UK Representation
to the EU Brussels

Social and Environment Section
Avenue d'Auderghem, 10
1040 Brussels

Tel: +32 (2) 287 8301
Fax: +32 (2) 287 8397
www.fco.gov.uk

Mr. Phillip Lowe
Director General
DG – Energy
European Commission
Brussels
B - 1049

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01 July 2011

Dear Mr. Lowe

UK report on biofuels pursuant to Article 4 of Directive 2003/30/EC

Please find enclosed the United Kingdom's report on support for biofuels during the calendar year 2010, as required by Article 4 of Directive 2003/30/EC on the promotion of the use of biofuels. The report will also be published shortly on the Department for Transport's website www.dft.gov.uk/topics/sustainable/biofuels/ . Electronic copies of this letter and report have been sent to the relevant officials in your services.

Yours sincerely,

Eirik Pitkethly
First Secretary, Environment

UK Report to the European Commission under Article 4 of the Biofuels Directive (2003/30/EC)

Promotion and Use of Biofuels in the United Kingdom during 2010: UK Report to European Commission under Article 4 of the Biofuels Directive (2003/30/EC)

Contents

Introduction

This report fulfils the UK's obligation to report to the European Commission by 1 July 2011 on the UK Government's support for biofuels during the calendar year 2010, as required by Article 4 of Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport.

The report covers:

- in section 1, the UK's targets for future biofuel sales and the measures the UK has taken during 2010 and subsequently to promote the use of biofuels to replace diesel or petrol for transport purposes;
- in section 2, the measures the UK has put in place to ensure that the environmental benefits of biofuels are fully realised;
- in section 3, the national resources allocated to the production of biomass for energy uses other than transport;
- in section 4, the total UK sales of road transport fuels, including biofuels, for the calendar year 2010.

Summary

During 2008 the UK Government introduced the Renewable Transport Fuel Obligation ('RTFO') to promote sustainable biofuels in the transport sector. In October 2007 the Renewable Transport Fuel Obligations Order (SI 2007/3072) ('the RTFO Order') was made, after it had been approved in draft by the UK Parliament.

Due to growing concerns about the sustainability of biofuels the previous Government commissioned Professor Ed Gallagher, the Chair of the Renewable Fuels Agency ('RFA'), to carry out a review of evidence concerning indirect impacts of biofuels. *The Gallagher Review of the Indirect Effects of Biofuels Production* was published in July 2008. The report recommended that due to the risk of unintended indirect effects, the UK Government should reduce the rate of increase of volume targets for the supply of biofuel. The Review is available at:
http://www.renewablefuelsagency.gov.uk/reportsandpublications/reviewoftheindirecteffectsofbiofuels

In response to the Gallagher Review, the UK Government consulted on proposals to slow down the rate of increase of the annual RTFO Obligation levels and this resulted in the Renewable Transport Fuel Obligations (Amendment) Order 2009 (SI 2009/843) ('the RTFO (Amendment) Order') in April 2009. The revised obligation levels are as follows: 3.25% by volume of total fuel supplied for 2009/2010, 3.5% for 2010/2011, 4% for 2011/2012, 4.5% for 2012/2013 and 5% for 2013/2014 onwards. The UK is expected to implement the transport elements of the Renewable Energy Directive (RED) in December 2011 with the draft legislation retaining these targets.

Fiscal incentives for biofuels were altered in 2010. Until 31 March 2010, biodiesel and bioethanol received the 20 pence per litre fuel duty incentive. After this date, the duty incentive was removed for biofuel from all feedstocks except used cooking oil (UCO) and biogas. The buy-out price was increased from 15 pence to 30 pence per litre of biofuel to provide additional incentive. In 2010 Biofuel sales were approximately 3.5% of UK road transport fuel at a level of around 1671 million litres for 2010.

Under the 2003 Biofuels Directive targets applied up to 2010. However in the longer term the EU Renewable Energy Directive contains a 10% renewable energy in transport target to be met by 2020. This target is primarily expected to be met through the use of biofuels.

SECTION 1: UK Measures to Promote Renewable Transport Fuels

i) The Renewable Transport Fuel Obligation

The RTFO Scheme

To support and promote the use of renewable transport fuels in the UK, the UK Government introduced the Renewable Transport Fuel Obligation (RFTO) in April 2008. This scheme was in effect throughout 2010. Under the RTFO all fossil fuel suppliers which supply in excess of 450,000 litres of fossil fuel per year must provide evidence that a certain percentage of their fuels for road transport in the UK comes from renewable resources. Fossil fuel suppliers can meet their obligation in a number of ways, either

- by supplying biofuels and claiming and redeeming certificates, or
- by redeeming certificates obtained from other biofuel suppliers, or
- by paying a buy-out price.

Each supplier of road transport fossil fuel has to produce certificates showing the supply of an amount of renewable fuel equal to the percentage specified. Percentages are expressed by reference to volume rather than energy content. RTFO certificates can be traded between suppliers.

The buy-out price has been set at a level designed to ensure that it will generally be more economic to supply biofuel, in order to maximise the uptake. For the first two years of the obligation the buy out price was 15 pence per litre. When the fuel duty incentive was removed in March 2010 the buy-out price was increased to 30 pence per litre, therefore ensuring that producing biofuel would, in normal circumstances, remain less expensive than buying-out the obligation. The scheme provides for the recycling of buy-out payments to biofuel suppliers who have redeemed or surrendered certificates.

The scheme specifies how certificates are applied for and issued. It also sets out the powers and duties of the Administrator, which was the Renewable Fuels Agency ('RFA') for the period covered by this report, and the civil penalties that it may impose following non-compliance with scheme requirements. The RFA also operated an internationally acclaimed carbon and sustainability reporting system.

RTFO obligation levels

The Gallagher review concluded that there was a risk that biofuel policies as they stood could lead to a net increase in GHG emissions caused by displacement of existing agricultural production. The previous Government accepted the main recommendations in the report and consequently consulted in autumn 2008 on a draft Renewable Transport Fuel Obligations (Amendment) Order to amend the RTFO Order, including slowing down the rate of increase of the obligation level. The consultation document was published on 15 October 2008 and is available at: (http://www.dft.gov.uk/consultations/closed/rftoorder/)

Following the consultation the Renewable Transport Fuel Obligations (Amendment) Order 2009 (SI 2009/843) ('the RTFO (Amendment) Order') was approved by Parliament and made in April 2009.

As a result of this amendment we expect a 5% volume (5.75% by energy) biofuel obligation will still be achieved but in 2013/14 rather than in 2010/2011.

Under the Renewable Energy Directive the UK is required to source 10% of our transport energy from renewable sources by 2020 (as part of a wider EU commitment to sourcing 15% of UK energy from renewable sources). Our analysis (as set out in the UK Renewable Energy Strategy, 2009) shows that this target will primarily be met through the use of biofuels, although other innovations are also expected to play a part. The transport elements of the Renewable Energy Directive are expected to be implemented in the UK in December 2011.

Cost Effectiveness

The intention of the policy is to reduce life-cycle carbon emissions from road transport. It is estimated that if 5% of road transport fuel were from renewable sources making 50% GHG savings then around 3.5 million tonnes of carbon dioxide (equivalent to 1.0 million tonnes of carbon) would be saved per annum. This assumes that there are no additional emissions due to indirect land use changes.

Analysis for the RTFO (Amendment) Order's Impact Assessment estimated that on this basis the RTFO would cost[1] around £114 per tonne of carbon dioxide saved (£409 per tonne of carbon), assuming average GHG savings of 50% are delivered[2]. Measures announced in other sectors tend to have a much lower cost, or in some cases a benefit, per tonne of carbon saved. However, over time the costs of saving carbon from biofuels may fall as production processes become more efficient, new technologies come on stream and the cost of displaced fossil fuel rises.

At 5% biofuel blends, due to the higher cost of biofuel and lower energy content compared to conventional fossil fuels, would be expected to add around 1.5% to driving costs by 2020.

The Explanatory Memorandum to the RTFO (Amendment) Order, which includes an impact assessment is available at:
(http://www.opsi.gov.uk/si/si2009/em/uksiem_20090843_en.pdf)

Work was commissioned in 2010 to provide and analysis of the potential options for cost-effective deployment of available sustainable bioenergy resources within the UK transport sector in order to meet the EU Climate Change and Renewable Energy goals for 2020 and 2050. A second study was undertaken to develop and assess options for the most cost-effective deployment of biofuel within the road transport

[1] Carbon cost-effectiveness estimates are presented as a net present value which nets out benefits (such as air quality and congestion impacts). Future costs and benefits have been discounted in line with Treasury Green Book Guidance.

[2] Reported carbon savings were 47% in the first year of the RTFO (2008/09) and 51% in the second (2009/10)

sector in order to meet the UK's 2020 Renewable Energy Directive target and Fuel Quality Directive target. The findings of this work are expected to be published in 2011.

ii) Other support mechanisms for biofuels

Fuel Duty Incentives

On 31 March 2010 the fuel duty incentive of 20 pence per litre for biofuels was removed. The duty incentive was retained for used cooking oil (UCO). Biogas also receives an incentive in the form of a duty differential equivalent to approx 41 pence per litre.

Government grant programmes

The UK Government in 2010, through the Alternative Fuels Infrastructure Grant Programme managed by Cenex, continued to provide grants toward the cost of installing alternative refuelling points including, for example, hydrogen, electric, natural gas and biogas stations. Although not exclusively aimed at biofuels, the grant programme attracted interest from a range of organisations considering the installation of biogas and hydrogen refuelling points. Since November 2009 the grant programme has assisted in funding of four biogas and two hydrogen refuelling stations. It has also supported the installation of over 70 electric vehicle charging points around the UK. More information is available at:
(http://www.cenex.co.uk/programmes/igp)

The scheme was initially granted State Aid clearance up to 2008 but following renewed State Aid clearance under a temporary framework to December 2010 the scheme was re-launched in July 2009. Applications for funding were considered up until 31 March 2010, and all projects funded under the programme completed within the 2010/11 Financial Year. A final report on the programme, including the projects supported and the impact that it has had on alternative fuel use for transport, is due to be published later in 2011.

iii) Support for other renewable fuels: bringing forward the hydrogen economy and electric vehicles

The energy used in ultra-low carbon vehicles has the potential to contribute to renewable energy targets if it is generated from renewable sources. This is true regardless of the energy carrier – examples can include electricity and hydrogen amongst others.

Most commentators agree that meeting the UK's longer-term climate goals will require the almost complete decarbonisation of road transport. To help achieve this aim, the Government has announced provision of over £400 million to support measures designed to promote the early uptake of a next-generation of ultra-low emission vehicle technologies. Electric, plug-in hybrid and hydrogen fuel cell electric

vehicles can all help to significantly reduce emissions from road transport, whilst allowing drivers to retain all the benefits associated with private car usage.

One of the principle barriers to mass commercialisation of ultra low carbon vehicles is that they are more expensive than their conventional counterparts. In July 2010 The Government announced plans for 'the Plug-in Car Grant', a consumer incentive to help make the total costs of ownership of a qualifying car more comparable with petrol or diesel equivalents. As manufacturers begin to make these cars in greater volume, the costs of production is expected to fall, decreasing the need for the grant. Both private consumers and businesses will be able to benefit from the Plug-In Car Grant when purchasing a qualifying ultra-low emission car and registering it in the UK. The grant came into effect in January 2011 and covers 25% of the total cost of the vehicle, up to a maximum of £5,000. The Government is adopting a 'technology neutral' approach to the problem of reducing emissions from transport. Cars with tailpipe emissions of 75g CO2/km or less, including electric, plug-in hybrid and hydrogen-fuelled cars are all potentially eligible for the subsidy.

The UK Government also offer matched funding support in setting up and developing infrastructure for plug-in vehicles in the 'Plugged in Places' scheme. Data from the Plugged in Places regions will feed into a strategy on a national recharging network, which the government is committed to delivering by June 2011. The government also provides funding to support the research, development and demonstration of key technologies for lower carbon vehicles, including improvements that can benefit traditional internal combustion engine vehicles.

The Government recognises that hydrogen fuel cell electric vehicles may also be part of the portfolio of solutions to decarbonise road transport, as indicated in the Automotive Council Technology Roadmap. Hydrogen fuel cell electric vehicles offer a range and refuelling time comparable to conventional combustion engine vehicles but with zero tailpipe emissions. However they still face challenges to reduce the cost of the fuel cell and produce sustainable and cheap sources of hydrogen.

iv) Sponsoring Research and Development

We are sponsoring biofuels research and development to help encourage the production of more sustainable biofuels.

Research Councils' Energy Programme Bioenergy sub-Group

A sub-Group of the Research Councils' Energy Programme Co-ordination Group has been formed to develop a strategy for and coordinate future bioenergy research. The Cross Council Bioenergy Strategic Coordination Group, led by the Biotechnology and Biological Sciences Research Council (BBSRC), includes representatives from five Research Councils and the Technology Strategy Board as well as a small number of external representatives from the research community. By providing coordination and focus for research efforts the Group will work to ensure that research into sustainable

bioenergy is able to make the maximum contribution to future economic growth whilst helping move the UK towards a low carbon future.

BBSRC Support for Research towards Second-Generation Biofuels.

Summary

Industrial Biotechnology including bioenergy is presented as a key priority for BBSRC in its current Strategic Plan (2010-2015) and Delivery Plan (2011-2015).

The annual spend in for BBSRC research relating to Second-Generation Biofuels was £10 million in 2009/10 and £12 million for 2010/12. This includes all post-first generation fuels (i.e. includes algal and bacterial sources for fuel, sometimes referred to as third or fourth generation). Studentships are excluded from this figure.

BBSRC provides support for this area via three funding streams: Responsive Mode; Managed Mode and Strategic Programme Grants awarded to a sub-set of the BBSRC Sponsored Institutes.

BBSRC Sustainable Bioenergy Centre (BSBEC)

Established in January 2009, this Centre, which represents a £24M investment, underpins development in the important and emerging bioenergy sector, delivering integrated activity across six research programmes that bring together a total of 12 universities and institutes with 14 industrial partners.

The Centre's focus is on optimising technologies and processes for the production of second-generation biofuels generated from: perennial biomass crops; barley straw; wheat straw and bacterial sources. Ensuring that bioenergy is economically, environmentally and socially sustainable is core to the Centre's programmes. Further information about BSBEC can be found here http://www.bsbec.bbsrc.ac.uk/index.html

Integrated Biorefining Research and Technology Club (IBTI Club)

A number of projects awarded by the IBTI club underpin research towards second-generation biofuels. Further details can be found here: http://www.bbsrc.ac.uk/business/collaborative-research/industry-clubs/ibti/ibti-index.aspx

Institute Strategic Programme Grants

Research towards second-generation biofuels forms the basis of Institute Strategic Programme grants at Rothamsted Research, The John Innes Centre and Institute of Biological, Environmental and Rural Sciences embedded within Aberystwyth University.

Other key Research Council projects include - "SUPERGEN bioenergy consortium" (£6.4M four year research project bringing together growers, biologists, agronomists,

economists, scientists and engineers to tackle the challenges associated with the further development of this renewable resource in a sustainable manner) and the "TSEC Biosys project" (which brings together natural and social scientists, engineers and economists from fifteen leading UK research organisations and from other organisations to focus on: the potential evolution of demand for bioenergy in the UK; analysis of bioenergy supply and demand dynamics and analysis of sustainability implications of bioenergy for transport as well as for heat and power generation;).

The Carbon Trust, a not-for-profit company with the mission to accelerate the move to a low carbon economy, has developed two bioenergy Research Accelerators. Supported by Government funding these intend to make investments of up to £10 million per 3-5 year project and are focused on specific challenges. The Algae Biofuel Challenge seeks to increase oil yield and reduce harvesting costs for algae farmed in mixed shallow salt/brackish water open ponds. The Pyrolysis Challenge investigates new ways of producing and upgrade pyrolysis oil to form low cost and low greenhouse gas emission transport fuel from wastes. Pyrolysis is the thermal decomposition of large molecules when heated in the absence of oxygen at temperatures over 500 °C.

In June 2010 the Department of Energy and Climate Change (DECC) and the Regional Development Agency for the North East of England, One North East, awarded INEOS Bio a £7.3m grant to support the construction of Europe's first advanced bioethanol-from-waste plant.

The 30 million litre commercial-scale bioethanol plant planned for the North East of England aims to convert biodegradable household and commercial waste to biofuel for road transport and renewable electricity and heat for homes and industry. An initial scoping phase of the project, including feasibility studies and front-end engineering design work was successfully completed in summer 2010. Construction of the plant has not yet commenced as the company are still in the process of securing the remainder of the funding required to finance the project.

Section 2: Ensuring the Environmental Benefits of Biofuels

Carbon and sustainability reporting

The RTFO is intended to help create the right market conditions for the best biofuels to flourish and will, where appropriate, encourage the development of more advanced biofuels in the future.

Following a public consultation in June 2007 the Government published its recommendation to the RFA on the details of carbon and sustainability reporting under the RTFO scheme. Biofuel suppliers are required to report certain carbon and sustainability data to the RTFO Administrator before certificates are issued for their biofuels. These reports cover matters such as the country of origin and the wider sustainability of the biofuels, and also the lifecycle carbon savings of the biofuels compared with the fossil fuels they replace.

Throughout 2010 the RFA published quarterly reports based on this data and including details on individual supplier performance, carbon intensity (GHG saving) and sustainability of biofuels used under the RTFO. This creates an incentive to source the best biofuels and encourages better performance.

Indicative targets for suppliers

The Government has set the following indicative targets for suppliers under the RTFO:

Annual target	**2008/09**	**2009/10**	**2010/11**
Percentage of feedstock meeting a qualifying environmental standard	30%	50%	80%
Annual average greenhouse gas saving of biofuel supplied	40%	45%	50%
Data reporting on sustainability characteristics	50%	70%	90%

At present, the RTFO obligation period runs from April to April. Published performance data for the first nine months of the obligation period 2010/11 indicates the following:

- 49% of biofuels are estimated to have met an environmental standard, compared to the 80% target.
- Greenhouse gas savings of 55% were achieved against the 50% target. This figure excludes the emissions from indirect land-use changes considered in the 'Gallagher Review';
- 82% of the data captured from suppliers provided information on sustainability characteristics, compared to the 90% target. The data reporting target of renewable fuel characteristics refers to the amount of data provided by transport fuel suppliers in relation to sustainability components such as the type of feedstock, feedstock country of origin, sustainability standard, and land use information.
- The implementation of the Renewable Energy Directive will bring mandatory sustainability criteria for biofuels in the UK. Suppliers will need to demonstrate

that their fuels meet these criteria in order for them to count against the total volume of renewable fuel they are obliged to supply. The criteria include a requirement for suppliers to show that their biofuels deliver greenhouse gas reductions of 35% against the equivalent fossil fuel, rising to 50% in 2017 and to 60%, for biofuels from new plants, in 2018. In addition, the cultivation of biofuel feedstocks should not cause loss of carbon stocks or biodiversity.

Climate Change Act 2008

The Climate Change Act 2008 contains a duty for the Administrator of the RTFO to "promote the supply of renewable fuel whose production, supply or use causes or contributes to the reduction of carbon emissions and contributes to sustainable development or the protection or enhancement of the environment generally". This came into force in January 2009 and recognises that the RTFO Administrator has a role in encouraging transport fuel suppliers to supply "good" biofuels.

Wider effects of biofuel production

The UK Government has been taking forward further research into accounting for and reducing the indirect effects of biofuels as part of its aforementioned research and development strategy. It is hoped that this work will help inform the European Commission's report into indirect land use change and any future methodology to account for these effects.

The RFA also published an annual report each January on the impacts of the RTFO. The report for the 2009/10 reporting year was published in January 2011 and is available online at:
(www.renewablefuelsagency.gov.uk/yeartwo).

SECTION 3: Biomass for uses other than transport

2010 saw the continuation of several schemes promoting biomass for uses other than transport.

Renewables Obligation

The Renewables Obligation (RO) is currently the UK Government's main mechanism for supporting renewable electricity generation. Since its introduction in 2002, it has succeeded in supporting the deployment of increasing amounts of renewable generation from 3.1GW in 2002 to 8GW in 2009.

The Renewables Obligation (Amendment) Order 2011 which came into effect on 1 April 2011 introduced mandatory sustainability criteria for all generators using bioliquids, in line with the requirements of the Renewable Energy Directive and introduced mandatory reporting against sustainability criteria for biomass generators over 50kw.

In 2010, following public consultation, the Government confirmed support for dedicated biomass, anaerobic digestion, energy from waste and advanced conversion technologies would be grandfathered (i.e. once accredited a generator receives a set level of support over its period of eligibility for the RO)

In 2010 we extended the RO from its current end date of 2027 to 2037 and limited the length of support a generator receives to 20 years.

Technology banding was introduced to the RO on 1 April 2009. This provided different levels of support to different technologies, depending on their costs and potential for large scale deployment. The Department of Energy and Climate Change (DECC) are currently undertaking a scheduled review of banding levels for all renewable technologies. Any Changes to support levels will come into effect from 1 April 2013 (1 April 2014 for offshore wind).

The Renewable Heat Incentive (RHI) is the Government's incentive mechanism for renewable heat generation. It will launch later this year for installations in the non-domestic sector and biomass, biogas (upto 200 kWth) and biomethane injection will be eligible technologies for this long-term tariff. For the domestic sector, in 2011, the Renewable Heat Premium Payment scheme will contribute to the upfront cost of domestic renewable heat installations and biomass will be an eligible technology for this one-off payment. From 2012, domestic installations, including biomass, will move onto the same long-term tariff support offered to the non-domestic sector in 2011. Bioliquids will be considered for support in the RHI from 2012.

The Government invested around £14 million between in 2008/09 in capital grants and R&D for emerging renewable and low carbon technologies including biomass. We continue to see an expansion of our renewable generation capacity.

In May 2007 the UK published its Biomass Strategy (http://www.defra.gov.uk/Environment/climatechange/uk/energy/renewablefuel/pdf/ukbiomassstrategy-0507.pdf). Key actions taken in England as a result of commitments

within the UK Biomass Strategy and the Government's earlier Response to the Biomass Task Force Report include:

- expanding the use of biomass on the Government Estate;
- developing the Biomass Energy Centre to provide expert information and best practice advice (www.biomassenergycentre.org.uk/);
- supporting energy crops under the Rural Development Programme for England;
- supporting the development of biomass supply chains through the Bio-energy Capital Grants Scheme and the Bio-energy Infrastructure Scheme;
- a review of the Government's approach to anaerobic digestion within England; and
- the publication of the Woodfuel Strategy for England (2007) (http://www.forestry.gov.uk/england-woodfuel).

More specifically:

The Energy Crops Scheme, is delivered by Natural England as part of the Rural Development Programme for England, supports the establishment of perennial energy crops for heat, electricity or combined heat and power (CHP) use within a specified area. It is planned to run until 2013. Under the scheme growers can claim 50% of the establishment costs for miscanthus (a woody grass) or Short Rotation Coppice (SRC) from a variety of trees (most commonly willow). Further information is available on the Natural England website at (http://www.naturalengland.org.uk/planning/grants-funding/energy-crops/default.htm)

In 2006, Defra funded a third round of the **Bio-energy Capital Grants Scheme** as part of a five-year capital grant scheme to support biomass heat installations - biomass-fuelled heat and combined heat and power projects, including anaerobic digestion in the industrial, commercial and community sectors in England only. Further Rounds followed and round 6 closed in March 2010. The new UK Coalition Government ministers in May 2010 agreed that there would be no further funding for the scheme, which has therefore closed. Biomass heat projects will in future be supported under the Renewable Heat Incentive

The Bio-energy Infrastructure Scheme (BEIS) provided grants to help the development of the supply chain required to harvest, process, store and supply biomass to heat, combined heat and power, and electricity end-users, with schemes restricted to projects based in England and open to businesses, local authorities and charities. Round 1 of BEIS launched in 2004, Round 2 in 2008 and Round 3 in 2009, with Round 3 closing in February 2010. The scheme is now closed.

In 2010 DECC, in association with industry, academia and other stakeholders, continued to provided R&D support in this area through the Technology Programme - including support work on next generation biofuels (such as ligno-cellulosic or 'woody' ethanol fuels) and biorefineries.

DECC is now in the process of deciding how to allocate the circa £200m innovation funding which it received in the Spending Review settlement. The Department is

working with members of the Low Carbon Innovation Group (BIS, Carbon Trust, the Technology Strategy Board, Energy Technologies Institute, and the Research Councils) and other relevant partners to consider the appropriate balance of funding priorities across different technology families. The potential for supporting innovation in bio energy technologies is being considered as part of this process.

SECTION 4: UK Production, Sales and Availability

Total sales of biofuels in the UK from January 15 2010 to January 14 2011* were 1,671 million litres, 62% of which was biodiesel. Total road fuel sales over the same period were approximately 48,282 million litres†. Biofuels made up 3.47% of total road transport fuel sales by volume (approximately 2.89% by energy content – see table 2 below).This represents an increase of approximately 19% in total biofuel sales from the 2009 total of 1,361 million litres.

Table 1 – UK biofuel sales (million litres)

2010*

Quarter	Biodiesel	Bioethanol	Total Diesel Sales	Total Petrol Sales
January to April	295	170	6,203	4,927
April to July	273	154	6,495	5,143
July - October	288	162	6,997	5,427
October – January 2011	180	149	6,413	5,006
Annual total	1,036	635	26,108	20,503

Notes

** Because of the RTFO Administrator's reporting timetable and corresponding availability of data, the figures above relate to the period from 15 January 2010 to 14 January 2011 rather than the actual calendar year of 2010*

.† Fossil fuel volumes given are obligated volumes and may differ from HMRC totals. Totals may not sum due to rounding.

Further details on UK fuel sales are available at:
(http://www.uktradeinfo.com/index.cfm?task=bulloil)

Converting these biofuels sales figures into percentages gives the following results for the calendar year 2009 as a whole, as set out in table 2.

Table 2 - UK biofuels sales as a percentage of total fuel sales

	Total sales in 2010 *(million litres)*	As a percentage *by volume* of total fuel sales	As a percentage *by energy content* of total fuel sales **
Biodiesel	1,036	2.15%	2.08%
Bioethanol	635	1.32%	0.81%
Total biofuels	**1,671**	**3.47%**	**2.89%**

***assuming the following RED/FQD conversion factors:*
Bioethanol: 66% of petrol energy content by volume
Biodiesel 92% of diesel energy content by volume

Feedstocks for UK biofuel production include recycled cooking oils, agricultural by-products (for example, tallow), and mainstream agricultural crops (such as cereals and root crops for bioethanol and oilseed crops for biodiesel). Among the imports are biodiesel feedstocks (including tropical products such as palm oil) and manufactured bioethanol and biodiesel.

Most biofuels were sold in blends, the vast majority at or below the level of 7% by volume, which is in line with European road fuel standards EN590 and EN228.

UK Department for Transport 2010