

Recommendations to DG-TREN public consultation on biofuel issues in the new legislation on the promotion of renewable energy

Question 1.1: Do you think the "possible way forward" described above is feasible? Yes, subject to recommendations made below.

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.) The word "burden" suggests (rather dangerously) that appropriate and coherent administrative arrangements for establishment, monitoring and verification of the measure are somehow undesirable. Such arrangements are, in Grian's view, at least, an essential and unavoidable ingredient of the success (or otherwise) of its implementation. We provide below some recommendations and guidance with a view to enhancing the overall efficiency of the proposed measure.

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. Absent significant and thoroughgoing implementation of a strong interpretation of the proposed Sustainability Criterion 1, it is hard to see the benefit of the "possible way forward" as proposed. If biofuels are not to significantly mitigate the production of GHG's, there is simply no environmental (and, probably, economic) benefit in supporting their production and consumption.

- The directive should define 'default values' for net greenhouse gas savings from different types of biofuel;
- These values should be based on a set of thorough "well-to-wheel" analyses of all likely qualifying fuels and production processes, including transportation of product to market, and including all upstream inputs (e.g. seed production, fuel inputs to mechanical cultivation and processing, and onward delivery to final fuel wholesalers);
- Such values should cover all greenhouse gases, including GHG's from land use and land use change corresponding to (and based on) existing IPCC guidelines;

- Biofuel suppliers should be obliged to follow default values and guidelines, or (as an option) to provide more precise and scientifically validated information (should it be available) on the savings from their particular production process.
- Any buffer or "safety margin" on demonstrable mitigation potential from biofuels should be set at a minimum of 20%

For more detail, see also recommendations to Q 1.4 below

Question 1.4 Carbon stock differences between land uses would be taken into account under criterion 2. Should they also be taken into account under criterion 1? Yes (see recommendations above).

If so, what method should be used to determine how the land in question would have been used if it had not been used to produce raw material for biofuels? Obviously, a coherent set of demonstration baselines and methodologies will have to be established and verified to demonstrate the additionality involved. The process used to develop and expand capacity under the CDM could possibly serve as a model. (In other words "learning by doing" on a project-by project, and project developer-led, process).

Question 1.5 As described in the "possible way forward", criterion 3 focuses on land uses associated with exceptional biodiversity. Should the criterion be extended to apply to land that is adjacent to land uses associated with exceptional biodiversity? If so, why? How could this land be defined? Question 1.6 How could the term "exceptional biodiversity" (in criterion 3) be defined in a way that is scientifically based, transparent and non-discriminatory?

In both cases, these concerns should be approached on the basis of relevant provisions of the Convention on Biological Diversity (CBD), in particular Article 6, which specifies that signatories should (have already) compile(d) a set of National Biodiversity Strategies and Action Plans (NBSAP's). Provisions of the proposed Directive should be compatible with, and capable of being integrated into, existing and planned NBSAP's, with particular emphasis on agricultural biodiversity provisions.

Question 2.1: Please give your comments on the "possible way forward" described above. The statement that: *"It seems clear that these indirect effects cannot be linked to individual consignments of biofuel"* rather obviously (and most undesirably, for a public consultation) takes a position that tends to pre-empt answers to Q2 below.

If you think the problem should be tackled in a different way, please say how.
See recommendations to Q.2.2 below

Question 2.2 Do you think it is possible to link indirect land use effects to individual consignments of biofuel? If so, please say how.

In a set of recommendations made to the Irish government in 1998, Grian proposed that fossil-fuel based CO₂ emissions can be tracked right through the consumption chain from upstream to point-of-use using a fully-transferable carbon tax as a "label" for either permitting and/or awareness-raising purposes and/or as a mitigation tool.

The key element in this strategy is that the tax is obliged to be fully passed through the product chain to the next user/operator, and that it is cumulative. Each additional (taxed) input is added to any previous inputs on a product-by-product, direct-input basis. Individual goods at point of sale thus end up "tagged" with a reasonably precise estimate of the amount of CO₂ emitted during the whole course of manufacture and localised at the ultimate retail level.

While it is true that this proposal is much easier to impose on CO₂ than on other GHG's, there seems no insurmountable obstacle to modifying this approach to the question under consideration here and applying a "shadow" GHG price to biofuels, based on the energy and land-use emissions caused by their production (as previously outlined).

Under Grian's strategy, however, any such emissions are again obliged to be passed through to the ultimate consumer, using perhaps again, a "shadow" (unpriced) label accounting for all emissions caused by an individual consignment on a "well to wheel" basis.

It is also true that this methodology is slightly hostage to possible lags in inventory results. It therefore also depends on possibly having to work (in a real-life situation) with an assumption of an "as per previous year" basis.

However, this (possible) limitation in fact answers both question 2.2 here, and also provides an opportunity to accurately track and measure progress of individual fuels towards overall sustainability in the mid to longer term. It is also in line with prior recommendations already made here on fuel values, fuel standards, and project and portfolio development.

Further detail is available from Grian on the substance of both our previous (1998) recommendations to the Irish government and the variation proposed here if required.

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)?

Under the methodology proposed here by Grian, there is no arbitrary distinction to be made between (so-called) "first-" and "second-generation" biofuels. The only distinction to be made is based on (measured) contributions to overall GHG mitigation

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. 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?

Under the framework recommended here by Grian, there is no arbitrary distinction to be made between (so-called) "first-" and "second-generation" biofuels on either a scientific or fiscal basis.

Question 4.1: Should the legislation include measures to ensure that diesel containing 10% biodiesel (by volume) can be placed on the market, and is in fact placed on the market? Question 4.2: Should the legislation include measures to encourage the use of ethanol and biodiesel in high blends? If so, what?

These questions would not arise if the overall EU transport strategy accepted that most, (if not quite all) the problems under consideration here are solvable at the vehicle manufacturing level (i.e. obligatory full flexi-fuel capability)

Question 4.3: Should the legislation include measures to encourage the use of biomethane, methanol and DME in transport? If so, what?

This question would not arise if the overall EU transport strategy accepted that most, (if not quite all) the problems under consideration here are solvable at the vehicle manufacturing level (i.e. obligatory full flexi-fuel capability).

However, it is doubtful to us, at first sight, that two fundamentally different fuel systems and vehicle types, (not to mention vehicle standards and vehicle regulations) are either

desirable or necessary within the context of the overall need to achieve the 10% objective.

Question 4.5: Should the legislation ask the Commission to review, by a given date, whether it is possible to be confident that the 10% target can be achieved through: a) rules that allow 10% blending by volume of ethanol in ordinary petrol, plus; b) rules that allow 10% blending by volume of biodiesel in ordinary diesel, plus; c) the four options listed under 'other options for solving the problem'; If so, what should the date be? If the review were to conclude that the target is unlikely to be met, what action should the Commission take?

Quite obviously, effective legislation is always open to review and improvement. The task of the Commission here (as elsewhere) is to ensure that:

- a) any legislation is maximally effective and efficient in the first instance, and
- b) any review procedure is similarly configured.

It is obviously impossible for us to answer the specifics contained in this question since they relate to proposals which we do not believe are necessary under our overall approach.

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)?

More generally, taxation should be primarily oriented at penalising GHG's in an explicitly targeted approach.

If business-as-usual fuel duties and taxation were reconfigured on a Community-wide basis to take account of the environmental damage caused by GHG's on a direct (GWP and quantity-based) pro-rata, polluter-pays basis, biofuels would substitute fossil fuels at the margin wherever it was most efficient, (considered in both fiscal and GHG terms).

However, the Community is still far from being anywhere near this situation.

In the meantime, therefore this (and any other) proposed Community legislation should aim to:

- a) use taxation to progressively penalise fossil fuels and fossil-fuel based technologies on a direct per-GHG basis;
- b) use regulation, administrative efficiency and fiscal incentives to maximally decarbonise new and emerging biofuel systems; and

c) then position them at the earliest possible opportunity to substitute fossil fuels at the margin in both economic and environmental terms.