



Sustainability Certification for Marine Fuels – Overview and Updates from ISCC

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The IMO and the EU aim to increase the uptake of sustainable marine fuels. Both intend to make use of certification to ensure sustainability

At IMO Level

Interim Guidance on the Use of Biofuels

- IMO published an interim guidance on the use of biofuels under Regulations 26, 27 and 28 of MARPOL Annex VI (DCS and CII)
- Biofuels require certification under an international certification scheme (reference to ICAO-approved schemes such as ISCC)
- Guidance valid until LCA Guidelines are fully operational

IMO LCA Guidelines

- The LCA Guidelines specify that the fuel lifecycle label (FLL) 'needs to be verified and certified by a third party'
- Further work on operationalization of certification element ongoing

At European Union Level

EU Emissions Trading System (EU ETS)

- Combustion of biofuels compliant with the EU RED criteria are rated with an emission factor of zero
- Compliance with EU RED criteria is shown via certification under approved schemes such as ISCC
- Treatment of RFNBOs and RCFs remain to be determined via legislative acts, expected in the course of 2024

FuelEU Maritime Regulation

- Builds on certification of fuels as per EU RED, i.e., under approved certification schemes such as ISCC
- Fuels not certified accordingly are considered to have the same emission factors as the least favourable fossil fuel pathway for the type of fuel in question

Why sustainability certification?

Certification can play a key role in ensuring that production of renewable fuels is sustainable and leads to GHG emission reductions

Sustainability certification aims to ensure



Sustainability in feedstock production

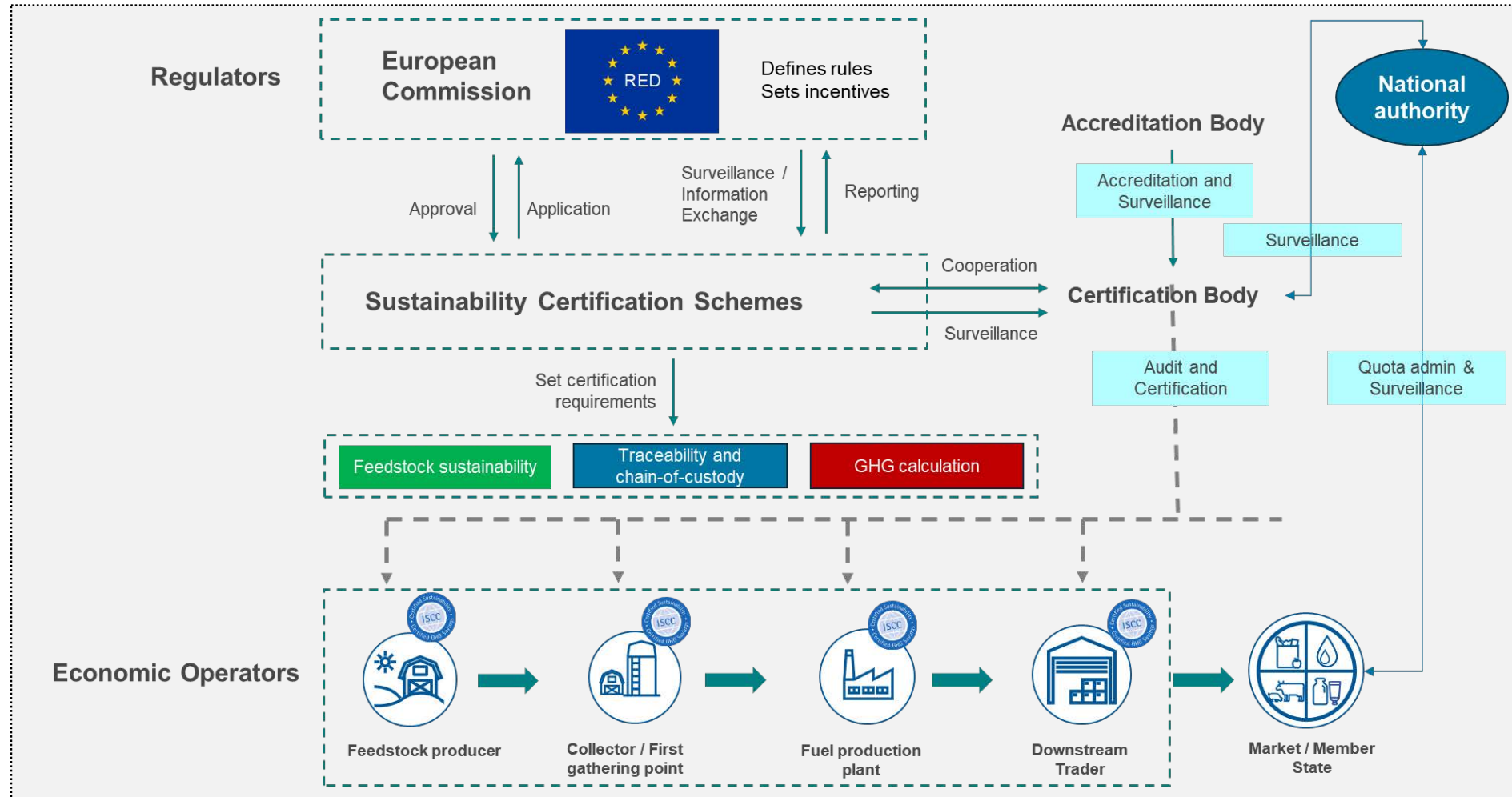


Traceability of sustainable materials through the supply chain



Verified reduction in life cycle emissions

The certification 'ecosystem' is comprised of a variety of stakeholders, with differing roles and responsibilities. Example EU RED



Schemes such as ISCC use third-party certification, an internationally recognized and widely used form of conformity assessments



- **One of the key advantages of third-party certification over other forms of conformity assessments is independence**

- The **certification scheme** provides a transparent and independent, conflict of interest-free auditing framework
- **Independent certification bodies** use that auditing framework to conduct conformity assessments of economic operators



- **Third-party certification**

- is **required as per major regulations** (e.g., under ICAO CORSIA, the EU RED, the UK's RTFO or Japan's FIT scheme)
- constitutes **best practice in major voluntary markets** (e.g., Rainforest Alliance, FSC certification for sustainable forestry or GlobalG.A.P. certification for good agricultural practices)

ISCC offers three certification systems, aimed at regulated and voluntary markets. System choice depends on 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 certification of SMF relevant for, in particular, the **FuelEU Maritime Regulation** and the **EU ETS**

ISCC PLUS



- Applicable for mostly **voluntary markets**
 - Energy and renewable fuels outside the EU RED II market
 - Industrial applications
 - Food and feed markets
- **Recognized in selected regulated markets**, such as for biofuel imports to Japan

ISCC CORSIA

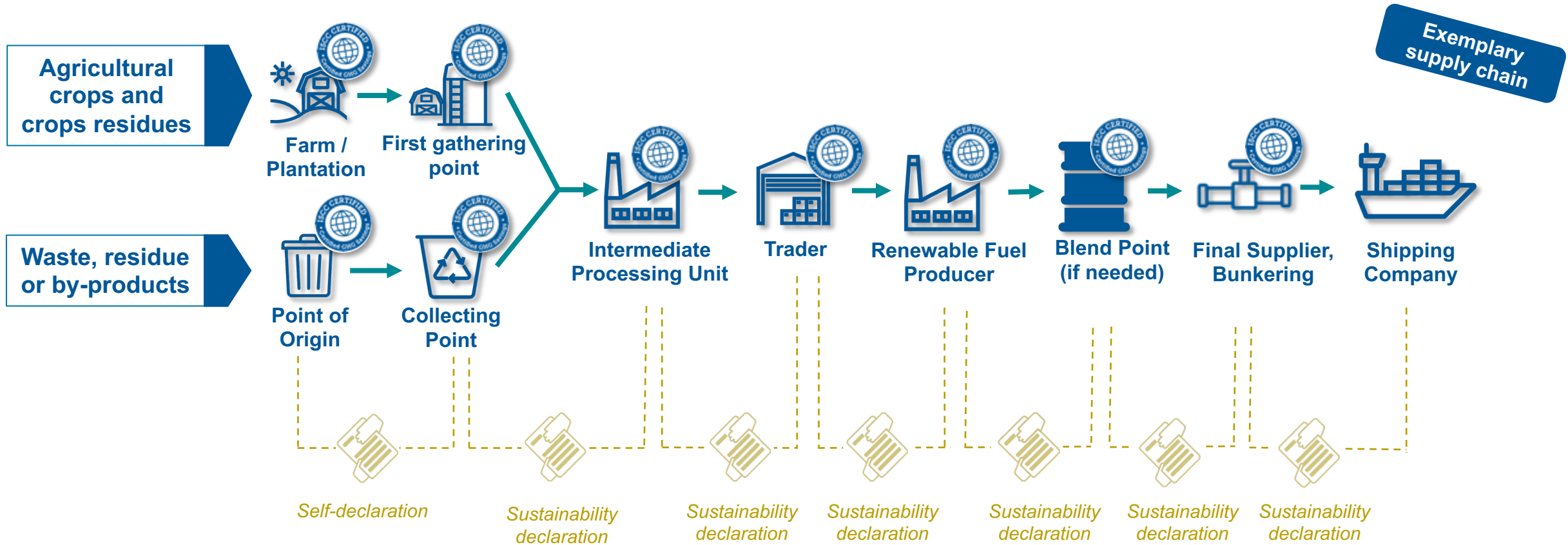


- Officially approved by ICAO
- Used to demonstrate compliance with the ICAO CORSIA sustainability criteria for sustainable aviation fuels
- ISCC CORSIA certified SAF can be used by airlines to make claims under CORSIA
- **Not relevant for marine fuels**

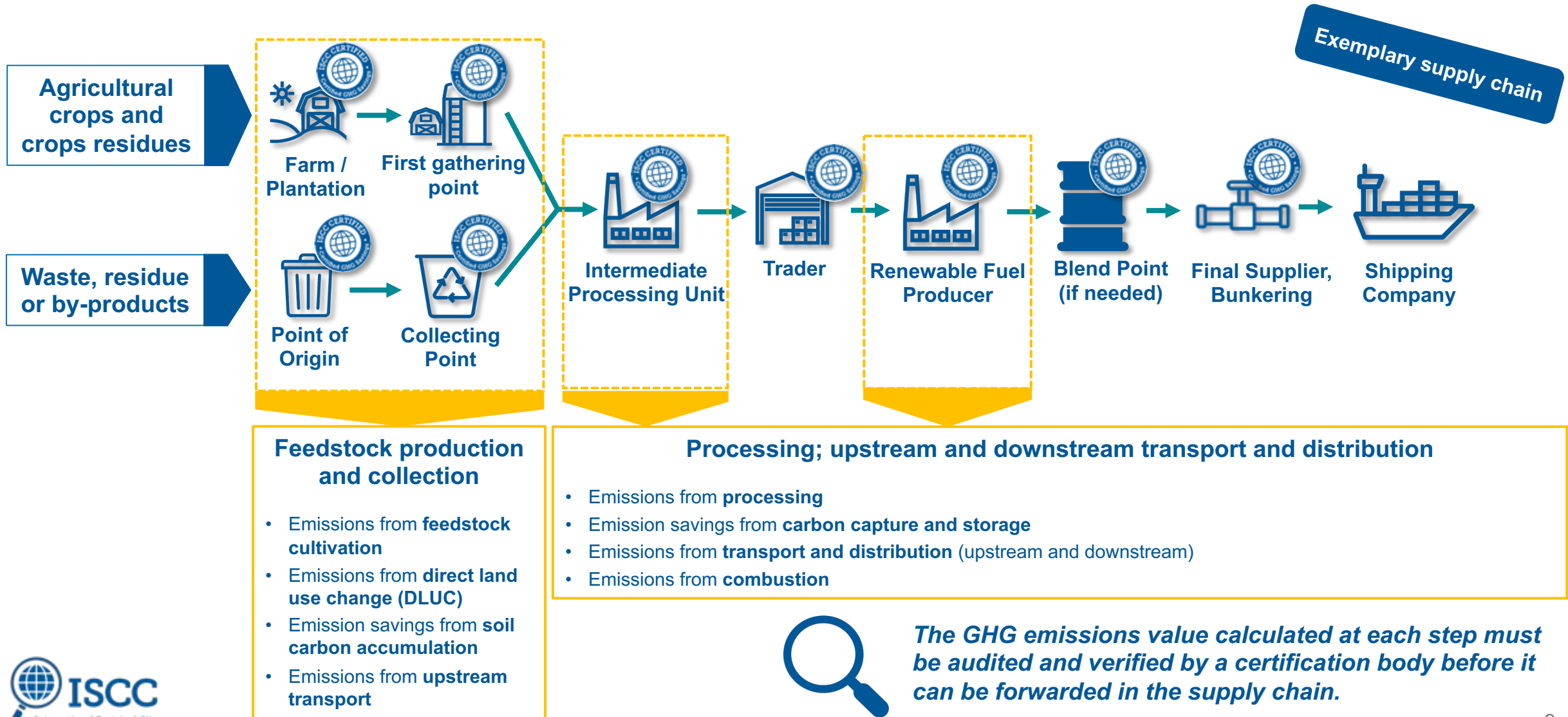
Certification bodies cooperating with ISCC provide auditor capacities all over the world, including for sustainable marine fuels



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 marine fuel's carbon intensity



A wide range of raw materials can be (and are!) ISCC certified, including recycled materials and renewables



Corn



Rapeseed

Bio



Sugarcane



Cotton



Tall Oil



UCO

Bio-circular



Forestry residues



Straw



Mixed Plastic Waste



End-of-life tyres

Circular (technical)



Waste textiles



CO₂ (post-industrial)

Examples



Renewable electricity

Renewable



Green hydrogen as energy carrier

Products that could serve as alternative fuels for shipping are certified under ISCC as of today



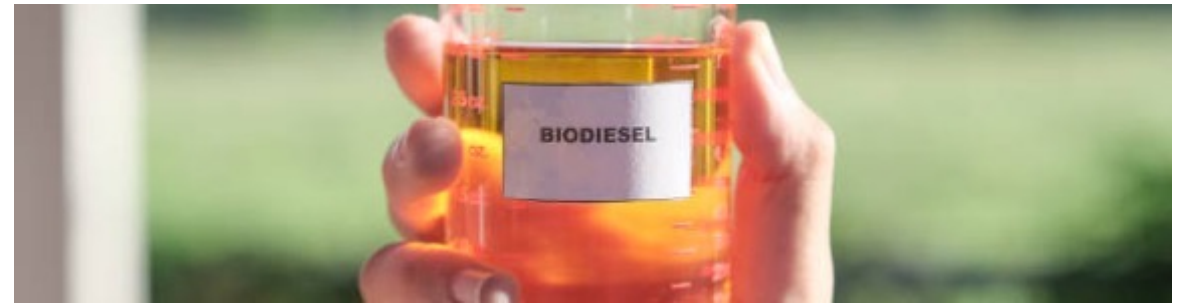
Bio-methanol



Bio-LNG



**Green hydrogen and derivatives
(e.g. green ammonia)**



Biodiesel

We see several challenges in SMF certification (as for renewable fuels overall) that will need to be worked through to facilitate market scale-up

Growing complexity in certification standards and requirements, lack of harmonization

- **Growing number and complexity of regulatory frameworks**, including the related certification frameworks
- **Oftentimes not full alignment** between different regulatory frameworks when it comes to certification (usually similar, but still distinct)
- Entities along the value chain (e.g., fuel producers) wanting to access multiple markets are faced with **multiple, oftentimes not fully aligned certification standards**
- **Certification schemes have limited leeway to harmonize** their certification standards if underlying regulatory frameworks are different

Handling of documentary evidence for fuel compliance if different regulatory frameworks interlink

- **Authorities require documentary evidence** from obligated parties (e.g., fuel suppliers or shipping companies) on the sustainability of the fuel supplied/used
- Generally, this evidence comes in the form of the **'Proof of Sustainability' (PoS) document**, indicating all relevant sustainability and GHG information for a fuel batch
- To mitigate the risk of double counting, the **PoS document can generally only be used once and for one purpose** (e.g., by a fuel supplier towards an EU RED obligation)
- Due to interlinkage and/or overlap of different regulatory requirements (e.g., EU RED, EU ETS, FuelEU Maritime), **different entities in the supply chain may want or need to make a claim on a single batch of fuel**
- Sometimes **lack of clarity around whether authorities accept multiple claims of a fuel batch** under different regulatory frameworks; in addition, not yet clear structure and guidance in place for **cases where the PoS is no longer available**



Final thoughts and outlook

- We remark a **noticeable uptake in interest in certification of SMF in recent months**, both in an EU and a global context
- **ISCC is committed to bringing in its experience** of 10+ years of renewable fuel certification, including from road transport and aviation
- **ISCC is actively supporting the operationalization of certification frameworks** in regulated and voluntary markets
- **ISCC will work with stakeholders to work through any upcoming challenges and support SMF scale-up**, including
 - aligning and harmonizing ISCC certification standards where reasonable and possible given regulatory circumstances
 - dealing with challenges related to provision of documentary evidence to facilitate compliance claims of obligated entities
 - further awareness raising around sustainability certification for marine fuels



Thank you!

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