

BIKE is a Horizon 2020 project whose objective is to support uptake of the low ILUC-risk concept for biofuel feedstocks. This series of Briefing Notes seeks to explore issues in the EU policy sphere which may impact low ILUC-risk value chains, and identify opportunities for fostering an enabling policy environment.

Low ILUC-risk in EU Member State policy



On the right: Harvesting of Castor bean in Sardinia (Italy).

It is well established that demand for biofuel feedstock has the potential to indirectly incentivise land clearance for agriculture, and hence undermine biofuels' environmental credentials. The EU's recast Renewable Energy Directive (RED II)ⁱ actively engages with this issue, stating: "Feedstock which has low indirect land-use change (ILUC) impacts when used for biofuels, should be promoted for its contribution to the decarbonisation of the economy"ⁱⁱ.

'Low ILUC-risk' certification, as defined in the RED II and associated regulationsⁱⁱⁱ, is designed to identify production systems that avoid ILUC, and detailed certification procedures for a broad range of crop types are under development. EU Member States wishing to guarantee genuine transport decarbonisation may consider using low ILUC-risk certification as a mechanism for mitigating the indirect impacts of crop-based feedstocks. This Briefing Note explores some of the options which are available to Member States for incorporating low ILUC-risk into their national biofuel strategies.

Taking account of ILUC in national policy

The RED II grants Member States the freedom to differentiate their support for biofuels based on ILUC considerations. Article 26 states that:

“Member States may distinguish between different biofuels produced from food and feed crops, taking into account best available evidence on indirect land-use change impact”^{iv}.

Member States have yet to explore the full range of possibilities for making use of this freedom in their national RED II implementations. Given that low ILUC-risk certification provides evidence that ILUC emissions have been avoided, Member States are empowered by this clause to consider policy measures that favour certified fuels.

Delivering value through exemptions

Under the RED II, low ILUC-risk certification can currently deliver value to palm oil projects by providing an exemption from limits on high ILUC-risk feedstocks. If national governments impose further limitations on feedstocks expected to have higher ILUC, then exempting low ILUC-risk fuels from those provisions could be a way to deliver support. An example is suggested in Article 26 of the RED II, which states that:

“Member States may, for example, set a lower limit for the share of biofuels produced from oil crops”;

the rationale being that oil crops have been associated with higher ILUC emissions^v. Indeed, a number of Member States are already setting more stringent caps on oil-based biofuels^{vi}. Allowing low ILUC-risk fuels to be exempted from lower crop caps would be a way to encourage adoption of low ILUC-risk practices.

Another possibility for using ILUC evidence to inform levels of support would be to require fuel producers to take RED II's ILUC factors for starch, sugar, and oil-based biofuels^v into consideration when assessing life-cycle emissions against the minimum GHG-saving thresholds. This would significantly increase the stringency of the emissions criteria, especially for oil-based fuels; exempting low ILUC-risk biofuels from this additional ILUC factor would then give them a considerable advantage and enhance their attractiveness. The European institutions have historically resisted inclusion of numerical ILUC factors in GHG calculations, however, and the acceptance of any national scheme that adopts this LCA practice could hence be questioned.^{vii}

Delivering value through bonuses

In addition to exempting low ILUC-risk fuels from limits placed on other fuel categories, Member States could also consider directing additional support to certified fuels. One approach would be a national target for low ILUC-risk biofuels. This could take the form of a share of transport energy, or an obligation for suppliers of food-based biofuels to source a certain proportion from low ILUC-risk sources. With sufficiently robust penalties for non-compliance, this would send a strong signal in favour of low ILUC-risk biofuels.

However, a limitation of this idea is that production of low ILUC-risk feedstock will be sensitive to weather and harvest variability, and with a limited pool of low ILUC-risk suppliers it may be difficult to consistently produce the annual volumes of feedstock material required. As a result, fuel suppliers who were forced to meet minimum supply targets under the scheme may experience unpredictable fluctuations in the cost of feedstock.

Another possibility would be to institute a system of multiple counting for the renewable energy contribution of low ILUC-risk fuels – similar to the current provision for double-counting feedstocks listed in RED II Annex IX. This has the advantages of a robust precedent; of enabling Member States to tune exactly how much benefit they want to give to low ILUC-risk fuels (applying a multiplier anywhere between 1 and 2, say); and of giving fuel suppliers the freedom to determine their participation in the system depending on feedstock availability and price, without sacrificing overall compliance with energy targets.

Conclusion

Regulating ILUC in the biofuels sector is a critical issue for those pushing for the decarbonisation of liquid fuels. Yet, owing to uncertainties in the quantification of ILUC emissions, it remains contentious, and the EU still grants support to biofuels that are believed to have quite significant ILUC emissions (e.g., rapeseed- and soy-based biodiesel). The low ILUC-risk concept represents a compromise solution, offering a practicable way to assess likely ILUC emissions from specific fuel batches, without resorting to ILUC modelling. In this regard, it is a potentially valuable tool in the policy-maker's toolbox – and, moreover, one that has already been sharpened through the efforts of the European Commission and international certification bodies.

Considering the diversity of RED II implementations among EU countries, it is clear there will be no one-size-fits-all prescription for incorporating low ILUC-risk into national policy: options such as the ones given above would require more detailed analysis to bring out their relevance to specific national contexts. Nevertheless, it is worth re-emphasising that a good deal of flexibility has been granted to Member States by RED II's Article 26, and Member States may find it appropriate to support low ILUC-risk projects as a means of improving the climate performance of their transportation sectors.

- I. Directive (EU) 2018/2001.
- II. REDII, Recital 91. Quotes in this Note are edited for readability (e.g., dropping ellipses).
- III. Commission Delegated Regulation (EU) 2019/807 and Commission Implementing Regulation (EU) 2022/996.
- IV. REDII, Article 26, Point 1, Paragraph 3.
- V. ILUC factors are quoted in RED II, Annex VIII, Part A.
- VI. E.g. Belgium has set a lower 2030 crop cap on diesel-substitute fuels than gasoline substitute fuels. See ePure, 2022, "Overview of biofuels policies and markets across the EU" <https://www.epure.org/wp-content/uploads/2021/01/201104-DEF-REP-Overview-of-biofuels-policies-and-markets-across-the-EU-Nov.-2020.pdf>.
- VII. REDII, Recital 81: "[ILUC] cannot be unequivocally determined with the level of precision required to be included in the greenhouse gas emission calculation methodology".



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