

Indirect Land Use Change Impacts of Biofuels – Consultation

Reply by the Flemish Energy Agency, Belgium

The Flemish Energy Agency welcomes the opportunity to communicate its view on the indirect impact of biofuels on the use of land which leads to additional emissions of greenhouse gases.

One of the most important purposes of the European and national biofuel policies is the reduction of greenhouse gas emissions. These policies should therefore aim at effectively reducing the emissions of greenhouse gases taking into account also the indirect land use change ('ILUC') impacts.

However the impact of ILUC on emissions is not only related to the production of biofuels and bioliquids. Proper attention should also be given to other aspects of land use change related to the production of food, animal feed and raw materials for the industry.

1) Do you consider that the analytical work referred to above, and/or other analytical work in this field, provides a good basis for determining how significant indirect land use change resulting from the production of biofuels is?

In answering this question you may for example wish to comment on:

- projected volumes of conventional and advanced biofuels in 2020
- assumptions around EU vehicle fleet and infrastructure in 2020, including diesel/petrol split and pace of introduction of new technologies
- models' treatment of crop yield growth "in the baseline" and in response to growth in demand;
- the underlying land use data
- the carbon stock values used in modelling and type of converted land
- models' treatment of co-products
- significance of the results in terms of hectares of land use change and emissions

The Flemish Energy Agency appreciates the research efforts by the European Commission with respect to the ILUC aspects of biofuel policies.

It appears from the research reports that biofuel policies actually have an ILUC impact which proves to be significant. The results also show that the size of the impact varies in function of the used model and parameters.

The ILUC aspect of biofuel policies is now sufficiently established so as to deserve the full attention of policymakers. A more precise estimation of the ILUC impact should take place through more sophisticated and improved modelling and more reliable statistics and data. Progress should be shared and discussed with stakeholders and Member States in a transparent way.

2) On the basis of the available evidence, do you think that EU action is needed to address indirect land use change?

It is the view of the Flemish Energy Agency that action should be undertaken now to avoid the negative impact of biofuel policy related ILUC on greenhouse gas emissions and on biodiversity. There already are sufficient research results showing such significant impact. A clear signal should be given to producers and the market indicating that an unlimited development of biofuels having a high ILUC risk is undesirable. A legislative proposal should be prepared in order to take into account in the sustainable criteria also the indirect emissions resulting from the impact on land use change.

3) If action is to be taken, and if it is to have the effect of encouraging greater use of some categories of biofuel and/or less use of other categories of biofuel than would otherwise be the case, it would be necessary to identify these categories of biofuel on the basis of the analytical work. As such, do you think it is possible to draw sufficiently reliable conclusions on whether indirect land use change impacts of biofuels vary according to:

- feedstock type?
- geographical location?
- land management?

If so, please say which, and indicate the evidence used to reach your conclusion.

Distinction can indeed be made between biofuels having a 'ILUC risk' versus biofuels having a lower risk. The precise impact of relevant biofuels categories must be further established through further research. However, it seems to be already possible to distinguish between some risk categories. Second generation biofuels for example in principle have a rather low ILUC-risk

Policies and measures should be adapted in order to promote the biofuels which have a low ILUC-risk

4) Based on your responses to the above questions, what course of action do you think appropriate?

A. Take no action for the time being, while monitoring impacts including trends in certain key parameters and, if appropriate, proposing corrective action at a later date

Please say how the monitoring should be done and what these parameters should be.

Given the significant impact ILUC impact of biofuels it cannot be an option not to take action. A further monitoring of impacts and trends in key parameters is however necessary

B. Take action by encouraging greater use of some categories of biofuel

Please say which biofuels, why and what sort of encouragement should be given.

Low ILUC-risk biofuels should be promoted like is for example already the case for second generation biofuels in the renewable energy directive (multiplied by two with respect to quotas and target counting).

C. Take action by discouraging the use of some categories of biofuel

Please say which biofuels and why, as well as what sort of measure should be taken, for example:

- increasing the minimum greenhouse gas saving threshold for biofuels
- imposing additional sustainability requirements on certain categories of biofuel (these could, for example, require the use of practices that can help mitigate indirect land use change impacts)
- attributing a quantity of greenhouse gas emissions from indirect land use change to all biofuels that use land

If the latter, please say how this should be calculated, and demonstrated – for example:

- a factor based on the estimated (modelled) land use change from a *marginal* extra quantity of crop production;
- a factor based on the *average* land use change from crops over some recent period;
- a factor based on any other consideration.

Please also say

- whether it should be reviewed and if so how often
- whether it should be implemented with any accompanying measures

All greenhouse gas emissions caused by the production of biofuels should be taken into account, also the emissions caused by ILUC. For that purpose a ILUC-factor related should be included in the calculation of the greenhouse gas emissions of the biofuels.

It seems to be clear that the ILUC-related emissions are not at all the same for all biofuels. It is therefore advisable to apply biofuel or crop specific ILUC-factors. However, more research and more sophisticated modelling is needed in order to establish sufficiently reliable crop specific factors.

Pending such further research results it is advisable to already apply a uniform ILUC-factor be based on the lower estimations. For biofuels produced from crops having a very low ILUC-risk (for example production from waste) this factor should be zero in order to give already some incentives.

In the short term a legislative framework should be developed adding an ILUC-factor to the sustainability criteria in the renewable energy and fuel quality directives.

The regulation should then be reviewed on a regular basis so as to take into account more detailed and crop-related ILUC factors established through further research

D. Take some other form of action

Please say what action and why

Measures in the context of biofuels policy are necessary but not sufficient to tackle the increase of greenhouse gas emissions related to land use change. Further international action is also needed to stop deforestation and introduce sustainable forestry and agriculture policies everywhere.