


Low ILUC-Risk Certification for Biofuels

Peter Hawighorst, Meo Carbon Solutions GmbH

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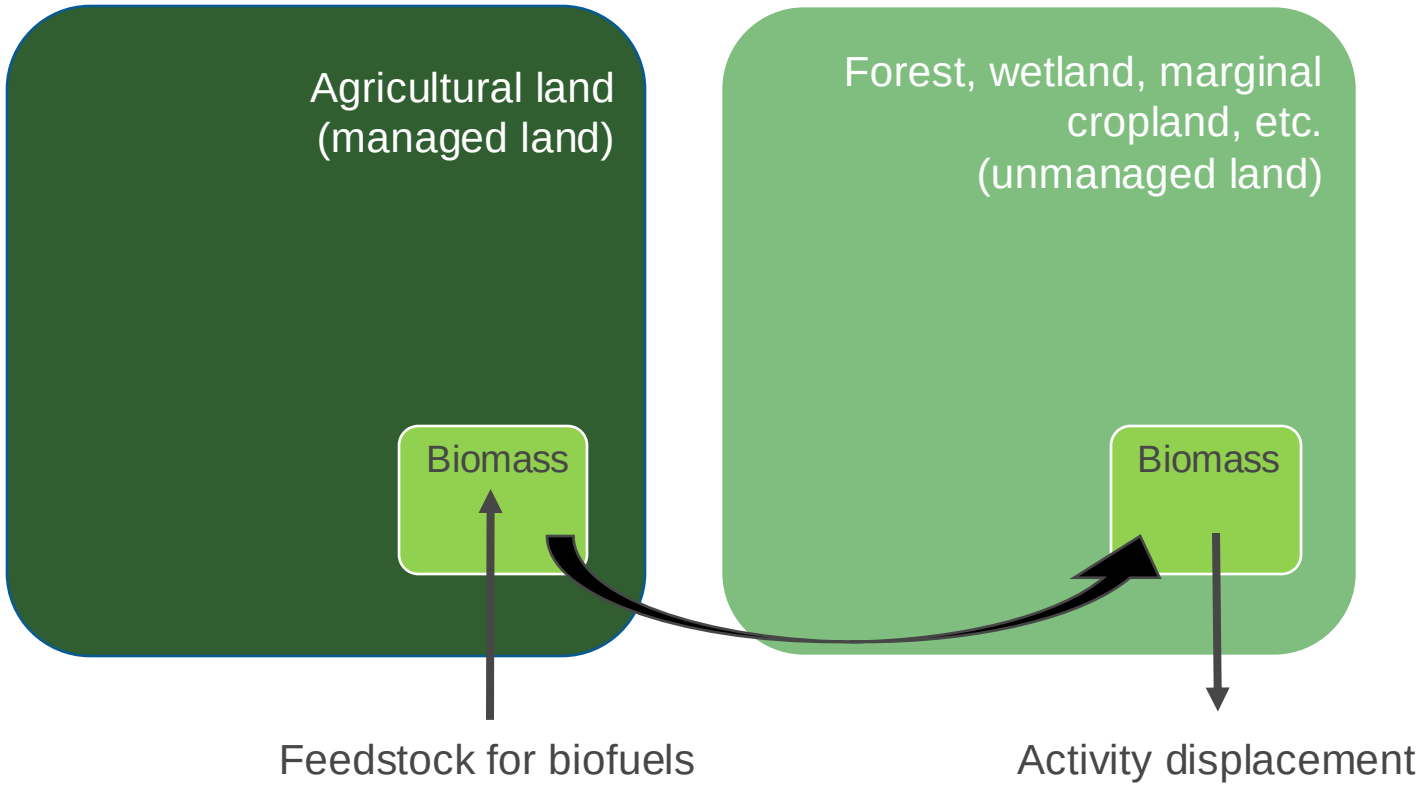
Low ILUC-risk feedstock production avoids the displacement of unmanaged land area for the production of biomass for food, feed and bioenergy

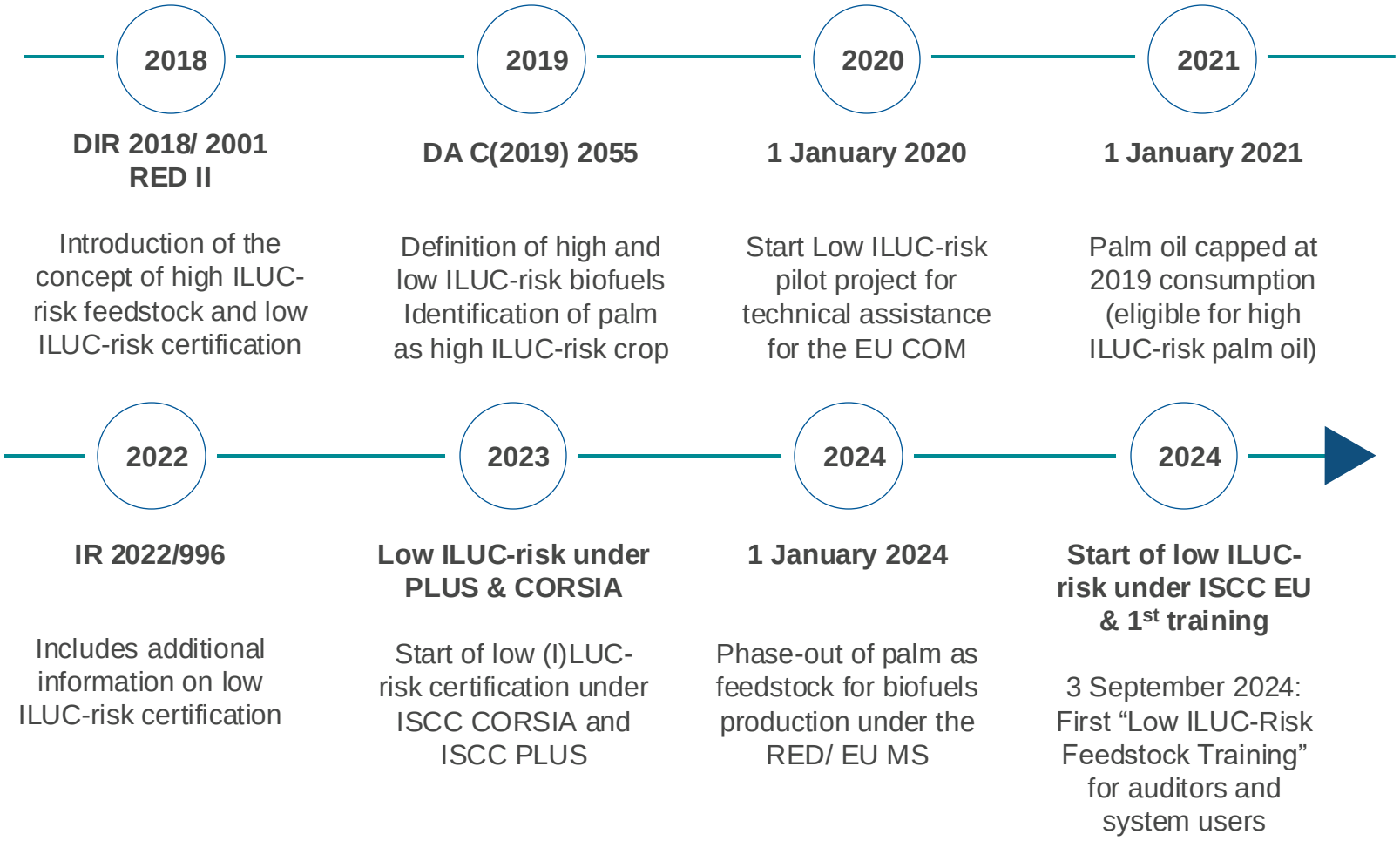
Indirect land use change (ILUC)



Low Indirect land use change (ILUC) risk

Low indirect land-use change-risk (ILUC-risk) (..) *means biofuels, bioliquids and biomass fuels, the feedstock of which was produced within schemes which avoid displacement effects of food and feed-crop (..)* ***through improved agricultural practices as well as through the cultivation of crops on areas which were previously not used for cultivation of crops,*** *and which were produced in accordance with the sustainability criteria for biofuels, bioliquids and biomass fuels laid down in Article 29*
(REDII, Directive 2018/2001 Article 2(37))

Starting in 2023, low LUC certification for SAF feedstock under ISCC CORSIA and ISCC PLUS is possible. Now, low ILUC-risk certification is possible under ISCC EU



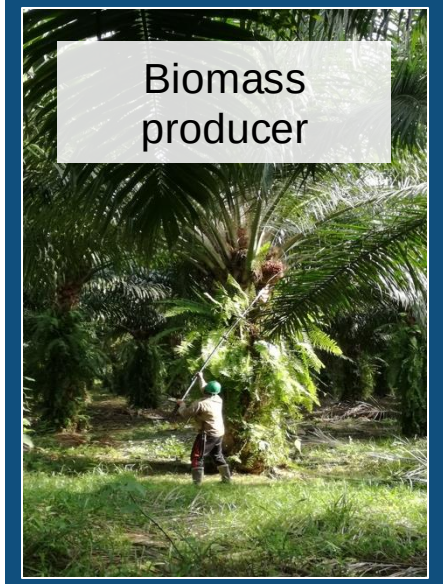
RED framework: Fuels produced from feedstocks classified as "high ILUC-risk" are capped at the 2019 consumption and will be phased out by 2030, unless those can be certified as "low ILUC-risk"

Low ILUC-risk certification is an add-on to a valid certificate. Five steps are needed to achieve low ILUC-risk certification

1. Identification of the *additionality measure*
2. *Sustainability* of the measure
3. *Additionality test*
4. *Dynamic Yield Baseline* (DYB)
5. Determination of the volume of **additional biomass**

Two approaches (additionality measures) can be applied to produce “additional”, low ILUC-risk biomass: Yield increase or cultivation on previously unused land

1 Identification of the *additionality measure*



Yield improvement on existing land through improved practices (Additionality measures)*

Approach 1

Cultivation on unused, abandoned or severely degraded land

Approach 2

* Additional feedstock can only be claimed as “low ILUC-risk” after the implementation of an additionality measure

The additionality measure should lead to an increase in yields in a sustainable manner

2 *Sustainability* of the measure

- System users/ companies **must be certified** under ISCC EU to achieve low ILUC-risk certification
- The **whole farm/ plantation must comply** with sustainability requirements
- Approach/ guideline:
  - ***The additionality measure must not compromise the future growing potential of the land and must not have a negative impact on the soil quality and carbon stock of the land.***
- **Low ILUC-risk certification as an "add-on" to already existing ISCC EU certification**

System users must prove the “additionality” of the implemented measure. Smallholders are exempted and must not conduct one of the two options

3 *Additionality test*

- Smallholders* do not need to prove additionality
- Cultivation on abandoned or severely degraded land are exempt
- Two options to demonstrate “additionality” and to conduct the *additionality test*:
  - **Financial attractiveness test** (focus: costs/ revenue of measure; calculation Net Present Value)
  - OR
  - **Barrier analysis** (e.g. First-of-a-kind measure, no access to finance)

*RED: smallholders = cultivation of land areas < 2 ha

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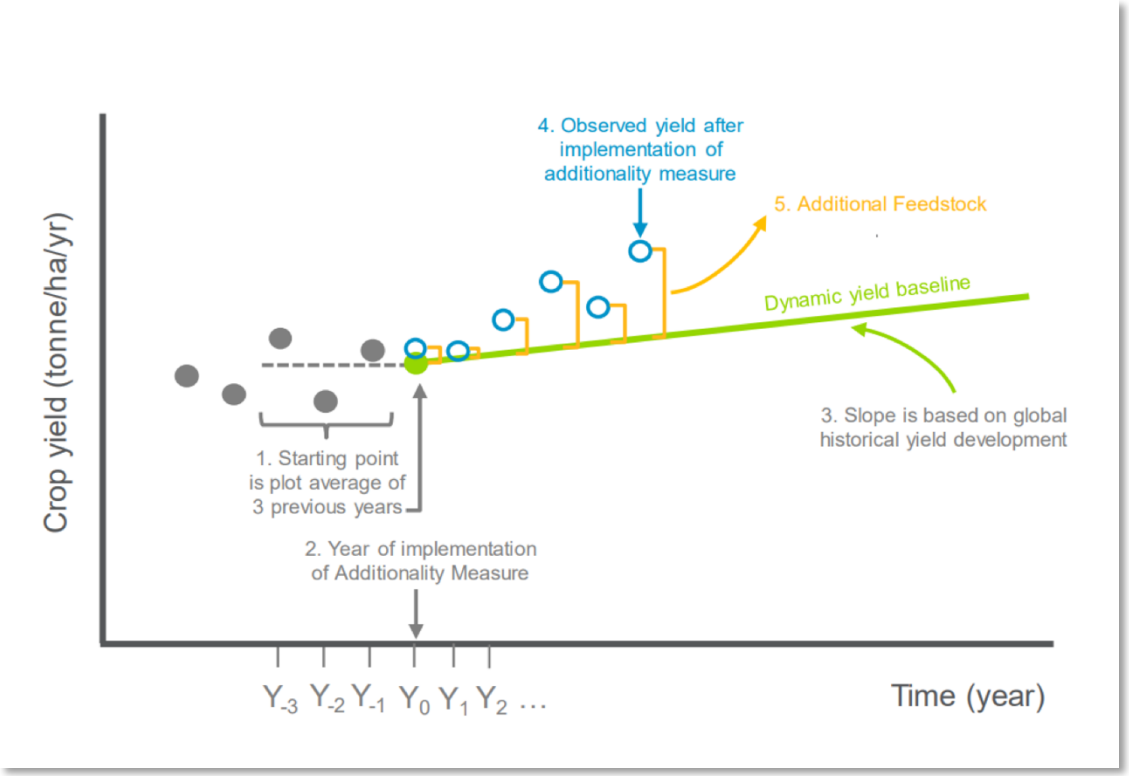
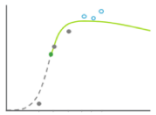
The *Dynamic Yield Based* is the methodology being used to determine the "reference" yields. Different approaches applied for perennial vs annual crops

4 *Dynamic Yield Baseline* (DYB)

- Basic approach: based on previous yields and estimated yield development ("slope"), a "dynamic yield baseline" is determined, "representing" future yields
- Valid for 10 years
- **Annual crops**: starting point based on historic yields
- **Perennial crops**: growth curve over lifetime





For **oil palm**, crop yield follows a curve over their lifetime, requiring a slightly different approach.

For **sequential crops**, crop-specific baselines may be needed.

Source: Guidehouse (2024)

For the cultivation on severely degraded or abandoned land, proving additionality (conducting an additionality test) is not needed

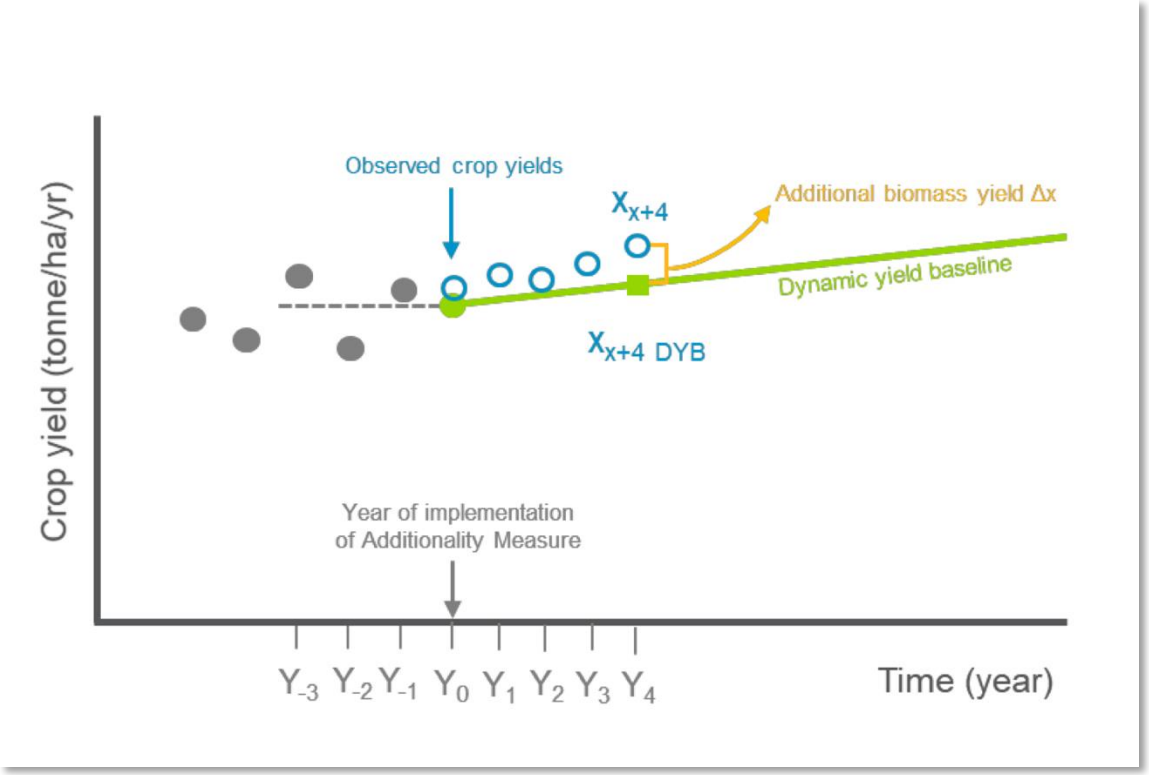
4 *Dynamic Yield Baseline* (DYB)

Severely degraded land	Abandoned land	Other unused land
Severely salinated, **or** significantly low organic matter (SOM) and severely eroded	Agricultural land that was abandoned due to biophysical or socio-economic constraints for at least five years	For a consecutive period of at least five years prior to certification was not used for food or feed crops, energy crops or fodder
• Salination, SOM, erosion thresholds introduced • No yield in previous three years = DYB is zero • Land with previous yields = baseline	• Documentation of historic land use needed	• Must pass additionality test • Documentation of historic land use needed

The volume of low ILUC-risk biomass must be determined each year. Only the “additional biomass” can be claimed as low ILUC-risk

5 Determination of the volume of **additional biomass**

- Actual yields are compared with “estimated” yields from DYB: the difference between actual yields and DYB is low ILUC-risk biomass
- **Only “additional” biomass can be claimed as “low ILUC-risk”**
- If yield is below DYB value: no “low ILUC-risk” volumes (for this harvest)



Source: Guidehouse (2024)

The low (I)LUC risk certification approach under ISCC CORSIA and ISCC EU is very similar. Parallel certification is possible

Certification criteria	ISCC CORSIA	ISCC EU
Low (I)LUC certification as add-on	✓	✓
Approaches for producing additional biomass	Unused land / additional biomass	Unused land / additional biomass
Sustainability of measure	✓	✓
Additionality test	Not needed	Yes, exemption for small holders, abandoned and degraded land
Determination of additional biomass	Yield baseline (no slope) for annual & perennial crops	Dynamic yield baseline for annual & perennial crops

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Conclusions

- ISCC implemented a low ILUC-risk certification approach into the ISCC EU certification scheme
- Certification as an add-on to “basic” ISCC EU certification
- “Additional” biomass produced under this add-on can be claimed as “low ILUC-risk”
- “Parallel” certification under ISCC CORSIA and ISCC EU possible
- Low ILUC-risk training: 3 September 2024*

*https://www.iscc-system.org/academy/iscc-trainings/low-iluc-risk-feedstock-training/

Thank you very much for your attention.
Feel free to get in touch with us!

Meo Carbon Solutions GmbH
Hohenzollernring 72, 50672 Cologne
Email: info@meo-carbon.com, hawighorst@meo-carbon.com
Phone: +49 221 / 508020 20

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