



THE ROYAL SWEDISH ACADEMY OF AGRICULTURE AND FORESTRY

European Commission
Ec-land-use-change-biofuels@ec.europa.eu

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Answer to the Commissions consultation on ILUC (indirect land use change) from the Royal Swedish Academy of Agriculture and Forestry.

The Royal Swedish Academy of Agriculture and Forestry (KSLA) is a free and independent network organisation working with issues relating to agriculture, horticulture, food, forestry and forest products, fishing, hunting and aquaculture and the environment – in short sustainable management of the green natural resources - plus agricultural and forest history. It is – since its foundation in 1811 – an important meeting place for the green sectors.

The assemblies, conferences, round tables and seminars of the Academy are important ways of achieving targets. By coming together for discussions on important questions it is possible to take initiatives on measures or activities that stimulate development.

The Academy has through its Energy committee and at a recent scientific seminar closely studied the ILUC-question. Here are our answers to the consultation at

http://ec.europa.eu/energy/renewables/consultations/2010_10_31_iluc_and_biofuels_en.htm
(last date 31 October)

The related documents are found at

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, we 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. We 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.

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 (reductions) 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 insignificant (8 g CO₂/MJ), and other stating that it is prohibitive (69 g CO₂/MJ). Both of these numbers can not be true.

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

No, we do not think that action is needed to address indirect land use change. It is, in fact, not adviceable to base legislation on such uncertain grounds. This 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:

No, the results from different studies are diverging also concerning different production paths. It has often been said that "second generation" biofuels should be favoured, as they have little

or no effect on land use change. This may be true, but if certain other "first generation" production paths also have negligible ILUC effects these should be able to compete freely on the market, as they probably in the short and medium term have lower production costs than second generation biofuels. 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.

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.

We believe alternative A is appropriate. Indirect land use effects do exist, as they do also with other types of land use (for food, feed, fiber, recreation, urban development, etc), and have to be analysed.

Focus should be on direct land use and land use change in leading production countries and production areas. The analysis of the development should be done in cooperation with the governments in the concerned countries, and engaging research institutions in these countries. Funds should also be allocated to research on how to develop strategies for sustainable production and how to protect carbon-rich and biodiverse lands.

A major reason for misuse of land resources is lack of laws regarding owner rights of forest and government insufficient steering?

Bilateral agreements regarding land use policies and governance with countries exporting biomass and biofuels to EU could be a way to ensure that appropriate action is taken on sustainable land-use issues.

In the case where agreements are made with developing countries, clear goals for improved land-use regulations and limitation of the time period of maximum five years should be incorporated in the agreements. The time-period could be shortened in high-risk areas, where extra attention on the land-use issues is required. These agreements should be regularly revised and land-use status improvements reported to the commission to make certain that improvements are achieved in order for the agreements to be prolonged.

This mechanism with bilateral agreements conditioned with verified improved land-use regulations and reports on land-use is a clear steering mechanism towards sustainable land-use and improved landowner rights in developing countries. Compared to the introduction of an ILUC factor such regulations would have a direct on the conditions in the concerned countries.

The Royal Swedish Academy of Agriculture and Forestry.



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