

Comhar SDC Response to the Public Consultation on the Biofuels Obligation Scheme

November 24th 2008

Contents

Context.....	1
General Recommendations	2
Responses to Key Consultation Questions	5
References.....	6

Context

The Government intends to introduce a biofuels obligation to ensure that a certain percentage of the transport fuel used in the state by 2010 consists of biofuels. This means that from 2010 it will be obligatory for all transport fuel suppliers to ensure that a certain percentage of their fuels are made up of biofuels. They have published a paper for public consultation on the proposed scheme and are requesting public comment on the relevant issues. Comhar SDC appreciates the opportunity to respond to this consultation.

The consultation paper begins by outlining the context for biofuels in the EU and recent concerns relating to the sustainability in terms of habitat and ecosystem preservation, greenhouse gas emissions savings, land use changes, energy security of supply, and the impact on commodity prices relating to biofuels.

Ireland has committed to increasing the share of biofuels in Irish transport under the 2003 EU Biofuels Directive, where targets were set for 2% and 5.75% (on the basis of energy equivalence) substitution of biofuels in transport by 2005 and 2010 respectively. The draft Renewable Energy Directive published in January 2008 Package sets a target of 10% of renewable energy in transport by 2020. Comhar SDC has misgivings regarding the EU renewable energy in transport target. While there may be some benefits in terms of energy security of supply and rural development associated with biofuels, it is a very costly measure to reduce greenhouse gas emissions compared with transport alternatives (Ryan et al 2006).

In Ireland to date there has been relatively little use of biofuels. They are more expensive to produce and there has not been broad coverage for the subsidy schemes that were put in place under the Mineral Oil Tax Relief (MOTR) schemes, and it was not very profitable to engage in transport biofuel production outside of these schemes. The MOTR II, which began in 2006, was planned to place 163m litres of biofuels on the Irish transport market in 2008, representing 2.2% of the entire fuel market (DCENR 2006). In 2007, the biofuels penetration had increased to 0.45% of the transport petrol and diesel market and therefore it appears that the 2008 target will not be achieved (SEI 2008).

The proposed Biofuels Obligation Scheme (BOS) will not provide subsidies to biofuels producers but will guarantee a market. Transport fuel suppliers will be obligated to hold the required amount of biofuels certificates at the end of the year showing that they have sold the requisite volume of biofuels to the market (one certificate per litre of biofuels sold).

General Recommendations

Biofuels Obligation Schemes are becoming the norm across Europe as a mechanism to meeting biofuels targets for the substitution of transport fuels. Comhar SDC agrees in principle that this can be a good way to encourage the takeup of biofuels in transport. However, as with all policies, it is the design of the policy measure that will determine its success or failure in terms of environmental effectiveness, cost efficiency, equity, simplicity and social benefits. Comhar SDC attempts in this short response to make recommendations that address these issues.

The use and production of biofuels can be employed to achieve several distinct goals. Comhar SDC appreciates that the public consultation document demonstrates clearly that the DCENR is aware of the concerns and issues associated with biofuels and this. An impact assessment and a cost benefit analysis of the biofuels obligation scheme has not been published as part of the public consultation and therefore it is difficult to assess the strengths and weaknesses of the scheme. It is not apparent from the document what the main objective with the implementation of a Biofuels Obligation scheme is. The potential options include:

- to meet the EU 10% biofuels substitution target in 2020;
- to reduce greenhouse gas emissions from transport;
- to introduce biofuels at least cost in Ireland;
- to increase rural development in Ireland;
- to improve Irish energy security of supply;
- to foster the growth of a renewables industry for the future in Ireland.

The design of the obligation scheme should reflect the government's choice of priority. The Renewable Energy Directive contains draft sustainability criteria relating to the following issues:

- Minimum greenhouse gas emission savings (latest draft 35%);
- Protection of lands with high carbon stock or of specific biodiversity value;
- Minimum social conditions.

It is good that any biofuels sold in Ireland will meet these sustainability criteria. But there may be additional conditions that should be attached to biofuels qualifying under the scheme depending on our priorities.

Under the scheme outlined for consultation, it appears that the main objective is to increase the volume of biofuels sold in Ireland in a cost-effective manner. The scheme is designed to require transportation fuel suppliers in Ireland to blend a minimum volume of biofuels in fuels sold in Ireland. Biofuels may be sourced domestically or from abroad and must meet a minimum greenhouse gas emissions saving threshold (set in the sustainable criteria). Suppliers will most likely purchase the cheapest biofuels available and pass through the additional costs to consumers. Therefore it can be expected that if the targets are set sufficiently high then the objectives set out in the first three points above will be met.

As the proposal stands, there are no incentives for the introduction of biofuels with (a) the highest greenhouse gas emissions savings, (b) Irish feedstock or production, nor (c) advanced technology (i.e. second generation biofuels). These should be investigated by examining the direct and indirect impacts of the scheme. A major flaw is the setting of targets in volumetric units rather than as energy-equivalent or greenhouse gas emissions saving units. There is little sense in achieving a high

amount of biofuels in volumetric terms if they do not represent a clear greenhouse gas emissions saving and perform to a high standard.

Assessment of Impacts

Comhar SDC notes that no Impact Assessment has been published for the proposed biofuels obligation scheme. This means that there is no cost benefit analysis comparing the impacts of various policy options on: costs to the exchequer, consumers, industry; the rural economy and agriculture; fossil fuel supplies, and greenhouse gas emissions; nor are the policy goals specified. In contrast, the UK Department for Transport produced a full Impact Assessment for the UK Renewable Transport Fuel Obligation (RTFO), which examined four options:

1. Do nothing – maintain the current duty incentive;
2. Increase the duty incentive;
3. Seek a voluntary agreement amongst suppliers;
4. Introduce an obligation.

The RTFO is now under review and the UK government has produced a further Impact assessment examining 3 options to modify the scheme. In both cases of Impact Assessment the costs and benefits of options are estimated including the monetized value of greenhouse gas emissions, reduced fuel resource costs and welfare gain from increased driving as well as non-monetized costs and benefits. A similar assessment is urgently needed for Irish biofuels policy. An Impact Assessment should examine the impact of different levels of biofuels penetration, i.e. at 2%, 5% and 10%, as it is likely that the impacts will change significantly as the obligation level increases.

Indigenous biofuels production and support for 2nd generation biofuels

It is a matter of policy priority selection whether it is desirable that biofuels are domestically sourced. It should be clear that imported biofuels are cheaper than Irish biofuels and therefore without additional measures it is unlikely that Irish biofuels will be used by transport fuel suppliers to meet their obligations. Currently under the MOTR II system more biofuel is produced indigenously than imported (SEI 2008). However, this may change if the biofuels policy changes from subsidies to obligation to blend. The Department of Communications, Energy and Natural Resources estimate that to substitute 2% of transport fuels with Irish biofuels would mean using 18% of the tilled land of Ireland for energy crops¹. Therefore it is highly improbable that 10% substitution (the government's target for 2020) can be achieved with Irish feedstock and crops alone. If cost efficiency is the goal then it is certainly a good choice to leave the fuel suppliers some flexibility and to let the market decide.

However, there may also be advantages to keeping our indigenous biofuels options open for the future. The signs are there that the next generation of biofuels, so-called "second generation biofuels", will be much more energy-efficient and cheap to produce than the current crop. In encouraging the development of these technologies, we may create an industry in Ireland for the future with employment and revenue benefits, particularly in rural areas. If this is to be achieved, the biofuels obligation

1

<http://www.dcmnr.gov.ie/Press+Releases/Dempsey+Announces+New+Biofuel+Obligation+to+Reduce+Harmful+CO2+Emissions.htm>

scheme should not eliminate the possibility for funding for Irish-produced biofuels, particularly those using advanced technology.

The subsidies needed to make Irish biofuels competitive are high, and the cost per tonne of CO₂ emissions abated will be very high (using excise duty relief between €200-€1000 per tCO₂ abated²) even for the transport sector. However, the advantages to financially supporting biofuels production in Ireland are more than the CO₂ emissions savings alone. They are likely to include improving the security of energy supply, supporting the development of a new industry, and encouraging rural development in Ireland. The benefits of fiscal support measures to a nascent biofuels industry should be assessed and compared with other measures likely to achieve similar goals. If the result is positive for biofuels, then Comhar SDC supports the continuation of financial supports for Irish biofuels in parallel with the obligation scheme.

The future looks promising for second generation biofuels and we may decide that we need to pay higher costs now in supporting advanced biofuels to gain savings later on. If the support for 2nd generation biofuels is considered to be outside the scope of the BOS, then an overall biofuels strategy should propose measures to ensure that Ireland is actively involved in the production of advanced biofuels in the future.

Climate change policy

It is important that fuel importers be incentivised to blend biofuels with higher greenhouse gas emissions savings. To this end we propose that the target be set in greenhouse gas emissions savings terms, i.e. that greenhouse gas emissions from transport fuels are reduced by 4% through the substitution of biofuels (estimated using the template provided by the EU Commission for the purpose of estimating greenhouse gas emissions savings associated with biofuels). In this manner the amount of greenhouse gas emissions saved through the use of biofuels will be clear, which is likely to be the ultimate goal of such a scheme. Of course the volume of biofuels used to do so should be reported for the purpose of records. If this system is not favoured over a volumetric biofuels substitution, then transport fuel suppliers should be awarded certificates in proportion to the amount of greenhouse gas emissions saved through the use of biofuels. A potential system could be the following:

- 35% savings = 1 certificate
- 50% savings = 1.5 certificates
- 75% savings = 2 certificates

Such a system would also incentivise the introduction to market of 2nd generation biofuels, which will have higher greenhouse gas emissions savings.

Summary Recommendations

In summary, Comhar SDC recommends the following with regard to the proposed BOS:

- An Impact Assessment for the scheme is needed. This is necessary to identify the impact of the scheme on:

² Lisa Ryan, Frank Convery, Susana Ferreira (2006) "Stimulating the use of biofuels in the European Union: Implications for climate change policy", Energy Policy 34, pp. 3184-3194.

- Environmental impact – estimated CO₂ emissions savings?
 - Employment / Rural development;
 - Agricultural practices;
 - Production of other crops;
 - Macroeconomic impacts.
- The purpose of the BOS should be made clear. It appears from the consultation paper that the priority is to increase the share of renewable energy in transport. This does should not be a goal in itself, rather it should be more strategic, such as to reduce greenhouse gas (GHG) emissions from transport, increase rural development, or to increase the security of Irish energy supply. Depending on the chosen goal, the scheme should be designed accordingly.
 - The target metric should be changed from volume to energy equivalent substitution or GHG emissions saved, depending on the priority of the scheme. A volume target may not mean anything in terms of how much energy is replaced or GHG emissions are saved. The EU biofuels Directive targets are given in energy equivalence terms so if different metrics are used in Ireland then it may be difficult to reconcile the amount of biofuels used with our EU commitments.
 - The benefits and costs of this measure should be estimated at different levels of biofuels penetration on the Irish market in order to properly evaluate the merits of the scheme.
 - If a volume-based scheme is used, then increased credits or certificates should be awarded to suppliers of biofuels with higher greenhouse gas emissions savings. In addition there should be incentives to supply advanced or 2nd generation indigenously-produced fuels , however more work is needed to establish the details of such a scheme.

Responses to Key Consultation Questions

1. At what level should the Obligation be set?

A full cost benefit assessment as part of an impact assessment of the scheme should be performed to assess the advantages or not of such a measure.

If it is decided that the benefits outweigh the costs then the scheme should be designed to encourage environmentally effective and cost efficient biofuels in the long and short term. The targets should therefore be formulated to achieve these goals. We should follow the European Parliament's lead and replace the biofuels substitution target with one that sets as its goal a reduction of greenhouse gas emissions from transport through biofuels. The main thing is to ensure that we reward environmental performance rather than an arbitrary volumetric quantity of biofuels with no idea of the actual impact on greenhouse gas emissions.

2. Is the definition of an Obligated Party correct?

Comhar SDC does not have a position on this question.

3. Should there be a De Minimis level?

There is unlikely to be such a case in Ireland since there are few transport fuel suppliers. However, Comhar SDC does not have a position on this question.

4. Should multi annual banking of certificates be allowed?

In general it is a good idea to allow banking to increase flexibility for suppliers and to reduce volatility in the market, which could result in sudden price rises. The situation should be monitored very carefully in order to assess the risk of hoarding of certificates and dumping.

5. Incentivisation for Second Generation Biofuels and Biogas?

Comhar SDC feels strongly that incentives for high performing biofuels should be included in the Obligation Scheme. A proposal for the award of certificates is suggested above. In addition, fiscal supports may be justified to support advanced biofuels produced in Ireland in the long term so that a future for an Irish biofuels industry is encouraged. Again, a cost benefit assessment of such a measure would need to be carried out.

6. The Levy System.

Comhar SDC agrees that there should be a penalty system for non-compliance with the Obligation. The amount of the penalty should be at least in excess of the increased cost of biofuels compared with conventional transport fuels.

References

SEI (2008) *Renewable Energy in Ireland, 2008 Report – Focus on Wind Energy and Biofuels*. Energy Policy Statistical Support Unit, Cork, Ireland.

DCENR (2006) “Dempsey Announces Results of Biofuel Excise Relief Scheme”, Dublin, 23rd November 2006. Available at <http://www.dcenr.gov.ie/Press+Releases/Dempsey+Announces+Results+of+Biofuel+Excise+Relief+Scheme.htm>

Further information available from:

Lisa Ryan,
Comhar SDC,
17 St. Andrew St.,
Dublin 2.
(01) 888 3917
Email: lisa.ryan@environ.ie
www.comharsdc.ie