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# Promotion and use of Biofuels in the United Kingdom During 2007

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

### **Introduction**

This report addresses the UK's obligation to report to the European Commission by 1 July 2008 on the effectiveness of the UK Government's support for biofuels during the calendar year 2007, 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 2007 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 2007.

### **Summary**

The UK Government is committed to the promotion of sustainable biofuels in the transport sector. During 2007 it put in place detailed legislation to meet this policy objective. In October 2007 the Renewable Transport Fuel Obligations Order (RTFO) (SI 2007/3072) was made, after it had been approved in draft by the UK Parliament. The order sets obligation levels for the proportion of biofuels in fossil fuel suppliers' total sales, of 2.5 per cent for 2008/09, 3.75 per cent for 2009/10 and 5 per cent in 2010/11. The order also set up the Renewable Fuels Agency (RFA) as the Administrator of the scheme.

Fiscal incentives for biofuels continued in 2007. Biodiesel and bioethanol received a 20 pence per litre fuel duty incentive which has stimulated a growing market in the UK. Biofuel sales were approximately 1 per cent overall at a level of around 500 million litres for 2007.

In 2007 the UK Government consulted on the requirements for carbon and sustainability reporting under the RTFO. This included a proposed carbon saving calculation methodology for different biofuel production chains. Following the consultation the Government issued a recommendation on carbon and sustainability reporting to the RFA. In January 2008 the RFA published their reporting requirements for suppliers of biofuel under the RTFO.

In February 2008 the UK Government asked Professor Gallagher, Chairman of the RFA to carry out a review of the emerging evidence on the indirect impacts of biofuel production. This review was published in July and confirmed that biofuels can play a role in tackling climate change and that there is a future for

a sustainable biofuels industry. However, it also concludes that there is a risk that the uncontrolled expansion and use of biofuels could lead to unsustainable changes in land use which might, in turn, actually increase greenhouse gas emissions. The UK Government now believes a more cautious approach to biofuel production than currently implied in the RTFO is necessary until the evidence is clearer about the wider environmental and social effects of biofuels. We therefore intend to consult in 2008 on a more cautious rate of increase in the UK's RTFO. We shall propose that the UK should reach a level of 5 per cent in 2013/14.

## **Section 1: UK Measures to Promote Renewable Transport Fuels**

### **i) The Renewable Transport Fuel Obligation**

In February 2007 the UK Government published a consultation document on the draft RTFO Order. It set out the proposed detailed design of the RTFO and sought views on a number of issues such as which suppliers would be affected, the thresholds at which suppliers become obligated and which fuels are included as eligible fuels to meet the obligation. The consultation document is available at: <http://www.dft.gov.uk/consultations/closed/rtforeporting/> and a summary of the responses at: <http://www.dft.gov.uk/pgr/roads/environment/rtfo/sumresponrtfo>.

The RTFO was implemented by Order SI 2007/3072. The obligation came into effect on 15 April 2008. The order sets the level of the obligation at 2.5 per cent of total fuel sales for 2008-09, rising to 3.75 per cent in 2009-10 and 5 per cent in 2010-11. The order defines the suppliers who are subject to the obligation. Primarily these are UK refiners and importers of fossil fuels. The order also lists those fuels which are eligible for Renewable Transport Fuel certificates - biodiesel, bioethanol and natural road fuel gas produced from biomass (commonly known as 'biogas').

The order provides that 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 buyout price.

The order sets out how certificates are to be applied for and how they are to be issued. It also sets out the powers and duties of the RFA as the Administrator of the scheme, and the civil penalties that may be imposed by the RFA for non-compliance with scheme requirements.

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. The UK Government recognises that the level of the obligation for 2010/11 (5 per cent by volume) falls below the 'reference value' (5.75 per cent by energy content) set out in the Directive. The UK's report to the Commission covering the year 2006 (published July 2007) explained the justification for the difference. (<http://www.dft.gov.uk/pgr/roads/environment/ukreptoecbiofuels2003301>).

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 will be 15 pence per litre, and it will then rise to 30 pence per litre, at the same time as the fuel duty incentive (see below) is phased out. The scheme provides for the recycling of buy-out payments to biofuel suppliers who have redeemed or surrendered certificates.

## **Cost Effectiveness**

The intention of the policy is to reduce carbon emissions from road transport. It is estimated that if 5% of road transport fuel were from renewable sources then 2.6 -3.0 million tonnes of carbon dioxide (equivalent to 0.7-0.8 million tonnes of carbon) would be saved per annum. This assumes that there are no additional emissions due to indirect land use changes.

The RTFO Order's Impact Assessment estimated that on this basis the RTFO would cost around £380 per tonne of carbon saved (£104 per tonne of carbon dioxide). Measures announced in other sectors tended 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 are likely to fall as production processes become more efficient and new technologies come on stream.

The Impact Assessment sets out the possible cost implications of the RTFO, in particular the expected higher costs of biofuels compared to the fossil fuels they replace. Costs were predicted for a wide range of possible future fuel costs, giving a range of possible discounted total fuel costs (in 2007 prices) from £2.4 bn to £6.6 bn.

Consumers will also have to pay for a fuel efficiency impact, as biofuels provide less energy than fossil fuels. At 5 per cent blends (the maximum permitted under current EU legislation), the impact would be about 0.5% for diesel and 1.5% for petrol. This equates to between £5 and £15 p.a. for the average motorist.

The Impact Assessment is available at ([http://www.opsi.gov.uk/si/si2007/em/uksiem\\_20073072\\_en.pdf](http://www.opsi.gov.uk/si/si2007/em/uksiem_20073072_en.pdf)) [external link].

## **ii) Other support mechanisms for biofuels**

### **Fuel Duty Incentives**

The existing 20 pence per litre fuel duty incentive for biofuels will cease in 2010. At the same time the RTFO buy out price will be raised to 30 pence per litre.

### **Government grant programmes**

During 2007 the UK Government, through the Refuelling Infrastructure Grant Programme managed by the Energy Saving Trust, continued to provide grants toward the cost of installing alternative refuelling points including, for example, for hydrogen, electric, bio-ethanol and natural gas or biogas stations. Although not exclusively aimed at biofuels, the grant programme has attracted interest from a range of organisations considering the installation of E85 bioethanol refuelling points. To date the grant programme has assisted in funding of 18 bioethanol (E85) refuelling stations and one E95 bioethanol

station. Further information on these stations can be found at:

<http://www.energysavingtrust.org.uk/fleet/Vehicles/Alternativefuels/Alternativefuelsrefuellingmap/>  
[external link].

## **Regional Selective Assistance (RSA) Grants**

As outlined in last year's report, RSA grants are one of the few methods of direct support for industry allowable under the EU's single market rules. During financial year 2006/07 the Scottish Executive and the Regional Development Agencies continued to offer support to a number of businesses in the sector. The Scottish Executive confirmed that it would provide a Â£9 million RSA grant towards the construction of a 500,000 tonne biodiesel plant at Grangemouth. A final decision on whether this project will go ahead has still to be made by the company concerned.

### **iii) Government Leading by Example**

The Government Car and Dispatch Agency has a small fleet of diesel vehicles. It uses a B5 biodiesel blend for these vehicles wherever practicable, and its total usage of B5 biodiesel increased from some 100,000 litres in 2006/7 to some 160,000 litres in 2007/8.

### **iv) Support for other renewable fuels: bringing forward the hydrogen economy**

Hydrogen stands alongside biofuels as the other major potential low-carbon transport fuel and could provide both ultra-low carbon and zero-pollution road transport.

The Government's response to the "UK Strategic Framework for Hydrogen Energy" was published in 2005 and included a funding package from the DTI of Â£15 million over four years for a UK-wide hydrogen and fuel cell demonstration programme. The first call of the Hydrogen, Fuel Cells and Carbon Abatement Technologies Demonstration Programme (HFCCAT) resulted in the allocation of a total of approximately Â£5 million to five projects. Three of these involve hydrogen, all of them in the transport sector. Two of them involve both fuel cell and internal combustion engine powered vehicles. These projects, which are now underway, will enable valuable operating experience to be gained, and problems requiring further research and development to be identified. An announcement regarding a second call is expected to be made in due course. HFCCAT is now part of the BERR/DEFRA Environmental Transformation Fund.

The Technology Strategy Board is supporting a project to develop a fleet of hydrogen-powered London taxis by 2012. Led by Intelligent Energy, and involving Lotus Engineering Ltd, LTI, and TRW Connekt, the project will use the arduous duty cycle of the London taxi to provide a platform for accelerated fuel cell vehicle lifecycle testing. This is one of 16 projects under the Low Carbon Vehicles Innovation Platform on which the Technology Strategy Board is investigating a total of Â£23 million.

## **v) Sponsoring Research and Development**

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. In addition the UK Government is providing Â£5 million to the Carbon Trust, as part of the Environmental Transformation Fund, for research projects on advanced biofuels. The Technology Strategy Board has announced a Â£10 million competition for collaborative research on low carbon energy technologies including transport biofuels.

The recently-formed Energy Technologies Institute (ETI) aims to accelerate the development, demonstration and eventual commercial deployment of a focused portfolio of energy technologies, which will increase energy efficiency, reduce greenhouse gas emissions and help achieve energy and climate change goals. Transport is among the focus areas of the ETI, which is considering options for launching a dedicated technology programme to develop sustainable transport fuels and transport management technologies.

The Biotechnology and Biological Sciences Research Council (BBSRC) launched an Initiative in Capacity-Building Awards in Bioenergy in 2007 with the aim of growing the UK capacity in bioenergy research. This followed on from BBSRC's Review of Bioenergy [http://www.bbsrc.ac.uk/organisation/policies/reviews/scientific\\_areas/0603\\_bioenergy.pdf](http://www.bbsrc.ac.uk/organisation/policies/reviews/scientific_areas/0603_bioenergy.pdf) [external link]. Applications (still under review) were invited for a Bioenergy Centre, to act as a focus for UK bioenergy activities, and Programme Grants, to address specific areas of research.

In addition to this, BBSRC is also participating in the ERA-Net Bioenergy call on short rotation coppice. The UK is involved in three of the applications. BBSRC currently funds research on willows for biomass, on *Miscanthus* and also research on biobutanol production from *Clostridium*.

## **Section 2: Ensuring the Environmental Benefits of Biofuels**

### **Carbon and sustainability reporting**

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. Certificates are issued for biofuels only if a carbon and sustainability report has been submitted to the RFA by the biofuel supplier. This means that from day one of the obligation there is a strong incentive for transport fuel suppliers to source sustainable 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. This will create a powerful incentive to source the best biofuels and we believe this is an important step towards mandatory sustainability standards.

The RFA will publish reports based on this data. It is considering the detailed format and frequency but is committed to presenting data on individual supplier performance on carbon intensity (GHG saving) and sustainability. It is expected that the RFA's reports will encourage better performance.

## Indicative targets for suppliers

Following the consultation on carbon and sustainability reporting requirements the Government revised the targets it had proposed for the level of performance in carbon and sustainability reporting that is expected from transport fuel suppliers. The Government has adjusted the originally proposed targets as follows:

Annual Target	2008/07	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 characteristic	50%	70%	90%

The Government has revised downwards the originally proposed GHG saving target for 2009/10 and 2010/11 to a level suggested as more realistic by the majority of stakeholders. The Government's aim has been that biofuels should, from April 2010, be rewarded on the basis of their carbon savings, provided this is compatible with EU and WTO requirements and subject to consultation on the detail of how this change might be delivered.

The originally proposed target for the percentage of biofuel feedstocks meeting a qualifying sustainability standard has been revised in two ways. Firstly, because of the lack of appropriate social standards across a wide range of feedstocks including wheat and rapeseed, the Government has changed the target so that it is expressed as the percentage of biofuel feedstocks meeting a qualifying environmental standard only (instead of both environmental and social). Secondly, the Government has set a new target for year one of the RTFO that at least 30% of biofuels should come from feedstocks grown to a qualifying environmental standard.

The Government has increased the data capture targets so that transport fuel suppliers should have the strongest incentives possible to gather information on the provenance of their biofuels. It is also likely that a mandatory EU-wide sustainability framework will be in place by 2011, which will require transport fuel suppliers to supply biofuel meeting mandatory standards.

The Government will keep these indicative targets under review in the future in the light of suppliers' performance in meeting them and other developments.

## UK Government's aims to reward biofuels according to their carbon savings and to introduce mandatory sustainability standards

The UK Government also announced on 21 June 2007 that it aimed to:

- reward biofuels under the RTFO in accordance with the carbon savings that they offer from April 2010, provided that this was compatible with World Trade Organisation rules and EU Technical Standards requirements, and was consistent with the policy framework being developed by the European Commission as part of the review of the Biofuels Directive, and subject to consultation on its environmental and economic impacts

- reward biofuels under the RTFO only if the feedstocks from which they are produced meet appropriate sustainability standards from April 2011, subject to the same provisos and consultation as above and subject to the development of such standards for the relevant feedstocks.

## **Climate Change Bill**

The Climate Change Bill which the Government introduced in Parliament in October 2007 contains a proposed new 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 would give the RFA a role in encouraging transport fuel suppliers to supply good biofuels.

## **Review into wider effects of biofuel production**

There have been increasing concerns expressed about the possible indirect effects of biofuels on food supplies and prices and on deforestation, and their overall impact on greenhouse gas emissions. On 21 February 2008 the UK Government announced a review, led by Professor Ed Gallagher of the Renewable Fuels Agency, of the emerging evidence on the indirect impacts of biofuel production. On July 7 the findings of this review were published and this is available at:

[http://www.dft.gov.uk/rfa/db/documents/Report\\_of\\_the\\_Gallagher\\_review.pdf](http://www.dft.gov.uk/rfa/db/documents/Report_of_the_Gallagher_review.pdf).

The review concluded that there is a future for a sustainable biofuels industry and rejects calls for a moratorium on biofuels because this would reduce the ability of the biofuels industry to invest in new technologies. However, it also concludes that there is a risk that the uncontrolled expansion and use of biofuels could lead to unsustainable changes in land use, such as the destruction of rainforest to make way for the production of crops. That might, in turn, increase greenhouse gas emissions, as well as contributing to higher food prices. The report also concludes that the introduction of biofuels should be slowed until policies are in place to direct biofuel production on to marginal or idle land and until these are demonstrated to be effective.

The report recommends that the rate of increase in the RTFO in the UK should be slowed to 0.5 % per annum, so that the RTFO reaches 5 % in 2013-14, rather than in 2010-11 as currently planned.

At the EU level, the report concludes that a mandatory 10 % renewable transport fuel target is not currently justified by the scientific evidence, but that a target of 10 % by 2020 could be possible if a number of important conditions are met. Those conditions include sufficient controls on land use change being enforced globally, as part of a new climate agreement, and new evidence providing further confidence that the target can be met sustainably.

The UK Government believes a more cautious approach to biofuel production is necessary until the evidence is clearer about the wider environmental and social effects of biofuels. We shall consult in 2008 on slowing down the rate of increase in the UK's RTFO, taking the level to 5 % by 2013-14.

## **Labelling scheme for biofuels**

The Government has asked the Low Carbon Vehicle Partnership (LowCVP) to explore the feasibility of a voluntary labelling scheme to allow responsible retailers to show that their biofuels are genuinely sustainable. Any scheme would need to be compatible with EU and WTO rules.

## **Independent review of the effects of the RTFO on industries using tallow as a feedstock**

During the passage of the draft RTFO order in the UK Parliament the Government gave a commitment to commission an independent review of the likely impacts of the RTFO on the other UK industries that use tallow as a feedstock. The purpose of the review was to consider the wider environmental impacts of supporting the use of tallow as a biodiesel feedstock. AEA Technology was commissioned to carry out the review and complete a report before the RTFO commenced on 15 April 2008. AEA's final report was published on 9 April and is available at:

<http://www.dft.gov.uk/pgr/roads/environment/rtfo/tallow/tallowfinalreport.pdf>.

The key findings of the report are:

- the UK Government should consider the effect of switching tallow to biofuel production, particularly on GHG emissions and if there is a negative impact this should not be supported. The indirect impacts should be considered:
- switching tallow to biodiesel will also have a net negative effect on employment, gross value added and the balance of trade:
- the oleochemicals industry in the UK is facing a number of problems, including increased competition from South East Asia, but biofuels are not solely to blame as they are part of a much bigger picture:
- demand for tallow for biodiesel could contribute to the problems, although there is little direct evidence that this is happening at present.

The Government will be discussing the report's findings with stakeholders and will consider them carefully in the context of current EU negotiations on future biofuel targets. The Government will also discuss with the Renewable Fuels Agency the review's recommendations for changes to the carbon saving assumptions for tallow, with the possible need for changes to the carbon and sustainability reporting mechanism in consequence. The report has also contributed to the evidence to the review of the indirect effects of biofuels led by the RFA.

## **EU biofuels targets**

In negotiations on the Fuel Quality Directive, the UK has argued that meeting the proposed greenhouse gas reduction target to 2020 would require the use of biofuels in very large quantities, much larger than the 10% target for renewable energy in transport proposed in the draft Renewable Energy Directive. The UK has continued to argue that greater consistency is needed between these two targets, and also that, so long as the greenhouse gas reduction target includes savings from biofuels, robust biofuel sustainability criteria need to be included in the Fuel Quality Directive as well as the Renewable Energy Directive. The

UK has participated fully in the special ad hoc group of the Committee of Permanent Representatives at the EU (Coreper) which has been drawing up core sustainability criteria.

Following the recommendations of the Gallagher review into the indirect effects of biofuels the UK Government will argue within the European Union that the proposed 10% renewable energy target for 2020 should be a conditional one, subject to a robust review mechanism and subject to the sustainability criteria for biofuels adequately addressing the indirect as well as the direct impacts of biofuel production. Policies to direct biofuel production on to marginal or idle land will need to be demonstrated to be effective and the detail of these control mechanisms will need to be agreed internationally.

## **Section3: Biomass for uses other than transport**

### **Renewables Obligation**

The Government's main mechanism for supporting generation of renewable electricity is the Renewables Obligation, which places an obligation on suppliers to source an annually increasing percentage of the electricity they supply from renewables (7.9% in 2007/08 rising to 15.4% in 2015/16).

Under the current regime the regulator (Ofgem) issues Renewable Obligation Certificates (ROCs) to generators for every 1 MWh of electricity generated from eligible renewable sources. Suppliers can meet their obligation by presenting the required number of ROCs, paying a buy-out price (£34.30/MWh in 2007/08) or through a combination of both.

Since its introduction in 2002 the RO has been successful in stimulating growth in renewable electricity generation - it has more than doubled since 2002 - and a project pipeline of more than 11GW is in place across the UK.

However, there are constraints on the availability and deployment of the cheaper forms of renewables. This means that to increase the amount of electricity generated from renewable sources a significant contribution will be needed from renewable sources that are currently more expensive, such as dedicated biomass generation and anaerobic digestion.

In order to meet this challenge the Government has proposed to 'band' the RO, that is to provide greater rewards to some technologies over others, from April 2009.

This will reduce the deadweight subsidy to established technologies (for example, landfill gas, co-firing of biomass with fossil fuel) and boost support to fringe technologies. This is expected to bring an increase of 40 per cent of renewable supply compared to keeping the existing support structure.

In 2006, the United Kingdom produced about 4.55 per cent of its electricity from renewable sources compared to 4.23 per cent in 2005. Biomass accounted for about 2.3% of all electricity generated in 2006. A detailed overview of the development of renewable technologies in the UK, including its impact on the environment may be found in the DTI's Digest of UK Energy Statistics (DUKES) at <http://www.berr.gov.uk/energy/statistics/publications/dukes/page39771.html> [external link].

Government is investing around Â£500 million between 2002 and 2008 in capital grants and R&D for emerging renewable and low carbon technologies such as offshore wind, biomass, solar, PV and wave and tidal. We are already seeing a dramatic expansion of our renewable generation capacity. For example the Government recently gave consent to the world's biggest biomass plant in Port Talbot and to one of the world's largest offshore wind project at the London Array. The Government also recently announced plans to potentially open our seas to up to 33 gigawatts of offshore wind energy,

In May 2007 the UK published its Biomass Strategy (<http://www.defra.gov.uk/Environment/climatechange/uk/energy/renewablefuel/pdf/ukbiomassstrategy-0507.pdf> [external link]). 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/](http://www.biomassenergycentre.org.uk/) [external link]);
- 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;
- publication of the Woodfuel Strategy for England (2007) (<http://www.forestry.gov.uk/england-woodfuel> [external link]).

More specifically:

- the Energy Crops Scheme, administered by Natural England, supports the establishment of perennial energy crops for heat, electricity or combined heat and power (CHP) use within a specified area. Under the scheme growers can claim 40% 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> [external link];
- the Bio-energy Capital Grants Scheme was launched in February 2002. Rounds 1 and 2 of the scheme were jointly-funded by BERR and the National Lottery's New Opportunities Fund and made available Â£66 million of funding UK-wide for the deployment of biomass-fuelled heat and electricity projects. The rounds were competitive and over-subscribed. Twenty-one bioenergy projects were offered grants under the scheme, which range from the installation of heat cluster technology, combined heat and power (CHP), to larger scale projects over 20MW deploying state-of-the-art thermal combustion and advanced conversion technology. Notable projects under the Scheme have included the construction of a 44MW, wood-fuelled power station at Lockerbie in Scotland, a 30MW SembCorp biomass power plant on Teesside, a 2.7 MW power / 10MW heat biomass CHP and pellet production project at Enniskillen, Northern Ireland and a 2.7MW plant at Eccleshall fuelled by short rotation coppice. Other supported power generation/CHIP projects are still developing.
- Round 3 of the scheme was funded by Defra to support the installation of biomass-fuelled heat and combined heat and power projects in the industrial, commercial and community sectors in England. Offers of around Â£8m of grant support have been accepted by 43 projects. Further rounds of the scheme will be run by Defra in the period 2008-2011;
- BERR, in association with industry, academia and other stakeholders, also provides 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;

- the Government has funded the Low Carbon Buildings Programme (phase one and two) which has, to-date, committed over £12 million of grant support to heat projects with just under £4 million for biomass heaters.

## **Section 4: UK Production, Sales and Availability**

Total sales of biofuels in the UK in 2007 were around 500 million litres, whilst total road fuel sales were approximately 49,522 million litres. As a percentage of total road transport fuel sales, biofuels made up some 1 per cent by volume (or some 0.85 per cent by energy content - see table 2 below). This represents an increase of approximately double the previous year's total sales which amounted to 264 million litres.

Biofuels sold in 2007 and the first few months of 2008 are set out in table 1 below:

### **Table 1 - UK biofuel sales**

<b>Month</b>	<b>Biodiesel (million litres)</b>	<b>Bioethanol (million litres)</b>	<b>Total diesel Sales â (million litre) *</b>	<b>Total Petrol Sales (million litres) *</b>
January 2007	21	9	1851	1989
February	25	14	2103	1973
March	25	9	1952	1823
April	31	17	2182	2115
May	28	10	2118	2035
June	30	13	2150	2049
July	30	12	2117	1982
August	31	15	2147	2058
September	31	10	2177	2037
October	31	17	2273	1997
November	30	13	2202	1977
December	32	15	2230	1985
Total for 2007	345	154	25502	24020
January 2008	29	13	1884	1917
February	32	19	2202	1920
March (p)	29	17	2163	1825
April (p)	31	14	2139	1962

## Notes

\*Total diesel and petrol sales figures include all biodiesel and bioethanol sales.

â Total diesel sales include all diesel sold for road transport, but do not include diesel sold for other purposes, such as for use in non-road mobile machinery or for domestic heating.

Totals may not sum due to rounding.

p Provisional amount

Further details on UK fuel sales are available at <http://www.uktradeinfo.com/index.cfm?task=bulloil> [external link].

Converting these biofuels sales figures into percentages gives the following results for the calendar year 2007 as a whole, as set out in table 2.

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

	<b>Total Sales in 2007 (million litres)</b>	<b>As a percentage by volume of Total Fuel Sales</b>	<b>As a percentage by energy content of Total Fuel Sales *</b>
Biodiesel	345	0.69%	0.63%
Bioethanol	154	0.31%	0.21%
Total Biofuels	499	1%	0.84%

\*assuming the following conversion factors:

Bioethanol 68 per cent of petrol energy content by volume

Biodiesel 92 per cent 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 5% by volume, which is in line with European road fuel standards EN590 and EN228.

## **US Subsidies**

The UK Government is aware of the impact of cheaper US biodiesel imports into the UK which have benefited from tax credits. However, this is an EU-wide issue requiring an EU-wide solution. The UK Government does not have the power unilaterally to impose restrictions on these imports. We have expressed our concerns on this issue to the European Commission at the highest level. UK Ministers wrote in 2007 to encourage the Commission to act quickly. The Government also supports the industry and the European Commission who have recently lobbied the US Congress to limit the tax credit provisions for biodiesel to the biodiesel produced and used in the US.

## **UK Department for Transport 2008**