

Addressing ILUC? The European Commission's proposal on indirect land use change

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This briefing provides a short analysis of the European Commission's current proposal for EU legislation on indirect land use change (ILUC) and comments on its potential effectiveness in limiting the use of unsustainable biofuels.

The use of biofuels in Europe has been growing in response to the target set in the EU Renewable Energy Directive. This requires that 10 per cent of energy used in transport should be from renewable sources in every EU Member State by 2020. Overlooked at the time the Directive was agreed, the indirect land use change (ILUC) consequences of ramping up biofuel use have now been recognised. The onus has been on the European Commission to come forward with a means of addressing the ILUC problem in EU legislation.

The run up to the proposal

After a long delay, the European Commission finally issued its proposal¹ on how to deal with the ILUC consequences of biofuel use driven by EU policy on 17 October 2012. This 'not perfect' official proposal, in the words of Connie Hedegaard, was presented at a joint press conference by energy Commissioner Oettinger and climate Commissioner Hedegaard herself. The proposal for a new directive to amend the Renewable Energy Directive (RED)² and the Fuel Quality Directive (FQD)³ marks an end to the extended period of internal Commission analysis and debate, informed by a series of external studies. During this time, the evidence base on the global agricultural market and land use impacts of a policy driven increase in the use of agricultural crops for the production of ethanol and biodiesel has grown and improved.

In mid-September, a draft version of the proposal was leaked, as we reported in an earlier briefing⁴. The few weeks between the appearance of this leaked version and the eventual proposal saw an outcry by industry. This was accompanied by intense lobbying efforts that led to the dropping of binding ILUC factors on biofuels as a policy mechanism in the final proposal, since this was seen by the biodiesel industry in particular as the most harmful mechanism

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proposed in the text. In this sense, the 17th October was a bright day for the EU's biofuel industry – the credentials of EU climate policy have rather suffered, however.

What's in it?

Environmental groups have led an attack on the contradiction between the Commission's recognition of ILUC as a problem and its simultaneous unwillingness to adopt sufficient measures to fix it⁵. The proposal clearly demonstrates the widespread recognition of the risks from ILUC and the Commission's acceptance that it is significant, as well as the limited (if any) potential of conventional biofuels to reduce greenhouse gas (GHG) emissions in the transport sector. But it falls short of properly addressing these risks, as can be seen from a closer look at the key elements of the proposal.

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The biodiesel industry and allies lobbied hard against the introduction of binding ILUC factors, resulting in their exclusion from the final text. This means that emissions from ILUC are ignored in the requirements for biofuels, at least for the time being, other than as a reporting item. The purpose of ILUC factors would be to take into account the emissions from indirect land use change caused by different groups of crops as part of the GHG life-cycle calculations required by the RED sustainability criteria. Oil seed crops are being attributed much higher emissions than cereals and sugar crops, for the purposes of the reporting requirement in the proposed Directive. This is in line with the IFPRI study contracted by the Commission⁶. In other words if ILUC factors of this kind had been introduced they would have influenced whether or not certain biofuels met the minimum GHG saving requirement and hence were considered sustainable. In the official proposal they are downgraded to reporting items only in both directives.

Capping biofuels from food crops at 5 per cent – interaction with the Fuel Quality Directive

The proposal is to limit the permitted contribution of biofuels derived from food crops (such as cereals and other starch crops, sugar and oil crops), to meeting the RED target to a maximum of 5 per cent of energy in transport in 2020. This reflects the Commission's recognition that conventional biofuels have ILUC effects and, furthermore, can lead to increased commodity prices as a result of impacts on agricultural markets. At the same time, the use of non-food agricultural crops does not avoid this problem very significantly since it still requires the use of cropland, with the ensuing ILUC risks. Further, by driving up the price for cropland, commodity price effects may be felt across the wider agricultural sector. All in all, the 5 per cent limit can be seen positively. It signals to investors that unequivocal policy support for conventional biofuels belongs to the past.

One question that arises is how the cap will impact Member States that have advanced to different degrees in meeting their target for renewable energy in transport. Across the EU, the average biofuel blending ratio was 4.5 per cent in 2010 (Table 1). While Eurostat data for 2011 are not available, different (news) articles commenting on the Commission proposal cite this same figure for 2011. Table 2 collates information from the latest EurObserver Biofuels Barometer that provides blending shares for a few countries only.

Table 1: EU Member States biofuel blending rates in 2009 and 2010

	2009	2010		2009	2010
EU27	4.0%	4.5%	Italy	3.4%	4.3%
Belgium	3.2%	4.3%	Latvia	0.4%	2.6%
Bulgaria	0.2%	0.6%	Lithuania	4.2%	3.5%
Cyprus	2.0%	2.0%	Luxembourg	2.0%	1.9%
Czech Republic	3.3%	4.1%	Malta	0.0%	0.0%
Denmark	0.2%	0.0%	Netherlands	3.4%	2.1%
Estonia	0.0%	0.0%	Poland	4.8%	6.0%
Austria	6.6%	6.2%	Portugal	3.6%	4.9%
Finland	3.7%	3.5%	Romania	3.4%	2.5%
France	5.9%	5.8%	Slovakia	9.0%	7.6%
Germany	5.3%	5.8%	Slovenia	1.7%	2.6%
Greece	1.1%	2.0%	Spain	3.4%	4.7%
Hungary	3.8%	4.3%	Sweden	4.9%	5.2%
Ireland	1.8%	2.3%	UK	2.5%	2.9%

Source: Own compilation based on Eurostat data

Table 2: Selected EU Member States biofuel blending rates in 2010 and 2011

	2010	2011*
Germany	5.8%	5.5%
France		<7%
UK	3.1%	
Spain	4.9%	6.1%
Sweden	5.7%	6.8%

Source: EurObserver Biofuels Barometer for 2011⁷ (*2011 figures are estimates)

The cap would have particular implications for those Member States that have already exceeded the 5 per cent share. Considering their position is important in order to understand their likely future negotiating position in the Council. There is an indication that Member States which have already progressed significantly towards the 10 per cent target might be reluctant to approve a Commission proposal that limits the extent to which the use of biofuel from food crops count towards the target to 5 per cent. Intra-EU trade in biofuels or the use of the RED's cooperation mechanisms (such as 'statistical transfers'⁸), could be a way

for those Member States exceeding the 5 per cent cap to sell or transfer their surplus biofuels to those Member States whose installed capacity will deliver less than 5 per cent in 2020. At present there is a sizeable group of 'deficit' Member States (see Table 1).

However, the targets set in the FQD need to be taken into account when forecasting the possible volume and destination of 'surplus' biofuels. There is reason to believe that the FQD target is likely to incentivise higher volumes of biofuels than envisaged by the cap. In practice this might negate the potential for 'surplus biofuels' in those Member States that have exceeded the 5 per cent level already.

As an example, assuming that an average GHG emission saving of 55 per cent could be achieved by biofuels consumed in 2020 (compared to fossil fuels), this would require roughly an 11 per cent biofuel share to meet the 2020 FQD target of reducing lifecycle GHG emissions from transport fuels by 6 per cent⁹. This assumes that no GHG reductions are made elsewhere along the fossil fuel supply chain, eg reducing flaring and venting from oil extraction, or by supplying lower-carbon fossil fuels. This is unlikely, but it highlights nevertheless that capping food-based biofuels at 5 per cent will make it very challenging to meet the FQD target without rather dramatic increases in second-generation biofuels. In other words, biofuel consumption is likely to overshoot the 5 per cent level in many Member States because of the FQD target¹⁰.

Summarising, the 5 per cent cap is an important element of the proposal that should be maintained, whatever occurs in the negotiations involving the Council and the EP. Its signalling power is of real consequence. Its practical relevance, however, hinges upon the interaction between RED and FQD mechanisms. Without any parallel limit to conventional biofuels in the FQD, the 5 per cent cap appears likely to be ineffective in curbing the consumption of conventional biofuels in many Member States in the period to 2020.

Increasing incentives for the use of advanced biofuels

The use of biofuels from waste and residue feedstocks is being incentivised by counting them at two or three times their energy content. Certain household and industrial waste, sewage sludge, agricultural residues such as straw and manure, algae and forestry residues are among those feedstocks to be incentivised by the proposed quadruple counting mechanism. While these are low-ILUC biofuels and the principle of prioritising more sustainable feedstocks is welcome, new questions are arising about the potentially wide range of feedstocks that could be involved. Which ones are most suitable and in what volumes are they available, taking into account questions of practicality, cost and sustainability? Which of the wastes and residues now in the spotlight are currently utilised already for other purposes? What would be the consequences of diverting them into the energy supply chain? What safeguards would be required to prevent an inappropriate diversion of material from beneficial alternative uses and to

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ensure sustainability? For example, cereal straw is a significant resource in parts of Europe with potential for energy supplies but a proportion of this needs to be returned to the soil to prevent degradation. How is this assured?

Under the Commission proposal, energy and woody crops as well as used cooking oil and certain animal fats would be incentivised through double counting. There is real potential here, which needs to be assessed carefully. Perverse effects of new policy need to be anticipated and avoided where possible. For example, there is anecdotal evidence reporting that incentives for the uptake of used cooking oil as a biofuel feedstock reduces the recycling of cooking oil. In other words, cooking oil can become designated 'used' more rapidly, which would increase the demand for oil in the food sector.

A better understanding of the volumes of genuinely residual wastes for biofuel production and the possible impacts on other sectors is now needed. The impact assessment accompanying the Commission's proposal lacks such an assessment. Relevant research should be undertaken urgently.

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Raising the minimum GHG saving threshold to 60 per cent

The leaked proposal suggested introducing a requirement for a minimum GHG saving threshold 'with immediate effect'. This was watered down in the final proposal to apply only to those installations that start operating after 1 July 2014. More stringent efficiency requirements for biofuel plants are a positive element of the policy framework, but unfortunately the provision proposed may have very little impact. Currently there is a great deal of overcapacity in the EU biofuel sector¹¹. Hence new generation capacity is not needed in the immediate future, at least not for the production of conventional biofuels. Plants already built would not be affected by the provision and therefore would be likely to contribute the bulk of the production of conventional biofuels up to the proposed 5 per cent cap.

On biofuels post-2020

While outside the legal text, the explanatory memorandum of the Commission proposal contains a recital that represents another signal of the waning of support for biofuels from food and feed crops. According to this, the Commission advocates that 'in the period after 2020 biofuels which do not lead to substantial greenhouse gas savings (when emissions from indirect land-use change are included) and are produced from crops used for food and feed should not be subsidised'.

The way forward: Stakeholder positions and ILUC in the ordinary legislative procedure

Many environmental NGOs are calling upon the European Parliament and the Council to re-introduce ILUC factors in a binding way during the legislative

procedures to take forward the Commission proposal¹². The position taken by industry groups is in the process of emerging. The decision to downgrade ILUC factors in the final proposal has changed rather drastically the perceived losers and winners from a future ILUC policy compared to the Commission's draft proposal. The introduction of binding ILUC factors would have meant that most biodiesel would fail to meet the sustainability criteria and hence would not be eligible for contributing to the target. At the same time, this would have created a potentially large new market for the ethanol industry. Non-binding ILUC factors together with the 5 per cent cap by contrast, mean that there is little room for the ethanol industry left in the market given the current dominance of biodiesel. Given their success in influencing the proposal this autumn, there is well justified concern that the different industry lobby groups will continue to stand united in their quest to abolish or loosen the 5 per cent cap.

Within the European Parliament, the Environment (ENVI) Committee will be the lead committee for the ILUC file. The Industry and Energy (ITRE) Committee will be actively involved¹³ and further committees will give opinions. In the Council of Ministers, an 'ad-hoc formation' between the energy and environment Council will deal with the file and negotiations will start under the Irish presidency in early 2013.

Key conclusions:

- **Maintain the 5 per cent cap proposal for the RED into agreed EU legislation, given that it is an important signal about the fading political support for conventional biofuels from food crops.**
- **To make the 5 per cent cap practically meaningful, introduce a parallel measure in the FQD to limit the use of biofuels from food crops.**
- **Bring ILUC factors back into the proposal as a workable means of accounting for ILUC emissions in current conditions and excluding those biofuels causing the highest indirect emissions. Their introduction in the RED and FQD should be accompanied by an appropriate grandfathering clause to protect existing investment and by incentives to stimulate genuinely low-ILUC biofuels.**
- **At the same time, policy solutions that would mitigate ILUC more directly, but over a longer time horizon, should be pursued further. One example would be land-use planning approaches in producer countries.**
- **Strengthen the recital in the Commission proposal stating that no support shall be granted after 2020 to biofuels which do not lead to substantial GHG savings (including ILUC) and are produced from food and feed crops. A revised text could announce the phasing out of support for any biofuels from food and feed crops. This would signal more clearly the political shift towards advanced feedstocks.**
- **Determine the availability of genuinely sustainable wastes and residues for biofuel production in order to be able to gauge the contribution that an advanced biofuel industry can make to meet the targets. An inventory of EU bio-resources and clearer set of sustainability criteria would be valuable. An urgent examination of the economic and environmental impacts of diverting wastes and residues into the energy supply chain is also required.**

Please visit our **Biofuel ExChange website**:

<http://www.ieep.eu/minisites/pursuing-change-in-biofuels-policy-developing-alternatives/introduction/>

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¹ The Commission's proposal of 17 October 2012 to amend the RED and FQD:

http://ec.europa.eu/clima/policies/transport/fuel/documentation_en.htm

² Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources.

³ Directive 98/70/EC of the European Parliament and of the Council relating to the quality of petrol and diesel fuels.

⁴ http://www.ieep.eu/assets/993/Biofuel_Exchange_briefing_note_Sept12_-_ILUC_Proposal_is_leaked.pdf

⁵ See for instance the press releases by Transport & Environment

(<http://www.transportenvironment.org/press/commission-misses-opportunity-get-biofuel-policy-right>), WWF-EU (<http://www.wwf.eu/?206474/European-Commission-proposes-half-measures-on-biofuels>) and

EEB (<http://www.eeb.org/EEB/index.cfm/news-events/news/eeb-statement-on-iluc-proposal/>).

⁶ Laborde, D (2011) *Assessing the Land Use Change Consequences of European Biofuel Policies*.

Final report October, International Food Policy Institute (IFPRI): Washington DC,

<http://www.ifpri.org/sites/default/files/publications/biofuelsreportec2011.pdf>.

⁷ <http://www.eurobserv-er.org/pdf/baro210.pdf>

⁸ Introduced in Article 6 of the Renewable Energy Directive.

⁹ 6% divided by 55%.

¹⁰ See also a previous briefing: Skinner, I and Kretschmer, B (2010) *The interactions between European policy drivers for increasing the use of biofuels in transport*,

http://www.ieep.eu/assets/751/Biomass_Futures_briefing_RED_and_FQD_final_17_12_10.pdf.

¹¹ For an analysis of existing biofuel production capacity, see a report prepared for T&E: Ecofys

(2012) *Assessing grandfathering options under an EU ILUC policy*,

http://www.ecofys.com/files/files/ecofys_2012_grandfathering%20iluc_02.pdf.

¹² See a recent blog by Nusa Urbancic from T&E,

<http://www.transportenvironment.org/newsroom/blog/commission%E2%80%99s-proposal-biofuels-story-missed-opportunity>.

¹³ The involvement of the ITRE committee might be through the EP's 'rule 50' procedure ('Procedure with associated committees') that calls for close cooperation between committees in cases of dossiers falling within the competences of two or more committees. The 'rule 50' procedure explained: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+RULES-EP+20121210+RULE-050+DOC+XML+V0//EN&language=EN&navigationBar=YES>.