

This document gives the response of the United Kingdom to the European Commission's consultation on indirect land use change (ILUC) impacts of biofuels.

Q1) Do you consider that the analytical work ... provides a good basis for determining how significant indirect land use change resulting from the production of biofuels is?

We consider that the results of the analytical work are compelling in showing that the greenhouse gas (GHG) emissions from ILUC are significant compared to the potential emissions savings from biofuel use. For some biofuels ILUC poses a risk to achieving GHG savings compared to the use of fossil fuels.

There is uncertainty associated with the scale of ILUC emissions; this is a new field and the science is developing. The Commission should continue to work to develop evidence on the scale of ILUC and actions that can be implemented to reduce any negative impacts of ILUC on GHG emissions and local environmental, economic and social conditions, including biodiversity loss. Such work should form the basis of reviews of ILUC mitigation actions implemented on the basis of the best evidence available now. While there are aspects of the uncertainty that can be reduced by further research, a single specific emissions value for ILUC will not be possible. This is because the substitution effects that give rise to ILUC are sensitive to the relative prices of a range of agricultural commodities, and so will give rise to a range of ILUC values.

International prices (absolute and relative) can vary significantly over time, whilst the degree to which international price movements are transmitted to national markets is affected by a range of factors (domestic supply and demand balances, transport costs and national policy in respect of agricultural trade and marketing) and will therefore also vary by commodity and country..

The analysis is already consistent and robust in showing that ILUC represents a significant risk to achieving greenhouse gas savings from the use of some biofuels. Uncertainty about the precise size of the impacts of ILUC should therefore not result in inaction: the risk should be addressed in line with the precautionary principle.

Q2) On the basis of the available evidence, do you think that EU action is needed to address indirect land use change?

Yes, the available evidence demonstrates that EU action is needed to reduce the risk posed by ILUC.

As discussed in Question 1, research shows that ILUC is significant and should not be ignored. The precise scale of ILUC is uncertain, this uncertainty cannot be ignored and, as with other aspects of climate change, cannot be a justification for inaction.

Q3) 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

ILUC results from the interaction between a specific biofuel production path and the wider economy. There are numerous factors that increase or reduce the risk of ILUC occurring and the scale of GHG emissions and social, biodiversity and local environmental impacts that result from any ILUC, including where geographically the land use change occurs. A number of reports have highlighted this, including recent work by E4Tech¹ and Ecofys². The Renewable Energy Directive already recognises a number of factors that reduce ILUC risk and provides a GHG bonus for production on unused or degraded land and ‘double counts’ the contribution towards targets made by wastes, residues and lignocellulosic biofuels.

Recent analysis, including the recent JRC report on the issue³, shows that distinctions between ILUC risks for different feedstocks

¹ E4Tech 2010: *A causal Descriptive approach to modelling indirect land use change*, published on www.dft.gov.uk

² Ecofys 2009: *Mitigating indirect impacts of biofuel production*. published in Year One of the RTFO; www.renewablefuelsagency.gov.uk

³ Edwards et al 2010: *Indirect land use change from increased biofuel demand: comparison of models and results for marginal biofuels production from different feedstocks*.

can be extended beyond the current recognition of wastes, residues and lignocellulosic feedstocks. Sugar crops are generally lower ILUC risk than oil crops; and some feedstocks for emerging biofuel technologies, such as algae, have very low ILUC risk.

In addition to differences between feedstock, some actions will reduce ILUC risk by reducing the displacement pressures generated by the biofuel production. It is important that such actions are recognised and rewarded.

A clear and sustainable proposal from the Commission distinguishing ILUC risk between feedstocks and recognising ILUC reducing actions is needed. This should support the fuels industry in mitigating ILUC, recognise the work that has been done to date and support further innovation in the industry. In developing such a proposal the Commission should engage with Member States and other producer nations to ensure that proposals are deliverable. The Commission should develop a clear framework for rewarding actions by producers to reduce ILUC pressures (for example use of coproducts).

Q4) 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

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

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

D. Take some other form of action

The following key principles should be the basis of any consideration of indirect land use change:

1. Any consideration of ILUC or approach to mitigating it must be based on the best available evidence, taking into account uncertainty and the varying impacts of different biofuels, and must be consistent with the precautionary principle.
2. The primary objective of addressing ILUC is to ensure that biofuels deliver GHG savings compared to the fossil fuels they replace
3. It is important for any proposal to address ILUC risk to be sustainable and take account of the impacts on food price, biodiversity, local environmental, economic and social conditions.
4. It is important for the calculations of GHG emissions to include ILUC, so as to measure and record progress at reducing GHG emissions using the best available evidence.
5. It is important for any proposal to address ILUC risk to support innovation by incentivising improvement in GHG savings and reduction of ILUC risk, rather than being simple pass/fail criteria.
6. Consistent with the above principles, any proposal to address ILUC risk should, as far as possible:
 - minimise any additional cost to industry and Member States.

- not introduce new barriers to international trade.
- not negatively impact energy security in the European Union.

The method for addressing ILUC should be robust but practical and proportionate, avoid unintended adverse consequences and reward actions that avoid ILUC. For example, in accordance with these principles and the responses to questions 1-3 of this consultation, a proposal that may present a complete approach to reducing ILUC risk would be the inclusion of both an 'ILUC factor' in the calculation of GHG emissions and GHG 'credits' for actions that practices that reduce ILUC risk without causing other significant impacts. The Commission should develop detailed options for addressing ILUC, and subject these to a full Impact Assessment, which takes into account the effect on obligated parties of meeting our targets under the Renewable Energy Directive and Fuel Quality Directive. The Commission should engage with Member States to develop such a proposal.

In developing an appropriate proposal the UK will support the Commission in investigating a full range of options, including extending the use of bonuses already used in the Directive, such as GHG bonuses and double counting certain fuels.