

Low ILUC risk

Options to produce additional biomass
without indirect impacts

studio
gear
up

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Principle options to avoid ILUC

Increasing crop yield

- Improvements on the crop and field level
- Innovation , organisation, know-how, inputs, machines

Direct and low-carbon Land Use Change

- Expand into land with low carbon stocks and low biodiversity value
- Unused land, abandoned agricultural land, waste land

- These options introduced by RED II
- Clarified further by ILUC Delegated Act

(small credit in the GHG accounting)

Combination

- Create additional space/time within the current cropping system
- Through multi-cropping, sequential cropping

Food-fuel synergy?

- Bridging yield gap of food crops, thereby making land available for fuel crop
- Very much desired, but not official option

Actions that reduce third party expansion into high carbon land

- Is actually most important option to avoid ILUC
- Not addressed in RED II – probably too complex

ILUC Delegated Regulation (EU) 2019/807

Definition of Additionality measure in Article 2:

- (5) 'additionality measure' 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 the cultivation of food and feed crops; and any action that enables the cultivation of food and feed crops on unused land, including abandoned land, for the production of biofuels, bioliquids and biomass fuels;

Main criteria in Article 5:

1. Biofuels, bioliquids and biomass fuels may only be certified as low indirect land-use change-risk fuels if:
 - (a) the additionality measures to produce the additional feedstock meet at least one of the following conditions:
 - (i) they 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;
 - (ii) they allow for cultivation of food and feed crops on abandoned land or severely degraded land;
 - (iii) they are applied by small holders;
 - (b) the additionality measures are taken no longer than 10 years before the certification of the biofuels, bioliquids and biomass fuels as low indirect land-use change-risk fuels.

Certification is under development

Main ingredients – mainly for additional yields

- **Additionality:** Demonstrate that the improvement measure is only implemented because of RED target
 - Measure would otherwise not make sense economically ??
- **Additional volume:** Demonstrate that a certain amount of biomass is produced additionally compared to the reference scenario
 - Requires measurement of yield
 - Requires understanding of what would have been yield in absence of the additionality measure
 - Statistical relevance
- **Link:** Demonstrate that the amount of additional biomass produced caused by the measure
 - There can be other drivers and reasons for a yield increase!

Certification is under development

Certification of expansion into abandoned agricultural land will be easier

- (2) 'unused land' means 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;
- (3) 'abandoned land' means 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;
- (4) 'severely degraded land' means land as defined in point 9 of Annex V, part C to Directive (EU) 2018/2001;