Legislation on indirect land use change - an EU perspective

Paul Hodson – European Commission

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EUROPEAN COMMISSION

I The EU legislative framework

II "Reviewing the impact of indirect land use change on greenhouse gas emissions"

III "Addressing ways to minimise that impact"

I LEGISLATIVE FRAMEWORK

Renewable Energy Directive (directive 2009/28):

- 20% binding target for **overall share of renewable energy** in 2020
- 10% binding target for **renewable energy in transport**
- **Sustainability scheme** for biofuels and bioliquids including
  - Minimum rate of GHG saving (35%, rising to 50% in 2017/60% for new installations in 2018)
  - Rules for calculating GHG impact
  - Restrictions on land from which biomass may come

Fuel Quality Directive (directive 2009/33):

- 6% binding target for **reduction in unit GHG emissions from road transport** by 2020
- Sustainability requirements for biofuels (identical to Renewable Energy Directive)

Directorate-General for Energy and Transport

Further work required by the legislation:

- Report and possible legislative proposal on **extending sustainability requirements to all bioenergy** (by December 2009)
- Report and possible legislative proposal on **indirect land use change** (by December 2010 - Commission services aim to report in March 2010)

Directorate-General for Energy and Transport

The EU legislative requirement on indirect land use change:

"The Commission shall, by 31 December 2010, 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. The report shall, if appropriate, be accompanied, by a proposal, based on the best available scientific evidence, containing a concrete methodology for emissions from carbon stock changes caused by indirect land use changes, ensuring compliance with this Directive, in particular Article 17(2).

Such a proposal shall include the necessary safeguards to provide certainty for investment undertaken before that methodology is applied…

The European Parliament and the Council shall endeavour to decide, by 31 December 2012, on any such proposal submitted by the Commission."

(Renewable Energy Directive, Article 19(6); equivalent provisions in Fuel Quality Directive)

II "REVIEWING THE IMPACT OF INDIRECT LAND USE CHANGE ON GHG EMISSIONS"

Analytical work under way in the Commission:

- **CGE** modelling (CEPII/IFPRI, using GTAP)
- **PE** modelling
- **Retrospective** analysis

Issues to address: (1) - need for proper modelling of co-products

	Co-product share (energy value)
Sugar cane	0%
Palm oil	5%
Sunflower	34%
Sugar beet	36%
Wheat	39%
Rapeseed	40%
Soya	66%

In the European context this issue can't be ignored

Issues to address: (2) - need to model full range of land types including:

- recently abandoned agricultural land
- recently deforested land
- peatland

Need for a convincing story about land conversion

- EPA: 27% of land converted to arable in the EU, 2001-2004, came from forest. What land is this?

Issues to address: (3) - EU scheme includes restrictions on the land from which biofuel can come (forest, wetland, peatland etc.)

Comparable restrictions in US EISA

Will these restrictions make any difference? (eg through premium price)

- If so, this should be modelled
- If not, what is the point of the restrictions?

III "ADDRESSING WAYS TO MINIMISE THE IMPACT"

- Options under examination include an indirect land use change "**factor**" in the greenhouse gas calculation methodology
- This does, however, raise some issues:
  - Imagine we attribute a GHG impact to all the goods a supermarket sells (not only the fuel). If we use the "factor" approach, the total amount of land use change attributed to all goods will far exceed the real amount. Can this be justified?
  - If we respond by attributing the factor only to "new" demands, how do we deal with biofuels that are "in the baseline". Can such biofuels be identified? Should they be exempted?

- Issues with the “factor” (continued)…
  - Where crops replace forest, the quantity of crops (aggregated over 20 years) is generally less than quantity of timber (at least, by energy value). Can we justify attributing all the C stock loss to the crops?
  - The introduction of a GHG factor will probably lead to more biofuel (to fulfill the Fuel Quality Directive target) and could lead to more indirect land use change. Is this desired?
  - Part of the solution to the problem of indirect land use change is to encourage yield improvements. Under an indirect land use change factor, how can we avoid penalising farmers who improve yields?

- What alternatives to the “factor” might there be?
  - one product’s “indirect land use change” is another product’s “direct land use change”. Can this be addressed for other products?
  - a higher “**cushion**” (minimum GHG saving) for biofuels and bioliquids?
  - “**bonuses**” in the GHG calculation for biofuels and bioliquids that avoid damaging land use change?
  - additional sustainability requirements for biofuels from **crops/locations systematically associated with damaging land use change** (e.g. requirement to show avoidance of this damage)?

- Next steps: consultation on **policy options** and **analytical approaches**

thank you

paul.hodson@ec.europa.eu

text of the Renewable Energy Directive (provisional version):
http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P6-TA-2008-0609