



1 How should a biofuel sustainability system be designed?

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

Practically the proposed 'possible way forward' is feasible. GHG savings can be calculated to a detailed level that is objective enough to discriminate between good and bad performing biofuels, as well as to support a reward scheme for biofuels based on the GHG savings achieved. The Netherlands and The United Kingdom are developing a Well to Wheel methodology to calculate the GHG savings of biofuels. After extensive testing it is the intention to implement this methodology in national legislation. In the first years the methodology will be tested in practice. When enough confidence is gained in its practical application, the intention is to use GHG savings as a basis to reward climate friendly biofuels.

The objective calculation of the GHG savings requires knowledge of the origin and production method of the biofuel. This is also required for the use of criteria 2 and 3 in the consultation document. The transfer of this information through the production chain in a reliable manner is possible, as some existing certification schemes like FSC have demonstrated. However for most of the feedstock used for biofuel this is currently not the case. The operation of certification schemes has to be extended in order to get reliable data from the producer to the consumer.

The Netherlands (and similarly the UK) intends to impose a reporting obligation upon the entire chain of supply and production (well to wheel) about sustainability and GHG savings in order to promote transparency. The reporting obligation will stimulate the information transfer through the production chain and will inform the consumers about the origin and sustainability of biomass, bio energy and biofuels.

Legally the proposed 'possible way forward' on mandatory regulations may be more difficult. WTO and EU regulations may inhibit the use of mandatory sustainability criteria. Minimum requirements and a ban on the use of unsustainable biomass can be seen as WTO-incompatible trade barriers.

The European Union should take an active approach to develop the use of sustainability criteria in WTO and EU regulations.

Sustainability criteria are a prerequisite for the large-scale use of biofuels. Unless minimal sustainability requirements are met, the proposed target of 10% biofuels in 2020 is not acceptable for the Netherlands.

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.)

Sustainability criteria will increase the administrative burden for production and trade, as they have to prove that they comply with these criteria. However, the real administrative burden is difficult to predict. It very much depends on the scale at which the criteria are applied and the possibilities for companies to



show that they are in compliance. For example, the availability of reliable certification schemes can significantly reduce the administrative burden.

The reporting obligation the Netherlands intends to impose is also aimed at stimulating the development of new and existing certification schemes that meet the sustainability criteria. The use of accepted certification schemes will make it easier for companies to report on the sustainability criteria of the biofuels.

The EC plans should therefore include an incentive for companies to create and use acceptable certificate schemes to prove their compliance with the sustainability criteria. When more countries will use the same certificate schemes, the administrative burden for producers will be lower.

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 sustainable 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 proposed "possible way forward" is an important step towards environmental sustainability criteria. The sustainability of biofuels should encompass a broader set of criteria including other sustainability criteria.

The Advisory Commission on the sustainability of biomass, a multi-stakeholder dialog, defines nine basic principles to which bio energy production should adhere to in order to be sustainable. These basic principals are:

- Principle 1: The greenhouse gas balance of the production chain and application of the biomass must be positive.
- Principle 2: Biomass production must not be at the expense of important carbon sinks in the vegetation and in the soil.
- Principle 3: The production of biomass for energy must not endanger the food supply and local biomass applications (energy supply, medicines, building materials).
- Principle 4: Biomass production must not affect protected or vulnerable biodiversity and will, where possible, have to strengthen biodiversity.
- Principle 5: In the production and processing of biomass the soil and the soil quality are retained or improved.
- Principle 6: In the production and processing of biomass ground and surface water must not be depleted and the water quality must be maintained or improved.
- Principle 7: In the production and processing of biomass the air quality must be maintained or improved.
- Principle 8: The production of biomass must contribute towards local prosperity.
- Principle 9: The production of biomass must contribute towards the social well-being of the employees and the local population.

The working group distinguishes between criteria that can be applied on a company level and criteria for which governments bear responsibility (principle 3, 8 and 9).

Biomass can be used for the production of biofuel and for the production of energy. Sustainability criteria should apply to both uses of biomass.

At the moment the Netherlands is preparing a response to the criteria proposed by the Advisory Commission.

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?



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?

Carbon stock differences should also be taken into account in criterion 1, as the changes in carbon levels in above- and below-ground carbon can largely influence the amount of greenhouse gas saving of a certain feedstock for biofuel and can also lead to negative greenhouse gas savings.

Only those carbon stock differences should be taken into account that are a result of directly demonstrable alterations in land use (for example a forest cut down to plant energy crops). Indirect changes in land should not be included in the calculation, but should be part of monitoring at the macro level of the implications of increased use of biomass.

In the Netherlands work on the methodology to determine the alternative land use is being done as part of the CO2-tool. We will inform the Commission of the results.

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?

The criterion should be extended to a buffer zone around areas with exceptional biodiversity. This will reduce the risk of indirectly damaging effect (e.g. groundwater pollution, chemical spray, intrusion) from adjacent production units. The Dutch working group on the sustainability of biomass defines this land as the area within a 5 km radius of the exceptional biodiversity. However, a more to the local situation adapted criteria might be more suitable.

1.6 How could the term "exceptional biodiversity" (in criterion 3) be defined in a way that is scientifically based, transparent and non-discriminatory?

Existing definitions such as Gazetted protected areas and High Conservation Value areas can be used.



- 2 Several existing directives, such as the Habitat Directive and the Bird Directive, and treaties, for example the Ramsar Convention on Wetlands, are based upon transparent criteria. These examples can be used to develop a definition and criteria for exceptional biodiversity. How should overall effects on land use be monitored?

- 2.1 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.

As described in the report "Criteria for sustainable biomass production", a distinction should be made between direct effects of land use from energy crops, and indirect effects. The report also indicates that the monitoring of indirect land use effects of energy crops is a government responsibility. This is in line with the problem description in the consultation document under section 2.

In our view land use by energy crops is a dynamic affair, connected to other land use dynamics. The past 6 months we have not only seen a new European target for biofuels, we have also witnessed an intensification of biomass use for other energy purposes within Europe. Moreover, there seems to be a global shift towards more intensive use of energy crops, often driven by providing security of energy supply. We refer to the Memorandum of Understanding between the US and Brazil, the investment plans of the ASEAN countries, biofuel targets being set by Brazil (for diesel), Japan and the Philippines. In addition, there is a global growth in meat consumption, which also effects land use.

In this dynamic environment a dynamic approach is necessary. Ideally monitoring should not be limited to the use of land for biomass production, but should include all changes. In our view a comprehensive monitoring system should be set up. It will be difficult to distinguish between all the factors that influence land use.

The monitoring of land use should be done in close cooperation between the European Commission, member states and countries that produce biomass for energy of biofuels. Adverse effects of European policies on land use should be addressed.



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

No. The monitoring of indirect land use effects of energy crops is a government responsibility. Looking at the European targets and the inefficiency of each European Member State developing its own monitoring system, we think here lays a European responsibility, where by the European Commission could take the lead.



3 How should the use of second-generation biofuels be encouraged?

- 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)?

The definition should be based on a) the types of raw materials from which biofuels are made. The definition should read "biofuel produced from cellulosic, hemicellulosic and lignin material".

A definition of type b) is often proposed, but the problem with this definition is that some production techniques are able to produce smaller quantities of cellulosic biofuel in combination with first generation biofuels. Under definition b) the complete production should be defined as second generation.

Some of the thermal production techniques that are under development will, on the short term, use vegetable oils or by-products derived from vegetable oils to produce liquid biofuels. The current discussion on fuel versus food/feed will also apply for fuels produced by these techniques and, therefore, we recommend to classify these biofuels as "advanced first generation" rather than "second generation".

Second generation biofuels should meet the same sustainability criteria as other biofuels.

- 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.

An advantage to second-generation biofuels in national support systems is only effective if the advantage is high enough. At the moment the worldwide production capacity for second-generation biofuels is limited and the production costs are substantially higher than the production costs for first-generation biofuels. Existing production capacity, often demonstration plants built with government support, will profit from this extra stimulation, but it will not be enough to build new production capacity.

Before we decide to follow this "possible way forward" a closer analysis on the production capacity and market for second-generation biofuels should be made. A possible outcome of such an analysis might be that the most logical way to move forward is to start building production capacity for second-generation biofuels using investments subsidies, and introduce this "possible way forward" once a certain volume of production capacity has been reached.



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?

Yes. Second-generation biofuels should perform better on the selected sustainability criteria. Products that reach higher levels of greenhouse gas savings could receive more benefits.



4 What further action is needed to make it possible to achieve a 10% biofuel share?

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?

No. In view of future targets diesel containing 10% biodiesel is an intermediate step. 10% biodiesel is technically feasible for many cars. There is no reason to stimulate the step to 10% biodiesel.

4.2 Should the legislation include measures to encourage the use of ethanol and biodiesel in high blends? If so, what?

Yes. In order to achieve a target of 10% biofuels in 2020 the use of high blends is necessary. Measures to stimulate the use of high blends could include amongst others:

- Measures to stimulate the production and use of cars that can use high blends. These could include incentives research and development for car manufacturers and tax incentives for users of these cars;
- Encourage gas stations to realize distribution systems and outlets for high blends;
- Tax incentives to make high blends competitive with normal transport fuels.

The EU CO₂ reduction targets ask for action from all possible angles, including the car manufacturers. With a target of 130 grams per km as starting point, the manufacturers could show additional activity by making flexi fuel cars available for the European market. Where there is a discussion on how to bridge the gap between the 130 grams per km and the 120 grams per km, making available flexi fuel vehicles for this could be the answer. Both, the CO₂ reduction targets and the market availability of flexi fuel vehicles are aimed at car manufacturers, thus providing a coherent approach with limited dependency of other market players.

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

The choice for a type of biofuel should be left to the market. If these fuels become technically and economically feasible, measures to stimulate innovation can be considered. At the moment we see no reason to encourage the use of these specific fuels.

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?

The Netherlands welcomes policy review mechanisms, in the form of peer reviews or otherwise.

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)?

Taxation is one of many possible steps to promote biofuels. Each member state should be able to choose the best mix of instruments to meet the targets on the local market.