract** between system user and CB is required (prior to registration with ISCC)
- List CBs cooperating with ISCC are **published** on the ISCC website (including contact details)

REGISTRATION AS ISCC SYSTEM USER

2
- After submission of registration form, ISCC confirms registration via email (CB in copy) and provides **ISCC registration number** (ISCC-Reg-xxxxx)

AUDIT CONDUCTED BY THE CB

3
- CB auditor **verifies compliance** with ISCC requirements based on ISCC audit procedures
- **ISCC Audit Procedures and checklists** can also be used for audit preparation

CB ISSUES THE CERTIFICATE

4
- If compliance with all ISCC requirements is verified, the **CB can issue the certificate**
- The CB sends the certificate to the system user

INTERNAL REVIEW BY ISCC

5
- **Overall verification of the certification** documents by ISCC
- If the certification documents are incomplete or contain major mistakes, ISCC contacts the CB

ISCC PUBLISHES CERTIFICATES ON WEBSITE

6
- After positive review of the certification documents, **ISCC publishes the certificate** (as PDF) on the ISCC website and **provides key information** on system users

ISCC puts emphasis on trainings and regular stakeholder dialogue, including on sustainable aviation fuels

ISCC CORSIA Training

ISCC Training CORSIA

Content:

- Regulatory framework for CORSIA eligible fuels
- Comprehensive information about the ISCC CORSIA and CORSIA PLUS certification systems
- Supply chain certification, traceability and chain of custody
- Life cycle assessment and verification
- Sustainability requirements for eligible feedstocks
- Low LUC risk certification

ISCC Technical Stakeholder Meeting SAF

ISCC Technical Stakeholder Committee Sustainable Aviation Fuels

Content:

- Update on regulatory frameworks
- Commercial deployment of SAF
- SAF sustainability certification in practice
- Stakeholder discussion
- Outlook and next steps

ISCC is committed to support the scale-up of high-integrity SAF

Credible and verified claims

Traceability and raw material identity

Clear chain of custody rules

Broad raw material and product coverage

Robust multi-stakeholder system

Broad market recognition

High level sustainability standard

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Thank you!

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