High and Low iLUC Risk Biofuels – Implications for Producers and How to Determine Low iLUC Risks

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The RED II will limit the use of palm oil as feedstock for biofuels from 2024 onwards – EU Member States shall implement latest by mid 2021, review of high/low iLUC criteria before end of 2023

Timeline on low and high iLUC risk feedstocks/ biofuels

- **2018**
  - 11 December 2018: DIR 2018/2001 RED II
  - 13 December 2018: DIR 2018/2001 RED II
  - 13 March 2019: Delegated Act C(2019) 2055 on high iLUC risk feedstocks

- **2019**
  - 24 October 2019

- **2021**
  - 1 January 2021: Palm oil capped at 2019 consumption (eligible for high iLUC risk palm oil)
  - 30 June 2021: EU COM to review feedstock expansion, smallholder provision and may amend the regulation
  - 31 December 2021

- **2023**
  - 1 September 2023: EU COM to review/amend criteria for low and high iLUC risk biofuels

- **2030+**
  - 31 December 2023
  - 31 December 2030: End phase-out of palm oil
  - 11 December 2018: Palm oil capped at 2019 consumption (eligible for high iLUC risk palm oil)
  - 13 March 2019: Delegated Act C(2019) 2055 on high iLUC risk feedstocks
  - 30 June 2021: EU COM to review feedstock expansion, smallholder provision and may amend the regulation
  - 31 December 2023
  - 31 December 2030: End phase-out of palm oil
Based on the methodology and the data being used for the determination, palm oil currently is the only feedstock to be classified as a high iLUC risk in the Delegated Act

Delegated act - high iLUC risk feedstocks

- For the purpose of determining the high iLUC risk feedstock for which a significant expansion of the production area into land with high-carbon stock is observed, the following cumulative criteria shall apply:
  
  a) the average annual expansion of the global production area of the feedstock since 2008 is higher than 1% and affects more than 100,000 hectares

  b) the share of such expansion into land with high-carbon stock is higher than 10%

➢ Palm oil is the only feedstock that falls under the definition of high iLUC risk feedstocks
Low iLUC risk palm feedstock shall comply with RED/RED II sustainability requirements and requires in addition Low iLUC risk certification.

- **Palm producer**
  - **High iLUC risk palm**
  - **Low iLUC risk palm**

- **Fulfils RED/RED II sustainability requirements**
  - 2021 – 2023: Capped at 2019 level
  - 2024 – 2030: Phase out; gradually decreasing to 0%

- **Fulfils RED/RED II sustainability requirements AND Low iLUC risk certified**
  - 2021 – 2030: max 7% food and feed crops

- **Market access for Low iLUC risk market for palm**
  - Gradually decreasing market
  - No market access for high iLUC palm after 2030

- **2021 – 2023:** Capped at 2019 level
- **2024 – 2030:** Phase out; gradually decreasing to 0%
- **2021 – 2030:** max 7% food and feed crops

- **Gradually decreasing market**
- **No market access for high iLUC palm after 2030**
- **Market access for Low iLUC risk market for palm**
Low iLUC risk biofuels must be obtained through the implementation of additionality measures

General criteria for certification of low iLUC risk biofuels, bioliquids and biomass fuels


2. Production from additional feedstock obtained through additionality measures

3. The evidence needs to be duly collected and thoroughly documented by the relevant economic operators

Additionality measures: any improvement of agricultural practices leading, in a sustainable manner, to an increase in yields of food and feed crops on land that is already used for cultivation; and any action that enable the cultivation of food and feed crops on unused land, including abandoned land
Additionality measures for Low iLUC risk palm must meet at least one out of three conditions. One is that the measure must become “financial attractive” for the producer.

1. Financially attractive
2. Allow for the cultivation of food and feed crops on abandoned land or severely degraded land
3. Applied by smallholders

Additionality measures become financially attractive or face no barrier preventing their implementation only because the biofuels, bioliquids and biomass fuels produced from the additional feedstock can be counted towards the targets for renewable energy under Directive 2009/28/EC or Directive (EU) 2018/2001 (financial additionality criterion).
Alternatively, low iLUC biofuels can be achieved through additional feedstocks from agriculture.

**Additional feedstock from agriculture**

- **Additional feedstock** means the additional amount of a food and feed crop produced in a clearly delineated area that is the **direct result of applying an additionality measure**.

- **Additionality measures** means any **improvement of agricultural practices** leading, in a sustainable manner, to an **increase in yields** of food and feed crops on land that is already used for cultivation.

- The additional feedstock must be calculated compared to a **dynamic yield baseline**.
Low iLUC measures have to be applied less than 10 years before certification

Additional feedstock from palm plantations

Dynamic yield baseline required

Framework conditions:

- Measures have been applied less than 10 years before certification
- Financially attractiveness criteria is met
- Evidence is duly collected and thoroughly documented
- Only the additional quantities are eligible as Low iLUC risk feedstock
..., another condition is that palm is cultivated on abandoned or severely degraded land...

1. Financially attractive
2. Allow for the cultivation of food and feed crops on abandoned land or severely degraded land
3. Applied by smallholders
Definition of abandoned and severely degraded land

Abandoned land or severely degraded land

Definitions:

- **Abandoned land**: unused land, which was used in the past for the cultivation of food and feed crops but where the cultivation of food and feed crops was stopped due to biophysical or socioeconomic constraints.
  - **Unused land**: areas which, for a consecutive period of at least 5 years before the start of cultivation of the feedstock used for the production of biofuels, bioliquids and biomass fuels, were neither used for the cultivation of food and feed crops, other energy crops nor any substantial amount of fodder for grazing animals.

- **Severely degraded land**: land that, for a significant period of time, has either been significantly salinated or presented significantly low organic matter content and has been severely eroded.
Requirements for certification of low iLUC feedstocks from abandoned land

Abandoned land or severely degraded land

Certification requirements:

▪ The land has to be in compliance with the sustainability criteria set out in Article 29 of Directive (EU) 2018/2001
▪ The land is in compliance with the definition of abandoned land and severely degraded land as provided in the delegated act
▪ The measures taken on the abandoned land to re-start cultivation have not been taken later than 10 years before the low iLUC certification of the land

➢ GRAS can support the verification of abandoned land and sustainability criteria
Example of the examination of the vegetation profile and image interpretation of an area

Abandoned land or severely degraded land

- The vegetation profile and image interpretation provides information on:
  - Actual and previous use of the land
  - Potentially “abandoned land”
- Example:
  - This land was detected through the heatmap as potentially abandoned since 2009
  - If the abandoned status is confirmed on-site and the sustainability criteria are verified, measures to re-start cultivation in 2019 could lead to the production of low iLUC feedstocks
Low iLUC risk certification will require evidences confirming the abandoned land status

**Abandoned land or severely degraded land**

Several evidences has to be provided to the auditor during such an audit:

1. **Potentially abandoned status** of the land before the re-start of cultivation
   - see GRAS detailed analysis last page

2. **Biophysical and socioeconomical constraints**, for which food and feed production was stopped
   - E.g. reports from independent experts
   - Evidence/documentation (e.g. soil analysis)

3. **Compliance with sustainability criteria**
   - Measures not taken yet: On-site verification by experts (e.g. biodiversity check), high resolution GRAS analysis
   - Measures already taken: E.g. reports from independent experts, HCV analysis
…or that palm is cultivated by smallholders

In this context, **smallholders** means farmers who:

- Own an agricultural area smaller than **2 ha**
- Independently conduct an agricultural activity
- Hold **ownership** over the agricultural area
- Could be **members of a cooperative**, which cannot be owned by a third party
For the palm industry it will be important to anticipate the RED II market implications – however, this will require further clarification of definitions and criteria.

- Without further clarification from the EU COM, e.g. smallholder determination, the future potential of low iLUC risk palm can not be determined.
- Available data on independent smallholders and abandoned land currently not sufficient.
- Clarification on additionality measures needed, e.g. recognition of re-planting (high potential) as relevant measure.
- Potential of alternative GAP measures (e.g. fertilizer management) difficult to determine and verify in short- to mid-term.

➢ Palm producers need clarification in order to prepare for the future market.
Many thanks for your attention!

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