10 July 2006

Response of the European Environmental Citizens' Organisation for Standardisation (ECOS) to the consultation on the Biofuels Directive Review

ECOS, the European Environmental Citizens' Organisation for Standardisation, is an association of NGOs active in the field of environmental protection, which together have more than 26 Million individual members. ECOS was created in 2002 as a non-profit association under Belgian law to enhance the voice of the environment within the European standardisation system. ECOS is supported by the European Commission and EFTA. Its secretariat is based in Brussels. Website: www.ecostandard.org .

Question 1.1: Is the objective of promoting biofuels still valid?

The promotion of biofuels is only a valid objective if it is directly linked to a **mandatory certification scheme** that ensures sustainable production of the raw materials used and if it takes place in the appropriate context, i.e. going hand in hand with robust measures in the field of energy efficiency and cutting total fuel consumption. Biofuels, therefore, should have targets relating to the quantity of GHG emissions savings.

For more on mandatory certification scheme, see under questions 4.1 and 4.2.

Question 2.1: With existing policies and measures, will biofuels achieve a market share of 5.75% in the European Union by the end of 2010? (Please give reasons for your answer)

This question is not the most important one: the question that really matters is, with existing policies and measures, can the promotion of biofuels meet all relevant objectives and especially environmental ones?

The key is to reduce GHG emissions without harming the environment on other fronts, such as for example biodiversity. The EEA's report 'how much bio-energy can the EU produce without harming the environment' indicates that existing targets can be met without harming the environment but also stresses that this is only possible when the right policy framework is in place. Furthermore the report did not look into the costs of production in Europe compared to other countries and the environmental risks that stem from importing biofuels or the raw materials from countries where they can be produced cheaper.

Question 2.2: What are the main factors favouring the development of biofuel use in the EU? What are the main obstacles?

ECOS thinks the fast move to bio-based products can potentially improve environmental and health performances, at the condition that the regrowing raw materials are produced and harvested in a verifiably sustainable manner. ECOS agrees with EEB, WWF and Birdlife International that **an accreditation system is needed** to prevent potentially negative

ecological effects of the production of raw materials (deforestation, decrease of soil fertility, degradation of water quality, loss of biodiversity and emissions of pollutants to the atmosphere).

The main problem with biofuels development in Europe is that **the regulatory framework needed to ensure a sustainable production and use of biofuels, is missing.** Incentives based on overall GHG balance and environmental impact are lacking as well as more generally environmental safeguards to make sure we promote the right kind of biofuels. If we simply make the 5.75% target mandatory, introduce fuel obligations or even increase the target, this will increase the demand for the cheapest commodities available today on the world market such as palm oil, soy or sugar cane. The production of these commodities often has devastating consequences for important ecosystems such as the rainforest and the 'cerrado'/savanna. With biofuels these impacts are likely to worsen. But also in Europe a biofuels target is likely to promote monocultures and a further intensification of farming practices. For this reason, biofuels targets should relate directly to GHG emissions savings and a reduction in fossil fuel use.

Question 3.1 Looking towards 2010, is the present European system of indicative targets and support for biofuels appropriate or does it need to be changed?

The last thing we need to do at this point is making the indicative targets for biofuels mandatory. Especially not when the regulatory framework for ensuring that the right type of biofuels are promoted is at this point completely absent.

On support on the supply side, the challenge is to ensure that the raw material is produced sustainably and used in the most efficient way possible. **On a global level, principles and standards should be defined and enforced through a multi lateral, stakeholder process.** Within the EU, this could for example be met through a strengthened cross compliance system which would then also look at the GHG balance of production.

On the demand side mandatory targets should be set for renewables, for example through a directive on renewables in heating and cooling. Biofuels, when produced sustainably, should count towards meeting those targets. If the same emissions savings may be delivered more efficiently through, for example, a combination of a number of different routes such as greater emphasis on efficiency and demand management, the extensification of production and the use of biomass resources for heat and power, then member states should keep this possibility. Flexibility in EU targets and policy for biofuels is therefore key.

Question 3.2: What are your views on the advantages and disadvantages of the options described in section 3.2 of this paper?

All options in 3.2 depart from the assumption that all biofuels are good. This approach could do more harm than good and should be abandoned. It should be replaced with sustainable objectives.

We also believe that it is better to work with obligations than with subsidies.

Question 3.4: Should other options than those in section 3.2 be considered?

An article or paragraph should be added, stating that any indicative target for biofuels does not prejudice targets, mandatory or not, set in other relevant legislation and policy promoting renewables in general, whether existing or in preparation.

Targets should not relate to the quantity of biofuel use but the quality: how much GHG they reduce and other sustainability requirements.

Question 4.1: Should there be a system – for example, a system of certificates - to ensure that biofuels have been made from raw materials whose cultivation meets minimum environmental standards? If so,
- What should be addressed in the standards?
- How should the system work? Are there good models to draw on?
- Should the biofuels directive be amended so that only biofuels which comply with environmental sustainability standards count towards its targets?

A system of safeguards is a condition *sine qua non* to ensure that biofuel policies actually deliver environmental benefits. Developing and implementing such a system raises a lot of practical questions, such as the ones in question 4.1. These cannot be solved through an on line internet consultation. Rather, the Commission should set up a specialist working group with a clear mandate to look into these questions, provide the Commission with basic facts and figures, and come up with clear recommendations for the revised Biofuels Directive.

That being said we provide some preliminary input in the above questions. Certification should, as a minimum, include the life cycle GHG balance and the sustainability of the cultivation phase in terms of impacts on biodiversity, water quality and use, soil quality and erosion and pollution. Standards could for example take the following general principles into account:

1. The CO_2 benefit should be at least 50% for the biofuel involved, with a perspective of development towards 80%, for the complete production and supply chain (seed to tank[1]).

2. The production of the raw material should be in conformity with all the legal requirements of the country concerned, including all the international treaties to which the country is a party.

3. Biomass should be grown with minimum fertiliser and pesticide input as such inputs have a serious impact on the climatic effect as well as on the wider environment.

4. The impact on the environment, apart from CO_2 emission, should also be known. Full Life Cycle Assessments must be carried out to determine whether such an impact is small compared to the benefits. Within the EU, SEA and/or EIA need to be carried out for bioenergy plans or programmes and projects.

5. No natural ecosystems should be converted as a result of the production of biomass, neither directly nor indirectly, as the immediate release of carbon into the atmosphere that this causes would likely outweigh any potential carbon savings.

6. Forest and agricultural ecosystems from which waste is used should not be depleted of their nutrients.

7. The use of bioenergy should not contribute to exceeding existing air quality limit values (particularly on PM10).

8. The production should not contribute to soil degradation and contamination or lead to a decline of the organic matter content of soils.

[1] The GHG balance of a particular biofuel pathway can be calculated through a 'carbon calculator' that takes in production related data from the life cycle of the biofuel to calculate a value for the GHG emission reduction in CO_2 equivalent per volume unit.

9. The biomass production should not have negative effects on the water reservoirs, especially in water-scarce regions and respect existing legislation.

10. The biomass used should not be food or fodder – or reduce the production of food or animal fodder.

Apart from these environmental criteria it is also important to look at social aspects, especially in countries, mostly non-EU, where for example property rights are unclear and disputed.

As a very minimum, the Biofuels Directive should be amended in such a way that only certified biofuels will count towards any target, be it indicative or mandatory.

It is of course unlikely that a fully fledged certification scheme will be operational at the same time as the revised Biofuels Directive will enter into force but what is important that work on such a system starts as soon as possible and is linked to the revision of the Biofuels Directive. One option to do this would be to write in the Directive that once Biofuels consumption passes a certain threshold level (for example 2%), a certification scheme should be operational, ensuring that biofuel counting towards a target is produced sustainably.

In case at the end of the decision making process, there is a need for technical specifications to be developed through standards, ECOS offers the following comments:

To reach environmentally ambitious standards in the field of biofuels ECOS sees the need to distinguish two phases: (i) the production of biomass and (ii) the transformation of biomass into fuel.

(i) The production of biomass

Because there is still a lot of work to be done to ensure that representatives of the environmental and consumers groups have a real influence in the “classical” standardisation process (ISO, CEN), ECOS recommends to initiate standards for this 1st phase within the framework of the ISEAL Alliance platform (International Social and Environmental Accreditation and Labelling).

The ISEAL Alliance is an association of leading international standard-setting, certification and accreditation organisations that focus on social and environmental issues. ISEAL members have in common that the standards and accreditation programs they develop are voluntary, truly international in nature and focusing on non-product related process and production method certification. ISEAL members are also committed to ensuring that their activities are in line with international norms and do not act as barriers to trade.

The ISEAL Alliance Code of Good Practice for Setting Social and Environmental Standards requires that interested parties “be provided with meaningful opportunities to contribute to the elaboration of a standard” and, “that participation reflects **a balance of interests** among interested parties in the subject matter and in the geographic scope to which the standard applies.” When stakeholders have confidence in the process and its legitimacy, differences among stakeholders can co-exist without disrupting the process. While these may seem fairly straightforward requirements, applying them in practice is much more complex.

Well-known initiatives of ISEAL members: Forest Stewardship Council (FSC) and International Federation of Organic Agriculture Movements (IFOAM).

ECOS would like to draw the attention to an initiative of the **IATP** (Institute for Agriculture and Trade Policy), member of ISEAL since September 2005. IATP has been developing **a set of sustainability standards for bioindustrial crop production**. IATP wants to provide a credible and transparent structure for producers, consumers and manufacturers interested in environmentally, socially and economically sustainable production of crops and forest products for bioindustrial purposes. IATP will make the standards broadly available in the US in 2006 and encourage a third-party certification. IATP is also thinking about developing site specific guidelines to its standards for Europe. Given this existing framework relevant to ensuring a positive ecological balance of biomass production, ECOS thinks it would be very interesting for European stakeholders to develop the standards for this 1st phase in close collaboration with ISEAL and IATP.

(ii) The transformation of biomass into fuel

As this second phase involves the industry sector, ECOS believes it will be difficult to avoid the classical standardisation process. However, it has to be stressed again that it is difficult to include environmental considerations into and to be environmentally progressive within the framework of the classical standardisation process for various reasons (non-exhaustive list):

- the process is dominated by economic considerations and stakeholders, not by those of public interest,

- environmental stakeholders (NGOs, EPAs) don't even have a vote when standards are being adopted, even if they have participated in the elaboration of the respective standard;

- Even when working on the basis of EC standardisation mandates, the results delivered by CEN are not subject to a regular independent compliance check, since the Commission does not have the staff resources to do this.

Existing standards in the field:

- European Standard EN14214 Standards for biodiesel: elaboration and adoption of standards concerning minimum requirement specifications including test methods for Fatty Acid MethylEster (FAME) as fuel for diesel engines or for space heating.

- In the field of *biofuels*: European Standard EN590 Specification for diesel fuel

CEN Technical Committees (TC) in charge:

- TC 19 / WG 21 Development of standards on bioethanol
- TC 335 Standardisation of solid biofuels derived from pure biomass fraction

Question 4.2 Should a wider system of certificates be introduced, indicating the greenhouse gas and/or security of supply impact of each type of biofuel? If so,
- How should this certification system work?
- How should the greenhouse gas and/or security of supply benefits of different biofuels be measured?
- Should biofuels with good greenhouse gas and/or security of supply performance be rewarded within biofuel support systems for biofuels? If yes, how?

Information about the GHG balance or security of supply impact of biofuels should be part of the information emerging from any life cycle analysis of different types and origins of biofuels. Whether this should be part of a certification system or whether this should be addressed through a separate system of incentives is a more pragmatic one which should be addressed

in the appropriate forum. The Commission should now start creating a platform for such a forum and give it a clear political mandate.

Biofuels with good GHG balance should obviously receive a preferential treatment as compared to biofuels which have a poor GHG balance. As to the 'how', again this should be addressed and discussed in such an expert group.

Question 4.3: Should there be a scheme to reward second-generation biofuels (made with processes that can accept a wider range of biomass) 16 within biofuel support systems?

Second generation biofuels should definitely receive some form of support. Key problem at the moment is the commercial application of the technology that already exists. Second generation will therefore more likely benefit from the support for large scale second generation plants (the first plant in the world will likely be built in the USA or Canada, not the EU). They should also benefit from a support scheme that rewards biomass with greater GHG as production of raw material for second generation can be done with less energy input.

In general we strongly prefer to incentivise 'good' biofuels over 'bad' ones, but the split 'first/second generation' is too general. Variations within first and second generation biofuels are very big too and any system should be designed to capture these differences too.

Question 5.1: Should the EU continue acting in favour of biofuels after 2010?

Again, the EU should continue to favour 'good' biofuels and stop favouring 'bad' ones.

Setting a target of 8% for 2015 is completely pre-mature. A proper assessment and evaluation should take place in 2010, also looking at the environmental impacts and estimates of further potential before deciding on any new targets post 2010.

Question 5.2: If the EU is to continue acting in favour of biofuels after 2010, should this action include or exclude the definition of a quantified target for biofuels?

Targets should not be binding and Member State flexibility to choose the most appropriate renewable energy mix should be retained.

Targets should not apply to biofuels but to environmental performance of biofuels in which 'good' biofuels count for more than 'bad' ones. Targets should be formulated in terms of GHG reduction and reduction in total fossil fuel consumption.

Question 5.3: Should EU action include the following measures (which could be pursued without defining a quantified target):
a) support for research, development and dissemination of good practice?
b) continued Community financial support for the supply of biofuels and their feedstocks?
c) continued scope for Member States to support biofuels through tax reductions/exemptions?
d) the labelling of all fuel to show the proportion of biofuel it contains?
e) a campaign to inform consumers of the benefits of biofuels?
f) any other options?

Actions should certainly include option a, and certainly not option b. As regards option a, money should be aimed at delivering fuels and production pathways that deliver the best GHG savings and at techniques for the sustainable production of biofuels and most certainly not an excuse to spend more research funding on biotechnology and GMO's. As regards option b, the long history of the CAP has showed the problems with production subsidies. They tend to distort markets, drive ecological destruction, lock farmers into obsolete production and create surpluses that do not have market demand.

Question 5.5: If the EU is to define a quantified target for biofuels after 2010, should this be expressed in terms of
– market share (as in the present directive)?
- greenhouse gas savings from biofuel use?
- reduced oil consumption from biofuel use?
- reduced fossil fuel consumption from biofuel use?

The target should be expressed in GHG savings, but it should remain flexible as to whether this is met through biofuels use, the use of other low carbon fuels, efficiency and demand management.

Climate change is the most pressing issue and besides, a policy based on GHG savings will also lead to good scores in terms of oil savings and fossil fuel savings because it will stimulate better biofuels. Conversely, choosing oil savings or fossil fuel savings will have perverse effect because it also rewards biofuels with a very bad GHG balance. Market share is the worst option of all since it does not offer any guarantees for climate change or energy security.

Question 5.6: If the EU is to define a quantified target for biofuels after 2010, should this remain a purely political step (accompanied by monitoring) or should it be given concrete form? If the latter, should this be in the form of:
a) adding reference values for later years to the biofuels directive as presently drafted?
b) one or more of the options in section 3.2?
c) some other form?

We favour non-binding values.

Question 6.1 Do you have any comments on the following issues, listed in the biofuels directive for inclusion in the Commission's progress report:

a) the cost-effectiveness of the measures taken by Member States in order to promote the use of biofuels and other renewable fuels?
b) the economic aspects and the environmental impact of further increasing the share of biofuels and other renewable fuels?
c) the life-cycle perspective of biofuels and other renewable fuels [and] possible measures for the further promotion of those fuels that are climate and environmentally friendly, and that have the potential of becoming competitive and cost-efficient?
d) the sustainability of crops used for the production of biofuels, particularly land use, degree of intensity of cultivation, crop rotation and use of pesticides?
e) the assessment of the use of biofuels and other renewable fuels with respect to their differentiating effects on climate change and their impact on CO_2 emissions reduction?
f) further more long-term options concerning energy efficiency measures in transport?

The six issues are all critical but also complex.

Concerning the issue of sustainability certification, there is a need to distinguish between greenhouse gas well-to-wheel emissions and agriculture / biodiversity issues.

Concerning cost effectiveness (a), we feel member states should, within limits, have freedom to choose whether they choose to use biomass in fixed sources or biofuels in mobile sources.

Concerning GHG emissions, an approach as described above could be helpful: linking obligations to the GHG performance, taking a 'worst case' scenario as a default, and giving suppliers the opportunity to improve their score in the obligation if they convincingly report that their biofuels is better than the worst case. Also, policies should be developed to discourage the use of fuels with a higher than normal greenhouse gas emission such as petrol or diesel from unconventional oil.

We feel that biodiversity is even more of a challenge for biofuels policy. The problem is that even if biofuel production itself is properly certified, the knock-on effects could be devastating. For example: sugar cane for biofuels is sustainably produced but replaces soy, soy in turn replaces cattle, and rainforest is burnt down for the cattle. It is morally unacceptable that valuable ecosystems are destroyed to run our cars and every effort should be taken to prevent that from happening. Per year a car uses ten times more energy than a man; such a figure indicates that the land use and hence repercussions of a serious biofuel policy are beyond imagination. It is certainly justifiable to have higher standards for production of fuel than for production of food.

The emergence of this new industry is a unique opportunity to set new standards that could eventually trickle down to the entire agriculture business.

Concerning energy efficiency, we insist that the revised biofuels directive should NOT make any link to the 120 g/km CO_2 target for new vehicles that the EU has to meet by 2010. The current directive does not make such a link and it is clear that the 120 g/km target has to be met through car-related measures, not through fuel measures. So, the current policy is 120 g/km on the vehicles side PLUS 5.75% biofuels on the fuels side.

Any link in a future reviewed biofuels directive that would suggest GHG savings from biofuels could count towards the 120 g/km target is double counting of efforts and a weakening of policies that is unacceptable in a time when climate change and oil dependence concerns are more paramount than ever. A concrete example: the US policy of awarding car manufacturers fuel efficiency credits for offering 'flexfuel' vehicles should NOT be adopted by the EU.