

INDIRECT LAND USE CHANGE IMPACTS OF BIOFUELS - CONSULTATION

AEBIOM answer

Final, 28 October

The Renewable Energy Directive and Fuel Quality Directive require the Commission, by the end of 2010, to submit a report to the European Parliament and to the Council

- reviewing the impact of indirect land use change on greenhouse gas emissions of biofuels and
- addressing ways to minimise that impact.

The report shall, if appropriate, be accompanied by a proposal based on the best available scientific evidence, which could also contain a concrete methodology for emissions from carbon stock changes caused by indirect land-use changes.

Further information can be found on the following web sites :

- Consultation, deadline 31 October 2010 :
http://ec.europa.eu/energy/renewables/consultations/2010_10_31_iluc_and_biofuels_en.htm
- Pre-consultation in summer 2009 :
http://ec.europa.eu/energy/renewables/consultations/2009_07_31_iluc_pre_consultation_en.htm
- Analytical work :
http://ec.europa.eu/energy/renewables/studies/land_use_change_en.htm

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?

No, AEBIOM do not think the analytical work presented provides the necessary basis for regulation of ILUC at this time. As the literature review presented by the Commission in July 2010 rightly points out there is a number of major uncertainties in the research presented so far. AEBIOM would particularly like to stress the following points:

Crop yields and yield response. As pointed out in the literary review the yield response to increased demand created by biofuels is critical to the result of the studies. If the response to higher prices leads to a faster growth of production than the demand there will be no need for extra land and consequently no negative ILUC-effect. With different assumptions of yield response the results can vary greatly. It is especially disturbing that only one of the many studies has made assumptions about changes in cropping intensity, and none has considered faster technological development.

Availability of land for increased agricultural production without using carbon-rich forests and grasslands. We feel this issue has not been studied in depth. We know there is abundant unused farmland in Europe, particularly in central and east Europe.

According to the aforementioned data of the National Land Service under the Ministry of Agriculture and the State Enterprise Centre of Registers, as on 1 January 2010, there were 99,912

ha of unused agricultural land and 8,752 ha of damaged agricultural land. There are no official data as to how much unused arable agricultural land there currently is.

In Lithuania the RES action plan mentions a enormous 1,45 million ha unused land !

Handling of co-products in the models. The different studies tackle this issue in remarkably diverging manners. As pointed out in the literary review the impact on land use change can vary between 8 and 64 percent depending on the model, as there is significant divergence between the studies concerning the treatment of co-products.

Converted land. The different studies use very different assumptions for converted land, what kind of land is converted, and what yield levels these lands will give.

In summary, the analysis is based on complex modelling using numerous assumptions and estimations that can vary greatly between different researchers and studies. The end results therefore also vary within a very wide range. As an example there are studies showing that the ILUC factor for sugar cane ethanol is equivalent to 8 g CO₂/MJ, and other stating it is 69 g CO₂/MJ !

2) On the basis of the available evidence, do you think that EU action is needed to address indirect land use change?
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No, AEBIOM do not think that action is needed to address indirect land use change. It is, in fact, not advisable to base legislation on such uncertain grounds, for several reasons.

The producers affected by a regulation, e.g. a certain ILUC factor in g CO₂/MJ, would have no way to avoid such a regulation by improving their production activities. By definition, the indirect effects are not under the control of the producers. The producers can only take responsibility for their direct actions and their direct effects, as they are regulated by the Renewable energy directive.

The result of an ILUC factor will not steer towards better biofuel production. Rather, the ILUC factor will be a general penalty on all biofuel production and make biofuels less competitive in relation to fossil fuels.

It is very questionable to base judicially binding regulation only on theoretical modelling, especially when the results of the modelling is so inconclusive and varies so much between different studies.

The introduction of an ILUC factor on biofuels imported to EU will be seen as a trade barrier and consequently be reported to WTO.

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:
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No, the results from different studies are diverging also concerning different production paths. It has often been said that "second generation" biofuels from lignocellulose and waste should be favoured, as they have little or no effect on land use change. This may be true, but we cannot back up the policy only on the base of definitions of biofuels. There should be a fair comparison and a level playing field on scientific ground, for any biofuel.

There is no reason to "punish" first generations fuels only based on theoretical ILUC calculations. Direct land use is of course relevant, and is handled in the sustainability criteria in RED.

First generation biofuels are producing by-products for the feed sector and might therefore have positive ILUC effects.

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.

AEBIOM believes alternative A is appropriate. Indirect land use effects do exist with all types of land use (for food, feed, fiber, recreation, urban development, etc), and have to be analysed. An ILUC factor will not prevent deforestation to happen and would fail to account for neutral or positive ILUC impacts.

Focus should be on land use and land use change in all countries in the world. Biofuels had this advantage to raise the consciousness about land use in the context of growing demography and energy needs. The analysis of such issue should be done in cooperation with the governments in the concerned countries, and research institutions in these countries. Satellite imaging offers a perfect tool to follow trends in land use.

Funds should also be allocated to research on how to develop strategies for sustainable production and how to protect carbon-rich and biodiverse lands.

Bilateral agreements with countries exporting to EU could be a way to ensure that appropriate action is taken. Such agreements could e.g. make sure that the existing biodiversity in those countries is maintained or even enhanced while increasing the overall productivity of sustainable agricultural irrespective of its end use.

An extension of the already existing sustainability requirements for biofuels to other uses of biomass such as for food and feed markets can also result in a reduction of negative ILUC factors.

At the same time the EU should actively support biomass production initiatives with positive ILUC impacts in order to both offset negative effects being created elsewhere and to develop and study real best practise land use models for other likeminded investors.