WWF Contribution to the European Commission – Energy & Transport Directorate

Public Consultation on the Review of the EU Biofuels Directive

June 19th 2007

1. Introduction by DG TREN

On 10th January 2007 the European Commission made proposals for a new Energy Policy for Europe. These included a renewable energy roadmap proposing:

- a binding 20% target for the overall share of renewable energy in 2020 the effort to be shared in an appropriate way between Member States;
- a binding 10% target for the share of biofuels in petrol and diesel in each Member State in 2020, to be accompanied by the introduction of a sustainability scheme for biofuels.

The Commission is now drafting proposals to incorporate these targets in legislation. In doing so, the Commission will take into account the views of stakeholders as expressed in last year's consultation exercises on heating and cooling and biofuels and the recent consultation exercise on administrative obstacles to the increased use of renewable energy in electricity generation.

The present consultation document complements those exercises. The Commission would like to know the views of public authorities, businesses, non-governmental organisations and other interested parties on the following questions:

- 1) How should a biofuels sustainability system be designed?
- 2) How should overall effects on land use be monitored?
- 3) How should the use of second-generation biofuels be encouraged?
- 4) What further action is needed to make it possible to achieve a 10% biofuels share?

The rest of the document explains the questions in more detail.

Responses should be sent to **TREN-BIOFUELS-CONSULTATION@ec.europa.int** by **Monday 4th June 2007**. This document exists only in English, but responses can be in any Community language. If you have views on some questions and not others, do not hesitate to send an answer covering only these questions.

Contributions will be published, on

http://europa.eu.int/comm/energy/res/legislation/biofuels en.htm.

For data protection reasons, the Commission will not process any specified personal data that you include with your reply.

1. How should a biofuels sustainability system be designed?

The Commission intends to bring forward a proposal for a simple incentive/support system for biofuels. Its objective is to further increase the greenhouse gas benefits of EU biofuels policy and to minimise environmental risks. The system could discourage:

- the conversion of land with high biodiversity value for the purpose of cultivating biofuels feedstocks;
- the use of environmentally harmful systems for biofuels production. It should avoid any discrimination between domestic production and imports and should not act as a barrier to trade. Its operation should be monitored with a view to making it more sophisticated in future.

A possible way forward

One option for the initial design of the scheme (before it is reviewed and steps are taken to make it more sophisticated) would be as follows:

- a) The legislation would list the "sustainability criteria" to be fulfilled by the biofuels that are used to fulfil the biofuels target. There could be three of these criteria (see box 1).
- b) Biofuels that failed to meet one of these criteria would not count towards national biofuels targets. They would not count towards national "biofuels obligations". They would not be eligible for tax reductions and similar types of financial support.
- c) Member States would be responsible for ensuring that the criteria were respected. The legislation would set out some procedural requirements (for example on reporting, verification and monitoring). The legislation would define types of evidence that Member States would have to accept as evidence that the sustainability criteria were fulfilled (see box 2).

BOX 1 POSSIBLE ENVIRONMENTAL SUSTAINABILITY CRITERIA FOR BIOFUELS

Sustainability criterion 1 – achieving a minimum level of greenhouse gas savings

Biofuels used to fulfil the requirements of the legislation should not emit more greenhouse gases in production than they save by avoiding the use of petrol or diesel – or (to give a safety margin) should achieve at least a given amount of greenhouse gas savings (for example 10%).

The directive would define 'default values' for net greenhouse gas savings from different types of biofuels. These could, for example, be based on the ranges given in the JRC/EUCAR/Concawe "well-to-wheel" study. They would cover greenhouse gases in general, not just carbon dioxide.

Biofuels suppliers could choose to use these default values, or to provide more precise information on the savings from their particular production process.

Sustainability criterion 2 – avoiding major reduction in carbon stocks through land use change.

Biofuels used to fulfil the requirements of the directive should not use raw material from land that was in certain land uses before a certain date (for example, the date of the

Commission proposal). These land uses would be those that are associated with high carbon stocks (for example, wetlands). IPCC guidelines could be used to identify them. The directive would define the land uses in question.

Sustainability criterion 3 – avoiding major biodiversity loss from land use change Biofuels used to fulfil the requirements of the directive should not use raw material from land that was in certain land uses before a certain date (for example, the date of the Commission proposal). These land uses would be those that are associated with exceptional biodiversity. The directive would define the land uses in question.

BOX 2

POSSIBLE TYPES OF EVIDENCE TO SHOW THAT ENVIRONMENTAL SUSTAINABILITY CRITERIA ARE RESPECTED

- 1. Some EU Member States and other countries are developing national schemes to measure greenhouse gas impacts. Once accredited for EU use through a comitology process, these would be evidence of greenhouse gas emissions in production (for sustainability criterion 1). The same approach could apply to international schemes that may be developed.
- 2. There are voluntary, international schemes setting standards for the production of agricultural and forest products. Some include requirements that would prevent land use change of the types described by criteria 2 and/or 3. Once accredited for EU use through a comitology process, these would be evidence that these criteria have been respected.
- 3. The European Community could negotiate bilateral or multilateral agreements with third countries, confirming that these countries have in place procedures to ensure that the types of land use change described by criteria 2 and/or 3 do not happen. The existence of such an agreement would be evidence that these criteria have been respected.
- 4. In the absence of these types of evidence, it would be for Member States to determine how to verify the fulfilment of the criteria. The directive could lay down minimum requirements for how this should be done.

This option is put forward as a starting point for discussion and to give an indication of how a system could work in practice.

2. Answers by WWF

Preliminary remark: this is not WWF's final comment or position on this issue and we reserve the right to modify or refine our views as the issues are further clarified.

Introduction

Reducing GHG emissions from the transport sector is key if emissions overall are to be reduced in the EU. Achieving this will require more than biofuels. WWF promotes fuel efficiency standards for all vehicles and the development of an alternative, more environmentally sustainable, transport strategy as priorities. Nonetheless, so long as fuel cells, plug-in hybrids and sustainable hydrogen production remain in their infant stages, biofuels appear as one of the only fuel supply alternatives for the transport sector.

Sustainability of biofuel feed-stocks is one of the most debated issues at the moment in relation to the fast development of this sector. The impacts resulting from the production of these crops are raising serious conservation, environmental and social concerns, especially now ambitious targets have been set in various parts of the world. Also of concern is the lack of standards to guide investment and development of bioenergy feedstocks in environmentally sensitive areas.

WWF has been promoting credible, independent, third-party certification for a wide range of commodities (forest products, palm oil, soy, fish etc.) as a solution to avoid unsustainable practices, improve management and deliver benefits to a wide range of stakeholders.

Based on the research data available we can state that credible certification can improve practices, promote responsible management, and increase production standards in a given sector. A recent comprehensive report, including case studies from several countries published by *Cashore et. Al* (2006)¹ identified numerous positive impacts of FSC (Forest Stewardship Council) both in the environmental and social field.

When it comes to sustainability of bioenergy in general and biofuels in particular, the range of crops that could serve as feedstocks is very wide and will become even wider with upcoming 2nd generation production methods. In general, certification work is characterized up to this moment by a "single commodity" approach with the exception of FSC which covers all forestry products.

Several credible sustainability systems for commodities already exist or are being developed. Many of these efforts are nascent and have not reached full maturity. Such systems take time to develop and require extensive consultation. Therefore, we believe that the European Commission should make use of the most recognized systems among them, such as FSC or RSPO, before using a new sustainability scheme. In other

¹ Yale School of Forestry & Environmental Studies, B. Cashore, F. Gale, E. Meidinger & D. Newsom, "Confronting sustainability - Forest certification in developing and transitioning countries", *July 2006*

words, the European bioenergy certification scheme should catalyze the use of existing schemes. Such a system is called a "meta standard" system.

This is also the approach that some Member States, such as the Netherlands and the United Kingdom have chosen. If Member States and the European Commission opt for a meta standard system and refer to the same standards, harmonization at the European level or even at the global level should be greatly facilitated.

WWF also believes that a European system is preferable to several national systems, and that a European system should be only the initial phase for a global process.

WWF recognizes DG TREN's wish to make a bioenergy certification system simple enough and operational from the start. However, important elements should not be sacrificed for the sake of simplicity or swiftness of implementation. Particularly since existing and emerging certification initiatives covering the major biofuel feedstocks – palm oil, soya oil and sugar cane – are already accounting for a broader range of sustainability impacts.

If DG TREN would proceed with a simplified scheme, clear deadlines for the later implementation of important missing elements should be included in the Commission's proposal.

WWF has commissioned a study² (available by the end of June 2007) suggesting a comprehensive meta standard system for bioenergy sustainability assurance. Some elements of this study are summarized below.

What would a meta standard system look like?

The design of a "meta-standard" will have much in common with the blueprint of a certification scheme. The credibility and the effectiveness of the meta-standard to deliver on sustainability will largely depend on the performance, or measurable results, of the certification schemes/systems on which it is built. The ISEAL Code of Good Practices and the WWF and World Bank Forest Alliance's recommendations can help to identify credible certification schemes³. Part of the WWF/WB Forest Alliance's requirements for credible certification schemes/systems are presented in Box 1.

Setting up the meta-standard will most probably involve the following main steps:

BOX 1: Elements of credible certification schemes (in forestry):

- Compliance with all relevant laws
- Respect for tenure and use rights
- Respect for indigenous peoples' rights
- Respect for community relations
- Respect for worker rights
- Delivery of multiple benefits from the forest
- Assessment and mitigation of environmental impact
- Maintenance of critical forest areas
- Specific provisions for plantations
- Implementation of a management plan
- Effective monitoring and assessment

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² Harmonised Sustainable Biomass Certification Scheme, Ecofys, June 2007

³ Forest Certification Assessment Guide: A Framework for Assessing Credible Forest Certification Systems

⁻ WWF & World Bank Global Forest Alliance.

- 1. A set of clearly defined principles and criteria which together address the key environmental and social impacts of biomass and make up the definition of sustainably produced biomass. The attached paper from Ecofys recommends not to define specific indicators in the meta standard, but rather to evaluate the indicators of the certification schemes against the meta standard.
- 2. Procedures and norms for benchmarking the sustainability criteria of existing standards against the sustainability criteria of the Meta-Standard. This norm defines whether all Meta-Standard sustainability criteria must be met from the beginning or whether, for pragmatic reasons, a limited number of gap-criteria will be permitted (for a limited period of time).
- 3. Procedures and norms for benchmarking the audit and certification quality of existing standards against the requirements of the Meta-Standard.

In addition, a representative and inclusive institutional background, dealing with standard setting, accreditation and evaluation will need to be set up.

Many of the certification programs exist now, but several essential ones are at an early stage of development.

If no certification scheme or standard is readily available for some types of crops or for some regions:

- Bilateral agreements could be negotiated with relevant governments to ensure that land use change and biodiversity loss will not precede the operational state of these relevant certification programs.
- Companies should become "active" members of existing initiatives ie: join working groups to develop standards; audit their own supplies to the draft standards if they exist.
- If no initiative exists for some types of commodities, certifiers should develop adapted indicators, based on the principles and criteria of the meta standard scheme. These indicators would be accredited by the European Commission. The indicators would be only used on a temporary basis, and an international stakeholder process should be set up at the initiative of the European Commission to develop a full bioenergy-specific certification scheme. EU funding should be made available for this process. After a time limit of 5 years a dedicated certification scheme should be in use.

Issues that cannot be addressed through a certification scheme

However, some of the macro issues such as food security & prices or displacement cannot always be effectively addressed through a certification scheme. Therefore, a meta standard system should be complemented by effective mechanisms to monitor, prevent or mitigate such unwanted macro effects. More about this under question 2.

Consultation questions

Question 1.1:

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

This possible way forward is a step in the right direction.

As stated in WWF's response to the European Commission's previous consultation during the review of the biofuels directive⁴, WWF has particular concerns regarding:

- Where bioenergy feedstocks are produced: ensuring the integrity of high
 conservation value areas harbouring significant biodiversity or landscape
 values, providing critical environmental services or being a fundamental part
 of basic needs and critical cultural identity of local communities. Areas such
 as forests, floodplains, peat lands, natural and semi-natural grasslands shall be
 managed in a way that maintains or enhances these key ecological or socioeconomic values.
- How bioenergy feedstocks are produced: using sustainable agricultural and forestry management techniques that can guarantee the integrity and/or improvement of soil and water resources, conserve biodiversity and avoid toxic loading to the environment;
- The GHG emissions and carbon losses associated with how and where bioenergy is produced, processed and distributed: ensuring that the landuse changes, production technologies and management systems applied comply with good practice and can demonstrate they deliver whole life-cycle savings over conventional fuels;
- *GHG accounting "leakage":* ensuring that bioenergy imported and used in Europe (and thus contributing towards GHG emissions reductions in the EU) fully account for the GHG and carbon life-cycles also for the processes which occurred outside of the EU⁵;
- Food, land and water displacements: an issue of particular concern in the third countries with which the EU will trade in bioenergy. All of the currently used biofuel commodities are also food and feed crops. The interest in bioenergy has already led to price increases for many commodities, which can challenge the capacity of the communities that depend on them to continue sourcing them for their own needs. But of concern are also EU Member States affected by water shortages where biofuel crops (such as sunflowers)

⁴ WWF Contribution to the European Commission – Energy & Transport Directorate Public Consultation on the Review of the EU Biofuels Directive, 10th July, 2006

⁵ Per definition, and irrespective of their relative efficiency, all bioenergies are accounted as 'carbon-free'. Countries "capped" under the Kyoto Protocol can accrue emissions reductions from bioenergy use within their national inventory & compliance regime. The emissions, however, resulting from the production of bioenergy remain accountable to the producing and exporting country. If these countries do not have emission caps under the Kyoto Protocol the emissions accrued during the production and delivery processes are unlikely to be accounted for or off-set.

are already widely produced and their expansion would provide a further unsustainable stress if simply added to current agricultural land use;

WWF would wish to see all of the above-listed issues addressed in the development and use of bioenergy. Such issues are of concern whether in biofuels for transport or biomass / biogas for heat and power generation. Limiting a sustainability scheme to biofuels for transport only doesn't make sense. Palm oil is being used for electricity as well as for transport, and wood waste will soon be used for transport, although it was only serving as source of electricity and heat until now. These examples show how electricity production and transport fuels can already be produced from the same biomass sources and will even more so in the near future.

We would like to stress that it is unlikely that a "minimum" sustainability scheme such as the one suggested in this consultation would resolve all above mentioned concerns. It is also difficult to imagine a system that would not include any social criteria, as these are critical components of credible certification schemes and landscape planning processes. We will not analyse the social criteria in depth, as this is not WWF's core competence. But we will formulate some suggestions. Finally, at some point of the development of the sustainability system, producers and other stakeholders from third countries should be consulted as well since this will apply to production of bioenergy inside and outside of the EU.

On the 3 suggested sustainability criteria:

Sustainability criterion 1 – achieving a minimum level of greenhouse gas savings

1) The GHG savings calculation proposal seems reasonable, although a cut off point at 10% (minimum 10% GHG savings) isn't really ambitious. A cut-off point at 30% seems reasonable as a start. A stepwise approach to increase this percentage to at least 50% in a second phase, with a clear revision timeline, is necessary to guarantee the climate effectiveness of bioenergy. As explained below, the support schemes should, after a clearly defined trial period, link incentives at the Member State level with actual GHG savings of the bioenergy. This should allow for continuous improvement of GHG performances of bioenergy.

The mentioned CONCAWE study doesn't take land-use change into account and doesn't cover all biofuels crops. Sound scientific evidence (e.g. IPCC's 4th assessment report) shows us that land-use change or even degradation of the existing vegetation cover (peatland forests in South-East Asia for example) are major contributors to GHG emissions. WWF wouldn't accept GHG balance calculation methods that don't take land use change into account.

As regards GHG emissions, the sustainability system could require the following prerequisites:

- Mandate bioenergy suppliers to provide, within a brief term following adoption of
 the new directive, annual reports on the amount, type and current GHG emissions
 of bioenergy they put on the market that is benefiting from a support scheme
 (such as obligations), and the measures they intend to adopt / strengthen in order
 to comply with the obligations set on them at EU level. Methodologies are
 currently being developed in the Netherlands and the UK.
- Mandate Member States to provide, within a brief term following adoption of the new directive, a specific section on bioenergy in their annual reports on GHG emissions;
- Set an initial cut-off point under which bioenergy is not eligible for support. Such cut-off point could be initially set at 30%. If no cut-off point is decided from the start of the scheme, a clear implementation deadline for a cut-off point is needed. A stepwise approach to increase this percentage over time, with a clear timeline, is necessary to guarantee the climate effectiveness of bioenergy.
- After a clearly defined trial period, incentives at the Member State level should link support to demonstrated GHG savings of the bioenergy;
- Allocate authority to the Commission to assess and challenge Member States and fuel suppliers on the solidity of their proposed strategies, and to penalise them in the eventuality of non-delivery or compliance.

The implications of this approach are:

- The reduction of GHG emissions globally has been politically mandated through the Kyoto Protocol. This provides a legal spur for transposing such a requirement into implementing legislation. Discriminating among bioenergy feedstocks based on GHG emissions savings can lead to no automatic exclusion of particular feedstocks, countries of production or methods of production, issues of particular importance under international trade rules;
- The EU imposes the obligation, and is responsible for ensuring it is delivered. But Member States and fuel suppliers are free to find the most efficient approach to delivering the result;
- GHG emissions savings fully legitimise bioenergy as an environment solution;

Different systems of accounting for GHG emissions and savings have been developed, including more recently the framework of the U.K.'s Low Carbon Vehicle Partnership (LowCVP)⁶ and the Dutch "Import Duurzame Bioenergie".

WWF would recommend that the European Commission adopts a single bioenergy GHG accounting system applicable to all operators in the EU, drawing from the European Trading Scheme (ETS) accounting system. This would greatly facilitate comparative accounting and thus collation of real information on trends. Other examples of accounting systems include WRI/WBCSD GHG Protocol, ISO 14064, methodologies developed by the CDM Executive Board.

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⁶ http://www.lowcvp.org.uk/

<u>Sustainability criterion 2 – avoiding major reduction in carbon stocks through land-use</u> change

If land-use change is taken into account in the GHG measurement, it would be quite simple to express the second sustainability criterion in terms of a carbon pay-back period. Bioenergy plantations with a carbon payback period of over 10 years should not be accepted.

<u>Sustainability criterion 3 – avoiding major biodiversity loss from land use change</u>

Avoiding conversion of high conservation value areas (HCVA)⁷ should be at the basis of any scheme the European Commission develops. The HCVA concept cannot replace the certification of individual commodities but is a general principle of credible certification of various commodities within the agriculture and forestry sector. The concept is recognized globally by many governments, industries, NGOs and stakeholders.

Identification and appropriate management of HCVA provides sustainable management of critical areas covering ecological and socio-economic values. A HCVA process will also take migration routes into account: Areas with exceptional biodiversity are not isolated islands but part of a wider ecosystem which is interlinked, providing migration routes for species. Migration enables mixing of gene pools making the whole ecosystem and the specific areas more tolerant for disturbances.

However, presently, no mapping exists of HCVAs at a global level. In some key ecoregions located in countries such as Indonesia, Brazil, Russia, WWF has carried out an identification of HCVAs (especially in the field of forestry). Defining HCVAs requires a process, including consultation of the local communities, NGOs and other stakeholders. Such a process should be part of a certification system. Good consultation practice can be drawn from the CDM Gold Standard procedure⁸ or FSC for example.

This iterative mapping exercise would lead to a progressive mapping of areas where bioenergy production is intended.

The following initiatives are helpful in defining areas with one or more HCVAs:

- Conservation International Biodiversity Hotspots
- Birdlife international Important Bird Areas
- The WWF G200 Ecoregions : the regions classified 'vulnerable' or 'critical/endangered'.
- European High Nature Value Farmland
- World Resource Institute (www.wri.org)
- HCV Network (www.hcv.net)
- Global Forest Watch (www.globalforestwatch.org)

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⁷ The definition of the 6 High Conservation Values can be found at http://www.hcvnetwork.org.

⁸ Gold Standard: www.cdmgoldstandard.org

- WWF Forests for Life Programme
- Forest Stewardship Council (FSC, www.fsc.org)

Ouestion 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.)

A meta standard system will imply approximately the same administrative burden as the standards it is referring to (FSC, RSPO...), with a few more steps on the GHG level. This additional GHG burden could disappear over time if GHG calculation is included in roundtable certification. To minimize the burden, there should be a clear process for information sharing between companies, Member States and the European Commission.

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.

Cfr Question 1.1.

Questions relating to individual criteria in box 1

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? 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?

Yes. The UK system (Low CVP) uses recorded land-use before 2005, climatic zone and habitat type and IPCC figures to calculate associated GHG emissions.

Ouestion 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?

RSPO example: When land adjacent to HCVAs is privately owned land, developers should be encouraged to maintain or improve the Conservation Values in the adjacent areas where possible. When the adjacent lands are protected areas or state owned, then developers should seek to assist the State to monitor or improve the HCVAs.

Environmental impact assessments can be produced that use a landscape approach pointing out the necessity of corridor and buffer zone areas around and between areas

with exceptional biodiversity. The assessment needs to be done in a participatory way to take social issues into account as in HCVA.

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?

Cfr Question 1.1

2. How should overall effects on land use be monitored?

The problem

Two of the sustainability criteria in the "possible way forward" in section 1 relate to the direct conversion of land for bioenergy production from other uses.

Increased demand for bioenergy is also likely to have an indirect effect on land use, leading to an increase in the total amount of land devoted to forestry and crop production. This land use change will be associated with greenhouse gas savings from bioenergy use. It will have other environmental effects. These could be positive or negative. The environmental effect of using land that would otherwise have been used for an out-of-town housing development is different from the effect of using land that would have been a biodiverse habitat.

It seems clear that these indirect effects cannot be linked to individual consignments of bioenergy. But they should still be monitored.

Possible way forward

The legislation could ask the Commission to report regularly on:

- how land use would have developed if biofuels use had remained constant;
- how land use has in fact developed; and
- the estimated effect on overall land use of increasing biofuels use.

Question 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.

Monitoring the macro effects will certainly help to understand the impacts of the EUs bioenergy policy. The Commission could support UNEP or FAO land use monitoring programmes and/or specific bilateral and regional initiatives with likely hotspots, for example Latin America, SE Asia and West Africa and prepare development packages of accompanying measures to address and mitigate these impacts if they are identified.

But more than understanding macro effects is necessary if Europe is to meet the objective of sustainably produced energy supplies. The Commission's proposal so far is devoid of incentives to ensure that more sustainable patterns of bioenergy production are

implemented. Technical assistance in new technologies of bioenergy production to countries exporting to the EU, particularly in areas challenged by land use change adverse to carbon sequestration and biodiversity, must be part of this plan. Otherwise Europe will be accused of transferring its energy consumption problems to the developing world.

Displacement

Displacement mechanisms are a threat to the core sustainability issues of biomass production:

- Biodiversity: the replaced activity may convert areas of high biodiversity such as tropical rainforest.
- Carbon stocks: the replaced activity may destroy large carbon stocks such as dense forest systems or by draining peat soils.
- Land rights: the replaced activity may push local people of their land.
- Food security: demand for biomass from agricultural commodities and agricultural land might contribute to higher food process and lower access to food for the poorest.
- Environmental impacts: expansion of the agricultural area can lead to more pressure on water resources, more soil erosion and degradation and more pollution of air, water and soil caused by pesticides and fertilisers.

These effects are all characterised by a high degree of irreversibility.

The potential very serious and highly irreversible consequences of displacement effects warrant a cautious approach in line with the "precautionary approaches" as adopted in the Rio Declaration on Environment and Development: "Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." Ex-post monitoring of displacement effects effectively postpones taking measures and is therefore considered in contradiction with the precautionary approach.

WWF proposes some additional measures within the certification scheme.

Proposal to prevent displacement effects

To prevent displacement effects, the 'additional' biomass consumption for bioenergy must be supplied from 'additional' production which does not displace other (agricultural) activities. There are three ways to achieve this:

- 1. Additional production on idle land (in line with sustainability criteria)
- 2. Additional production through higher yields on existing plantation (using sustainable agricultural practices.)
- 3. Bioenergy production from waste products and residues (only if the replacement of the current use of the residues does not cause negative environmental effects),

It is proposed to not require this for the current consumption of biomass for bioenergy. The production of this biomass already takes place today (e.g. large scale rapeseed

production in Germany) and it is considered undesirable to ban this current production from the bioenergy market. Any negative sustainability impacts of current production will have already taken place: they form a sunk cost. In practice this means that if at the time of implementation of such regulation the average realised biofuel percentage in the EU⁹ is 2%, only biofuels realised on top of this 2% must be from idle land or increased yields. If biofuels develop to 10% in 2020 this means that of the 10% total biofuels in 2010, 8% must be produced from feedstocks originating from idle land or increased yields.

Production on idle land

The challenge with realising production on idle land is that there is no internationally agreed upon definition of idle land. Much "idle land" harbours high levels of biodiversity. Furthermore, land-use planning clearly is the terrain of the producing country and it is not for importing countries to decide where a producing country should allocate its production expansion. Not having clarity on which land can be considered to be 'idle' forms a major barrier to realising production on idle land. This problem could be compared to the "high conservation value areas mapping". Therefore:

Identification of idle land would happen in the same way and probably be part of the same process as for the identification of HCVA.

Such a programme should build upon existing knowledge and mechanisms being designed to protect biodiversity such as in the Convention on Biodiversity. Furthermore, such a programme should include the active involvement of:

- local and national governments of the relevant areas
- biodiversity experts with relevant local experience
- local communities (assisted by NGO's with local representation).
- industry representatives

Question 2.2

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

Cfr. Question 2.1.

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

The Commission intends to bring forward a proposal to encourage the production and use of second-generation biofuels.

Question 3.1:

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⁹ The percentage could also be set at the national level but this would create a situation where countries with already high biofuel penetration do not have to source their feedstock from idle land or higher yields while countries which have a zero biofuel penetration need to source all their feedstock from such sustainable sources.

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

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.

For WWF, favouring bioenergy based on the raw material or on the technology is not relevant, when GHG savings and other environmental and social criteria are at the origin of a certification scheme. The Commission should encourage the production of GHG efficient bioenergy, produced in an environmentally and socially benign way irrespective of the technology used to produce it or from what source it was derived. By promoting better GHG balances, "2nd generation" will only be favoured if it delivers on GHG. The Commission should leave the industry the flexibility to decide which feedstocks or technologies they will use to achieve this. The EU could encourage second generation through support for research and for pilot projects.

Ouestion 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?

Cfr. Question 3.2