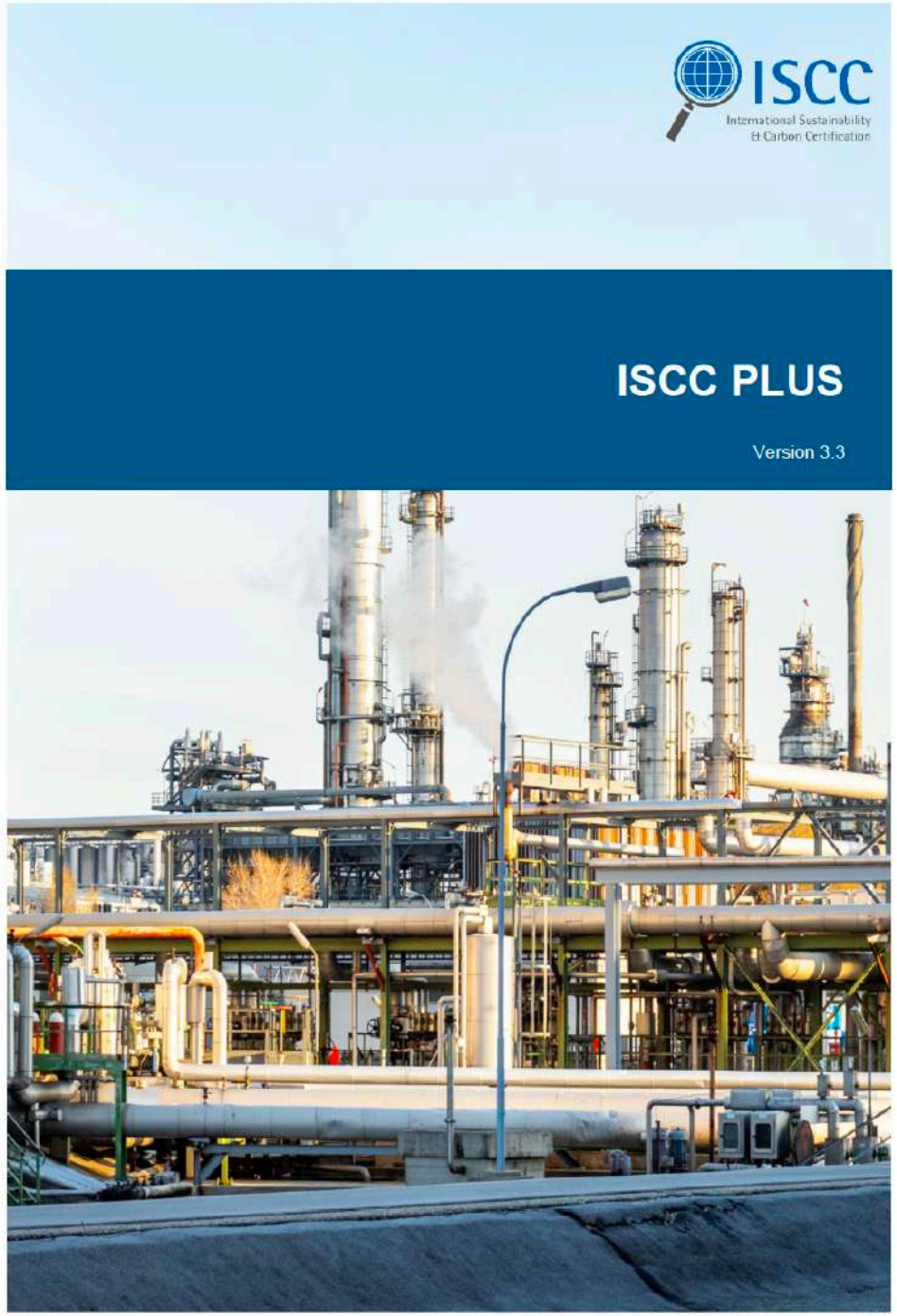
Development of ISCC PLUS since the last Technical Stakeholder Meeting

Dr. Peter Hawighorst, Meo Carbon Solutions,

ISCC Technical Stakeholder Meeting „Circular Economy and Bioeconomy“, 10 December 2020



The ISCC PLUS System Document will go again into Public Consultation after the TC

Key amendments for 2nd round of stakeholder feedback

- Mandatory forwarding of new raw material categories
- Voluntary forwarding type of raw material /country of origin
- Several updates in circular chapter (clarifications and extensions of definitions, e.g. re-use and re-naming post-industrial → pre-consumer material)
- Specification of ISCC compliant claim
- Inclusion of renewable electricity
- Extension to sub-chapter in mass balance: controlled blending
- More detailed definition of value chain elements
- New chapters on group certification for small companies and trader/distribution setups

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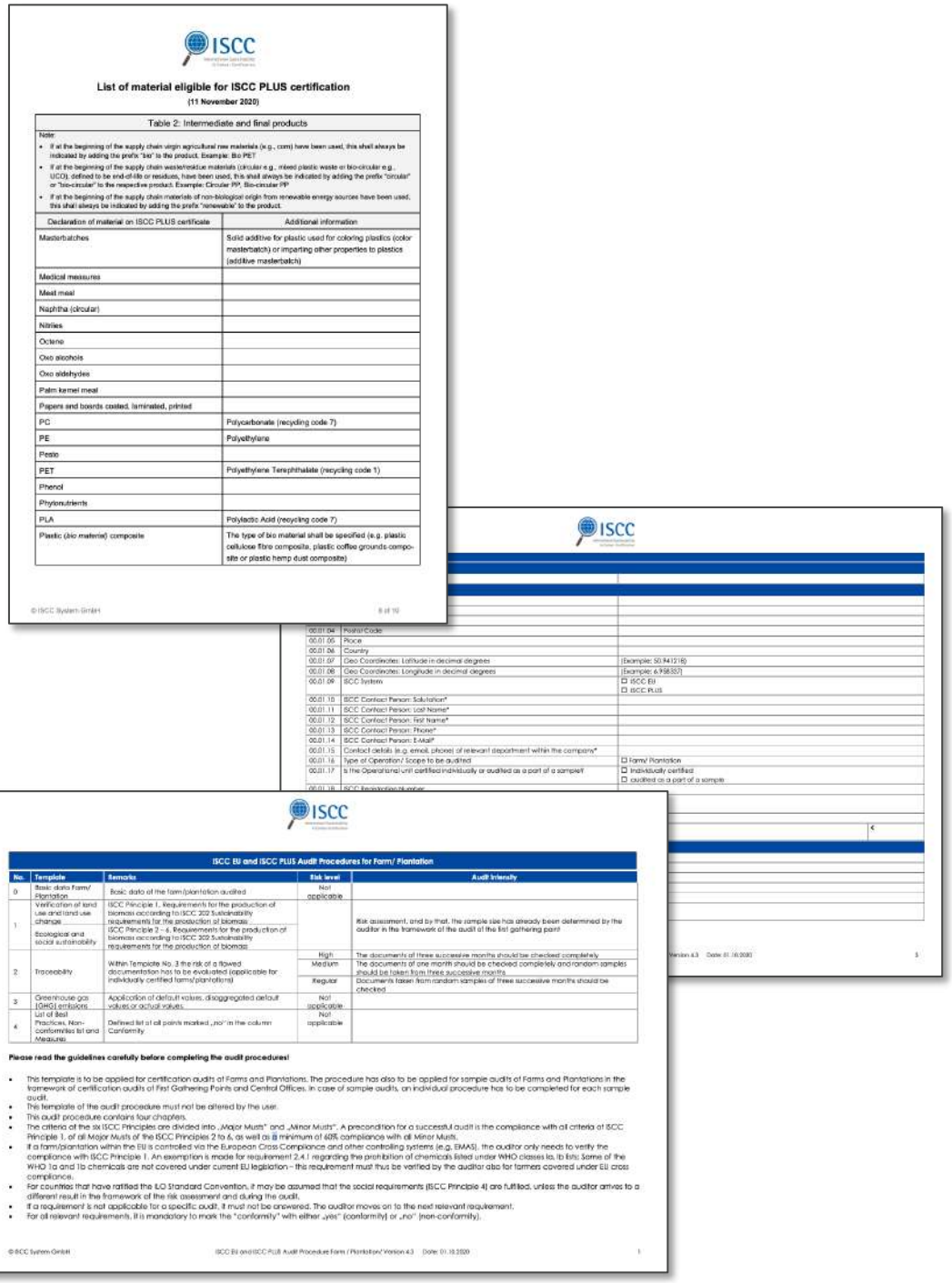

List of material eligible for ISCC PLUS certification

(11 November 2020)

Table 2: Intermediate and final products

Note:

- If at the beginning of the supply chain virgin agricultural raw materials (e.g., corn) have been used, this shall always be indicated by adding the prefix "bio" to the product. Example: Bio PET
- If at the beginning of the supply chain waste/residue materials (circular e.g., mixed plastic waste or bio-circular e.g., UCO), defined to be end-of-life or residues, have been used, this shall always be indicated by adding the prefix "circular" or "bio-circular" to the respective product. Example: Circular PP, Bio-circular PP
- If at the beginning of the supply chain materials of non-biological origin from renewable energy sources have been used, this shall always be indicated by adding the prefix "renewable" to the product.

Declaration of material on ISCC PLUS certificate	Additional information
Masterbatches	Solid additive for plastic used for coloring plastics (color masterbatch) or imparting other properties to plastics (additive masterbatch)
Medical measures	
Meat meal	
Naphtha (circular)	
Nitriles	
Octene	
Oxo alcohols	
Oxo aldehydes	
Palm kernel meal	
Papers and boards coated, laminated, printed	
PC	Polycarbonate (recycling code 7)
PE	Polyethylene
Pesto	
PET	Polyethylene Terephthalate (recycling code 1)
Phenol	
Phytonutrients	
PLA	Polylactic Acid (recycling code 7)
Plastic (*bio material*) composite	The type of bio material shall be specified (e.g. plastic cellulose fibre composite, plastic coffee grounds-composite or plastic hemp dust composite)

ISCC EU and ISCC PLUS Audit Procedures for Farm/ Plantation

No.	Template	Remarks	Risk level	Audit intensity
0	Basic data Farm/ Plantation	Basic data of the farm/plantation audited	Not applicable	
1	Verification of land use and land use change	ISCC Principle 1, Requirements for the production of biomass according to ISCC 202 Sustainability requirements for the production of biomass		Risk assessment, and by that, the sample size has already been determined by the auditor in the framework of the audit of the first gathering point
	Ecological and social sustainability	ISCC Principle 2 – 6, Requirements for the production of biomass according to ISCC 202 Sustainability requirements for the production of biomass		
2	Traceability	Within Template No. 3 the risk of a flawed documentation has to be evaluated (applicable for individually certified farms/plantations)	High	The documents of three successive months should be checked completely
			Medium	The documents of one month should be checked completely and random samples should be taken from three successive months
			Regular	Documents taken from random samples of three successive months should be checked
3	Greenhouse gas (GHG) emissions	Application of default values, disaggregated default values or actual values	Not applicable	
4	List of Best Practices, Non-conformities list and Measures	Defined list of all points marked „no" in the column Conformity	Not applicable	

Please read the guidelines carefully before completing the audit procedures!

- This template is to be applied for certification audits at Farms and Plantations. The procedure has also to be applied for sample audits of Farms and Plantations in the framework of certification audits of First Gathering Points and Central Offices. In case of sample audits, an individual procedure has to be completed for each sample audit.
- This template of the audit procedure must not be altered by the user.
- This audit procedure contains four chapters.
- The criteria of the six ISCC Principles are divided into „Major Musts" and „Minor Musts". A precondition for a successful audit is the compliance with all criteria of ISCC Principle 1, of all Major Musts of the ISCC Principles 2 to 6, as well as a minimum of 60% compliance with all Minor Musts.
- If a farm/plantation within the EU is controlled via the European Cross Compliance and other controlling systems (e.g. EMAS), the auditor only needs to verify the compliance with ISCC Principle 1. An exemption is made for requirement 2.4 / regarding the prohibition of chemicals listed under WHO classes Ia, Ib lists: Some of the WHO Ia and Ib chemicals are not covered under current EU legislation – this requirement must thus be verified by the auditor also for farmers covered under EU cross compliance.
- For countries that have ratified the ILO Standard Convention, it may be assumed that the social requirements (ISCC Principle 4) are fulfilled, unless the auditor arrives to a different result in the framework of the risk assessment and during the audit.
- If a requirement is not applicable for a specific audit, it must not be answered. The auditor moves on to the next relevant requirement.
- For all relevant requirements, it is mandatory to mark the "conformity" with either „yes" (conformity) or „no" (non-conformity).

The updated ISCC PLUS audit procedures must be used since 1 October onwards

ISCC PLUS procedures / Material list

- Update of **ISCC PLUS audit procedures** as of 27 August 2020 and must be used since 1 October 2020 onwards
  - Templates for CoC, Farm/ Plantation, PoO

- **ISCC PLUS material list**: last update 11 November 2020
  - In case of new materials, not included on ISCC PLUS material list, please contact ISCC before the audit

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ISCC PLUS Self-Declaration for Waste and Residues — **Point of Origin**

Name of Point of Origin	
Street address	
Postcode, city	
Country	
Material provided to the Collecting Point (+ waste code if applicable)	
Recipient of Self-Declaration (Collecting Point)	

No.	Requirements	
1	Documentation is available to prove compliance with ISCC requirements (e.g. for quantities delivered under ISCC) including contractual agreements with subcontractors and recipients (collecting points), delivery notes/ weighbridge tickets.	
2	The respective material is a waste and has reached the end of its intended life cycle. This means any substance or object which the holder discards or intends or is required to discard. The waste was not intentionally produced and its further use requires an additional processing step.	
3	In case of plastic waste: The delivery is essentially free of paper, biomass and/ or used tires and consists of plastic of the Resin Identification Code (RIC) categories (please tick boxes):	☐ 1 PET ☐ 2 HDPE ☐ 3 PVC ☐ 4 LDPE ☐ 5 PP ☐ 6 PS ☐ 7 Other
4	The point of origin holds appropriate licenses and permits to act as a legal waste management company or is an entity that generates recovered material as defined in ISO 14021:2016. In either case, this can be proven by relevant documentation. Recovered material is defined by ISO as material that would have otherwise been disposed of as waste or used for energy recovery but has instead been collected and recovered as a material input instead of using new primary material for a recycling or manufacturing process.	
5	Compliance with applicable national and regional legislation is ensured (in particular with respect to the definition of waste, waste prevention, waste collection, waste sorting, transport, labelling of waste, etc.).	
6	☐ Post-consumer material ☐ Pre-consumer material[1]	
7	☐ (Technical)-Circular ☐ Bio-Circular ☐ Renewable[2]	

I herewith confirm that all above-mentioned requirements are met and that my operations comply with the ISCC requirements*. I further accept that auditors from certification bodies, inspectors from authorities (with the purpose to evaluate the performance of the auditor) or ISCC may verify the compliance with the ISCC requirements on my premises.

Evidence/findings of the above-mentioned requirements are readily available and can be provided during the audit and upon request.

Place, Date: _____ **Signature:** _____

[1] In case neither "post-consumer" nor "pre-consumer" origin is specified, it is not allowed to classify the material as being of "post-consumer" status. This document neither replaces official delivery documents nor does it take precedence over national waste classification legislation.
[2] Examples: fossil-circular: mixed plastic waste (MPW); bio-circular: Used Cooking Oil (UCO), renewable: electricity from renewable energy sources

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Version 1.0: 11 November 2020

New ISCC self-declaration for Points of Origin and all types of waste and residues

- Confirming w/r status
- Differentiation post-consumer / pre-consumer material
- Raw material category
- Relevant documentation to be in place
- Complinace with national law

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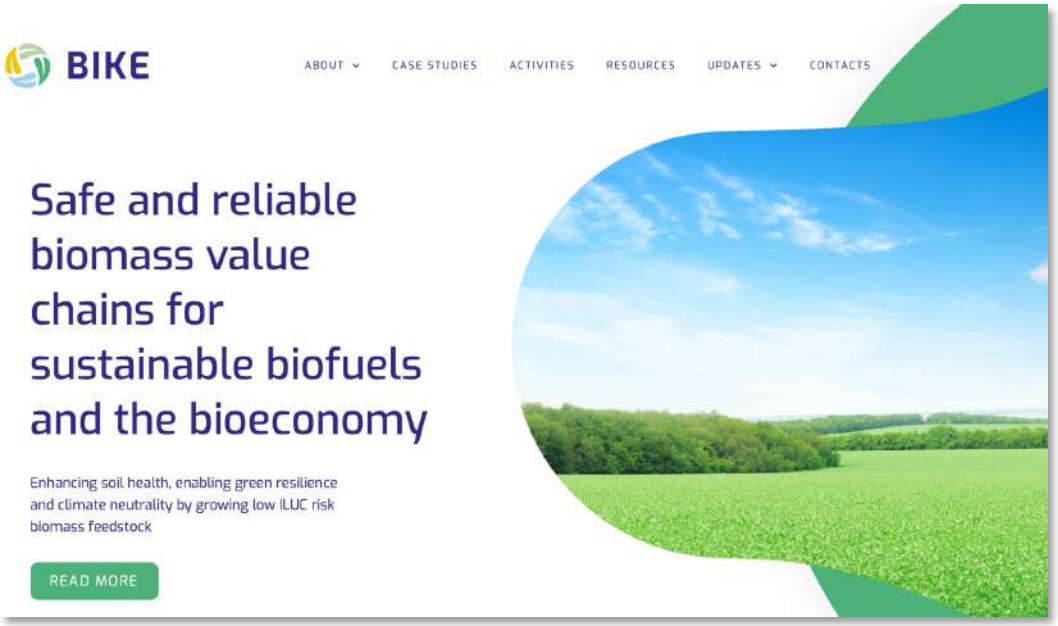

Please find more information on our homepage:
www.bike-biofuels.eu

BIKE

ISCC is partner in an EU-funded project on low ILUC risk certification for bio-based products

- Project started 1 September 2020 (3 year duration)
- ISCC leading „certification module“ within project
- Development of **ISCC PLUS module for low ILUC risk certification**
- Project partners, e.g.:
  - University of Florence (IT)
  - Stichting Wageningen Research (NL)
  - FAO (IT)
  - Imperial College London (UK)
  - UPM
  - ENI

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 952872.

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In 2020 Amsty certified several plants producing circular styrenes in the US

Source: Facebook (2020); https://www.regenyxllc.com/regenyx-history-news

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Orkla shows its commitment to source certified plant-based feedstock to use the ISCC logo and additional claims on the packaging

Together with our supplier **we are replacing fossil plastic with bio-based through ISCC certified mass balance,** corresponding to the amount of plastics in this packaging. This leads to 50% less CO_2 emissions from the plastics in this bag.*

**Our suppliers have made an LCA on this.*

ISCC
www.iscc-system.org
MIX supporting
certified sustainable material

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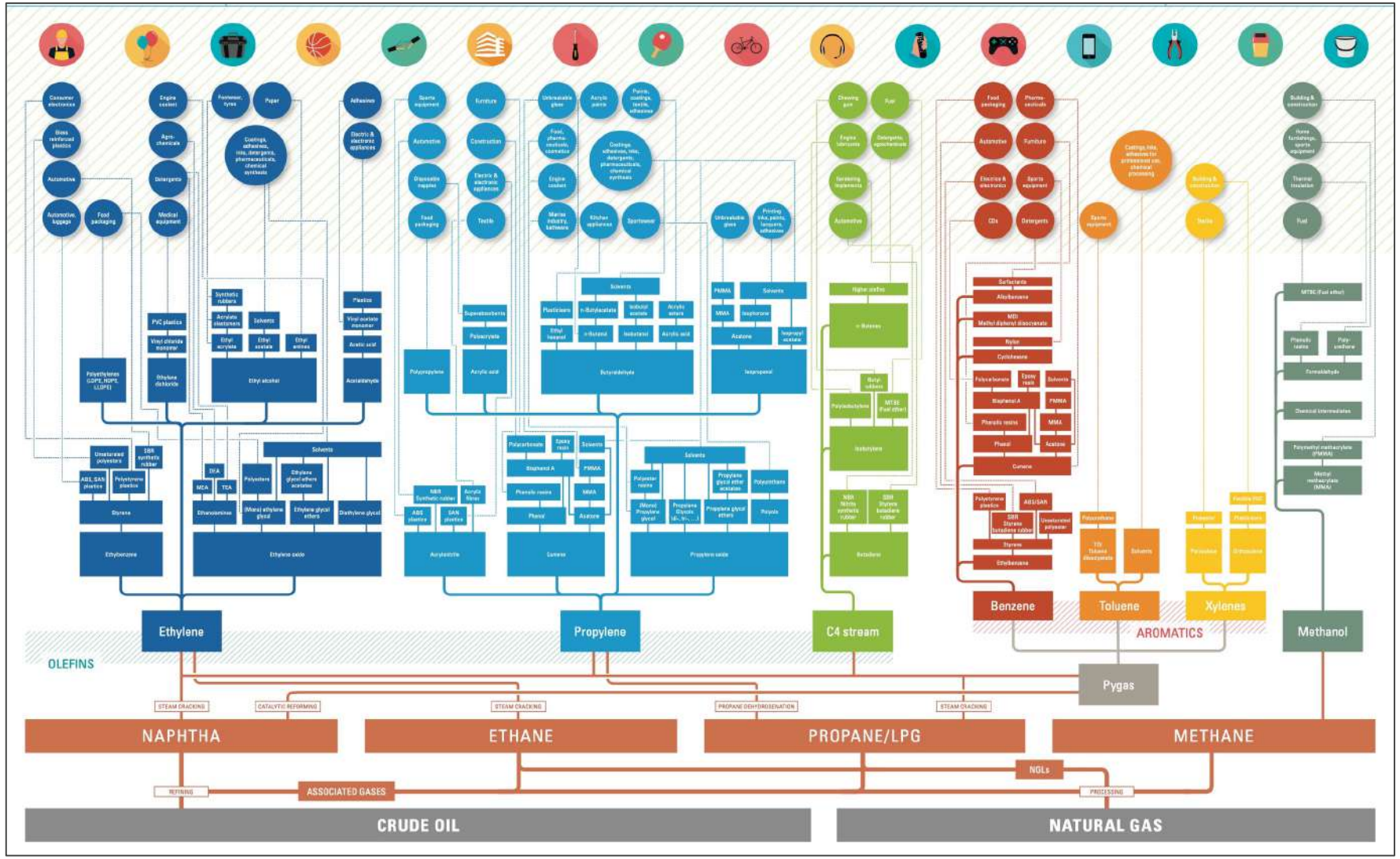
The feedstocks for the petrochemical industry are crude oil and natural gas



Flowchart of petrochemical industry

- Main steps between raw materials and feedstocks
- Important building blocks:
  - Ethylene
  - Propylene
  - C4 stream
  - Pygas
  - Methanol
- Petrochemical industry feedstocks:
  - Crude oil
  - Natural gas

Source: Petrochemical Europe, petrochemistry.eu

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These sustainable raw materials are the feedstocks for ISCC PLUS certified system users and products

Corn

Canola

Tall Oil

UCO

Mixed Plastic Waste

End-of-life tires

Sugarcane

Cotton

Forestry residues

Straw

Waste textiles

CO_2 (post-industrial)

Bio | **Bio-circular** | **Circular (technical)**

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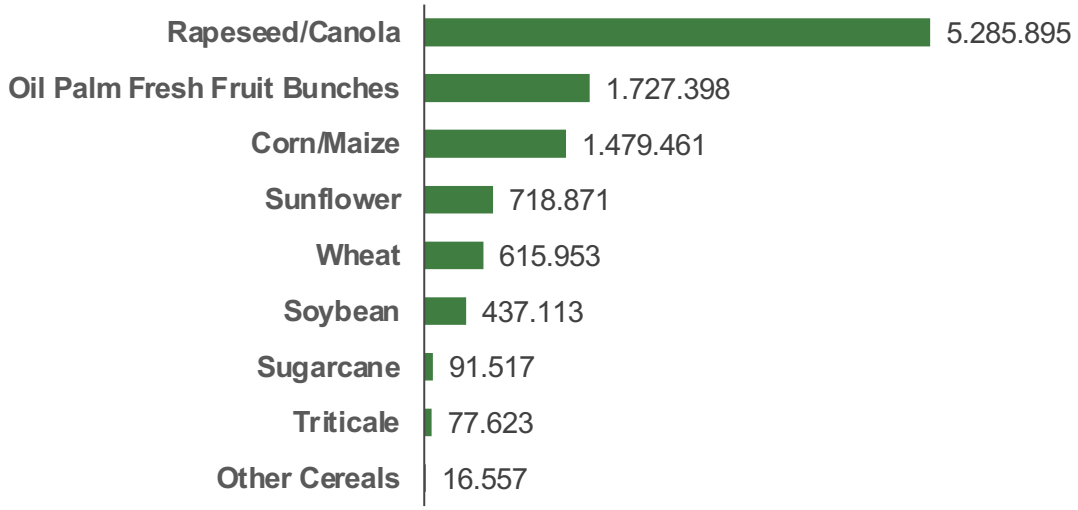
More than 10 mio. ha of agricultural land and 10+ mio. t of bio-circular raw materials are certified under ISCC

Bio

Bio-circular

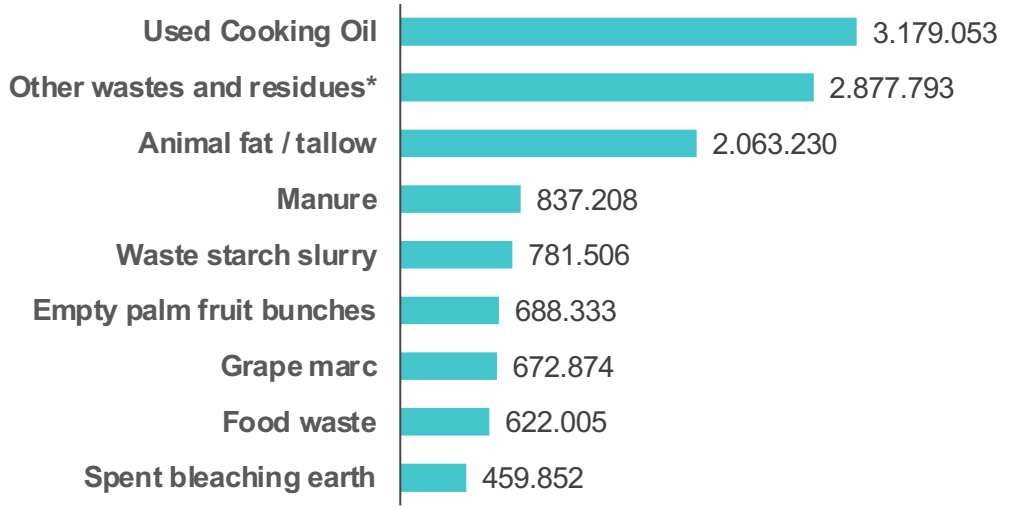
Bio raw materials (cultivation area in hectare)



More than 10 mio ha of ISCC certified agricultural area

Note: Amounts in MT from EU Reporting 2019. Cultivation area calculated by applying yield data from 2019 by FAO (2020).

Bio-circular raw materials (amount in MT)



More than 10 mio t of ISCC certified bio-circular raw material

*Other waste and residues include e.g. brown grease, crude glycerine, crude tall oil, organic municipal solid waste, PFAD, POME, tall oil pitch and waste pressings.

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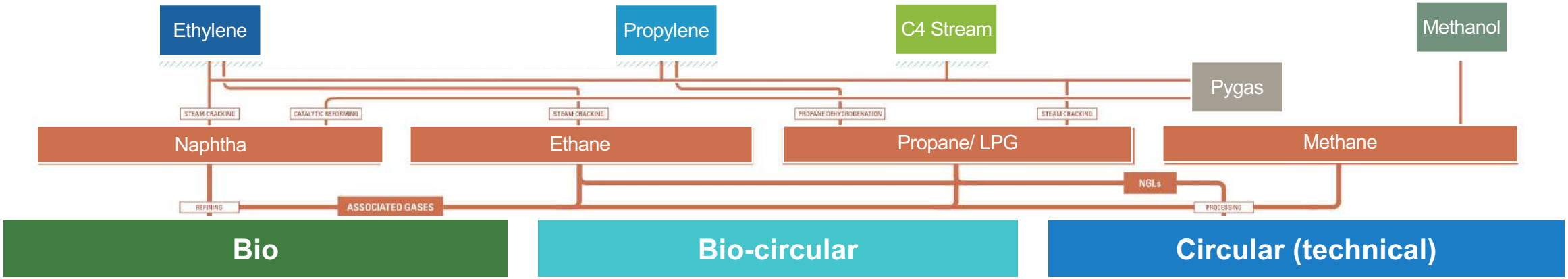
Based on these feedstocks, the most important building blocks of the chemical industry are produced by several ISCC system users



Source: Meo Carbon Solutions based on ISCC (2020), Petrochemical Europe, petrochemistry.eu

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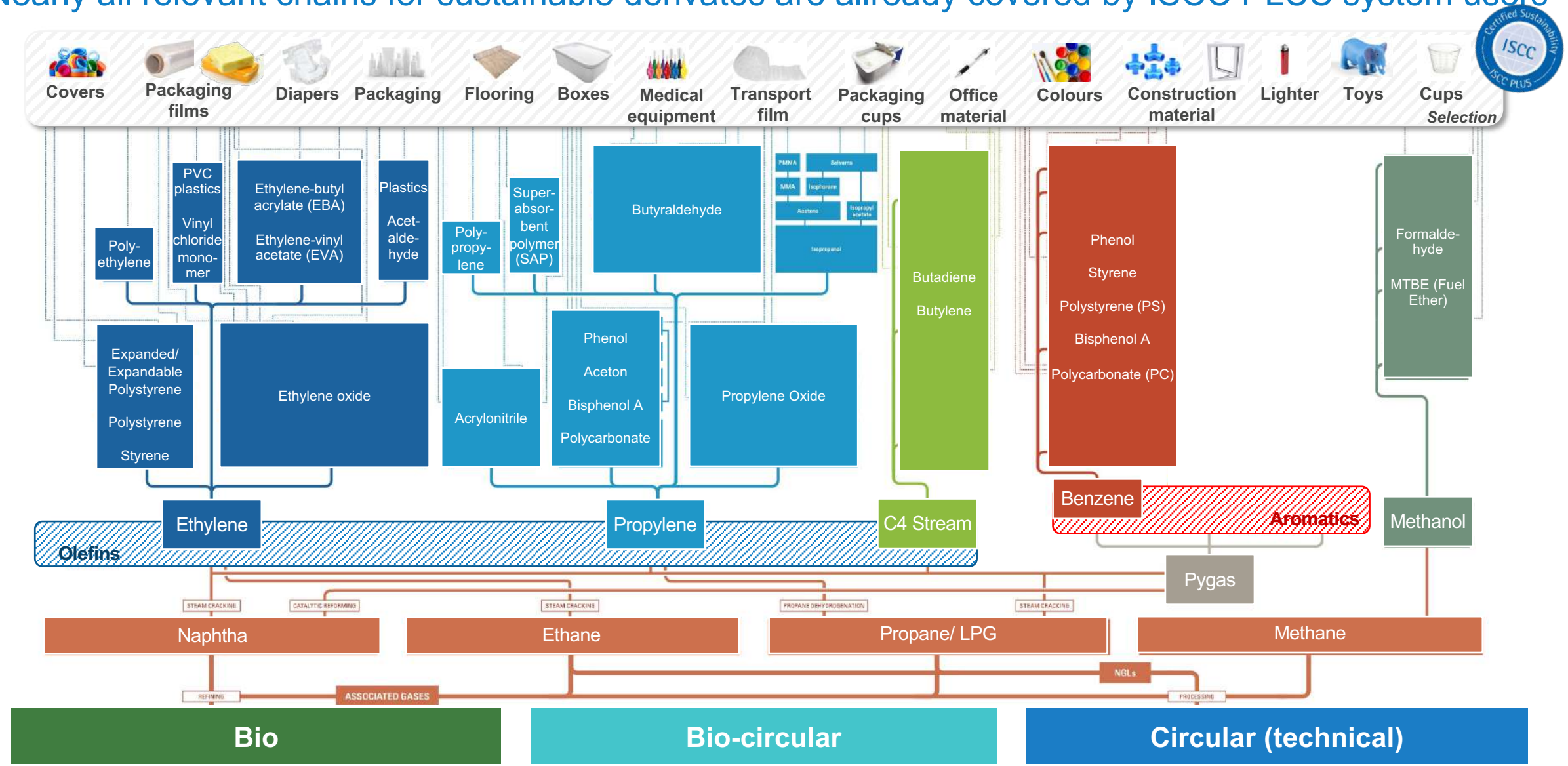
Nearly all relevant chains for sustainable derivates are allready covered by ISCC PLUS system users



Source: Meo Carbon Solutions based on ISCC (2020), Petrochemical Europe, petrochemistry.eu

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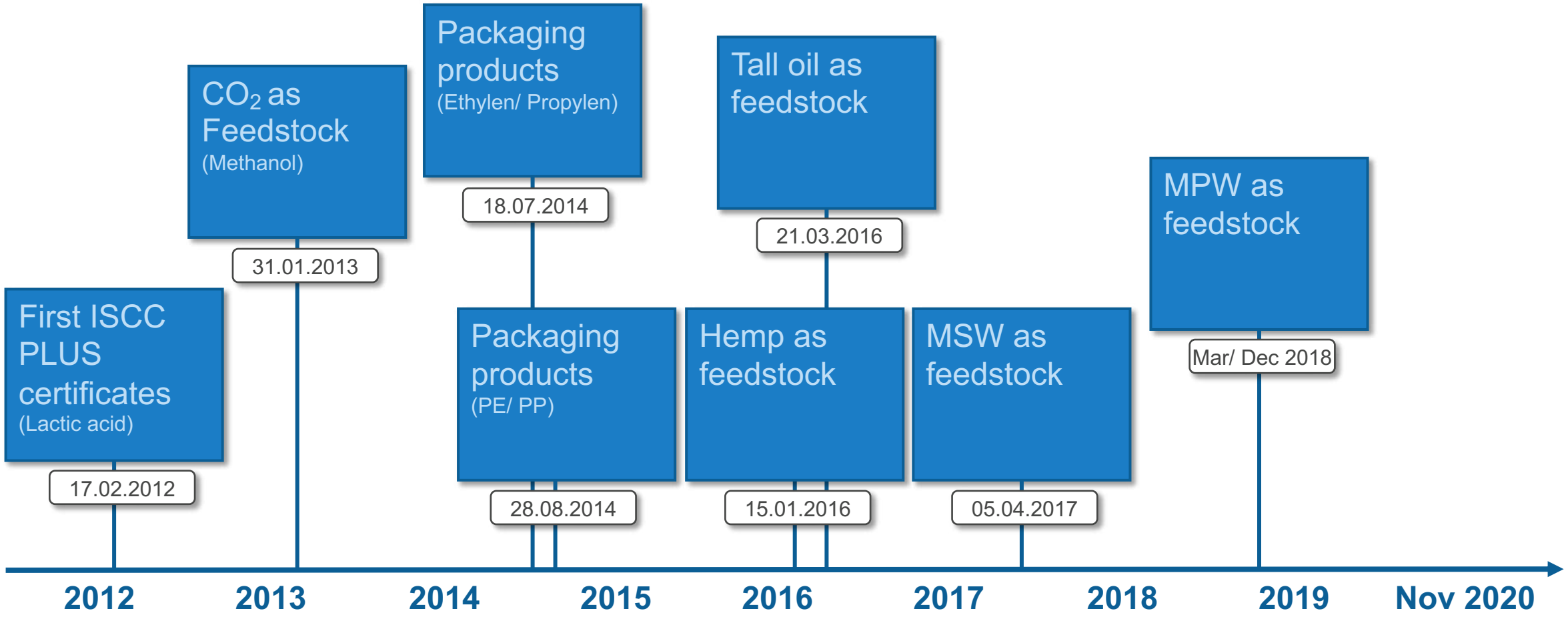
The first ISCC PLUS certificates were issued in February 2012, covering products processed from lactic acid



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Outlook: What‘s next at ISCC PLUS

- **Green Deal** (circular economy action plan implementation, regulatory framework for packaging in EU MS)
- Recycled Carbon Fuels (**RCFs**) and Renewable Fuels of Non-Biological Origin (**RFNBOs**); cover renewable electricity
- Further support of stakeholder initiatives and system users
- Working on recognition with competent authorities
- Become more brand owner and consumer facing (logo, licensing, etc.)
- BIKE Project – development low ILUC risk module

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