

TOWARDS A NEW LEGISLATION FOR BIOFUELS

EC Energy and Transport Directorate – General Public Consultation Exercise
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Response by **IEFE** – Centre For Research on Energy and Environmental Economics
and Policy – Bocconi University, Milan, Italy

Contact: augusto.ninni@unibocconi.it, alessandro.lodi@unibocconi.it

General questions

Generally speaking, the responses to the EC public consultation exercise can be placed at two levels. At the first level, the response can explicitly emphasize how the questions posed by the Energy and Transport Directorate are comprehensive about the general issues involved. It is usually claimed that the features of sustainability stressed by the specific questions of the public consultation only deal with a part of the issues. For instance, the “possible way forward” refers to three criteria of sustainability (GHG savings, changes in carbon stocks through changes in land uses, loss in biodiversity stemming from changes in land uses). It is possible to refer to other, further criteria to take into account in the future EU Directives: however the question posed by the Directorate only refers to what is proposed by the Commission. The extension is however useful, as it clarifies the framework within which the single responses have to be understood.

The second level is far simpler, as it should face explicitly the questions posed by the Directorate.

The IEFE’ s approach. The use of biofuels should be promoted, as they are the only existing technological alternative to oil products in the transport sector, which can be developed already in the short and medium period. The reasons are that:

- the energy transport consumption is the only energy final category which is certainly expected to increase, both in industrialized and (above all) in emerging countries;
- around 95% of the energy consumption in IEA countries is made from (mainly imported) oil;
- it is expected that 90 % of the increase in CO₂ emissions from 1990 to 2010 will come from transport (both figures from EU, Biofuels in the European Union, A Vision for 2030 and beyond, 2006);
- other reasons to promote biofuels are their effects on non-GHG pollution (PM₁₀ and quality of air) and biodegradability (important in case of large damages)

- last but not least: biofuels are a renewable source of energy, which is not the case of oil

Taking this into account, the evaluation of the sustainability of biofuels should be considered looking at its only alternative in the short and medium period as a fuel for road transports, i.e. (mainly imported) oil.

However, it is known that the promotion of biofuels meets three large obstacles, at the current level of technology:

- large increases of the availability of supply of feedstocks can trigger off competition with food crops if in already cultivated areas, or may worsen the overall GHG emission levels if in grazing or forest lands;
- definitive evaluations of net overall (in terms of life-cycle-analysis) benefits in terms of energy inputs and GHG gains are difficult to carry out, as they differ largely among various feedstocks (and the localization of crops itself)
- only the cost competitiveness of Brazilian sugar cane ethanol is sound and stable, while the economic competitiveness of the other biofuels is strictly dependent on the dynamics of oil prices and utilization of the other biofuels is currently requiring to be subsidized.

On a large scale, this means that, at the current technology, a very large substitution of biofuels for road transport oil products is quite impossible to reach. Currently, biofuels are then a technology of transition, so that the commercial exploitation of “second generation” biofuels is quite obligatory in order to achieve the expected results.

This is obviously the approach followed by the European Commission. The “compulsory” share of 10 % in the road fuel consumption (in energy content) by 2020 can be achieved, if four conditions are fulfilled:

- problems of cost competition are solved (there is no need to go on through subsidies, after the phase of “infant industry”);
- production is sustainable;
- technologies of second generation are ready for commercial utilization;
- the Fuel Quality Directive has been amended in order to reach suitable levels of blending in the road fuels.

The current public consultation tries to get suggestions on how the second issue can be defined in the next revision of the Directive on biofuels, and how can be implemented; further, it is looking for suggestions about how to satisfy the third, more uncertain condition.

Specific questions

1. Design of sustainability

Question 1.1:

Do you think the "possible way forward" described above is feasible?

The sustainability criteria to be met in order to be eligible for tax reductions or other forms of financial support, or to be accounted for “biofuel obligations”, should be the first two proposed in the box 1: achieving a minimum level of GHG savings and avoiding major reduction in carbon stocks through land use change. Both criteria should be met at the same time.

As a device to spur suppliers to produce biofuels, the first criterion of sustainability should be put in a relatively simple and friendly way. It is enough that net emissions of GHG coming from supplied biofuels, taking into account however the WtW approach (not only production !), are less than the same coming from the avoided oil products (of course, according the WtW approach). The suppliers should be required to provide information on the emissions in phase of production, while the emissions after the production phase should be evaluated (in terms of average results) by independent, national bodies comparing them with the avoided emissions and give one-year authorizations. However, the same suppliers should also provide information about the possible land use change to the same national body which, after the due checks on carbon stocks, become responsible for the authorization to the suppliers to be an “eligible biofuel producer”.

There are two ways to ascertain the level of environmental sustainability (meeting both criteria):

- either the feedstocks grow in the area of the European Union or candidate countries or members of the European Neighbourhood Policy, so they may fall under the normative of the Community;
- or if they come from outside EU they could be provided by specific EU suppliers, which warrant the required specific values of emissions and carbon stocks, under the EU normative. They could do this either because they are vertically integrated or because they have long term contracts with the real producers of feedstocks or finished products. Another possible solution is to consider them inside CDM ‘s experience, even if up to now the CDM tool seems not to fit the biofuels issue very much (look at the UNCTAD documentation).

Anyhow, the provision of biofuels should require a regulation approach, as its sustainability problems do not allow a free market approach. The incentive for the suppliers on passing correct sustainability information to regulatory boards comes from the frequency of checks and authorizations, that should be limited to one year (of course, it can be iterated!).

Question 1.2

What do you think the administrative burden of an approach like the "possible way forward" would be? (If possible, please quantify your answer.)

I think it is like a sunk cost. It means that it requires a heavy administrative burden at the beginning of the initiative, as a fixed cost, but after its variable cost is rather small, and limited to casual checks. This occurs even if the soil stock changes, as what is important is the setting of the practice.

The cost of this administrative burden should be passed on biofuel suppliers.

Question 1.3

Please give your general comments on the "possible way forward", and on how it could be implemented. Does it give an adequate level of assurance that biofuels will be sustainably produced?

If you think the problem should be tackled in a different way, please say how, giving details of the procedures that would be used.

The criteria n. 1 and n. 2 can be quantified pretty easily. GHG variations can be measured, the economic costs of GHGs evaluated, and transnational instruments of compensation are currently working.

The creation of regulatory bodies releasing one-year authorizations to biofuel suppliers in EU should allow both sustainability and a framework for implementation.

Question 3.1:

How should second-generation biofuels be defined? Should the definition be based on:

- a) the type of raw materials from which biofuels are made (for example, "biofuel from cellulosic material")?**
- b) the type of technology used to produce the biofuel (for example, "biofuels produced using a production technique that is capable of handling cellulosic material")?**
- c) other criteria (please give details)?**

Second generation biofuels should be defined according to type of raw materials they come from, but in negative terms. It means that the materials that have to be excluded, usually for environmental reasons, should be explicitly quoted, giving freedom about the choice of the accepted materials and the choice of technologies.

Question 3.2:

Please give your comments on the "possible way forward" described above. If you think the problem should be tackled in a different way, please say how.

The legislation would confirm that second-generation biofuels may receive higher subsidies than first-generation biofuels (subject to Community state aid rules and applicable Community tax legislation).

The “subsidy plus” should be dependent on a per-hectare yield, directly linking the benefit in terms of the subsidy on the gain in terms of productivity on energy basis, provided that there is no worsening in terms of environmental sustainability with respect to the biofuels of first generation.

Question 3.3

Should second-generation biofuels only be able to benefit from these advantages if they also achieve a defined level of greenhouse gas savings?

The GHG savings should be obtained through a higher productivity per hectare, without any worsening in specific GHG emission. If they are able to achieve such target, they should deserve a supplementary premium.

The design of the subsidy should be binary. One part refers to productivity gains, another part to emission gains.

Question 4.6

More generally, what role should taxation play in the promotion of biofuels (considering different situations such as low blends, high blends and second-generation biofuels)?

Fuel taxation should be linked only to CO₂ (or total GHGs) emissions. As in European countries the weight of taxation is far more important than other factors at the pump level in order to shift the decisions of the consumers, the MSs must be able to utilize fuel taxation in order to discriminate against the consumption of oil products. It should become the chief instrument.