Biofuel issues in the new legislation on the promotion of renewable energy, Public consultation exercise, April – June 2007

Response from BirdLife International, the European Environmental Bureau and the Transport and Environment Network

BirdLife International, EEB, and T&E welcome this consultation and its focus on the sustainability of biofuels. We appreciate the political priority the Commission is giving to this issue, and believe that it is essential that a practical, effective means for ensuring biofuels are produced sustainably and deliver significant and proven GHG emissions is developed.

General comments

Before addressing the questions posed in the consultation document, we would like to stress the following principles, which underpin our position on biofuels:

- Climate change, together with the loss of biodiversity and ensuing ecosystem degradation, poses the biggest long-term threat to the global environment. We therefore support policies and measures that reduce the anthropogenic greenhouse gas (GHG) emissions that cause climate change. Global GHG emissions need to peak by 2015 and decline steeply thereafter to stay within the 2˚C average global temperature increase widely held to be the limit of 'safe' global warming. This requires bold public policy addressing all sectors.
- Climate change and the alarming rate of biodiversity decline worldwide are the most critical environmental challenges society faces today. Policy must therefore seek to deliver for both. As a minimum, tackling one must not unnecessarily exacerbate the other.
- Biofuels could play a minor positive role in the transition to a low carbon economy. However, feedstock production relies on large amounts of agricultural land, a limited resource, as well as on soil and water resources. The use of land for biofuels competes with the production of food, other industrial materials such as fibre, and biomass for heat and electricity. This must be acknowledged and fully factored into policy choices.
- Given the limited amount of available land, emission reduction in the transport sector cannot rely primarily on biofuels. Facilitating the use of biofuels can therefore only be seen as a minor supplement to a policy mix consisting of many elements, such as demand management, modal shift toward more effective transport means, and increased fuel efficiency in

vehicles. Measures such as well-to-wheel fuel taxes, road-user charging, and mandatory efficiency standards should form the backbone of a sustainable transport policy.

- Most importantly, biofuels policy should only be designed through a general greenhouse gas (GHG) emissions reduction obligation for transport fuels as proposed by the Commission in the reviewed Fuel Quality Directive, and not through a mandatory biofuel volume target for the following reasons:
    - Volume targets will incentivise only the cheapest and most readily available biofuels rather than the most efficient and innovative ones and do not reflect the gain or loss made in terms of GHG emissions. Even if a minimum GHG performance standard for biofuels is in place, a volume-based policy does not incentivise suppliers to go beyond that standard;
    - In a biofuels volume policy, only biofuels would have to become accountable for their sustainability, whereas fossil fuels (petrol and diesel in this case) would continue with business as usual – which would imply a shift towards ever heavier and unconventional oil sources tat could completely outweigh any GHG gains biofuels could bring.
- Finally, it is important to develop the system in a way that encourages the biofuel/biomass applications that produce the least level of pressure on land use. The use of waste as feedstock and small scale on farm use by farmers can play such role.

Such an approach would still require the development of sustainability criteria for biofuels, however. Regardless of the incentive system, a robust sustainability certification must ensure that biofuels enjoying such incentives do not lead to environmental degradation.

Question 1.1 and 1.3

We welcome the 'possible way forward' proposed in the consultation document as a starting point for discussions on this subject and believe that, in tandem with the proposal to introduce GHG monitoring and reduction requirements under the Fuel Quality Directive, it could help establishing an appropriate framework for addressing the sustainability of biofuels and their contribution to GHG emissions reductions.

We believe that it is essential that the EU system for ensuring biofuels deliver significant and proven GHG emissions savings and are produced sustainably must be compatible with the systems being developed in the UK, the Netherlands and Germany, and must not undermine them by adopting less ambitious standards.

The system should seek to deliver these standards across the EU. If too much flexibility is granted to Member States, standards will be inconsistent from one to

the next, failing to deliver their objectives and inhibiting the development of the industry.

Sustainability criterion 1

This criterion is essential if biofuels are to deliver on their chief objective of reducing GHG emissions. By definition, if reducing GHGs is an objective of EU policy there has to be a minimum level of delivery for biofuels eligible for EU or Member States targets and support.

A life-cycle approach to the calculation of the GHG savings of biofuels relative to conventional fuels provides the best basis for this criteria, and we suggest that the calculators developed in the UK and the Netherlands work, as well as providing default values, is developed into a GHG calculator system that would provide an EU-wide standard for calculating GHG balances of biofuels. The overall GHG balance should include the contribution made by land-use change where it occurs, as this can be the most significant variable in the life-cycle of the biofuel, regardless of whether the change is deemed to be eligible for sustainability criteria 2.

A minimum GHG standard of 10% is too low for the following reasons:

- At this saving level, biofuels would be a grossly expensive way of delivering GHG emissions reduction and an inefficient use of land resources;
- This is a pessimistic saving level towards the bottom end of what is achievable for all biofuels, allowing bad practice, such as not using combined heat and power production at the processing stage.
- It would only exclude the very worst biofuels and would fail to incentivise good practice in any way, not making a distinction between a biofuel that delivers a 10% saving and one that makes a 90% saving; this will reduce the incentive for innovation and investment in high performance technologies, including so called second generation biofuels.

We therefore suggest that a minimum saving of 60% is introduced. This is achievable with most biofuel feedstocks and would reflect good practice.

In addition to a minimum GHG saving standard, we suggest that all policies to achieve the target should incentivise best practice, so that, for example, biofuels with outstanding GHG savings could receive more credits in an obligation system, or a greater tax incentive. This would incentivise the best biofuels from a GHG perspective, including (but not limited to) second generation fuels.

Sustainability criterion 2

If the production of biofuels causes the loss of high carbon land-uses, it defeats the purpose of biofuels. The loss of high carbon land-uses, principally through conversion to agriculture, is already responsible for 20% of global GHG emissions. Increased biofuel production risks aggravating this. We therefore welcome this criterion.

We agree that high carbon land uses are defined as suggested, with reference to IPCC guidelines and after the date of the Commission proposal. It is important that this criterion applies to all high carbon land-uses, regardless of whether the carbon is above ground, as with forests, or below ground, as with permanent grasslands.

Sustainability criterion 3

We welcome this criterion and believe that it is absolutely necessary in ensuring that biofuel development does not directly displace habitats with global importance for biodiversity. In our response to Question 1.6 we suggest a range of land use classification systems that could be considered in the definition of land uses that would be protected by this criterion.

This criterion, along with sustainability criterion 2, would satisfactorily deal with protecting important land-uses from direct conversion into biofuel production. It will not, however, deal with indirect land-use change as a result of displacing production that does not meet the proposed criteria elsewhere, where it might replace the important habitats that this policy is trying to protect. We propose that this is addressed through flanking measures designed to encourage the protection of important habitats and to monitor land-use change globally.

The individual sustainability criteria proposed in this consultation document would place requirements directly on biofuel producers. Indirect land-use change is, in most cases, beyond the control of these producers, and it therefore seems inappropriate to attempt to address them through these criteria. This issue must, therefore, be addressed in parallel measures to the sustainability criteria proposed here, including:

- Supporting global land-use monitoring initiatives currently being taken forward by the FAO and UNEP so that we can develop an understanding of how biofuels are causing land-use change at the global level.
- Encouraging and helping enforce the protection of important habitats worldwide, and, in particular, promoting paying for avoided deforestation.
- Including strong review clauses to the EU biofuels that would require consideration of whether Biofuels being used in the EU are indeed sustainable in a wider sense (taking leakage effects into consideration) and whether the actual GHG emissions saving is being delivered. This should be based on a range of indicators including habitat loss worldwide.

Question 1.2

Promoting biofuels only makes sense if there are significant GHG benefits to be gained from it and this can be demonstrated. Inevitably, this will have some 'burden' associated it for the Commission, Member State Governments and the biofuels industry. This burden can, of course, be minimized through, for

example, relying on already existing accreditation schemes. Given that meeting the proposed EU targets for biofuels would require considerable public investment, and that sustainability and the delivery of GHG savings are the "raison d'être" of biofuels, we believe that biofuels must demonstrate that they are delivering their promises. If the administrative burden of doing this is too great, then the promotion of biofuels should simply be abandoned.

Question 1.4

We welcome the principle of having the protection of high carbon land uses as a separate sustainability criterion as it emphasizes the critical nature of this requirement. This would, however, only protect land-uses defined as 'high carbon stocks'. Depending on how this term is defined, it is likely to omit land-use changes that would have significant impacts on GHG but not in comparison to land with the highest carbon stocks. Ignoring such emissions would be against the principle of calculating the GHG balance of biofuels over the whole life-cycle of their production.

We therefore strongly recommend that land use change (and land management) is accounted for under Criterion 1 and suggest that the methodology developed both by the JRC/Concawe/EUCar and by the IPCC is used as a technical basis for taking this forward.

We believe that the reference land use should be land use prior to a given date, such as the date of introduction of these standards. Hypothetical land uses would introduce error and a level of subjective evaluation that is likely to be highly contested, potentially undermining confidence in the system.

Question 1.5

Land-use planning ideally takes place at the national and regional level to ensure functional ecosystems, which may contain a mosaic of different land-uses, are retained at appropriate sizes. Like indirect land-use change, this cannot be achieved by individual producers and, as a consequence, by certification. The principal of protecting areas adjacent to land uses associated with exceptional biodiversity is useful as it would create a buffer zone between important habitats and agriculture, reducing the probability of gradual encroachment and indirect damage through, for example, lowering of water tables through drainage and spray drift. However, this will not need to be a separate requirement, assuming that the definition used for areas of exceptional biodiversity is an adequate one that considers areas on the basis of ecosystem approach.

Question 1.6

Various global and regional approaches have been taken in the past 20 years, trying to map the most important biodiversity areas for the purpose of setting conservation priorities. Some of this approaches are now backed by sufficient scientific research and applied on a sufficient scale as to provide the "exclusion zones" that the Commission is looking for under criterion 3. For birds, BirdLife International has identified, on the basis of homogeneous scientific criteria, Important Bird Areas (IBA) for most regions of the world. The few missing

inventories are currently being completed. Similar exercises are under way for other taxa (e.g. Important Plant Areas). Work is currently underway to harmonize the different scientific approaches under the Key biodiversity Areas (KBA) approach but a full coherent global KBA mapping will still take a few years. The EU could take KBAs inventories as a reference where they have been already widely agreed and list a limited set of internationally recognized systems to be combined in areas where a KBA system is not recognized yet. Some Countries, such as Brasil have officially recognized "priority areas for conservation" on the basis of scientific data so such official designations could be accepted if it is demonstrated that they offer a sufficient safeguard. Within the EU, the Natura 2000 network covers most important biodiversity priority areas. Given some Member States still incomplete designation of Special Protection Areas, designated Natura 2000 sites should be supplemented by still undesignated IBAs. The European Court of Justice has in fact upheld repeatedly the principle that IBAs are to be used as SPA shadow list.

We believe that Natura 2000 is robust enough to stand any challenge by non EU countries claiming that a KBA approach is discriminating them in comparison to EU production.

In the case of Natura 2000 sites, not all land use change linked to expansion of energy crops should be excluded automatically. Many Natura 2000 sites have been designated in agricultural areas and switching for certain crops to others could actually be beneficial to biodiversity. The rule should thus be that biofuels produced in Natura 2000 sites should be considered acceptable only if it can be shown that their production is compatible with the specific conservation objectives of the sites (as defined by management plans or other legally binding instrument).

Question 2.1

We believe that the proposal for monitoring and periodic review of wider impacts of biofuels production is positive and important. Given the globalised nature of agricultural markets, leakage effects are inevitable at a global level and across sectors and commodities. Managing this effect is beyond the control of individual biofuel producers and companies' accreditation and therefore beyond the scope of accreditation. Even the best designed certification scheme cannot ensure that EU biofuels policy will not lead to severe global problems such as acceleration in the rate of deforestation or large scale displacement of small farmers.

While certification would try and ensure the sustainability of actual fuel consignments, this monitoring and revision process should ensure the overall sustainability of the policy itself. For such a system to be effective, it should be based on a well-defined set of indicators and include clear rules for revision of the targets in light of any significant developments being detected.

In addition to the criteria suggested in the consultation document, we suggest that the following indicators are monitored:

- The rate of loss of habitats with exceptional biodiversity, including rainforest loss. This should be monitored in cooperation with existing FAO and UNEP initiatives and based on remote sensing, as well as on supplementary ground proofing
- The production and local availability of key agricultural commodities in feedstock producing countries/regions
- Basic social statistics in feedstock producing regions (household income, nutrition level of poorer section of society etc).

It is critical that this information informs the development of future biofuels policy, and, in particular, of future biofuels targets. In addition to requiring regular reports from the Commission, the legislation should therefore require formal consideration of whether biofuels targets should change as a result of the information reported.

Question 2.2

Whilst addressing indirect land-use changes via certification itself is not possible, mechanisms for encouraging Governments to deal with these issues include allowing certification of crops only in regions where an effective land planning and enforcement system is present or in development, and suspending the recognition of biofuels as meeting the proposed sustainability criteria where they are produced in regions where significant habitat conversion has been detected. This would encourage producers to encourage and respect the development of land-use rules. The EU should also provide support for the development of government structures in developing countries that would be able to develop and enforce appropriate land-use rules. This would help minimize WTO challenge of this policy.

Question 3.1, 3.2 and 3.3

We do not believe that any particular biofuel technology should be favoured over another, and that instead support should be organised for the delivery of GHG emissions savings. A market-based approach aiming at decarbonisation of transport fuels could achieve just that. The combination of Article 7A of the proposed review of the Fuel Quality Directive with a robust sustainability certification system for biofuels might constitute such an approach. In practice this would encourage most second-generation biofuels, but, by targeting the desired output as opposed to a generic technology, it would ensure that perverse outcomes are avoided, such as encouraging production pathways that are considered second-generation but fail to deliver significant GHG emissions.

Furthermore, the term second-generation fuels is likely not to include some biofuels that have the potential to make significant GHG emission reductions, such as biogas from animal manure and sludge. We do not believe that it is the Commission's, or indeed any public authority's role to pick winning and losing technologies, and that, instead, the desired outputs should be defined and it

should be left to the industry to develop the technologies that will deliver these outputs.

Excluding poorly performing biofuels as well as the worst biofuels from obligations, tax incentives, etc., will also help stimulate the market for best practice biofuels by reducing the market viability of poor practices. Upper GHG emission savings standards that benefit from increased support will also incentivise best practice, as would linking the reward to the delivery of other environmental benefits through, for example, biofuels from:

- Feedstocks based on waste that would otherwise be landfilled or degraded in waste water treatment plants;
- Feedstocks based on natural or semi-natural vegetation, such as native grasslands or reeds, delivering both biofuel production and ecosystem restoration.

Second generation biofuels would need to respect the same sustainability standards as all other biofuels as they pose, in principle, the same threats. The use of woody biomass will, however, require specific sustainability standards to prevent overexploitation of forests.

Question 4.5

We believe that a review clause should be included in the legislation to ensure that EU biofuels policy is making significant and proven reductions in GHG emissions and is contributing to sustainable development. EU legislation should make it clear that biofuel targets will only be pursued if these criteria are being met. This would send a clear signal to the biofuels industry, essentially issuing a contract that offers public support in return for environmental benefits and a sustainable industry.

Question 4.6

Taxation can play a key role in promoting cleaner transport but to do so it must reflect real GHG emissions. Taxing transport use, fuel consumption and carbon content all have important roles to play and their use should be combined and coordinated. Member states should only be allowed to use tax incentives to favor low GHG fuels, and not particular technologies.