DET KONGELIGE
MILJØVERNDEPARTEMENT

Royal Ministry of the Environment

Norwegian response to the EU consultation on biofuels and indirect land use change (displacement effects) - 29 October 2010

Norway's position has consistently been that the reduction of greenhouse gas emissions must be the primary function and purpose for national and international policies to promote biofuels. For biofuels to deserve government promotion and funding, we should be confident that the biofuels actually reduce net global emissions of greenhouse gases. The savings compared to fossil fuel must be based on lifecycle emissions, and should be of a magnitude to give robust savings even when taking into consideration i.a. modelling uncertainties, local variation and problems of measurement. Our position has also consistently been that biofuels must be sustainably sourced and produced, so as to prevent negative effects on environmental or social issues. We need to make sure that the biofuels we promote actually contribute to reduced greenhouse gas savings and that these savings to do not come at the cost of biodiversity, clean air, healthy soils, sensible water usage, food security for the world's poor and other important issues. Norway sees biofuels as part of the mix of possible measures and instruments to reduce greenhouse gas emissions from transport, but we wish to be able to handle this wisely and well.

Specific biofuels can vary quite considerably in their effects on greenhouse gas emissions as well as on other sustainability issues. The variations correspond both to differences between feedstocks, land use changes and different choices regarding crop management and manufacturing options. There is therefore a strong and obvious need both to be able to identify which biofuels are better and worse, and to be able to promote the best biofuels whilst discouraging production and use of biofuels with low (or negative) greenhouse gas savings and poor sustainability performance. To this end, it is necessary to have in place an internationally accepted, comprehensive and rigorous certification system for biofuels. The EU "sustainability scheme" for biofuels - as set out in the Renewables Directive and the revised Fuel Quality Directive - is the first step in this direction. Norway has welcomed the initiative and we would like to see the sustainability scheme developed further, whilst at the same time recognising the challenges involved.

In our general position on biofuels and in our response to the preconsultation exercise on biofuels in 2009, Norway expressed concern about possible displacement effects of increased production of biofuels. We argued for including displacement effects (or so-called indirect land use effects - ILUC) of feedstock production explicitly into the assessment of the biofuels we wish to promote. We have with interest followed the scientific and policy debates on the issue of such displacement effects over the last

years, and the studies from various sources put forward by the European Commission as background for this consultation.

Our position on the consultation issues is that:

- There is compelling evidence that ILUC is significant and needs addressing.
- A "do nothing"-approach is not seen as acceptable. We feel it would be far less credible to ignore the ILUC effects than to use the current best approach available for including them.
- We consider that there is sufficient scientific basis for the introduction of an "ILUC factor" for evaluation of net greenhouse gas savings from biofuels, differentiated by main feedstock types.
- We would also encourage introduction of a mechanism for special promotion of biofuels with no or very low risk of displacement effects. This would be linked to beneficial management and production methods, and should be subject to further development and refinement over time.
- We would also strongly encourage a concerted effort in further research and studies to focus less on quantifying unwanted displacement effects from biofuels and more on how to prevent such displacement effects. Norway would be interested in contributing towards such research and studies.
- We would also like to underline that although focus currently is on net greenhouse gas effects from displacement, other sustainability issues are also important in this context, concerning i.a. biodiversity, water, soil, air, land rights and food security.

We expand on this position in our responses below to the specific questions in the consultation.

Question 1) Do you consider that the analytical work referred to above, and/or other analytical work in this field, provides a good basis for determining how significant indirect land use change resulting from the production of biofuels is?

Response:

Norway considers that on the basis of these analytical works and scientific progress over the last years there is compelling evidence that ILUC is a crucial element in being able to judge the benefits - if any - of promoting biofuels to combat climate change. The studies and analyses show a consistency in both magnitude and direction of ILUC effects that we consider gives sufficient grounds for action now. The different results from the different studies can - in our view - reasonably be explained by their differences in scope, focus and assumptions, and are reasonably convergent and comparable. We note, for example that the ILUC effects in the IFPRI modelling tend to be smaller than many of the other studies, which can be explained chiefly by the fact that IFPRI - through a number of assumptions - in practical terms is modelling a business-as-usual situation for Europe with an increase only in bioethanol based on Brazilian sugarcane. We could discuss whether or not assumptions of high petrol/low diesel share or the relatively low total biofuels share is "correct" or not, but do not feel that these or other discussions of this kind change the overall picture. We are aware of

the arguments concerning, for example, modelling of different diesel/petrol splits, crop yield growth in the baseline, carbon stock values used and treatment of co-products. Our view is that some modelling uncertainties and assumptions could tend to underestimate ILUC whilst others could tend to overestimate ILUC. We do not find that the uncertainties and limitations of underlying assumptions give results that are consistently skewed towards underestimation or overestimation, or that they are based on wildly unreasonable assumptions. We consider, instead, that the results from the many different studies and modelling exercises show enough consistency to conclude that the ILUC effects of most biofuels are significant and will offset - and may even exceed - much of the greenhouse gas savings of replacing fossil fuels. Whilst there will always be some modelling uncertainties and measuring inaccuracies, Norway believes that such uncertainty in the effects and extent of ILUC is no longer a reason for not accounting for such effects.

Question 2) On the basis of the available evidence, do you think that EU action is needed to address indirect land use change?

Response:
As outlined above, Norway most emphatically thinks that EU action is needed to address this issue now. We consider a wait-and-see approach as a real risk of undermining our goal of combating climate change, a real risk of perverse incentives for land use choices, a real risk of private and government spending on the wrong biofuels and a real risk of locking us into the wrong land management and production practices. Disregarding ILUC in evaluation of biofuels will most likely lead to less climate savings for our money, delay the development of truly low-carbon transportation solutions and jeopardise our efforts at reducing fuel carbon intensity.

Question 3) If action is to be taken, and if it is to have the effect of encouraging greater use of some categories of biofuel and/or less use of other categories of biofuel than would otherwise be the case, it would be necessary to identify these categories of biofuel on the basis of the analytical work. As such, do you think it is possible to draw sufficiently reliable conclusions on whether indirect land use change impacts of biofuels vary according to: feedstock type, geographical location, or land management?

Response:
Norway considers that there is at present sufficient basis for differentiation according to feedstock type, and certainly some types of land management are gaining recognition as no-risk or low-risk for displacement effects. We therefore suggest a two-pronged approach - with introduction of an added general ILUC factor according to feedstock type and also introduction of a bonus mechanism for land management and production/manufacturing management associated with no or low risk of displacement.

Question 4) Based on your responses to the above questions, what course of action do you think appropriate?
A. Take no action for the time being, while monitoring impacts including trends in certain key parameters and, if appropriate, proposing corrective action at a later date.
B. Take action by encouraging greater use of some categories of biofuel.
C. Take action by discouraging the use of some categories of biofuel.

Response:
Norway does not consider a "no action"-approach as acceptable (alternative A). We feel it would be far less credible to ignore the ILUC effects than to use the current best approach available for including them.

We consider that the data is now sufficiently robust to conclude that unless special efforts are made primarily concerning choice of crop management and of production management, most or all biofuels production will have displacement effects. The scientific evidence suggests that there is a reasonable basis for differentiation according to feedstock type. We therefore recommend introducing a so-called ILUC factor in the calculation of net greenhouse gas effects of biofuels (alternative C). We suggest that as a starting point the marginal IFPRI numbers for ILUC for the main feedstocks can be used as a reasonable conservative value for this purpose. The IFPRI values tend to be lower than in a number of other studies, so we consider such an approximation to be not overly stringent. For feedstocks where there is no IFPRI marginal value for ILUC, we suggest using a standard default value of some reasonably medium level - for example 40 or 50 g CO_{2eq}/MJ. Some feedstocks have *per se* no land impact and therefore no displacement risk, and should have a zero ILUC value. These are feedstocks that are real wastes and residues - i.e. with no other alternative pathways or current usage, such as municipal solid waste (MSW), methane gas from organic waste, sewage and manure, waste oils and fats from the food industry and the like.

The factor should be reviewed regularly to accommodate for updated data and more sophisticated modelling in the years ahead. Norway also considers that interested parties, scientists and member states shall be allowed to request revisions based on updated data, in line with the provisions under the Directive for requesting revisions of other default data.

As an accompanying measure to the "ILUC factor" we recommend setting up a more specific ILUC factor or bonus system (alternative B), which gives economic operators or others the opportunity to achieve a smaller or zero ILUC factor by substantiating that the specific conditions of feedstock sourcing and/or manufacturing either avoid displacement pressure altogether or substantially reduce the risk of displacement of current land use. We suggest that this be based on a recognised and verifiable set of management practices. Such practices could involve yield increases through better crop management and less waste, increasing yields per hectare through co-production of biofuels alongside existing land use, better conversion efficiency, improved conversion technology, putting truly unused land into use and increasing yields on truly marginalised lands. The set of recognised practices should be updated regularly as new best practices are identified - or claimed and validated. The best practices

should not focus solely on avoiding pressure on land use - but preferably also on issues like avoiding negative effects on water, soil, air, land rights and food security. Norway does not consider it acceptable that other sustainability concerns have to be sacrificed to achieve climate change mitigation. We need to find the win-win solutions.

Further to the establishment of an ILUC factor and a more specific ILUC bonus system, Norway would recommend that further study and research efforts be put into identifying more of the best practices and how to avoid displacement effects of increased production of biofuels.

In conclusion, we would like to draw attention to a follow-up point. Focus for ILUC at this initial stage is on effects on net GHG savings, but effects on i.a. biodiversity, water use, soil, air pollution, food prices, land grabbing, etc., are also important. At this stage we accept GHG factoring as a proxy that to some extent also is expected to contribute to avoidance of LUC/ILUC that can have other negative sustainability effects. However, we would like to see progress also on these other issues in the coming years.