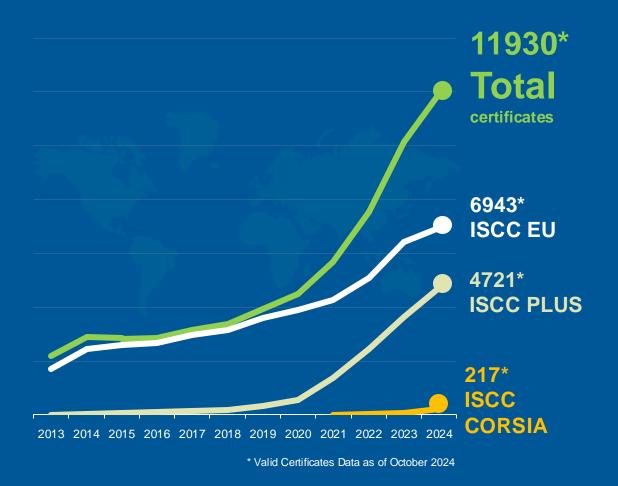


Explore new market opportunities with ISCC – Unlock untapped potentials

ISCC is growing disproportionately worldwide. SEA seems not to participate at all - an attempt to explain



Possible reasons for SEA markets not participating in overall ISCC growth:



Focus on traditional commodity markets



Shifting to customer target groups that have **lower regulatory requirements**



The expanding complexity of potential market segments, along with the rising number of additional requirements (EUDR, CSDR, CSDDD, CBAM, etc.), is restricting insight.



Unlocking Untapped Market Potentials with ISCC - Potential Overview

Supply Chain Input / Feedstock



Agriculture



Forestry



Waste / Residues



Renewable Electricity



Non Renewable



		Compliance System		
Sustainability Certification	RED II	RTFO	JAPAN FIT	ISCC EU
	Refuel EU	IRA Tax Credits	Circular Regul.	
	CORSIA	Voluntary Claims	EUDR	
	CORSIA LCAF	Registry Usage	FSS	ISCC CORSIA
taina	ETS EU	Voluntary Food	Low iLUC	ISCC PLUS
Sust	ETS UK	Voluntary Feed	E-Fuels	
	FuelEU Maritime	Voluntary Chemical	RNFBO	
LO	Potential sco	Potential scope of the EU Green Claims Directive		ISCC CFC
Mitigation	Carbon Footprint Voluntary Market			
GHG Miti	Voluntary Carbon Market			ClimatePal
	EU Carbon Removal and Carbon Farming Regulation			

Currently most Market Participants focus on the RED W / R market

Supply Chain Input / Feedstock



Agriculture

Certification

Sustainability



Forestry



Waste / Residues



Renewable Electricity



Non Renewable

elq eld GHG Mitigation

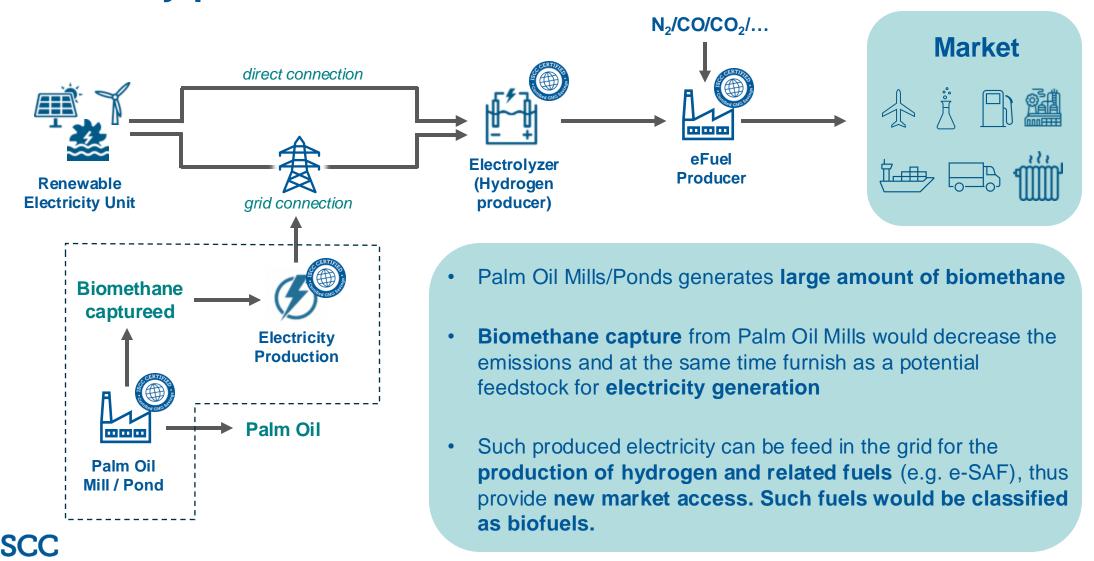
Compliance	Market / Compliance			
	JAPAN FIT	RTFO	RED II	
ISCC	Circular Regul.	IRA Tax Credits	Refuel EU	
	EUDR	Voluntary Claims	CORSIA	
ISCC COF	FSS	Registry Usage	CORSIA LCAF	
	Low iLUC	Voluntary Food	ETS EU	
ISCC PL	E-Fuels	Voluntary Feed	ETS UK	
7	RNFBO	Voluntary Chemical	FuelEU Maritime	
ISCC CI	Directive	ope of the EU Green Claims	Potential sco	
	Carbon Footprint Voluntary Market			
Climate		Voluntary Carbon Market		
	Regulation	moval and Carbon Farming	EU Carbon Re	

System

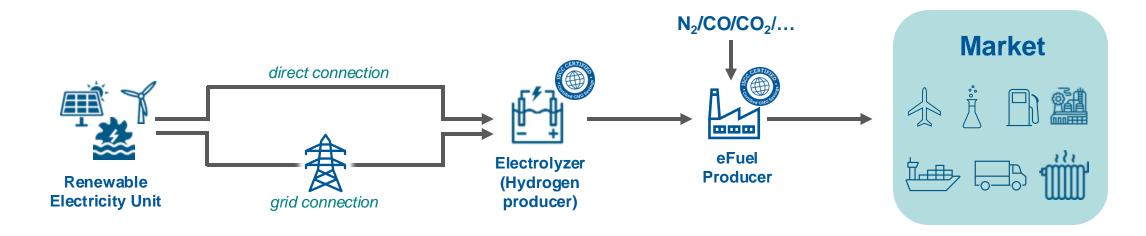
RSIA

LUS

Palm Oil Mills can be a valuable source of biomethane for electricity production and further e-fuels



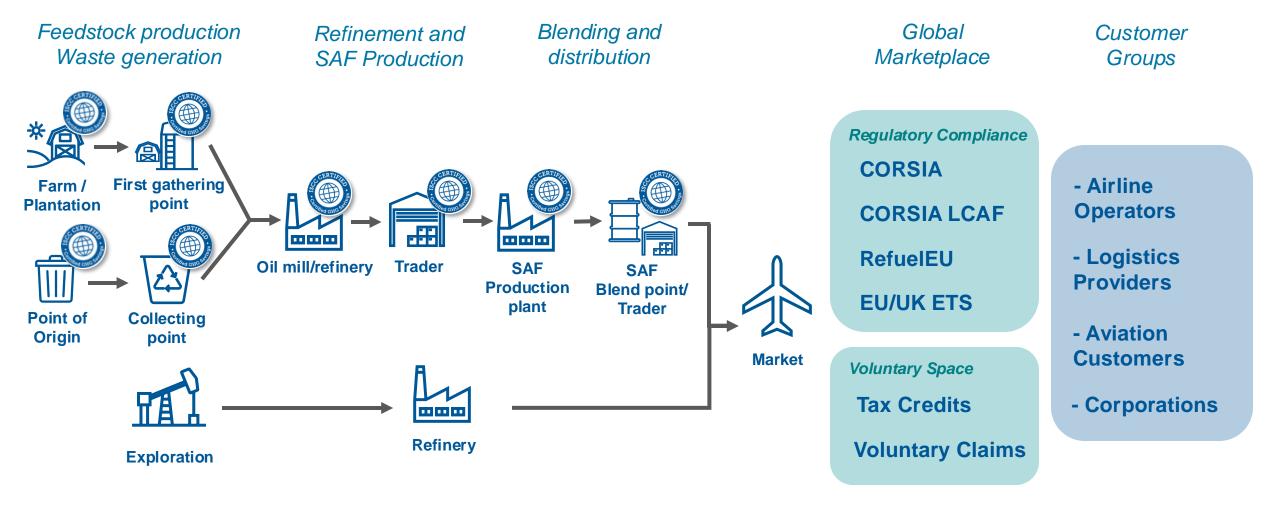
For RFNBOs certification, a non-biological source of electricity shall be applied for hydrogen production



- Under the EU, renewable electricity of non-biological origin can be used for the production of RFNBOs.
- ISCC has already received the **positive technical assessment for the ISCC EU RFNBOs certification** and awaits for the European Commission recognition of the voluntary schemes.



Unlocking untapped market potentials with ISCC – the case of aviation fuels





Expanding global opportunities: The ISCC Credit Transfer System for voluntary SAF markets





Globally, **airlines, logistics providers, and aviation end-customers** are looking to purchase and **claim GHG emissions reductions** from SAF



Provides **transparency and credibility for SAF** by connecting physical supply chains to resulting claims



Easily integrated into existing certification processes, allowing **global** market access through ISCC CORSIA, ISCC EU, & ISCC PLUS



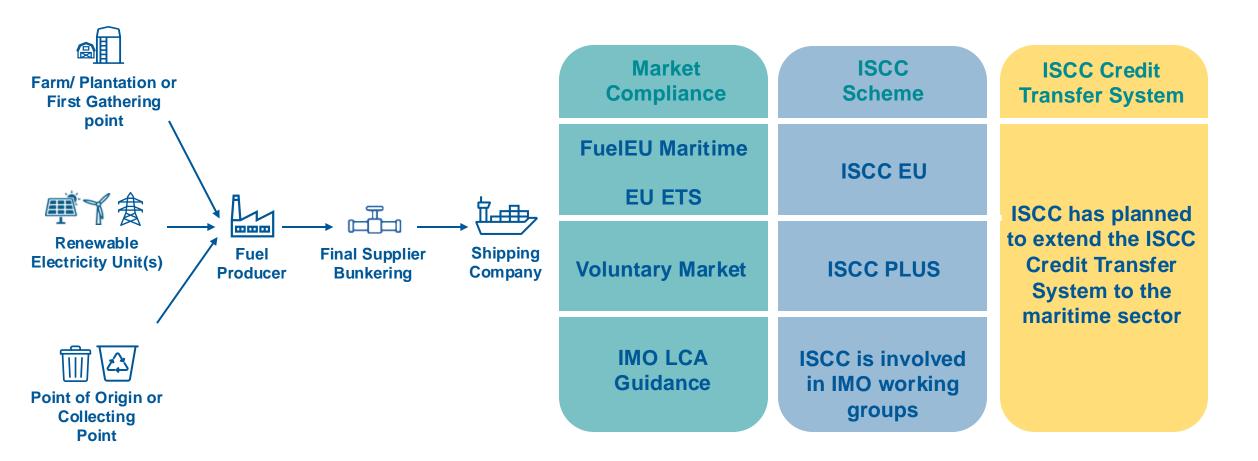
Users and transactions growing, with many fuel suppliers, airlines, and end customers onboarding



ISCC one of the **first movers** exploring **expansion to other global markets**, such as Marine fuels



Unlocking untapped market potentials with ISCC – the case of marine fuels





As the SMF market develops, more and more companies choose ISCC for SMF certification including in the SEA region





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12/08/2024 - NEWS

Total Energies Marine Fuels Supplies its First B100 Biofuel Bunker in Singapore

The UCOME biodiesel supplied is a second-generation, waste-based fuel sourced in Southeast Asia. This circular economy approach minimizes competition with arable land and is certified under the International Sustainability & Carbon Certification (ISCC) system.

Source: TE Website, retrieved on Oct 7th 2024

Straits Energy gains ISCC EU Certification for marine biofuel entry





Source: The Malaysian Reserve, retrieved on Oct 7th 2024

Malaysian supplier bunkers containership with ISCCcertified biofuel

May 1, 2024, by Naida Hakirevic Prevljak

Tumpuan Megah Development, a subsidiary of Malaysia's investment holding company Straits Energy Resources Berhad, has completed what is believed to be 'the first delivery' of International Sustainability and Carbon Certification (ISCC EU) certified marine biofuel by a Malaysian supplier.

Source: OffShore Energy, retrieved on Oct 7th 2024



Malaysia: Tumpuan Megah **Development achieves ISCC EU** certification for bio bunker fuels

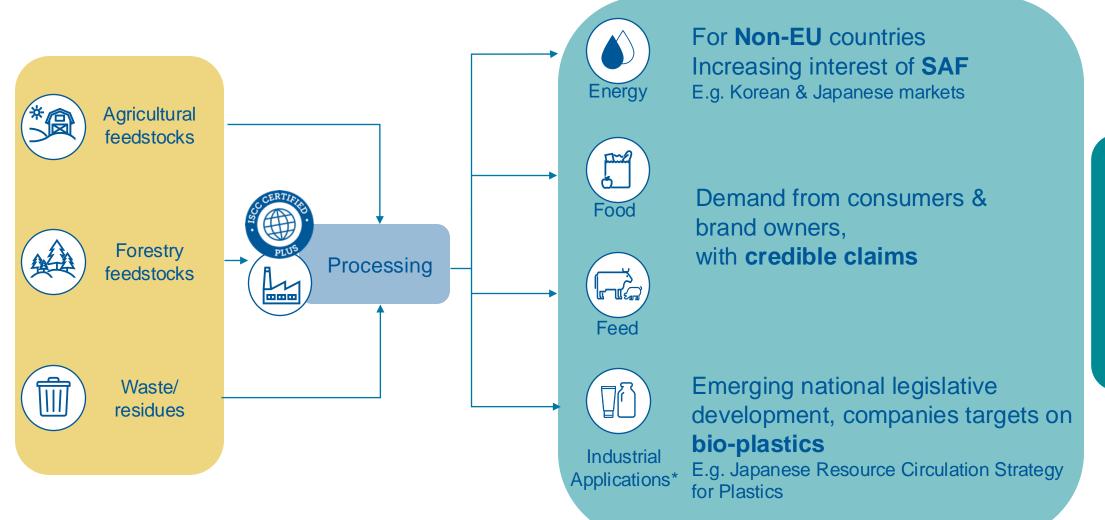
Bunkering firm Tumpuan Megah is the first Malaysian industry player to achieve ISCC EU certification as a supplier and trader of biofuels, spearheading industry's efforts to lower shipping's carbon footprint.



Source: Manifoldtimes, retrieved on Oct 7th 2024



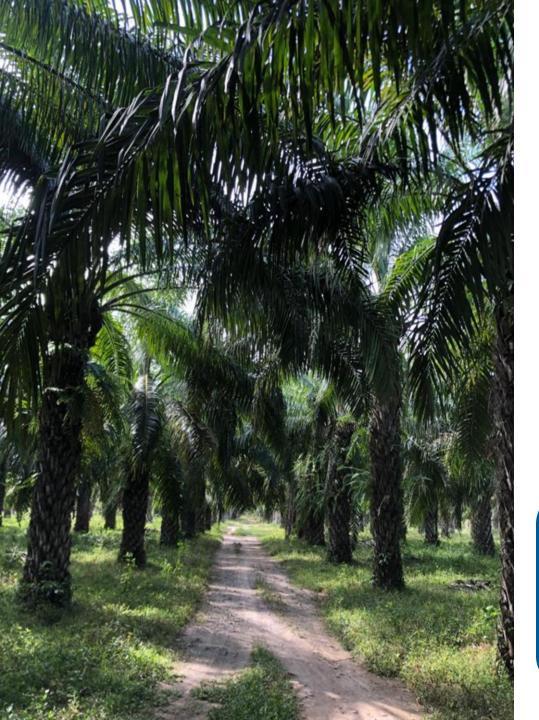
Unlock new markets with ISCC PLUS



Relevant Add-ons:

- EUDR
- FSS
- Low ILUC





Opportunities for palm certification under ISCC PLUS



Aims at supporting the efforts at the production level of global agricultural value chains in fostering zero hunger worldwide.



Aims at supporting system users with the **due diligence process** to fulfil their EUDR obligations.

Pilot certification project

- Gremca and Daabon in Colombia
- ISCC EU and PLUS certification with EUDR Add-on
- FSS Add-on certification already successfully applied
- Materials: Palm FFB, palm crude oil

Global reach of ISCC PLUS with regard to tire manufacturers



- More than 25 tyre suppliers (end-product) are certified under ISCC PLUS as of October 2024
- There are over 5 ISCC PLUS certified System users handling natural rubber

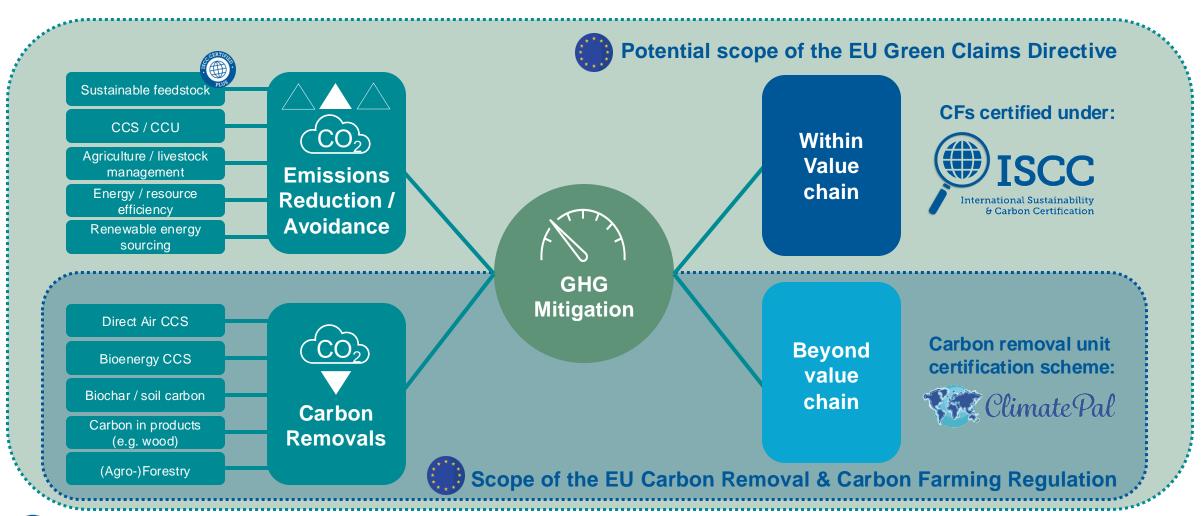


Pilot Certification project:

- ISCC PLUS certification for natural rubber
- Pilot certification for EUDR Add-on
- Country: Liberia, Africa



GHG Mitigation: certification routes





Carbon Credits + ISCC certification? Depends...



Eligibility for carbon credit certification



Additionality

Does the market provide an insufficient incentive to produce the sustainable feedstock?

Verifiability

Is a carbon crediting methodology available and applicable to the GHG mitigation activity (e.g., "CDM booklet")? Or can a methodology be developed to quantify and verify the GHG mitigation?



Eligibility for certification under ISCC PLUS



ISCC PLUS basics

Do production and supply chain meet all certification criteria regarding sustainability, traceability and chain of custody?

GHG calculations

Are any GHG savings calculations (e.g., versus fossil fuels¹) only used to demonstrate *sustainability* and compliance with certain thresholds?

GHG mitigations are not claimed through ISCC PLUS claims





Bio / Circular / Renewable origin

The certification may enable the consumer of the feedstock to claim it as bio, circular or renewable (not carbon neutral).

Carbon footprint

If a carbon footprint² is determined and certified (GHG add-on), the consumer of the feedstock may report the corresponding emissions in their voluntary disclosure. The GHG mitigation – e.g., CCS – itself must not be included in the footprint calculation.

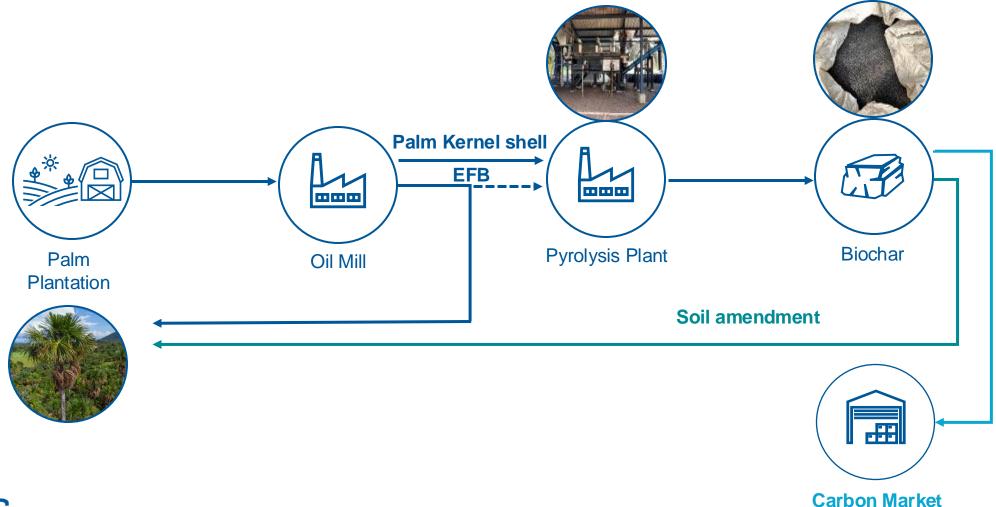
Simultaneous certification of carbon credits + feedstock may be feasible







Example: Biochar production from palm oil production residues (palm kernel shell) + use of EFB as soil amendment





An important pillar to unlock these untapped potentials is the ISCC sustainability platform

