

The UK Government Response to the European Commission Consultation

Biofuel Issues in the new legislation on the promotion of renewable energy

4th June 2007

Introduction

The UK Government is grateful to the European Commission for the opportunity to respond to this consultation.

The Commission's proposals for a new Energy package for Europe include an ambitious 10% binding minimum target to be achieved by all Member States for the share of biofuels in overall EU transport petrol and diesel consumption by 2020, to be introduced in a cost-efficient way. The binding character of this target is appropriate subject to production being sustainable, second-generation biofuels becoming commercially available and the Fuel Quality Directive being amended accordingly to allow for adequate levels of blending.

The UK Government is committed to delivering its part of these targets. However, we recognise that whilst biofuels can offer significant greenhouse gas benefits over fossil fuels, if we are going to reach this level, ensuring the sustainability of the biofuels supplied will be critical. Without a properly thought through system in place to ensure the biofuels supplied under these targets both internally and by import are genuinely sustainable, they could lead to the destruction of habitats and wider negative environmental and social effects. In order to be truly sustainable any standard must identify environmental, social and economic principles. We think the shared UK principles of sustainability are useful for this debate. These are:

- Living within environmental limits (environment, ecology and natural resources)
- Ensuring a strong, healthy and just society (meeting the diverse needs of all)
- Achieving a sustainable economy (prosperity and opportunities for all)
- Using sound science responsibly
- Promoting good governance

We think the proposed legislation should include interim targets which should not be moved past unless such sustainability can be assured.

In the UK, the UK Government has announced that it will introduce a Renewable Transport Fuel Obligation from April 2008 requiring transport fuel suppliers to ensure that 2.5% in 2008 rising to 5% in 2010 of their total fuel supplies comes from renewable sources. The UK Government is very clear about the need to consider sustainability issues in taking forward the Renewable Transport Fuel Obligation (RTFO). That is why the UK

Government will require all transport fuel suppliers supplying biofuel and registering for an RTF certificate to report on the carbon saving and sustainability of the biofuels they have supplied from the start of the obligation. As set out in Budget 2007, work on developing a framework for these reporting schemes is being led by the Low Carbon Vehicle Partnership and is progressing well. The UK Government will consult on this draft framework shortly. This work is being carried out in co-operation with the Dutch Government and the European Commission and will demonstrate how such systems could be developed on an EU-wide basis. The UK Government believes it is essential to develop over the medium term mandatory minimum standards for carbon and sustainability at EU level if biofuel sustainability is to be assured. Ahead of such a standard being developed and agreed internationally to ensure compliance with WTO rules, we think market based instruments such as requiring fuel suppliers to report regularly on the sustainability of their biofuels have a role to play.

The UK Government intends to do everything possible ahead of EU legislation to encourage the use of only the most sustainable biofuels, in a way that is compatible with international trade rules and any future global sustainability and carbon intensity standards. For example through the UK-Brazil-South Africa-Mozambique Biofuels taskforce, the UK is working to help develop sustainable biofuel production in Africa and support Africa to become suppliers in the global market. Once experience with reporting has been established, The UK Government's intention is to move beyond this and reward different biofuels on the basis of their relative carbon saving performance under the RTFO.

The UK Government broadly supports the Commission's intention to legislate in this area and with the **concept** of withholding support and incentives for unsustainable biofuels. We assume the Commission will satisfy themselves that the terms of their legislative proposals are consistent with WTO rules. The concept of unsustainable biofuels implies a need to develop a standard at an international level. This will take time. We would urge the Commission to consider the development and agreement of a biofuel sustainability standard as a priority but also recognise that ahead of international agreements, instruments such as reporting have a role to play. The Commission may like to consider the mechanism the UK Government has proposed for measuring Green House Gas savings and sustainability of biofuels in the development of its policy in this area. It will also be important to discuss any policy ideas with the relevant international bodies including the Global Bio-energy Partnership and the Roundtable on Sustainable Palm Oil (RSPO).

The UK Government notes that there are potentially three legislative vehicles that address biofuels - the Biofuels Directive, the proposed changes to the Fuel Quality Directive and the proposed Directive stemming from the conclusions of the EU Spring Council meeting. We would urge the Commission to consolidate these proposals into a single legislative vehicle, provided that it is subject to the Article 251 qualified majority procedure.

Finally, we would note that tax issues are a matter for Finance Ministers at ECOFIN Council. Any tax measures would need to be agreed by unanimity in accordance with the EC Treaty.

Our detailed responses to the questions in the consultation paper are given below. Although, these proposals and our answers are focused on bio-fuels for transport, the UK Government is also considering the sustainability impact of biomass used for heat and power. Biomass used for power may result as by-products of industrial processes and waste as well as crops being grown for energy purposes or harvested for food. There is much less homogeneity in these feedstocks and therefore quantifying sustainability is more challenging and the mechanisms proposed for bio-fuels may not be entirely transferable. For example calculating green house gas savings will be more difficult e.g. how to calculate the GHG savings from a waste or life-cycle of products that may have alternative uses. The UK government believes that tackling the sustainability of biomass for heat and electricity should also be considered on a European wide basis in light of the EU 20% renewable energy target for 2020.

The Commission may also like to consider the UK Biomass strategy which sets out how the UK aims to increase sustainably the energy generation from bioenergy and biofuels.

1. How should a biofuel sustainability system be designed

Q1.1 Do you think the way forward described is feasible?

Whilst we support the broad concept of not giving support for unsustainable biofuels, we think the way forward proposed by the Commission is too simplistic and would not ensure the wider sustainability of the biofuels supplied under biofuels obligations in the longer term. We recognise there are issues of compatibility with the World Trade Organisation rules and would urge the Commission to ensure that any proposal they make is WTO compliant.

The Commission suggests three sustainability criteria - minimum greenhouse gas savings, avoiding major reduction in carbon stocks and avoiding major biodiversity stocks. We emphasise that to be truly sustainable a biofuel standard must address environmental, social, economic and governance principles. The criteria suggested are discussed further below.

Sustainability Criterion 1 – We agree it is necessary to develop a criterion to ensure biofuels achieve a minimum green house gas saving. The minimum greenhouse gas saving should be challenging and should be increased over time as new technologies with greater green house gas savings become available. We think it is important that the criterion should include the effects of direct land use change. We agree with the process for this set out in the consultation. That is that the directive should define default greenhouse gas savings for different types of biofuels. These should be based on a lifecycle

well-to-wheel study of biofuel production and should cover all the major green house gases not just carbon dioxide. The UK in cooperation with the Dutch Government has developed a framework for measuring carbon savings which includes default values for the major biofuel production chain and we attach a copy to this response for your information. Biofuel suppliers should be allowed to use the default values if they do not have more precise information about the carbon saving of the biofuels supplied. The information they submit must be backed up by evidence that the declared green house gas savings have been achieved. This could be achieved by requiring an independent audit of the suppliers processes and data capture.

We consider that it is important that the same methodology should be adopted by all member states. Member states should not be able to develop individual carbon measurement methodologies. This is because biofuels are an internationally traded commodity and it would be detrimental if biofuel suppliers had to maintain different records for their biofuels depending on the domestic market they were supplying. Further this will ensure consistency with the internal market principles

The UK Government strongly believes that there should be incentives to go beyond the minimum carbon savings. This should be achieved by giving greater credits for biofuels which both offer superior carbon savings and meet the other sustainability criteria. We propose that member states should be required to reward biofuels on the basis of the carbon saving of the biofuel supplied. One way this could be achieved is, above the minimum threshold to reward biofuels on a sliding scale for the carbon saving achieved by the fuel.

We recognise that there may be concern that this could encourage significant quantities of imports from countries which have a climatic advantage in producing biofuels that have greater carbon savings. But we emphasise that to receive a certificate a biofuel should be required to meet both a carbon saving and all other minimum sustainability criteria. If an imported biofuel can meet all these requirements, it should be encouraged. We would urge the Commission to avoid protectionist measures that could result in biofuels in the EU that deliver very low carbon savings and other environmental benefits and could lead to challenge under the WTO and other international rules.

Sustainability criteria 2 and 3 - We agree that sustainability criteria to avoid major reduction in carbon stocks and biodiversity loss through land use change should be included in any proposal. In order to ensure consistency with relevant standards such as the Round Table on Sustainable Palm Oil (RSPO), the reference year for land use change should be 2005.

Whilst the UK Government supports the criteria set out in the consultation document as a first step, we believe that these criteria are too simplistic to ensure the sustainability of biofuels supplied under the proposed legislation. Land use change is only one area in which biofuel production can cause environmental damage. Any sustainability standard must eventually include the following principles if it is going to ensure sustainability:

Environmental principles
1. Biomass production will not destroy or damage large above or below ground carbon stocks
2. Biomass production will not lead to the destruction or damage to high biodiversity areas including avoiding deforestation
3. Biomass production does not lead to soil degradation
4. Biomass production does not lead to the contamination or depletion of water sources
5. Biomass production does not lead to air pollution
Social principles
6. Biomass production does not adversely effect workers rights and working relationships
7. Biomass production does not adversely affect existing land rights and community relations - though we recognize this is a difficult issue.

Inherent in the social principles, it is important that work is carried out to ensure that biofuel supply doesn't affect food security and supply or reduce economic opportunities for workers in supply countries. These can't realistically be monitored by fuel suppliers so we recommend the Commission carry out ex post analysis on these principles.

We recognise however that there are difficulties in a standard including some of these criteria (particularly the Social principles which will require engagement with the WTO to ensure compliance). The UK Government therefore proposes a phased approach in which a standard initially includes the criteria described by the Commission but that fuel suppliers are also required to report on the wider sustainability of the biofuels they have supplied in member states as outlined above in the short term. This complementary reporting to a minimum standard would help to build up an evidence base and improve information in biofuel supply chains so that the Commission could move towards a more robust minimum standard in due course.

The UK Government's approach to sustainability reporting is to develop a meta standard piggy backing on existing standards that include sustainability criteria. The UK Government proposes to allow reporting against a number of existing environmental and social standards for the Renewable Transport Fuel Obligation. The following is an illustrative example.

Standard	Qualifying Environmental Standard?	Qualifying Social Standard?
Linking Environment and Farming Marque	Yes	No
Roundtable on Sustainable Palm Oil	Yes	Yes
Sustainable Agriculture Network/ Rainforest Alliance	Yes	Yes
Basel Criteria	Yes	Yes
Forest Stewardship Council	Yes	No
Social Accountability 8000	No	Yes

Assured Combinable Crops Scheme ¹	No	No
EurepGAP IFA	No	No
International Federation of Organic Agriculture Movements	No	No

The Commission could adopt the same approach for fuel suppliers to report against existing standards. The accepted standards need to be specified in or under the legislation to ensure clarity for suppliers. The UK Government notes that there are very few standards currently available that would ensure the sustainability of a biofuel as set out above. A legislative proposal from the Commission would need to be conditional on the further development of the standards and indeed may act as an incentive for their development.

Possible types of evidence to show that Environmental criteria are respected

The consultation suggests a number of forms of evidence that could be used to show that the sustainability criteria are being met.

The UK considers that one set of standards must apply for the whole of the community. We therefore feel that it is necessary that the Commission establishes biofuel sustainability as an area of EU competence to ensure consistency with the internal market.

Further the UK does not think that bilateral or multilateral agreements between countries give enough assurance that sustainability criteria are being met. Neither does the fact that a country has a national law demanding sustainability criteria are adhered to mean that they will be.

We therefore consider that the Commission should base its approach upon develop existing standards developed by Member States or an existing international standard and have it accredited for EU use through a comitology process. The legislation must set out the accepted standards and the levels of auditing required. We recommend that independent audits against the standard should be required to a limited level of assurance.

¹ ACCS is not currently a Qualifying Scheme but is considering additional criteria that would meet all requirements.

Q1.3 Please give your general comments on the possible way forward and how it could be implemented?

Broadly the UK Government believes the legislation should be implemented as suggested. That is the Commission should set minimum standards for biofuels supplied in and to the EU and only those biofuels that meet those standards should receive support under domestic schemes. Suppliers should be required to provide evidence that the biofuel supplied meets the standard. Until a more robust standard can be developed as outlined above, fuel suppliers should be required to report on the principles of sustainability lacked by the standard.

Q1.4 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?

As discussed above, the UK Government considers it critical that the effects of land use change on carbon emissions of a biofuel are taken into account. This should be included in criterion 1. The UK Government acknowledges that the effects of land use change are challenging to measure and that measuring land use change doesn't offer protection against biodiversity loss under all circumstances. The UK's approach which we would encourage the Commission to follow to ensure consistency with emerging international standards is to measure land use change against a reference year of 2005. The UK Government then proposes to define default values for the effects of the most common forms of land use. So for example if the land use change post 2005 for a UK supplier was from grassland to annual crop land, a default carbon intensity value of 5.2 tonnes CO₂ per hectare would be recorded.

Q1.5 As described in the "possible way forward", criterion 3 focusses 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 UK Government believes that if biofuel production has a negative effect on the biodiversity or any other negative affect on the land adjacent to the crop land then this should be recorded. However we think measuring and preventing this effect may pose practical problems.

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

The UK Government strongly supports a criterion that takes account of the effects of biofuel production on biodiversity. The Round Table on Sustainable Palm Oil criteria refer to an area of High Conservation Value and we think that this term would be much firmer for criterion 3. We think that the Commission must do more detailed work on determining how this criteria should be defined

and what indicators to use and should carry out more consultation on this issue.

Q2 How should the overall effects on land use be monitored

Q2.1 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.

The UK Government agrees that it is important to monitor the overall effects of land use change, including the indirect effects. This is particularly important for the so called displacement effects where the growing of a biofuel crop displaces some other activity which in turn can have a negative environmental impact. The UK Government agrees that it is very difficult to measure the indirect effects of land use change and that linking the indirect effects to individual consignments of biofuel would be very difficult.

The UK Government believes that the proposed way forward is a practical one. However such measurement may fall outside the Commission's core competence and be better suited to an organisation such as UNEP. We think that ex post facto analysis is the best way to monitor indirect effects of land use change. Resources such as satellite photos need to be made available possibly via the EU environment security satellite. We agree that the legislation should ask the Commission to report regularly – possibly annually - on the effects as proposed.

The analysis needs to include an initial study to set a benchmark followed by continuous monitoring. It should take account of the impacts of biofuels upon food production. It should include economic studies including the effects on commodity prices.

Under the UK's Renewable Transport Fuel Obligation (RTFO) The UK Government proposes that the RTFO Administrator will analyse ex post facto the indirect effects of land use change and report to the Secretary of State and Parliament annually.

Q2.2 Do you think it is possible to link indirect land use effects to individual consignments of biofuel? If so, please say how.

We think it is very difficult to link the indirect land use effects to individual consignments of biofuel. Firstly this would require a very burdensome process to pass information up the supply chain for each consignment of material in the chain. Secondly these effects are usually outside the control of individual suppliers in the supply chain.

Question 3 How could the use of second generation biofuels be encouraged?

The UK Government believes that Member states should be allowed, but not required, to incentivise the development of new biofuel technologies that offer greater carbon or sustainability benefits.

Member States should be free to use a variety of mechanisms, including extra credits under obligations, capital grant funding etc., as appropriate.

Q3.1 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 UK Government believes that the definition of second generation biofuels may be counterproductive as there may be other advanced biofuels technologies that offer environmental and social benefits but which don't fit into the conventional definition of a "second generation" process. The UK Government therefore prefers the term "advanced biofuel technology." Any definition of an advanced biofuel technology must focus on the carbon savings and land use efficiency of the process. It is critical that the definition must be wide enough to ensure that future technologies that could offer greater carbon savings do not get excluded.

Q3.2 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.

The UK Government agrees that advanced biofuel technologies may offer benefits over current commercial processing techniques including higher CO₂ savings, lower land usage and less competition with food source requirements. For this reason the UK Government agrees that their development should be encouraged.

We therefore agree that Member States should be *allowed* (rather than required) to give additional subsidies to advanced biofuel technologies. This support should only be available for technologies which deliver clear benefits for sustainability, including a high minimum level of greenhouse gas saving, and may also recognise the significant commercial barriers to bringing these technologies to the market.

Q3.3 Should second-generation biofuels only be able to benefit from these advantages if they also achieve a defined level of greenhouse gas savings?

Yes. As discussed above, "second generation" biofuels should be rewarded primarily to reflect the additional environmental benefits that they offer.

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?

The UK Government feels that it is important that the Commission first solves the sustainability issue and notes that the spring council conclusion included sustainability as a key condition of the binding nature of the targets. We recognise that a 10% market share by energy content is an ambitious target. We emphasise that this must target must be achieved by the sustainable supply of biofuels. The UK Government would draw the attention of the Commission to the negative publicity surrounding biofuels in the UK at the time of writing. The UK Governments consultation on the draft RTFO legislation received nearly 6000 responses discussing biofuel sustainability.

The UK government considers that it should be left to the market to decide how to deliver biofuels in the most commercially efficient way. We do however think that it is essential for the fuel quality directive and CEN diesel standard to be amended to allow higher blends of biofuels via existing distribution. The Commission will also need to negotiate necessary agreements with automobile manufacturers to ensure that this will not lead to the validity of drivers warranties being called into question. We think that it will be necessary to indicate this intention to automobile manufacturers and fuel suppliers so they can take this into account in their designs at an early stage.

Q4.2 Should the legislation include measures to encourage the use of ethanol and biodiesel in high blends? If so, what?

The UK Government support E85 blends through a Refuelling Infrastructure grant programme which aims to increase the infrastructure of alternative refuelling stations for road vehicles. The programme was launched in August 2005 and provides grants toward the cost of installing alternative refuelling points including, for example, for hydrogen, electric, bio-ethanol and natural gas / biogas stations. The UK government also announced the following support in the 2007 budget:

- On company car tax: an annual discount of **2%** for those vehicles which are capable of running on bioethanol E85

- On Vehicle Excise Duty: an increase in the discount for alternatively fuelled vehicles from £10 to £20
- On fuel duty: an extension of the current rebate of 20 pence per litre from 2009 to 2010

Whilst we think it should be left to the market to decide the most efficient way of getting biofuels to the consumer we would support flexibility in the legislation that would allow Member States to incentivise high blend uptake where they wish to do so.

Q4.3 Should the legislation include measures to encourage the use of biomethane, methanol and DME in transport? If so, what?

We think it should be for industry to decide which biofuels are commercially viable in meeting EU targets. We agree that Government has a role to play in setting the framework but think that Governments should not pick winners or try an impose solutions that could be costly on industry.

The legislation should give further flexibility to member states to incentivise new biofuels that avoid blending constraints – such as BTL, biobutanol and bioETBE. The development of biofuels that avoid blending constraints is our preferred route to delivering EU targets.

Q4.5 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 legislation should ask the Commission to review whether the 10% target by energy content is achievable. This analysis should include low blends of both bioethanol and biodiesel and should consider the effects and potential of the other options listed. We believe that such interim reports should be delivered by the Commission in 2012, 2015 and 2017. Each report should be accompanied by an interim target enshrined in the directive. The Commission should only move to a higher interim target if it is satisfied that the sustainability criterion can be met.

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)?

The UK Government remains firmly of the view that decisions on tax in this area are a matter for individual member states. Therefore, the legislation

should not restrict or oblige member states to use taxation to encourage or discourage certain biofuels production techniques or usage (including high blends, new biofuels, second generation etc). Furthermore, the Commission's forthcoming review of the Energy Taxation Directive would be the appropriate vehicle for discussion of this issue amongst Member States if it is deemed necessary. Finally, if there were to be any proposals on tax in this area then these would need to be decided by unanimity voting at ECOFIN Council, which is the correct forum for dealing with tax issues.