

Response of the Low Carbon Vehicle Partnership to the RTFO Consultation

This paper presents the draft response of LowCVP to the RTFO Consultation and is for discussion and agreement at the meeting

Introduction

This response to the UK Department for Transport's Renewable Transport Fuels Obligation (RTFO) Consultation has been prepared by the Low Carbon Vehicle Partnership (LowCVP).

LowCVP is an action and advisory group whose members work to accelerate a sustainable shift to low carbon vehicles and fuels in the UK and thereby stimulate opportunities for UK businesses. The Partnership is a multi-stakeholder forum with approaching 250 members including many leading vehicle manufacturers and fuel suppliers, major fleet operators, environmental and consumer groups, academics and representatives of government departments.

LowCVP has undertaken a considerable programme of cutting-edge work in the area of biofuels including activities to:

- Identify environmental impacts of biofuels production & UK capacity to supply biofuels from indigenous sources
- Achieve consensus amongst most leading research groups on WTW GHG calculation boundaries and methods demonstrated through detailed examination of the wheat to ethanol process
- Develop systems for quantifying and reporting on the GHG savings from supplied fuels and demonstrate they are practical
- Define voluntary standards for environmental assurance of biofuels and demonstrate they are practical
- Examine the feasibility and manage the development of practical systems for carbon certification and sustainability (C&S) assurance within the Renewable Transport Fuels Obligation (RTFO).

Overview

Most LowCVP members support the introduction of the RTFO which they believe provides a challenging but appropriate mechanism to reduce the carbon intensity of transport fuels. There are a range of views on the optimum design for the RTFO amongst LowCVP members. This response therefore focuses upon Part 2 of the consultation that addresses the nature and levels of future RTFO targets.

Amongst LowCVP members there is widespread support for the introduction of minimum carbon and sustainability standards - but considerable debate over the timing of introduction. Most industry members believe that following the RTFO launch in April 2008 a period of stable operation is needed before further changes are introduced, whilst NGOs, some other organisations and a small number of companies request the immediate introduction of mandatory minimum standards. Others members, including some from industry, fall between these extremes and propose minimum standards be introduced at the earliest practicable opportunity. LowCVP members would like Government, as soon as possible, to specify the timetable for their introduction. In bringing forward possible developments to the RTFO following this consultation the DfT should be mindful to balance the need for further improvements to the RTFO to deliver greater environmental benefits against the benefits of establishing a stable regulatory framework in which business can operate.

1. Most LowCVP members support the introduction of minimum sustainability standards – and most industry members wish to see these established in conjunction with an EU-wide policy (*Consultation questions 14, 20*)

Increased demand for biofuels has stimulated considerable concern surrounding the effects of additional pressure on land availability leading to competition between food and fuel, reduced carbon stocks, biodiversity losses through direct and indirect deforestation and pressure on smallholder communities in the South. LowCVP members recognise these risks and the need to manage adverse effects. The introduction of minimum sustainability standards and removal of incentives for “unsustainable” feedstock is broadly supported. Members’ preference is for EU-wide agreement and action on this issue (with NGOs demanding UK leadership to pioneer the use of minimum standards and exclude unsustainable feedstock in the absence of robust EU-measures).

There is a strong consensus that the UK should use its leadership in the implementation of a practical biofuels C&S reporting framework to engage with both the major biofuel users and suppliers both within and outside the EU to develop minimum sustainability standards which, when implemented, will create the desired market demand for sustainable feedstock. WTO rules present a possible barrier to progress depending on how standards are framed– but to date, Government has not engaged with WTO members on this issue – an essential precursor to progress. Whilst it will be challenging to develop international consensus on standards for sustainable biofuels, the Government should make more efforts in this area. A good starting point would be to seek to obtain international acceptance on a WTW calculation method for GHG-saving. This would assist with the development of incentives for biofuels with lower carbon intensity (including the impact of direct land-use change).

Moves by the EU to develop mandatory standards are seen by most members as helpful – although there are concerns regarding specific proposals. The Government is encouraged to ensure the EU develops practical, technology neutral proposals building upon the UK reporting requirements.

LowCVP members recognise the proposed C&S reporting does not manage indirect land-use changes or concerns regarding competition between crops for energy, food and other applications. UK Government is therefore urged to initiate research internationally in partnership with those countries in the areas of key concern (e.g. Brazil, Indonesia, Malaysia) to understand these complex relationships. Specifically, the FCO and DFID working with DEFRA, DfT and DTI should assist these countries to identify and develop monitoring and management practices to avoid the adverse effects of indirect land use changes. Key to this will be developing effective mechanisms to encourage biofuel production on idle (degraded) land and supporting effective governance and management of areas of high conservation value. The Taskforce comprising the UK, South Africa, Mozambique and Brazil provides a good initiative through which this can be taken forward.

2. LowCVP supports the transition to a carbon-based technology neutral obligation (*Consultation questions 13, 15,19,21,22,24*)

Stakeholders support development of the RTFO to a scheme that rewards fuels on the basis of carbon intensity (although views differ on the timing and need for policies to ease the transition for established biofuel suppliers). An incentive based upon carbon intensity should provide an efficient market based mechanism to facilitate the delivery of increased GHG savings at lower costs. It may also stimulate the development and implementation of “advanced” biofuels and research and development of low carbon agricultural practices and conversion technologies. It will reward co-firing with renewable feedstock, including by-products, to achieve lower biofuel carbon intensity.

A system that rewards biofuels on the basis of their carbon intensity (calculated on a WTW basis including direct land-use change) is preferred. This would involve issuing Renewable Transport Fuel Certificates on the basis of the measured carbon intensity – possibly compared to an agreed target level. For example; if the target in a given year was a 50% GHG saving (compared to fossil fuel) a litre of fuel with a 50% saving would receive 1 certificate and that with a 75% saving could receive, say 1.5 certificates.

The extent to which rewarding fuels with a lower carbon intensity provides an adequate incentive for ‘advanced’ technologies is uncertain. ‘Advanced’ processes can deliver significant GHG savings and other benefits compared to some first-generation biofuels, but are broadly comparable in carbon intensity to Brazilian sugar-cane ethanol. If cultivated in a sustainable manner these fuels should not, and under WTO rules, cannot be discriminated against simply because they are defined as a first-generation product. Additional specific measures for research and development are also necessary for the UK to take advantage of the potential for ‘advanced’ processes and feedstocks that may provide future hydrogen feedstock.

LowCVP members believe the long-term policy framework should be technology neutral based upon the environmental performance of the fuel and not based on a feedstock type or conversion process. Most LowCVP members do not support the long-term use of subsidies for fuels or technologies against specific policy objectives, in this case the delivery of carbon savings, but do recognise the need for specific measures and support to facilitate market introduction. Without specific incentives it

is highly unlikely any alternative low carbon fuel will be able to overcome the significant barriers to market development needed to displace petroleum based fuels. Alternative support to address specific obstacles such as high capital cost plant, for example, should be made available – such as through Enhanced Capital Allowances. The Alternative Fuels Framework also provides an effective mechanism to support the introduction of alternative fuels in a transparent and manner – but which has been used to a limited extent to date.

Whilst LowCVP members do support a transition to certificates based upon the carbon intensity of biofuels, most members believe this should not destabilise the present supply industry and or significantly hinder further investment by creating unnecessary uncertainty. Some members of the biofuels industry support a 'Grandfathering Scheme' to provide market stability with guaranteed support for a finite period for existing plant or those under construction.

An alternative approach involves a graduated move towards a carbon based obligation. This would provide time for industry to adapt through appropriate investments and the carbon calculation methodology to be tested¹ while providing the clear indication and timeframe for the policy development. The approach would involve moving progressively over a number of years from 100% of certificates being issued on the basis of volume to one where 100% of certificates would be issued on the basis of carbon intensity. This avoids sudden market disruption through introducing a carbon based system in a single year.

In moving to a carbon-based system considering must be given to ensure consistency with the proposed revisions to the Fuel Quality Directive (FQD) (98/70/EC). Current proposals not yet adopted include mandatory monitoring of lifecycle GHG emissions from 2009 with year on year reductions introduced from 2011.

3. Many LowCVP members support the development of an increased market for high blend biofuels (*Consultation question 25*)

Many LowCVP stakeholders support the development of an increased market for high blend biofuels², in appropriately designed or adapted vehicles, in addition to their use in low blends for all vehicles. Whilst all stakeholders anticipate the RTFO will be an effective mechanism to stimulate supply of biofuels for road transport, most believe that the current implementation of the RTFO is unlikely to provide a stimulus to develop the market for high blend biofuels that offer the potential to deliver further reductions in GHG emissions. This is because:

- The target level has been set at the level of the current Fuel Quality Directive and European Fuels Standards (5%) - obligations can be met largely through supply of low blends.
- At current duty rates low blends are more attractive economically than high blends. In addition, the Treasury has indicated it intends, over time, to increase

¹ Some LowCVP members suggest a 3-year reporting process is necessary before moving to carbon based targets

² Major oil companies remain concerned about the value and cost of such an approach

the buy-out price and reduce the duty differential for biofuels, further reducing the stimulus for high blends.

Many LowCVP members believe an increase in RTFO targets beyond the level of the current fuel quality standard for low blends; and the buy-out price - to encourage fuel suppliers to invest in refuelling infrastructure for high blends – is desirable. Some members also support mechanisms outside the RTFO to stimulating high blends.³ For example; fiscal incentives through duty differentials could be linked to the achieved level of GHG savings.

All LowCVP members recognise that vehicles operating on high blends represent just one element of a much wider portfolio of technology solutions aimed at reducing CO2 from road transport. Robust carbon and sustainability assurance is a key element of this market going forward along with specific measures and support to facilitate market introduction for low carbon fuels and vehicles going forward. Within the passenger car or commercial sector of the market, depot-based fleets and those operating in a limited area are seen as the key early adopters, initially avoiding the need for extensive refuelling infrastructure.

Opportunities also exist for use of high blend biofuels for heavy goods vehicles (HGVs) in the commercial sector – where improvements in efficiency maybe harder to achieve. Current Fuel Quality Standards and vehicle manufacturer warranties limit the biofuel component within the fuel to 5% in the case of FAME biodiesel. However a number of heavy duty vehicle manufacturers have provided warranties for high level blends up to B100.

HGVs such as trucks and buses are often depot based or travel on restricted routes whereas light duty commercial vehicles tend to operate in specific localities. About 440,000 goods vehicles over 3.5 tonnes and 100,000 buses represent less than 2% of the vehicle population yet produce approximately 24% of the CO2 from road transport. Infrastructure development could be focused within these sectors of the transport market. The use of high blends in these sectors could make significant contributions to GHG reductions e.g. the use of B30 within the existing HGV and LDV fleet offers potential GHG-savings of up to 1.5 million tonnes⁴, greater than the 1 million tonnes currently forecast for delivery within the RTFO.

In order to achieve these savings an appropriate, long-term fiscal framework would be needed that ensured a small cost saving for operators of commercial vehicles. In order to provide support for the use of high blends some members of the LowCVP recommend that:

- The current fiscal incentive (20ppl) should be restructured to apply to the fuel, rather than to the blend components to allow all fuels to compete on an equal basis.

³ Such as continued support to address infrastructure costs and further fiscal incentives for vehicles able to operate on these fuels.

⁴ Assuming a GHG saving of 40% and no significant land use change. Figures based on DfT Statistics (2003) refer to total Carbon eq emissions from total road transport sector: 32.5 million tonnes. Passenger cars account for 19.8 million tonnes, HGVs incl buses 8.2 million tonnes, LDVs 4.4 million and other 0.1mt.

- The Alternative Fuel Framework should be used to develop the most appropriate fiscal incentives.

Fuel quality standards are key to the high and low blend market. Out of specification fuel risks disruption for consumers and therefore most LowCVP members agree that RTFO certificates should be linked to fuels that meet quality standards. Support for the high blend market must therefore recognise and balance the potential benefits, costs and risks.

Development of a market for any vehicles operating with high blends is only supported so long as the fuels are sustainable, achieve good levels of GHG-savings and do not significantly worsen air quality⁵. Members also only support the use of high blend fuels for appropriately adapted or warranted vehicles.

⁵ The use of high blend biodiesel in HGVs can lead to a considerable increase in NOx emissions, however the use of bio-ethanol in vehicles can offer improved emissions with respect to air quality compared to petrol.