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Dear Sir/ Madam.

The DfT press release says that the consultation seeks views on:

- The detailed design of the scheme and which suppliers will be affected;
- How suppliers of renewable fuel would report on the carbon savings and wider impacts of those fuels;
- How the RTFO might develop after 2010/11.

The first point is extremely revealing. The government appear to suggest from this that they are concerned about the suppliers. This would be extremely laudable if the concept of the supply chain included the supplier countries and if the idea of the supplier country was its citizens rather than the corporations and landowners who control the feedstock. It is quite clear from the report that this is not the case at all. By suppliers you mean UK farmers and biofuel companies and other vested commercial interests. In fact you have pro-actively sought the views of many UK and EU organizations, prior to this public consultation. Nearly half of these were from the agri-business & biofuel, oil and automotive industries. A further third represent commercial and industrial interests. Over two hundred groups were asked for their opinion, a mere eight of these were environmental NGOs. Biofuelwatch are the only organization in this country devoted to the situation on biofuels and we would ask that from now on we are also included in the consultation process along the rather one-sided industry lobby.

As usual conspicuous by their absence were the groups who represent the billions of citizens in the majority world where most biofuels will be produced and who will be adversely affected by your ill-advised policy: the landless movement in Brazil, the subsistence farmers in Indonesia, the indigenous people of Borneo, India & West Papua, the afro-Colombians of Colombia, poor farmers in Paraguay and Argentina. It is censorship by omission. Some commentators might venture that this looks like another form of colonialism where the West take the resources of the South. Large numbers of NGOs, particularly from the global South, have signed four different declarations expressing concerns about the threats biofuel monocultures pose not just to the climate and rainforests, but also to food security, human and land rights and biodiversity (Letter to UNFCCC delegates in Nairobi - <a href="http://tinyurl.com/2blplo">http://tinyurl.com/2blplo</a>, Letter from Latin American NGOs to EU - <a href="http://tinyurl.com/26ed49">http://tinyurl.com/26ed49</a>, Letter from Indonesian NGO Sawit Watch to EU - <a href="http://tinyurl.com/yq5nur">http://tinyurl.com/yq5nur</a>, Open letter to EU ministers by over 250 organisations and prominent individuals from north and south <a href="http://tinyurl.com/2vgtke">http://tinyurl.com/2vgtke</a>). This lack of consultation invalidates the moral authority of the RTFO and in particular any reporting or certification standards.

We will comment on the report where it seems appropriate to do so: quotes from the report are shown in italics and ours are in red.

#### Introduction and Executive Summary

"2.During 2004 and 2005, the Government carried out a detailed feasibility study which considered whether an RTFO would be technically and legally feasible, how it might work in practice, the benefits it might deliver and what it might cost to implement." Why is their no mention of the environment, sustainability, greenhouse gas emissions and food supplies here? This is rather mis-

leading since fears regarding the environment were highlighted in Renewable Transport Fuel Obligation (RTFO) feasibility report in November 2005: "the main environmental risks are likely to be those concerning any large expansion in biofuel feedstock production, and particularly in Brazil (for sugar cane) and South East Asia (for palm oil plantations)" <a href="http://www.dft.gov.uk/stellent/groups/dft\_roads/documents/page/dft\_roads\_610329-01.hcsp#P18\_263">http://www.dft.gov.uk/stellent/groups/dft\_roads/documents/page/dft\_roads\_610329-01.hcsp#P18\_263</a>

The report suggested that the way to solve this very real problem was to ban the import of environmentally destructive feedstock's. The government asked its consultants whether a ban would infringe world trade rules. The answer was yes: "mandatory environmental criteria ... would greatly increase the risk of international legal challenge to the policy as a whole" -E4Tech, ECCM and Imperial College, London, June 2005. Feasibility Study on Certification for a Renewable Transport Fuel Obligation. Final Report.

"5. The RTFO is intended to create a strong and stable market for biofuels, and, in the longer term, other renewable fuels, in the UK. By the time the level of the RTFO reaches 5%, it will have created a demand for 2.5 billion litres of biofuel a year. This could save as much as a million tonnes of carbon a year, which would be the equivalent, in carbon terms, of taking a million cars off the road." When you say 'could', is this because it could be said that biofuels are carbon neutral, which you will know they are not. Does this saving assume this?

## Purposes of this consultation

"7. Part 2 seeks views on how the RTFO might evolve over time, including on issues such as the nature and level of the RTFO after 2010/11." Is it possible that consideration would be given to the evolution leading to a moratorium? On environmental grounds this is what must now happen. Biofuels lead to agricultural expansion and intensification, both of which drive biodiversity losses and are major sources of greenhouse gas emissions due to land changes and use of fertilizers.

"What will happen next

21. The Government will make a further announcement in due course about the nature and level of RTFO targets for the years after 2010/11." A moratorium would appear not to be on the agenda as you talk about targets that are 3 years away.

#### Part I of the consultation

The Objectives of the RTFO

"I The main purpose of the Renewable Transport Fuel Obligation (RTFO) will be to deliver carbon savings of approximately one million tonnes per annum from the transport sector by 2010/11." It is clear from this statement that the RTFO will have failed if this is not the case. And we would assert that this is indeed the case as the RTFO is increasing greenhouse gas emissions: Biofuel expansion threatens to accelerate global warming and push the planet beyond the point where greenhouse gas concentrations and thus the climate can be stabilized. As the Stern Review and IPCC reports make clear, deforestation and agriculture together account for around one third of global greenhouse gas emissions. Already, biofuel production is leading to increased rates of deforestation in many rainforest nations, including amongst others Indonesia, Malaysia, Colombia, Brazil, Paraguay, Argentina and Cameroon. Indonesia's biofuel plans are set to expand palm oil production 43-fold and threaten most of that country's remaining rainforests and peatlands. If those plans are implemented, 40-50 billion tonnes of carbon are likely to be released into the atmosphere. This is

the equivalent of around six years of global fossil fuel burning [http://tinyurl.com/yqf2lb].

"2 It will be one of the main policy instruments in the transport sector to reduce greenhouse gas (GHG) emissions and to increase the use of renewable fuels, helping to meet our international obligations under the Kyoto agreement and the EU Biofuels Directive...." It is unacceptable and grossly negligent that the main policy for reducing greenhouse gas emissions will actually increase them. Nitrous oxide (N2O) is the third most important human-induced greenhouse gas. Its global warming potential is 296 times that of CO2 and it has a long atmospheric life-time of around 120 years. Atmospheric concentrations of N2O have increased by 17% since the industrial revolution mostly as a result of intensive monoculture production. Chemical fertilizer application in the tropics has 10 -100 times the impact on global warming compared to temperate soil applications (Intergovernmental Panel on Climate Change, Climate Change 2001: The Scientific Basis, Chapter 4, 4.2.1.2., http://www.grida.no/climate/ipcc\_tar/wg1/136.htm)

Conversion of forests to cropland, use of nitrate fertilisers, large-scale planting of legumes (such as soybean) and decomposition of organic residues have been identified as major causes of N2O emissions from agriculture. (Emission of nitrous oxide from soils used for agriculture, JR Freney, <a href="http://www.springerlink.com/content/1573-0867/">http://www.springerlink.com/content/1573-0867/</a>

Nutrient Cycling in Agroecosystems, http://www.springerlink.com/content/cf2cpyh40qtw/Volume 49, Numbers 1-3 / July, 1997, http://www.springerlink.com/content/p252k307q4451582/

# The obligated parties

"This will give obligated suppliers complete control over the biofuels that they source, and will give refiners full control over refinery planning and scheduling." This is staggeringly irresponsible and completely add odds with your stated aims of endeavoring to supply only sustainable biofuels (which you admit is not currently possible). You have stated the risks of sourcing from the tropics but assert that the suppliers should be allowed to do this, which of course they are – which means rainforest and grassland destruction and greenhouse gas emissions. FAO figures confirm that agricultural expansion is happening at the expense of natural habitats. Biofuel expansion is likely to push up the price of soya which is likely to accelerate deforestation of the Amazon. A recent scientific conference concluded that there is a 10-40% risk that "with partial deforestation the entire landscape could become drier and a domino effect could occur producing a 'tipping point' affecting the whole forests."

(http://www.sciencedaily.com/releases/2007/04/070403143622.htm)

This is a very high risk for a potential high-impact disaster, which could release up to 120 billion tonnes of carbon dioxide into the atmosphere, cause the extinction of large numbers of species, and alter rainfall patterns across a large part of the northern hemisphere, thus putting global food supplies at risk.

As Dr Philip Fearnside of Brazil's National Institute of Amazonian Research has said: "With every tree that falls we increase the probability that the tipping point will arrive." (http://www.ecoearth.info/shared/reader/welcome.aspx?Linkid=58636

The expansion of soya, palm oil and sugar cane, however, is also linked to deforestation in many parts of Asia, Latin America and Africa, with disastrous consequences in terms of carbon emissions, loss of carbon sinks, and regional drying and warming trends. Soya has been identified as the main cause for the high deforestation rate in South America's tropical and subtropical seasonally dry forests. -

(Agriculture expansion and deforestation in seasonally dry forests of north-west Argentinam H. Ricardo Grau et al, Environmental Conservation (2005), 32:140-148)

Answer: The only appropriate threshold is a sustainable one and since the RTFO is not based upon sustainability in any way, the question is rather nefarious and duplicitous. It might be argued that there is no minimum threshold earth as the earth can not sustain any further agriculture. The Millennium Ecosystem Report has shown that 60% of ecosystems are already degraded. Soya and sugar cane expansion, for example, are destroying some of the most biodiverse ecosystems on earth, such as the Cerrado, the Pantanal, and the Atlantic Forest, with soya driving large-scale deforestation and biodiversity losses in the Chaco region, too. Palm oil plantations are destroying biodiversity in South-east Asia, many parts of Africa, including Cameroon, parts of the Amazon, Ecuador and Colombia.

The level of the Obligation

Question 6: should the RTFO have an end-date defined in the RTFO Order, and if so what should it be?

Answer: The RTFO should be ceased immediately and a moratorium instigated.

"26. The Government is keen that the level should increase above 5% in future, but only provided that certain very important conditions are met. Part two of this consultation discusses this issue in more detail. Once a decision has been taken on future levels of the RTFO, the RTFO order will be amended accordingly." The evidence would suggest that this is not a good idea. Around 550 billion tonnes of carbon - 30% of all terrestrial carbon – are stored in global peatlands. (Policies and practices in Indonesian wetlands, Wetlands International, 2005,

 $\frac{http://www.tropenbos.nl/news/mini\%20symposium\%20Wardojo/Marcel\%20Silvius\%20-\%20Tropenbos2-7-'06.pdf\ )$ 

Draining peat leads to oxidation and susceptibility to fires. Peat cutting and 'conversion' is a problem all over the world, partly due to agricultural expansion. Peat destruction is most rapid and extensive in south-East Asia, with Indonesia alone holding 60% of all tropical peatlands. Scientists predict that nearly all of the peat will be drained, mostly for plantations, in coming years and decades which will commit around 40 billion tonnes of carbon to be emitted to the atmosphere. (http://www.biofuelwatch.org.uk/peatfiresbackground.pdf

Palm oil expansion for biodiesel makes this a virtual certainty.

#### Eligible fuels

Question 7: does this provide a proper framework for identifying those fuels which should count as renewable fuels for the purposes of the RTFO?

Answer: No. The only framework that should apply is based on sustainability and this should be defined as, being rigorously shown not to have an adverse effect on old growth forests, wetlands and grasslands, greenhouse gas emissions, biodiversity, soils, water, food security and human rights. On a macro level it has already been shown that the market does not allow this to happen. NASA have shown that the rate of Amazon deforestation directly correlates with the world market price of soya [http://tinyurl.com/2pfga4] That price is expected to rise sharply as demand for soya biodiesel grows. Soya expansion is linked to deforestation not just in the Amazon but also elsewhere, including the Pantanal, South America's Atlantic Forest and a portion of the Paranaense forest in Paraguay and North of Argentina. In Argentina, more than 500,000 ht of forest land were converted to soya plantations between 1998 to 2002 [http://tinyurl.com/28upep].

## Award of RTF certificates

37. A report detailing the carbon saving benefits of the fuel and the sustainability impact of the fuel, in the format set out by the Administrator, has been supplied to the Administrator by the required date (see paragraphs 41-49).

# **Carbon and Sustainability Reporting**

- "41. The carbon savings offered by different biofuels, and the wider environmental and social impacts of the production of those fuels, vary significantly according to how and from what they are produced. The Government is committed to promoting the use of only the most sustainable biofuels with a low carbon intensity towards meeting the RTFO." It is difficult to see how this is the case given the comment on 'obligated parties'.
- "42. The Government is keen to move as soon as possible to a system under which only those biofuels which can be proved to come from sustainable sources are eligible for renewable transport fuel certificates under the RTFO, and under which different biofuels are rewarded according to the level of carbon savings that they offer. These issues are discussed further in part two of this consultation paper, and views are sought on the relative merits of different possible approaches." Same comment as above. Also, what does 'as soon as possible' mean in terms of time?
- "43. As of today, however, there is no internationally agreed definition of a "sustainable biofuel", nor is there any internationally agreed methodology for calculating the precise greenhouse gas savings from biofuels. If, ahead of international standards being developed, the UK Government were to refuse to allow certain biofuels to qualify for the RTFO on sustainability or carbon saving grounds, this may be successfully challenged as a barrier to trade, threatening the continuation of the RTFO." If there is no agreed method of calculating greenhouse saving how is possible to provide a figure of 1 million tonnes of carbon a year? Is this why you say 'could'? You don't sound as keen as you did in the previous paragraph. You say it 'may' be challenged. It would appear that you are willing to accept deforestation and an increase in greenhouse gas emissions because an unelected body 'may' challenge you. Is it unreasonable to suggest that this is a dereliction of your duties to those you represent and entrusted you with power?
- "44. The UK Government is working with the European Commission, other EU Member States and other international bodies to develop comprehensive, verifiable and robust environmental standards for biofuels but this process will not be complete before April 2008." This would be a step in the right direction if any other environmental standard had been shown to work. However this is to be welcomed and on the face of it is a responsible action. However what follows on from this would be the need for a moratorium until April 2008.
- "45. Ahead of this, the Government intends to do everything possible to encourage the use of only the most sustainable biofuels with the lowest carbon intensity, in a way which is compatible with international trade rules." Same comment as 41, 42, 43. The statement is not compatible with the reality of the market place. And as you are only to well aware this was known at the beginning of the RTFO process (see point 2).
- "46. We are therefore, as an interim measure, developing a reporting framework under which transport fuel suppliers will be required to report in detail on the greenhouse gas balance and wider environmental impacts of the biofuels they put on the market. This will be an essential first step towards the development of robust carbon and sustainability standards for biofuels." Reported to whom and then what?

"49. The Administrator will publish regular reports on the relative performance of different transport fuel suppliers as well as on the total environmental impact of the RTFO. This will put pressure on all transport fuel suppliers to source sustainable biofuels which offer a high level of carbon savings." How? This doesn't sound like a 'comprehensive, verifiable and robust environmental standards for biofuels' unless you only intend to develop such a system within the EU and not the UK.

Question 8: In advance of internationally agreed standards, is there more that can be done to help ensure that biofuels are sustainably sourced, for example through voluntary standards or agreements?

Answer: It has already been shown that a moratorium is required on the RTFO whilst the proper research is carried out into whether any form of biofuels are sustainable. Certainly large-scale mono-cultures will never be. It is baffling that you ask whether voluntary standards or agreement can 'help'. We can find no example where such a system has worked. Can you? Furthermore mandatory certification will not work due to issues of displacement and enforcement in the supplier countries. Reports published by the Food and Agriculture Organization show that the increasing use of European rapeseed oil for biodiesel is one of the prime reasons for rising palm oil prices, since palm oil is increasingly used to replace rapeseed oil in other sectors [http://tinyurl.com/2kmgb5]; expansion of corn is displacing soya crop to South America where the conversion of forest to pasture is increasing greenhouse gas emissions. No ideas have been put forward as to how 'certification' or 'standards' could prevent those massive 'secondary effects' and thus help to save rainforests, other ecosystems and the livelihoods of communities.

The impacts of the RTFO on small-scale biofuel producers

Question 11: what are likely to be the impacts of the RTFO on micro-scale biofuel producers, and how might any adverse impacts be mitigated?

Answer: This question would be acceptable if it was followed by a similar question on the macro-scale producer countries. (This is a fundamental problem of the RTFO; it does not look at the macro issue of biofuels on the climate, food supplies and sovereignty, biodiversity and human rights.) The impacts of the RTFO on the macro level not only increases greenhouse gas emissions but also has a deleterious affect on world food supplies and food sovereignty for the majority world. According to FAO's latest report on world food perspectives, "Traditional food and fibre use of land may lose out in this competition simply because, on the margin, the potential market for energy is huge in relation to that for food, eventually leading to rising food prices. The latter may not dent the welfare of those who can afford to pay higher prices for both food and fuel, including the population groups that benefit from the development of biofuels. However, low income consumers that do not participate in such gains may be adversely affected in their access to food".

Forecasts for 2006/07 marketing year confirm a tight supply situation also for coarse grains and oilseeds, where production may not be sufficient to satisfy global demand, thus necessitating a sizeable reduction in stocks. (FAO. Food Outlook.Global Market Analysis. N° 2. December 2006) Indeed, in six of the last seven years, humans worldwide consumed more grains and oilseeds than were produced. (D. Qualman, Biodiesel and ethanol can't fuel this civilization. Union Farmer Monthly. Vol. 57 Issue 1. Jan 2007) It is feared that the sharp fall in global reserves may lead to a more precarious situation in the future should weather problems prevent an increase in world production, resulting in higher international prices and threatening food security worldwide. (USDA Production and Supply Distribution

Statistics. FAO. Crop Prospects and Food Situation. N° 4. October 2006). In fact, higher world prices in 2006 have already led to cuts in imports in some wheat importing countries, like Nigeria, and increasing maize demand for ethanol in the US has driven maize export price up some 70%, triggering food problems and social unrest in Mexico, where the cereal is a staple. "Against this background, a massive increase in production would be needed in order to prevent stocks from eroding further and to thwart price escalations", according to FAO Report (Food Outlook.Global Market Analysis. N° 2. December 2006).

World grain reserves are now at their lowest level for over 30 years. Rising food prices and diverting land from food to 'energy crop' production undermine the EU's commitments with regard to the UN Millennium Goals.

Part 2 of the consultation

"Section 1: the conditions that must be met before the Government is prepared to increase the level of the RTFO beyond 5%."

'74. Biofuels have significant potential to deliver carbon savings. The Government has estimated that once the level of the RTFO reaches 5% in 2010/11, it will save around a million tonnes of carbon per annum, which is roughly equivalent to taking a million cars off the road. This calculation assumes that, on average, biofuels offer something like a 60% carbon saving compared to their fossil fuel equivalents. In practice, some biofuels offer a greater carbon saving than this, and some offer a smaller saving. This variance depends on the nature of the biofuel feedstock and the carbon emissions associated with its cultivation (including fertiliser use), harvesting, processing and transportation to point of use. We would take issue with these figures.' Rapeseed is the most efficient European crop from a greenhouse gas balance point of view and yet most studies show that these savings are between 53-56%.

A 2006 review of life-cycle energy and greenhouse gas assessments (Ethanol can contribute to energy and environmental goals" by Alexander Farrell et al, Science Vol 311, 27.1.2006. Source: <a href="http://rael.berkeley.edu/EBAMM/FarrellEthanolScience012706.pdf">http://rael.berkeley.edu/EBAMM/FarrellEthanolScience012706.pdf</a>) found that 74-95% of the energy in corn ethanol comes from fossil fuel inputs, and even that study has been criticized as over-optimistic by Tadeus Patzek who calculates that CO<sub>2</sub> emissions of complete production cycles mean that Corn-ethanol produces emissions between 50-100% more than fossils fuels. (<a href="http://tinturl.com/hapv3">http://tinturl.com/hapv3</a>)

A recent study by Wetlands International, Delft Hydraulics and Alterra (Peat CO2, Assessment of CO2 emissions from drained peatlands in SE Asia", Hooijer, Silvius, Wösten and Page, 2006 <a href="http://www.wetlands.org/publication.aspx?ID=51a80e5f-4479-4200-9be0-66f1aa9f9ca9">http://www.wetlands.org/publication.aspx?ID=51a80e5f-4479-4200-9be0-66f1aa9f9ca9</a>) estimates that one tonne of biodiesel made from palm oil from South-east Asia's peatlands is linked to the emission of 10-30 tonnes of carbon dioxide. Once emissions from peat fires and the loss of carbon sink capacity are taken into account, we estimate that one tonne of palm oil biodiesel from South-east Asia would therefore have 2-8 times more life-cycle carbon emissions than the amount of mineral diesel it replaces.

"75. The growing and processing of biofuel feedstocks also has a number of wider environmental impacts, which vary significantly according to where and how the biofuel feedstocks are cultivated. Within the UK, the environmental impacts of growing rapeseed or cereals can vary considerably according to where and how they are cultivated (e.g. whether on setaside or on arable land, and with the use of different amounts of fertiliser etc.). Internationally, the environmental impacts of crops such as palm oil, soya and sugar-cane depend to a large extent on the previous use of the land on which the crops were grown."

The EU has a target of halting biodiversity loss by 2010. Set-aside land sustains biodiversity. The European Environment Agency have stated that any reduction in or abolition of set-asides will result in serious biodiversity losses across Europe. However, David Miliband has said that 'set-aside' 'is helpful neither for farming nor the environment'. This is perhaps why set-aside has been targeted despite evidence that shows the amount of CO<sub>2</sub> released from soil when natural vegetation is converted to agriculture cancels out any savings from growing biofuel [http://tinyurl.com/ywecc5]. If spare agricultural land was allowed to naturally regenerate in the EU, it could do more for climate change emissions than growing energy crops.

We are particularly concerned because there is strong evidence that the results of deforestation and ecosystem degradation can be non-linear, i.e. that both agricultural intensification (based on large-scale monocultures and high fertiliser and pesticide inputs) and expansion could trigger large-scale, irreversible ecosystem changes and possible collapse which could then trigger equally irreversible climate feedbacks. We are very concerned that there has been virtually no research into whether large-scale biofuel expansion might bring about 'low-probability, high impact' results – such as tipping all or part of the Amazon forest into an irreversible cycle of megafires and desertification, and if so, whether this is a high or a low probability

"76. The Government has made clear that it is committed to increasing the level of the RTFO beyond 5% after 2010/11, but only provided certain conditions are met:" This seems somewhat meretricious and contradictory since you have also made it clear that the existing target is valid without any form of sustainable conditions being met.

"Confidence that the biofuels will be produced in a sustainable way, so that they deliver the maximum practicable carbon savings with the minimum practicable adverse environmental impact;" Once more why does this not apply to the existing RTFO and why therefore is there not already a moratorium? Are you expecting trade rules to change by 2010 or is it that you 'may' be willing to challenge them?

"77. Before increasing the level of the RTFO beyond 5%, the Government will also want to be satisfied that this represents an effective use of our biomass resources. Biomass can be used in a number of ways to deliver environmental and other benefits. Alternative uses of biomass, which in many cases can deliver greater carbon savings at lower cost than using an equivalent amount of biomass to produce a high-quality liquid transport fuel, include:

*Using biomass as a substitute for fossil fuels in the generation of electricity;* 

Using biomass as a substitute for fossil fuels in the generation of heat, for use in either domestic or industrial settings;"

Frankly this must mean that the RTFO will not be increased beyond 5%, since it is more efficient to use biomass to generate electricity or CHP than first convert it to a liquid transport fuel. This is not to say that it can be done sustainably in the free market.

## Sustainable production of biofuels

"82. It might also be possible to specify that, from a given date, only those biofuels meeting certain minimum environmental and social standards should qualify for credits under the RTFO. This may depend to some extent on how quickly standards can be agreed in this area. Work is already under way on this in bodies such as the international Round Table on Sustainable Palm Oil production. The European Commission is also planning to develop a certification scheme. It should be noted,

however, that until similar standards and practices are developed in other sectors, there will be an ongoing risk that "sustainable" feedstocks are diverted to use as transport fuels, with "unsustainable" feedstocks being used in other sectors (such as food production). Thus, increased demand for "sustainable" biofuel feedstocks might still lead to deforestation and other adverse environmental effects." You have exposed the problem of certification schemes and it is difficult to see how this displacement would be avoided, even it was enforceable.

Question 13: Should the Government specify that, from a given date, credits under the RTFO should be linked to the GHG-saving of the fuel? If so, what arrangements should operate and how quickly should this requirement be introduced?

Answer: Yes but only if they include the full lifecycle that would include land change. However, if they did there would be no savings from imported feedstock from the tropics and therefore no meaningful RTFO as the UK can only grow 4% of our needs if all our arable land was used. Obviously this would not be allowed to happen but if more of UK & EU land was used for certified biofuels, then more of food would need to be imported from the South leading to habitat destruction and increased greenhouse gases. These to would then need to be included in the full life cycle emission of EU biofuels.

Question 14: Should the Government specify that, from a given date, only those biofuels meeting certain minimum environmental and social standards should qualify for credits under the RTFO? If so, what standards should be applied, and from what date?

Answer: It would be tempting to say yes, if this followed a moratorium which took our definition of sustainability into account and our concerns about macro-economics and displacement. But there will be no moratorium and these conditions wouldn't be met and the question is a mute once since this consultation makes it clear that the government can not set any such minimum standard, due to world trade rules or at least you have no wish to risk a challenge from the WTO.

Question 15: Is the Government right to await the review of the relevant fuel quality standards before setting targets higher than 5%?

Answer: This is the wrong question. The only way this target should be set is on environmental, social and climate change grounds. This was the case when the EU Biofuel Directive and original RTFO were passed.

#### **Costs to consumers**

"88. We will also monitor the impacts on other markets which make use of the same feedstocks, including the food and oleo-chemical industries. The Government has received representations from a number of stakeholders to the effect that Government support for biofuels is putting up the price of commodities such as rapeseed oil and palm oil, which is having an impact on food prices." We have referred to this. It doesn't seem to worry you unduly.

Question 16: To what extent should Government support for biofuels be constrained by the impact on fuel prices at the pump?

Answer: What has the price got to do with environmental cost?

Question 17: Will the RTFO have an adverse impact on other sectors? To what extent should this constrain future Government support for biofuels?

Answer: Yes the RTFO will have a very great affect on other sectors. These include the 250 organizations who wrote an open letter to the EU; the 350 conflicts in Indonesia caused by oil palm plantations displacing local people; the personal testament of the President of Organizacion Nacional Indigena de Colombia (<a href="http://www.biofuelwatch.org.uk/blog/">http://www.biofuelwatch.org.uk/blog/</a>) The following testimonies should constrain the RTFO. The constraint should be an immediate moratorium:

"We want food sovereignty, not biofuels...While Europeans maintain their lifestyle based on automobile culture, the population of Southern countries will have less and less land for food crops and will loose its food sovereignty...We are therefore appealing to the governments and people of the European Union countries to seek solutions that do not worsen the already dramatic social and environmental situation of the peoples of Latin America, Asia and Africa. "(from a declaration by Latin American NGOs)

"Palm oil for biofuels increases social conflicts and undermines land reform in Indonesia...It is unavoidable that, as a consequence of Europe's biofuels policy, the land rights of indigenous peoples and local communities will be relinquished further, and that food security will be undermined and lands for agricultural purposes and subsistence livelihoods will diminish." (Sawit Watch, Indonesian NGO)

"It is a push by industry to make another scramble for Africa, grab the land and continue with business as usual. The industrial bio-energy push to do increased bio-energy demand will be nothing other than an effort at extending the frontiers of neo-colonialism in its continued march on the back of the fabled market forces" (Environmental Rights Action/Friends of the Earth Nigeria)

The 800,000 permanently malnourished human beings in our shared planet with 800 million cars should constrain this ill-advised policy. It might be argued that this should constrain the RTFO completely, but that perhaps is a matter of morals and ethical foreign policy.

Section 2: the possible nature of, and level of, future RTFO targets

Question 18: Do you consider the above analysis of the options correct? Are there any other options that the Government should consider?

Answer: No. The rationale of the RTFO is incorrect as it does not consider the true environmental costs to the climate and is constrained by world trade rules. The true costs to the climate is the overriding option that should be considered, followed by food supplies and sovereignty, biodiversity, soil & water issues and human rights.

Question 19: What are your views on the relative merits of the different ways in which future RTFO levels might be expressed?

Answer: The only merit for setting the RTFO level is based upon our definition of sustainability. This is not being met when the RTFO is a mere 0.6%.

## Level of targets

"94. Provided that the conditions on sustainability, costs and technical standards outlined in section 1 can be met, and irrespective of the precise format of the 2015 or 2020 RTFO target (see annex B), the Government is keen to hear views from stakeholders on whether the level of the RTFO

should be **maintained at the 2010/11 level, or increased** (and, if so, by how much) by the years 2015 and 2020."

How can you possibly ask for a figure to increase the target when this would have to be based on peer-reviewed scientific data, based on rigourous sustainability criteria? To ask industry and the general public to simply pluck a figure from the air is completely unacceptable and at odds with your stated aim to stabalise the climate at a safe level. We believe that it is proven that the environmental effects are already known so it should neither be **maintained or increased** but a **moratorium** is needed.

"95. In setting future targets, the Government will also want to take account of the European Commission's proposals for increasing the use of biofuels across the European Union. The Commission has, for example, proposed an amendment to the Fuel Quality Directive which would require transport fuel suppliers to achieve a reduction of 1% per annum in the lifecycle CO2 emissions associated with their fuels. The Commission is also due to propose a number of amendments to the current Biofuels Directive (2003/30/EC), which are likely to include binding biofuels sales targets."

Question 20: is the Government right to insist that robust carbon-saving and sustainability criteria are built into future EU-wide biofuel targets and support mechanisms?

Answer: Yes but for the complex reasons explained above, regarding displacement and your knowledge of WTO rules this will not be enough.

"The Government is particularly keen to hear stakeholders' views on when targets for individual years beyond 2010/11 should be set. The Government recognises that industry will want certainty to enable planning for the future. However, the full effects of a 5% biofuel penetration, for example on the environment, will not be known until 2010 at the earliest." The obvious answer would be to wait until they were, but that is not what you are looking for. We would agree that the full effects will not be known but the we can already see (referenced earlier) the effects of worldwide penetration of just 1% of transport demand.

Question 21: What should the level of the RTFO target be in future years (eg 2015 and 2020)? Should the level of ambition be maintained at the 2010/11 level, or increased?

Answer: What an irresponsible question. Have you learnt nothing? The first target was not based on full cycle greenhouse gas savings. It is increasing them and you simply ask should we carry on with this or increase them ....!

Question 22: When should the Government set targets for years beyond 2010/11?

Answer: After a moratorium on the existing target has proved whether there is a sustainable large-scale biofiels market.

Section 3: Support for "second generation" biofuels, and other renewable transport fuels

"100. The Government is keen to encourage the development and use of those renewable transport fuels which offer the highest levels of carbon saving with the minimum adverse environmental

impact. "Second generation" biofuels (ie biofuels generally produced from feedstocks other than food crops through a number of advanced processes, including gasification and the use of enzymes to break down the cellulose in the feedstock) have the potential to meet both of these objectives, as do the best of today's "conventional" biofuels (particularly where crops are grown with low fertilizer input and processed in an energy efficient way)." Second generation biofuels based on ligno-cellulosic technology are still at the research stage. Over two years ago the UK government hosted the conference 'Avoiding Dangerous Climate Change'. The Prime Minister forwarded the report that said the world had 10 years to reduce greenhouse gas emissions to a safe level. Second generation biofuels are not a readily available tool for avoiding catastrophic climate feedback mechanisms to be triggered. They may not be commercially available for another 10-15 years. There has been no independent assessment as to the likely environmental impact of second-generation biofuels, especially if they involve genetically engineered trees or microbes, and there are serious concerns that those impacts could be severe. (see for example http://news.mongabay.com/2006/0806-cellulosic.html).

Question 24: Will rewarding different biofuels on the basis of their relative carbon saving performance be sufficient to bring these fuels onto the market? If not, in what other ways might the Government support the development and use of "advanced" renewable transport fuels?

Answer: It is not proven that these "advanced" technologies will deliver the improved carbon savings that are claimed. The government should not support second generation biofuels for reasons outlined above. It should put money into true renewable energy, energy reduction, public transport and a modal shift in transport to localized economies in line with the dangers presented by peak oil and climate change.

# Specialist and high-blend uses of biofuels

"108. Many stakeholders have suggested that, in order for E85 fuels to be an economically attractive option, they would need support over and above the duty incentive and RTFO certificates. But views differ among stakeholders on whether the additional costs of supporting E85 fuels and vehicles would be justified by the environmental benefits. As with all biofuels, the amount of carbon saved will depend entirely on how the fuel has been produced."

Question 25: Should the Government consider providing additional support to encourage the use of high blend biofuels?

Answer: No. You are right to mention (108) how they are produced, but you should be less vague. What you are talking about is promoting a product that is 17 times more harmful than the existing RTFO target.

*Illustration of some possible alternative ways of setting future RTFO levels* 

You present 7 options. Whenever the words environment, carbon savings and or sustainability appear the rather vague WTO risks appear in the disadvantages box. This is clearly unacceptable behaviour for a democratically elected sovereign state that has a responsibility to look after the welfare of its citizens.

Partial Regulatory Impact Assessment Draft Renewable Transport Fuel Obligations Order

Chapter 2
Purpose and intended effect

# 2.1 Objective

"The proposed Renewable Transport Fuel Obligation (RTFO) will deliver carbon savings of approximately one million tonnes per annum by 2010.

Alongside duty incentives, it will be the main policy in the transport sector to reduce greenhouse gas (GHG) emissions and to increase the use of renewable fuels, helping to meet our international obligations under the Kyoto agreement and the EU Biofuels Directive." This is unforgivable and an act of gross dereliction to your commitments made at the conference 'Avoiding dangerous Climate Change'. 'The main policy in the transport sector to reduce greenhouse gas (GHG) emissions' must be demand reduction as it must be in every sector in the economy. The fact that you are willing to spend £5.1 billion on widening the M1 shows that you are unwilling to face up to this reality. Like the car manufacturers you are using the RTFO to maintain business as usual and a tool that means not confronting the electorate to change their behaviour.

# 2.2 Background

## Carbon Reduction Targets and the Biofuels Directive

"UK emissions of a 'basket' of greenhouse gases fell by nearly 14.6 per cent between the 1990 base year and 2004. However, emissions in the transport sector have increased by approximately 10% over the same period. The transport sector is now responsible for approximately 25% of UK GHG emissions – equivalent to 43.8 million tonnes of carbon in 2003." That backs up our claim. How much is the transport sector projected to rise over the period of the RTFO? In a similar period walking has fallen by 20%, cycling by 6% and local bus by 11%. Since the government came to power, rail and bus fares have risen by 7% & 16% respectively where as motoring cost have fallen by 6%.

# Renewable Fuels Duty Incentive

Renewable fuels are one of the few options identified in the transport sector that can achieve cost-effective carbon savings. However, they can cost more to produce than their fossil fuel equivalents and consequently Government intervention is required to create a stable market for them. In July 2002, the Government introduced a duty incentive of 20p/litre below regular diesel fuel (ultra low sulphur diesel) for biodiesel. A similar incentive for bioethanol began on 1 January 2005.

# 2.3 Rationale for Government Intervention Issues requiring a Government-led response

Stern Review - "The scientific evidence points to increasing risks of serious, irreversible impacts from climate change associated with business-as-usual (BAU) paths for emissions." That's all very well and good. When will the government re-introduce the fuel duty escalator? When will the government intervene in road charging, congestion charging, enforcing speed limits and introducing minimum CO<sub>2</sub> emissions on car manufacturers? When will they invest in an integrated mass public transport system and cycle paths like our neighbours in Europe enjoy? When will they intervene in the energy market so that we can move to an economy powered by renewable energy?

## Impacted groups

"The main impacted group are the obligated suppliers i.e. suppliers of fossil fuels for road transport. This includes approximately eight major oil companies and 20-40 smaller oil importers and distributors". Again no mention of the impacted groups in the majority world.

The impacted sectors are discussed in more detail below.

#### **UK Refiners**

"They will source renewable fuels from the global market, tending towards long term contracts with small numbers of large suppliers." And the global market means the tropics and deforestation and greenhouse gas emissions.

#### Oil Importers

There are a number of suppliers that sell oil in the UK that is imported rather than produced in a UK refinery. These suppliers import from global markets using storage facilities at ports." And global markets mean the tropics and deforestation and greenhouse gas emissions.

# Large Biofuel Suppliers

There are two large biofuel plants in operation in the UK at time of writing, with a number in development or planning stages. There are also a small number of suppliers importing renewable fuels in high volumes into the UK." Importation will be from the tropics (as you state the majority already is) and that means deforestation and greenhouse gas emissions.

## Small Biofuel Suppliers

"The main concern raised by smaller suppliers regarding measures to promote renewable fuels more widely is so-called 'secondary blending', where the oil majors and importers bring in fuel that already has a biofuel component." They 'bring in fuel' from the tropics which means deforestation and greenhouse gas emissions.

#### **UK Farmers**

"It will be up to obligated suppliers, however, to decide whether to source their renewable fuels from the UK or from overseas producers." And 'from overseas' means the tropics and deforestation and greenhouse gas emissions. Again you know this is already the case.

## Environmental groups

"There are numerous environmental groups who are concerned with both measures to reduce greenhouse gas emissions and to ensure the sustainability of any biomass used to produced transport fuels. These groups have been engaged with policy development through the Low Carbon Vehicle Partnership (LowCVP)1. A number of environmental groups have argued that the Government should only support renewable fuels which meet certain minimum environmental standards, but WTO rules currently mean that such a requirement would be subject to challenge." The LowCVP has failed to recognize the macro issues of biofuels and is therefore completely ineffective.

Chapter 3 Consultation

#### 3.2 Public Consultation

"DfT has consulted extensively in developing its renewable fuels policy, maintaining links with stakeholders throughout." The Dft has failed to consult with the organizations in the majority world, already highlighted. This is not acceptable and must be rectified from now on. This brings the consultation into disrepute and invalidates it. It is not enough to consult the vested interests of industry that are connected with the biofuels market place and a few selected UK NGOs.

Chapter 4 Options

## Option 1. Maintain the current duty incentive

"Similarly, there is a risk that supplies predominantly come from 'unsustainable' sources, as this

option has no controls or mechanisms for encouraging sustainability. Whilst renewable fuels clearly offer a number of environmental benefits, the possible expansion of biomass production could also have a number of other effects, including possible impacts on land-use, landscape, biodiversity and soil structure, both in the UK and abroad.

# Option 2: Increase the duty incentive level

The risks of low carbon savings and unsustainable supplies identified in option 1 apply to this option also, and would be increased assuming the policy was successful in achieving higher sales levels. Similarly, the risks related to the possible variance in carbon life cycle benefits actually achieved apply too.

#### Option 3: Seek a Voluntary Agreement amongst suppliers

The risks that apply to options 1 and 2 in terms of carbon saving and sustainability of renewable fuels apply to this option also." It would appear that you see the risk as unacceptable, hence the RTFO.

## Option 4: Introduce a Renewable Transport Fuel Obligation (RTFO)

Carbon and Sustainability Reporting (C&S) The RTFO targets savings of around one million tonnes of carbon emissions per year. To achieve this at a 5% obligation by 2010-11, the average carbon saving of each litre of fuel needs to be 60%." We have shown that a 60% saving is not achievable if land use changes are taken into account; this is why their needs to be an immediate moratorium.

#### Risks with respect to the stated objective

"The risks related to the level of carbon savings and sustainability identified in option 1 potentially apply to an RTFO also. However, the RTFO incorporates measurement and reporting mechanisms that increase the level of control and visibility of these risks. Under the RTFO, suppliers will have to report on the carbon savings expected from their fuels. This will allow the Administrator to measure whether the target is being achieved. The RTFO could in future move to rewarding fuels in proportion to the carbon saved, giving a material incentive to use "better" biofuel. The Administrator will also be able to compare the relative carbon saving achieved by different suppliers. Suppliers will also have to report on the sustainability impacts of their fuels and the publication of comparative data should again encourage them to use fuels from sustainable sources." We almost don't need to comment. Are you seriously proposing that this will alleviate the risks you highlight?

"The accuracy and honesty of carbon and sustainability reporting is considered separately from volume data. There will be a standard method for calculating carbon savings. Consideration is being given to developing a quality standard for the reporting of carbon and sustainability data so that the Administrator would have confidence in the data reported by suppliers certified to the standard." It is interesting that you use the word honesty. That is not a word associated with the supplier corporations and governments and until calculations on carbon savings include land use changes, they will be dishonest.

#### Unintended consequences (all Options)

"There is a lot of uncertainty surrounding the impact of growth in biofuel usage as it is an emerging industry within the complex interdependencies of environmental issues and globalised fuel supply chains. Many possible unintended consequences can be imagined but some of these are much less likely, and less well understood, than others." We agree that the issues are complex. You refer to 'possible unintended consequences can be imagined'; if you are referring to increased deforestation, loss of grasslands, human rights abuses, conflict between feeding people and cars and

lastly and by no means leastly increased greenhouse gas emissions, they are not imagined. They are very real and have been outlined within our submittal. Therefore you can no longer suggest that these are 'unintended conaequences' or 'imagined'.

# Environmental and sustainability

There could be unintended environmental consequences of increased demand for renewable fuels:

- Increased sourcing of renewable fuels from unsustainable sources could cause substantial environmental damage, particularly in the case of Indonesian palm oil, where sensitive habitats are at risk from clearing in order to plant new crops;
- Renewable fuels could be channelled into transport fuel usage rather than for generating electricity or heat, where the carbon savings can be greater;
- There may be difficulties in correctly disposing of the waste products associated with biofuel production;
- The RTFO may promote the development of widespread monocultures that can have multiple adverse impacts.

As we have shown the RTFO is already doing all of the above, which is why there needs to be a moratorium.

"All of these issues may be used by NGOs to attack the RTFO and perhaps to make it a scapegoat for other unrelated environmental issues. The RTFO will require reporting on the sustainability impacts of the fuel supplied, in order to encourage suppliers to source sustainably and to monitor the impacts of the fuels supplied." You were right those 'issues' are we feel legitimate grounds for 'attacking' the RTFO. We do not understand how we are making it a 'scapegoat for other unrelated environmental issues' and would be grateful for an explanation.

## Fuel Market

"The programme has endeavoured to work with stakeholders to minimise the impact of the scheme on the oil industry, but nevertheless there may be unintended consequences as businesses in various parts of the supply chain adapt to the new environment." Once more it is staggering and at the same time not at all surprising that you have 'endeavoured' to 'minimise the impact of the scheme on the oil industry' whilst at the same time not working with the real stakeholders to minimize the impact on the powerless people of the developing world.

#### Diversity and security of supply

Although the increased use of renewable fuels may deliver benefits in terms of increased diversity of supply, this may also give rise to some issues:

- The UK would become increasingly dependent on fuel from countries with whom it does not have the same history of relationships and supply management as the oil-producing nations, becoming more vulnerable to a crisis in relations or supply;
- The UK would become increasingly reliant on a product susceptible to "a bad year", due to crop, weather or other problems. This product feeds people.

Chapter 5 Costs and Benefits
5.1 Costs

#### **Policy Costs**

RTFO least cost to government.

We read the 7 pages and could not find any reference to environmental costs.

## 5.2 Benefits

Independently of the option selected, the benefits of achieving a 5% level of biofuel sales can broadly be summarised as:

■ Significant reduction in CO2 emissions in the transport sector;

We have shown that this is not the case due to false accountancy.

## Reduced emissions of CO2 and other greenhouse gases

The benefits of renewable fuels are primarily their carbon savings compared with the use of conventional fossil fuel (petrol and diesel). Renewable fuels are produced from plants which are a renewable source of energy. When renewable fuels are burned they do not add to the net release of CO2 to the atmosphere in the same way as the burning of fossil fuels does, because the crops that have been used to make them will have absorbed an equivalent amount of CO2 from the atmosphere as they grow. However, the production of renewable fuels does involve the use of energy. If fossil fuels are used to produce that energy, the production of renewable fuels leads to the release of CO2 from fossil sources. The carbon savings from the use of renewable fuels are therefore usually quantified as net i.e. in terms of their fossil-CO2 emissions relative to conventional petrol and diesel. Thus, if a renewable fuel is produced using little fossil fuel derived energy, it might provide 85% net carbon savings relative to conventional road fuels. If it is produced using a lot of fossil fuel, it might provide only 25% net carbon savings. There can also be a significant variance in the net carbon savings associated with renewable fuels depending upon the feedstocks used. The table below presents the carbon saved assuming that the average net carbon savings are currently around 50% and grow to 75% over time (though it is important to note that actual variance is potentially far wider). All of this is meaningless as you have not taken account of emissions from habitat destruction and thus the proposition of the RTFO is deeply flawed.

## Improved fuel security

"Wider use of biofuels will result in a rise in the number of countries from which the UK sources road fuel. While around 90% of UK crude oil is imported from just two countries (Norway & Russia), the supply of vegetable oils is more diffuse. Five countries (Papua New Guinea, Indonesia, Malaysia, Colombia & the Netherlands) provide around 85% of the UK's imports of palm oil and four countries (France, Belgium, Finland and the Netherlands) provide over 90% of the UK's imports of rape oil". This current supply of vegetable oil for human consumption and animal feed causes deforestation and global warming and you now propose to compound this with vegetable oil for cars.

## Chapter 7 Competition Assessment

"The biofuel market in the UK is very new and makes up a very small proportion of overall fuel sales (approaching 0.6%). The majority of biofuel sales are currently from imports, brought in by the independents". So currently the UK is fuelling global warming with biofuels.

"Measures to promote biofuels further, whether through obligation or fiscal incentives, are likely to further develop and mainstream the biofuel market in the UK, and lead to both increased imported biofuels and domestic capacity." Further increasing global warming.

"A growing biofuel market should provide new opportunities for suppliers to compete, for example in developing cheaper biofuels and other renewable fuels. This should aid the technological

development of renewable fuels, benefiting both the consumer and the environment." To maintain the proposition that this will benefit the environment is difficult to believe given the facts we have presented from the globally warming world.

Throughout the report we are told that the RTFO would be the equivalent, in carbon terms, of taking a million cars off the road. That is 4% of our cars. How much would congestion or road pricing or car sharing take off the roads? How many cars would be taken off the roads in carbon equivalent if people had them regularly serviced or inflated their tyres correctly? How many cars would be taken off the road in carbon equivalent if drivers accelerated and braked gradually or if they could rely on or afford public transport? How many lorries could be taken of the roads if freight was on the railways? Do you have the figures for these alternatives? What would be the equivalent number of cars if people walked and cycled locally? 25% of car trips in the UK are less than 2 miles and 58% are less than fives miles. If there were literary less cars on the road, more people might feel safer to get back on their bikes. Congestion charging and car sharing would aid this transition.

The report says: "Renewable fuels are one of the few options identified in the transport sector that can achieve cost-effective carbon savings." In 2005 a review from defra on reducing carbon emissions, showed that enforcement of the 70 mph speed limit would save 890,000 tonnes of carbon a year or 9/10 of the RTFO. This measure is described as "politically difficult", as is carsharing and road user charging. The same (restricted) report states that changing speed limits would save 1.7 million tonnes of carbon and car sharing between 0-0.5 million tonnes or between 70 and 75% more savings than the RTFO (if the figure of 1 million was correct).

The policy is doing the opposite of what it intends and you know this, because it is "politically easy".

Yours Faithfully

Ian Lander for Biofuelwatch