

## **Indirect land use change – Possible elements of a policy approach – preparatory draft for stakeholder/expert comments**

### Introduction

The recently adopted Renewable Energy Directive and Fuel Quality Directive require the Commission to “submit a report to the European Parliament and to the Council reviewing the impact of indirect land use change on greenhouse gas emissions and addressing ways to minimise that impact”.

This must be done by December 2010 at the latest. The Commission services foresee that the Commission would make the report – and, if appropriate, the accompanying legislative proposal - by March 2010, so that Member States can take it into account in their National Renewable Energy Action Plans, which must be submitted by the end of June 2010.

As a first step in addressing ways to minimise the impact of indirect land use change, the Commission services have drafted the attached preparatory list of possible elements of a policy approach, drawing on ideas that have been identified in various fora. This paper is without prejudice to the Commission's final position. Nothing in this paper should be taken as indicating that the Commission considers that any of the elements in their current form is necessarily feasible and/or compatible with Community policies and commitments.

Experts and stakeholders are invited to submit comments on this list to the mailbox [ec-land-use-change-biofuels@ec.europa.eu](mailto:ec-land-use-change-biofuels@ec.europa.eu) by **Friday 31<sup>st</sup> July 2009**. You are advised that your comments will be made public on a Commission website.

In commenting, respondents are invited to bear in mind that the Commission services are willing to examine variants, a combination of policy elements, hybrids and other possible elements.

In addition, comments are invited on aspects of the policy elements such as feasibility; effectiveness in addressing the problem; uncertainty; costs and benefits, including the administrative burden; and international trade implications.

This preparatory work will feed into the definition of policy elements for a formal consultation exercise to be held in the autumn, and for the Commission's impact assessment.

The Commission services also intend to make publicly available, at a later stage, their work to review the impact of indirect land use change on greenhouse gas emissions.

The policy elements in the attached list are the following:

- A. Extend to other commodities/countries the restrictions on land use change that will be imposed on biofuels consumed in the European Union
- B. International agreements on protecting carbon-rich habitats

- C. Do nothing
- D. Increase the minimum required level of greenhouse gas savings
- E. Extending the use of bonuses
- F. Additional sustainability requirements for biofuels from crops/areas whose production is liable to lead to a high level of damaging land use change
- G. Include an indirect land use change factor in greenhouse gas calculations for biofuels
- H. Other policy elements that respondents may wish to raise.

**Policy elements A and B address the general issue of land use change rather than focussing specifically on biofuels**

**Policy element A**

*Extend to other commodities and countries the restrictions on land use change that will be imposed on biofuels consumed in the EU.*

The sustainability scheme restricts the land from which raw materials for biofuels are taken.<sup>1</sup>

Under this approach, the Community would work with relevant partners on the extension of these restrictions to other commodities/consuming countries. Methods for doing this could include:

- Encouraging other administrations to adopt the same restrictions;
- Encouraging industries to apply the same restrictions on a voluntary basis;
- Requiring goods sold in the EU to be labelled in respect of their compliance with these requirements.

**Policy element B**

*International agreements on protecting carbon-rich habitats*

The implementation of multilateral agreements on protecting carbon-rich habitats such as tropical rain forests in countries that are threatened by land use changes and resulting large GHG releases could limit indirect land use change emissions.

(The Commission has proposed in its Communication on deforestation<sup>2</sup> to work in the international negotiations on climate change towards the development of a Global Forest Carbon Mechanism, a financial mechanism through which developing countries would be rewarded for emissions reductions achieved by taking action to reduce deforestation and forest degradation.)

**It may well be concluded that, whatever their other advantages and disadvantages, these elements require the introduction of measures that go beyond the scope or timetable of the present exercise.**

**The remaining elements (C to G) address biofuels directly.**

---

<sup>1</sup> The restrictions in question apply to raw material taken from primary forest; nature protection areas; highly biodiverse grassland; land converted from wetland; land converted from a “continuously forested area” (canopy cover of more than 30%) and undrained peatland, unless evidence is provided that it is still undrained.

(The cut-off date for these restrictions is the use of the land in January 2008.)

<sup>2</sup> COM (2008) 645

**For the purposes of these elements, it is assumed that on the basis of analytical work, including modelling and/or retrospective analysis, a satisfactory understanding has been reached on the level of indirect land use change emissions and how these vary by biofuel (for example by type, feedstock and/or location of production).**

**The remaining elements would take this analytical work as their starting point.**

**Policy elements C and D focus on the need for a "cushion" to ensure that the greenhouse gas benefit of the policy as a whole – with indirect land use change taken into account – is at an acceptably high level.**

#### Policy element C

*Do nothing*

(The existing minimum required level of greenhouse gas savings - 35%, rising in 2017 to 60% for new installations and 50% for existing installations – is considered, under this approach, to be enough to provide an adequate "cushion" against the estimated adverse side-effects from indirect land use change.)

#### Policy element D

*Increase the minimum required level of greenhouse gas savings*

(Under this approach, the conclusion would be that the cushion provided by the existing minimum requirements is not adequate and needs – in the light of the estimated adverse side-effects from indirect land use change - to be increased.)

**The view might be taken that it is not enough to focus on the greenhouse gas impact of the policy as a whole – it is necessary to differentiate between individual consignments of biofuel, encouraging the use of some and/or discouraging the use of others.**

**Policy elements E, F and G address this in different ways.**

#### Policy element E

*Extending the use of bonuses*

The existing sustainability scheme provides a bonus of 29 gCO<sub>2eq</sub>/MJ (equivalent to a 35% saving) in calculating the greenhouse gas impact attributed to biofuels from land that is severely degraded or heavily contaminated.

Under this approach, this bonus could be increased; it could be extended to biofuels that do not come from land; and it could be extended to biofuels from idle land.

## Policy element F

*Additional sustainability requirements for biofuels from crops/areas whose production is liable to lead to a high level of damaging land use change*

An assessment would be made – on the basis of analytical work (see above) – of the countries, crops or crop/location combinations where increases in demand for agricultural commodities systematically lead to damaging land use change, whether this change occurs domestically or globally.

In order to count as fulfilling the sustainability criteria, these biofuels would need to meet additional requirements. They would, for instance, have to provide evidence that their production practices did not lead to the damage in question (for example, because they converted degraded land – or because of the introduction of verifiable measures, at national level or otherwise, to control damaging land use change or increase agricultural yields).

## Policy element G

*Inclusion of an indirect land use change factor in greenhouse gas emission calculations for biofuels*

An additional factor  $e_{iluc}$  would be included in the formula<sup>3</sup> for calculating lifecycle greenhouse gas emissions from biofuels. This would be derived from analytical work (see above).

If the analysis suggest that there is no variation in indirect land use change emissions between different biofuels then for those biofuels to which indirect land use change is attributable  $e_{iluc}$  would be given a constant value.

If the analysis suggests that there is variation in indirect land use change emissions between different biofuels (for example according to type, feedstock or location of cultivation of raw material) then the value of  $e_{iluc}$  would be determined on the basis of classes or types or locations of biofuel as appropriate.

For biofuels not giving rise to indirect land use change – for example this could be imagined for biofuels not requiring land – the value of  $e_{iluc}$  would be zero.

## *Variants*

- This approach could be combined with a reduction in the minimum required greenhouse gas saving (on the grounds that part of the reason for a threshold above zero is to deal with uncertainties in the greenhouse

---

<sup>3</sup> This currently reads:  $E = e_{ec} + e_l + e_p + e_{td} + e_u - e_{sca} - e_{ccs} - e_{ccr} - e_{ee}$

gas calculation, and introducing an indirect land use change factor reduces those uncertainties)

- Biofuel producers could be allowed to offset the indirect land use change emissions attributed to them by providing evidence of emissions saved in other parts of the primary sector (perhaps only in the same region)
- The factor could be weighted by yields of biofuel per hectare

#### Policy element H

*Other policy elements that respondents may wish to raise.*