

**EXPLANATORY MEMORANDUM TO
THE RENEWABLE TRANSPORT FUEL OBLIGATIONS ORDER 2007**

2007 No. 3072

1. This explanatory memorandum has been prepared by the Department for Transport and is laid before Parliament by Command of Her Majesty.

This memorandum contains information for the Joint Committee on Statutory Instruments.

2. **Description**

- 2.1 The Order imposes an obligation on fuel suppliers to ensure that, by 2010, renewable fuels make up 5% of their UK road fuel sales. They will need to report their road fuel volumes to an Administrator, the Office of the Renewable Fuels Agency, which is set up by the Order and which will issue tradeable certificates in return for the supply of renewable road fuel. The certificates can be used as evidence of meeting the obligation. If they have insufficient certificates, suppliers may fulfil the obligation by paying an amount calculated as set out in the Order. These payments go into a fund which is then distributed amongst suppliers, according to the number of certificates they redeem or surrender.

- 2.2 It is not expected that the Administrator will issue physical certificates; instead the Administrator will credit a fuel supplier's account to represent the issue of a certificate. The account holder will be able to view the status of applications for a certificate, and view the account and trade certificates, electronically through the Administrator's systems and present the account holder's account balance as evidence of meeting, in whole or in part, the renewable transport fuel obligation.

- 2.3 It is expected that the Administrator will have specially designed IT systems in place to handle the information processing required. However, should there be any delays to the establishment of the IT system, the Order includes provision for the Administrator to use other methods of information processing, account management and certificate issue as it deems appropriate.

3. **Matters of special interest to the Joint Committee on Statutory Instruments**

Cross referencing to the Hydrocarbon Oil Duties Act 1979

- 3.1 There are a number of cross references in the Order to the Hydrocarbon Oil Duties Act 1979. For example, the definitions of "relevant hydrocarbon oil" and various biofuels in article 3 cross refer to the meanings in that Act. And in article 5, whether a renewable transport fuel may count towards the discharge of the obligation depends partly on whether excise duty is chargeable under that Act.

- 3.2 This cross referencing approach has been adopted with the intention that, so far as possible, the Order should keep in step with the Act. If in the future there are any amendments to the relevant sections in that Act, it is intended that those amendments should feed through into this Order, by virtue of section 20(2) of the Interpretation Act 1978. So for example if the definition of "bioblend" were to be amended in that Act, it is intended that that amendment should also have effect for the purposes of this Order.

Revocation of RTF certificates

- 3.3 To avoid the purpose of the scheme being undermined, the Department considers it necessary to make some provision for the revocation of certificates in certain circumstances, for example where a certificate has been issued as a result of fraud or a material inaccuracy in the information provided to the Administrator. Therefore article 20 enables the Administrator to revoke a certificate held by an account holder. The enabling powers for this article are to be found in section 192(4)(c) of the Energy Act 2004 (power to make incidental and supplementary provision).
- 3.4 Article 20 also includes provision for the service of notices on the account holder and any transferee of certificates before the certificates are revoked, for the opportunity to make representations, and for the reconsideration of a revocation.

“Self-monitoring” aspect of annual report to Parliament

- 3.5 The Administrator’s annual report to Parliament must include details of the Administrator’s value for money and effectiveness, as set out in article 14(4)(d) to (g).
- 3.6 This provision has been included to reflect the recommendations in the Hampton Review “Reducing administrative burdens: effective inspection and enforcement” (March 2005), in particular recommendations 4 and 12, relating to regulators being obliged to assess their own effectiveness and being made more accountable for the way they work. As it proved necessary to provide for the establishment of a new Non-Departmental Public Body to act as Administrator (rather than being able to use an existing body to carry out this function), the Department considered it particularly important to reflect these recommendations in the Order.

4. Legislative Background

- 4.1 This is the first time that the powers in Chapter 5 of the Energy Act 2004 have been exercised.
- 4.2 The proposed Renewable Transport Fuel Obligation (RTFO) should deliver CO₂ savings of approximately 2.6 - 3.0 million tonnes per annum by 2010. Alongside duty incentives, it will be the main policy in the transport sector to reduce greenhouse gas emissions and to increase use of renewable fuels, helping to meet our international obligations under the Kyoto agreement and the EU Biofuels Directive.
- 4.3 During the passage of the Bill which became the Energy Act 2004, Lord Whitty, in the House of Lords on 20 April 2004, said that secondary legislation would address many particular details raised in debate, including how the obligation would work in practice, which companies would be obligated, what fuels would be considered, how the scheme would be administered and policed, how compliance would be demonstrated, what information would be required from companies, whether there would be buy-outs and trading, how the issue of forcing foreign companies to comply would be addressed, and how penalties would be calculated¹. These issues have been addressed in the Order, which sets out:
- The definition of obligated suppliers in article 4;
 - The fuels considered in articles 3 and 5;
 - How the scheme will be administered and policed in articles 6-15;
 - How compliance will be demonstrated in articles 16-20;
 - What information would be required from suppliers in articles 7, 8, 12 and 13;
 - Whether there would be buy-outs and trading in articles 21 and 18 respectively;
 - The calculation of civil penalties in article 23.

¹ Hansard 20 April 2004 Column 262 and 15 July 2004 Col 1403

The Administrator will have to make efforts to ensure that all suppliers (whether or not foreign) who are “obligated” as defined by the Order are identified as such and made aware of their obligation to register, provide information and meet their obligation.

4.4 Stephen Timms, at the time Minister for Energy, undertook, in the House of Commons on 13 July 2004, that there would be appropriate consultation before an Order was introduced and that the Order would consider the issue of the usage of fossil-fuel derived energy in the production of biofuels.² Stakeholders were involved in extensive discussions with Government as to the workings of the obligation for over two years, culminating in a formal consultation in Spring 07, which is referred to in paragraph 7.3 below. The usage of fossil-fuel derived energy in the production of biofuels is considered in:

- The attached Impact Assessment, where the benefits are calculated on the basis of “net” carbon savings rather than gross
- The reporting of carbon saving information, on which a public consultation is currently underway to determine the methodology and format of data reporting to the Administrator.

As currently set-out, the amount of fossil-fuel based energy used to produce biofuels is not material in the award of RTF certificates. The Government has announced its aim to include these impacts from 2010 onwards, subject to certain caveats.

5. Territorial Extent and Application

5.1 This instrument applies to all of the United Kingdom.

6. European Convention on Human Rights

The Parliamentary Under Secretary of State for Transport, Mr Jim Fitzpatrick MP, has made the following statement regarding Human Rights:

In my view the provisions of the Renewable Transport Fuel Obligations Order are compatible with the Convention rights.

7. Policy background

7.1 Policy Objectives

Road transport currently accounts for approximately 25% of UK greenhouse gas emissions, equivalent to 112.5 million tonnes of carbon dioxide in 2003. Renewable fuels currently account for 0.6% of road fuel sales in the UK, at about 260 million litres per annum.

The Government announced in November 2005 that it would introduce a Renewable Transport Fuel Obligation (RTFO) as a way of supporting the use of biofuels and other renewable fuels in the transport sector. It also announced that the level of the RTFO would reach 5% by 2010.

The Chancellor of the Exchequer confirmed in the 2006 Budget that the RTFO would start in April 2008, and that the levels of the Obligation in the years 2008/9 and 2009/10 would be 2.5% and 3.75% respectively.

² Hansard, 13 July 2004, Column 1337

The RTFO is intended to create a strong and stable market for biofuels in the UK. By the time the level of the RTFO reaches 5%, it will have created a demand for 2.5 billion litres of biofuel a year. This could save around 2.6 - 3.0 million tonnes of CO₂ emissions per year.

7.2 Alternative delivery options

The attached Impact Assessment describes a full analysis of the RTFO and three other options for achieving reductions in carbon emissions in the transport sector:

- Maintaining the duty incentive for renewable fuels, or
- Increasing the duty incentive, or
- A voluntary agreement amongst fuel suppliers.

These options were not adopted because they do not provide sufficient certainty of achieving the policy objective. The duty incentive does not give sufficient long-term certainty for potential investors in biofuel production and infrastructure and has not achieved the desired levels of biofuel sales since its introduction. A voluntary agreement has been deemed unachievable and unworkable by the UK fuel industry, because of the economic incentive to supply fossil fuels.

7.3 Consultation

Stakeholders from the oil industry, the renewable fuels industry, UK agriculture and environmental groups have been closely involved in the design of the RTFO over the last year.

A formal public consultation lasting twelve weeks took place between February and May, 2007. Detailed analysis of the responses is in the Government's response to the consultation, published on 18 July, 2007 and available in the Houses' Libraries and at <http://www.dft.gov.uk/consultations/closed/drafttrfo/rforesponsestoconsul>

The Government received 6,335 responses to the consultation. Of these, 6,270 were from members of the public, primarily asking that mandatory minimum standards for carbon saving and sustainability associated with biofuel be introduced in the RTFO from the outset.

Other issues raised by stakeholders included:

- Concerns about the impact of the RTFO on the environment, in that some biofuels may not save any or very much carbon, and may be produced in a way that creates more damage to the environment
- How obligated suppliers should be defined, as either the suppliers of fossil fuel at the duty point or the duty-payers on the fossil fuel
- The levels of the obligation and whether they were achievable
- Whether fuel should meet minimum quality standards to be eligible for certificates.

The balance of responses on the detailed issues of the RTFO reflected the discussions the Government had had with stakeholders in the two years prior to the consultation. The Government recognises that the arguments on the above issues are finely balanced and believes that the Order sets out the best way forward for introducing the obligation and delivering the desired reduction in carbon emissions.

The Government has already announced its aims to introduce a number of changes to the RTFO in the future, provided that certain conditions are met. These address the concerns raised regarding carbon savings and sustainable feedstock production.

The Government has also, as a result of the consultation, made changes to the Order to ease the burden on impacted suppliers by relaxing the timescales for correcting erroneous information and for appealing against decisions by the Administrator on civil penalties.

7.4 Guidance

The vast majority of impacted suppliers are already closely involved with the implementation of the RTFO. Many are involved in developing the carbon and sustainability reporting requirements, and all will have the opportunity to register with the Administrator and become accustomed to the reporting requirements and computer systems in advance of the RTFO scheme coming into operation in April 2008. The Administrator will be responsible for communicating the obligation to suppliers in the industry and for providing continuing guidance, on line and in person, for suppliers wishing to register or requiring assistance with the operation of the scheme.

8. Impact

8.1 An Impact Assessment is attached to this memorandum.

8.2 There is no specific impact on the public sector other than that fuel costs may increase.

9. Contact

Rupert Furness at the Department for Transport Tel:020 7944 4899 or email: rupert.furness@dft.gsi.gov.uk can answer any queries regarding the instrument.

Summary: Intervention & Options

Department /Agency: Department of Transport	Title: Impact Assessment of the Draft Renewable Transport Fuel Obligations (RTFO) Order	
Stage: Final Proposal	Version: 0.g	Date: 28 September 2007
Related Publications:		

Available to view or download at:

<http://www.>

Contact for enquiries: Rupert Furness

Telephone: 020 7944 4899

What is the problem under consideration? Why is government intervention necessary?

Dealing with climate change caused by greenhouse gas emissions is a key priority for the Government. Road transport emissions continue to increase and are difficult to reduce. Existing intervention in the form of a duty derogation for lower carbon fuels such as biofuels has had limited impact. The market will not solve the problem itself because of the extra costs of biofuels compared to fossil fuels.

What are the policy objectives and the intended effects?

The policy aims to reduce carbon emissions from road transport by 2.6 - 3.0 million tonnes of CO₂ per annum (0.7 - 0.8 million tonnes of carbon) by obliging road transport fuel suppliers to ensure that 5% of the fuel they supply comes from renewable sources.

What policy options have been considered? Please justify any preferred option.

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

Option 4, the introduction of an obligation, is preferred, on the grounds of greater likelihood of achieving the desired carbon savings - because investors will be more confident and there is a strong financial incentive to comply that is more stable than a duty incentive.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? The impacts of the policy will be reviewed with quarterly interim reports and detailed annual reports. The overall success of the programme will be reviewed after three years of operation.

Ministerial Sign-off For final proposal/implementation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the costs, benefits and impact of the leading options.

Signed by the responsible Minister:

Jim Fitzpatrick

2nd October 2007

Summary: Analysis & Evidence

Policy Option: 4	Description: Introducing a renewable transport fuel obligation for road transport
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COSTS	ANNUAL COSTS	Description and scale of key monetised costs by 'main affected groups' Fuel costs = £2,145m - £5,762m Costs of new facilities = £240m; Administrative costs = £33m Forecourt costs = £5m; an additional cost representing the change in welfare due to fuel cost increase is also included.				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 5px;">One-off (Transition)</td> <td style="width: 30%; text-align: center; padding: 5px;">Yrs</td> </tr> <tr> <td style="padding: 5px;">£ 252m</td> <td></td> </tr> </table>		One-off (Transition)	Yrs	£ 252m	
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	£ 252m					
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Average Annual Cost (excluding one-off)	£ 200m to £563m					
Total Cost (PV)		£ 2,428m to £6,601m				
Other key non-monetised costs by 'main affected groups'						

BENEFITS	ANNUAL BENEFITS	Description and scale of key monetised benefits by 'main affected groups' Monetised value of reduced carbon emissions				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 5px;">One-off</td> <td style="width: 30%; text-align: center; padding: 5px;">Yrs</td> </tr> <tr> <td style="padding: 5px;">£</td> <td></td> </tr> </table>		One-off	Yrs	£	
	One-off		Yrs			
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Average Annual Benefit (excluding one-off)	£ 84m - £96m					
Total Benefit (PV)		£ 834m - £951m				
Other key non-monetised benefits by 'main affected groups' Market / employment opportunities in agriculture and biodiesel production; diversity and security of national fuel supply; likely positive impact on innovation; possible positive impact on congestion.						

Key Assumptions/Sensitivities/Risks

Results are presented as a range based on different oil price scenarios.

Price Base Year 2007	Time Period Years 13	Net Benefit Range (NPV) £ -5,109m to £ -1,594m	NET BENEFIT (NPV Best estimate) £ -3,080m
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What is the geographic coverage of the policy/option?	UK				
On what date will the policy be implemented?	15 April 2008				
Which organisation(s) will enforce the policy?	RFA				
What is the total annual cost of enforcement for these organisations?	£ 1.5m				
Does enforcement comply with Hampton principles?	Yes				
Will implementation go beyond minimum EU requirements?	No				
What is the value of the proposed offsetting measure per year?	£				
What is the value of changes in greenhouse gas emissions?	£ 84m - £96m				
Will the proposal have a significant impact on competition?	No				
Annual cost (£-£) per organisation (excluding one-off)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">Micro</td> <td style="width: 25%; text-align: center;">Small</td> <td style="width: 25%; text-align: center;">Medium</td> <td style="width: 25%; text-align: center;">Large £75k</td> </tr> </table>	Micro	Small	Medium	Large £75k
Micro	Small	Medium	Large £75k		
Are any of these organisations exempt?	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">Yes</td> <td style="width: 25%; text-align: center;">No</td> <td style="width: 25%; text-align: center;">N/A</td> <td style="width: 25%; text-align: center;">N/A</td> </tr> </table>	Yes	No	N/A	N/A
Yes	No	N/A	N/A		

Impact on Admin Burdens Baseline (2005 Prices)		(Increase - Decrease)
Increase of £ 713-1426k	Decrease of £ 0	Net Impact £ 713k-1426k

Key:	Annual costs and benefits: Constant Prices	(Net) Present Value
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Evidence Base (for summary sheets)

[Use this space (with a recommended maximum of 30 pages) to set out the evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Ensure that the information is organised in such a way as to explain clearly the summary information on the preceding pages of this form.]

Background on Biofuels

Biofuels offer favourable carbon savings over fossil fuels because the greenhouse gases emitted when they are burned have been absorbed from the atmosphere in the cultivation of the feedstock. There is more information about what biofuels are and how they work in Annex A.

THE CASE FOR GOVERNMENT INTERVENTION

Carbon Reduction Targets and the Biofuels Directive

Emissions in the transport sector have increased by approximately 10% since 1990 and continue to rise. The 2007 Energy Review estimated that road transport will emit 119 million tonnes of CO₂ (32.5 million tonnes of carbon) in 2010, rising to 124 million tonnes (33.9 million tonnes) by 2020. These estimates include an assumed benefit from the RTFO. This continuing increase makes achievement of the Government's Kyoto commitments all the more stretching.

The EU Directive 2003/30/EC ("the Biofuels Directive") requires Member States to set targets for biofuel sales. The main objectives of the directive are to reduce life-cycle emissions of CO₂ from transport across Europe, and to reduce the EU's future reliance on external energy sources. The Directive includes a reference value for the 2010 target which is that 5.75% (by energy content) of fuel sold should be biofuel.

The Stern Review

The Stern Review emphasised that "The scientific evidence points to increasing risks of serious, irreversible impacts from climate change associated with business-as-usual (BAU) paths for emissions." In identifying possible solutions, the Review stressed the importance of:

- Establishing a price for carbon within a tax/trading/regulatory framework
- Clarity and predictability about the future rules and shape of schemes will help to build confidence in a future carbon price.

The Duty Incentive

In July 2002, the Government introduced a duty incentive of 20p/litre below regular diesel fuel for biodiesel. A similar incentive for bioethanol began on 1 January 2005. In the first two fiscal years of the incentive, biofuels made up 0.04-0.06% of total UK fuel sales.

It has been the Government's practice to announce the duty incentive on a rolling three year basis to provide some certainty for investors. However, there have been concerns that:

- A duty incentive promised for three years still does not provide sufficient certainty to stimulate the market, as evidenced by the low proportion of biofuel sales to date, and experience in Germany where a promised 10 year incentive period was cancelled after less than 10 years;
- The 20p/litre value is insufficient to cover the increased costs of biofuels;
- A duty incentive does not guarantee that a desired level of biofuel sales, and hence carbon savings, will be achieved.

Market Failure

The market for road transport fuels in the UK is very price competitive. The additional costs of biofuels over fossil fuels effectively restrict the impact that biofuels can have on the marketplace without Government intervention.

POLICY OBJECTIVES AND INTENDED EFFECTS

Objectives

The objective of the policy is to reduce the carbon emissions caused by road transport without requiring wholesale changes to:

- Vehicle engines and performance
- Driver behaviour
- The fuel distribution infrastructure in the UK.

The policy is likely to save 2.6 - 3.0 million tonnes of CO₂ per annum (0.7 - 0.8 million tonnes of carbon) from 2010 onwards.

The policy should also make a contribution to improving the diversity and security of UK fuel supplies by sourcing fuels and feedstocks from a wider range of countries than at present, although this will be limited while the volume of fuel is low.

The policy should also encourage the UK biofuels industry to:

- Supply relevant feedstocks, in the farming sector;
- Produce biofuels in the chemical and refining sectors; and
- Develop technologies to improve the performance and production of biofuels.

Intended Effects

The primary intended effect is that fuel suppliers in the UK will supply all their petrol and diesel for road use to include 5% (by volume) bioethanol and biodiesel respectively. This would amount to approximately 2.5 billion litres of fuel from 2010-11 onwards. An obligated supplier may decide that it is uneconomic to provide biofuels at the prevailing cost, and may instead opt to pay a buy-out price for each litre of its obligation that has not been delivered. The extent to which the obligated suppliers buy-out will affect whether 5% of fuel is in fact delivered as biofuels, or some lesser amount.

In the first two years of the scheme the combination of the duty incentive and the buy-out price will give suppliers 35ppl "cover" for the extra costs of biofuels i.e. if biofuels cost 34 ppl more than fossil fuels, it makes economic sense to supply the biofuels. If the cost differential exceeds 35p, it makes sense to pay the buy-out price. This mechanism also provides price protection at the pump – the highest cost to the supplier will only be 15ppl for 5% of the fuel. So the most the pump price will increase should be 0.75ppl, plus VAT, if suppliers opt to buy-out.

If one or more obligated suppliers take the option of buying-out of the obligation, the payments received will be put into a buy-out fund which will be "recycled" to suppliers who have either (i) redeemed certificates against their obligation, or (ii) "surrendered" surplus certificates for a share of the recycling fund.

Through trading in certificates, an obligated supplier may show that another supplier has delivered the necessary amount of biofuel instead. It is expected that the opportunities for trading and recycling will provide some further financial benefit to those biofuels suppliers who will be in a position to earn certificates.

POLICY OPTIONS

The four options compared are:

1. Do nothing – maintain the current duty incentive
2. Increase the duty incentive
3. Seek a voluntary scheme agreed by the major suppliers
4. Introduce an obligation

The criteria for considering the options are:

1. Likelihood of achieving the desired level of carbon savings
 - a. Certainty of volumes
 - b. Investor confidence
 - c. Carbon performance of the renewable fuel
2. Sustainability concerns
3. Cost to the consumer / taxpayer

The analysis of the options against these criteria is shown in the table below. The outcome is that an obligation is the most favourable option. It also had the broadest based support amongst stakeholders consulted in early discussions on how to increase biofuels contribution to carbon saving.

	Likelihood of achieving the desired level of carbon savings	Sustainability concerns	Cost to the consumer / taxpayer
Maintain / increase the duty incentive	<p>Prior to the announcement of the obligation, biofuel sales were less than 0.1% of total fuel sales.</p> <p>The incentive is too inflexible a mechanism to deal with the varying relative costs of the fuels. Investors do not have sufficient confidence in the permanence of a duty incentive.</p> <p>There are no mechanisms for calculating or assuring a level of carbon saving from the biofuel supplied.</p>	<p>The use of a duty incentive provides no mechanism for addressing concerns about the sustainability of the biofuels supplied.</p>	<p>If 5% of total fuel sales was achieved with the incentive at the current rate of 20ppl, it would cost Treasury around £500 million in foregone revenue.</p> <p>Every increase of 5ppl in the incentive would cost around £125 million.</p>
Voluntary agreement	<p>Industry has signalled that they consider this to be unworkable, so negotiating a workable agreement could prove very difficult, and may not be possible.</p> <p>It would not provide the level of certainty needed to support investment decisions by biofuel producers, and so capacity may not increase sufficiently.</p> <p>There is a risk that a</p>	<p>Industry believes that voluntary schemes to assure sustainability are not effective.</p>	<p>The price sensitivity of the market is the reason that suppliers would be strongly incentivised to avoid, or not comply with, any voluntary arrangement.</p>

	<p>voluntary agreement in the UK would be the lowest priority for fuel suppliers faced with obligations or high levels of incentives in other European countries.</p> <p>Without sanctions for missing targets, it is likely that targets would not be met and CO₂ emissions would not be reduced.</p> <p>In order to get 100% agreement across the industry, it is likely that the agreed level of targets and performance will be at the low end of the possible range. There is still a risk of non-participation or suppliers getting a “free-ride”.</p>		
Obligation	<p>Sets a strong expectation that the target level of sales will be achieved if the biofuel is affordable within the constraints of the buy-out mechanism.</p> <p>Provides increased confidence to investors of the long term support for the market.</p> <p>Encourages the use of biofuels that offer substantial carbon savings, with the aim of moving to a system that directly rewards carbon saving.</p>	Encourages the use of biofuels that come from sustainable sources, with the aim of moving to a system that only rewards sustainable fuels.	<p>The fuel price increase to the consumer is capped by the buy-out mechanism. At 5% sales and 20p duty incentive, the extra price increase at the pump is capped at 0.88pppl (0.75pppl + VAT). At 5% sales and 0p incentive, the extra price increase is capped at 1.76pppl (1.5pppl +VAT).</p> <p>Consumers will also have to buy 1.68% more fuel to travel the same mileage in a petrol car, and approx 0.5% for a diesel car.</p>

ANALYSIS OF COSTS TO MAIN AFFECTED GROUPS

Obligated Suppliers

Obligated suppliers will incur one-off costs to cover the following items:

- Construction of facilities for receipt, storage and blending of biodiesel at refineries and import terminals
- Construction of facilities for receipt, storage and blending of bioethanol at coastal and inland terminals
- Changes to operating procedures including changes to systems and training for staff
- Training on Administrator's systems
- Registering with the Administrator
- Establishing supply chains for biofuels
- Setting out reporting requirements and assuring accurate and comprehensive reporting throughout the supply chain.

Total capital costs to the industry, incurred over 2007-2010, are likely to be in the region of **£240 million**, according to industry estimates.

One-off administrative costs are likely to amount to **£1 million**, for the industry as a whole, during the set-up and early period of the obligation, 2007-08, according to industry estimates.

Obligated suppliers, if they wish to meet the obligation through delivering sufficient renewable fuel, will incur continuing costs for procurement, blending and distribution of biofuels, which are more expensive than fossil fuels. The biofuel cost estimates (presented in Table 1 below) include estimated operating costs of procurement, blending and distribution.

Obligated suppliers will incur ongoing costs to cover the following items:

- Reporting information to the Administrator
- Gathering carbon and sustainability information along the biofuel supply chain
- Preparation and auditing of annual carbon and sustainability reports.

In the partial Regulatory Impact Assessment, published alongside the Consultation on the RTFO Order in February 2007, the Government estimated these costs to obligated suppliers as £36,820, as shown in Appendix F. Following responses to the Consultation and further analysis, these costs are now estimated at £75,000 per annum, per obligated supplier. It is estimated that there will be between 10 and 20 obligated suppliers. The revised estimate is also detailed in Appendix F.

Fuel retailers

Owners of fuel filling stations will incur costs associated with preparing their facilities for biofuels, particularly bioethanol. This will include a one-off tank clean for the petrol tanks, but there is no requirement for new pumps except where filling stations intend to sell higher blends of biofuel e.g. B85, which is 85% biofuel and may be used on some specific new models of car.

Other costs for fuel retailers may include:

- More frequent checking for water in petrol storage;
- Clearing out microbiological infestations;
- Protecting pumps against acids derived from biofuels.

There are differing estimates of the costs that will be incurred by fuel retailers, depending on the impact of the above problems and commercial decisions taken by different companies. The Government continues to estimate a cost of **£5 million**, spread across approximately 10,000 filling stations and commercial sites.

Government

The Government will incur costs in completing the establishment of the scheme including the NDPB that will act as the Administrator. These costs are estimated at **£5.8 million**. Within this £5.8 million, the remaining costs between the making of the Order and the scheme completing its implementation phase are estimated to be **£ 1 million**.

Under the RTFO, the Administrator would have running costs associated with measuring supplier performance, enforcing the obligation, auditing and checking volume, carbon and sustainability information and managing the staff and operations of the Administrator.

These costs are currently estimated at **£1-2 million** per annum. The main items would be staff, IT hosting and software maintenance, and bought-in inspection and compliance services.

The Government will also pay an increased cost for its fuel, as described below.

The Impact of the Duty Incentive

The duty incentive represents lost revenue to the Treasury, with the amount increasing as sales of renewable fuels increase.

The costs of collecting the duty incentive are largely independent of the level of incentive, except where a higher level encourages greater fraud and hence requires more enforcement. Similarly, a zero duty incentive may slightly reduce the costs of enforcement to HMRC.

Consumers

Obligated suppliers are likely to pass costs on to their customers in the UK, but these increases will be capped by the buy-out mechanism at 0.75p per litre, plus VAT, in the early years of the scheme.

In assessing the costs and benefits of renewable fuels, key assumptions must be made regarding the costs of renewable fuels and fossil fuels. These can vary significantly, both currently and over time. The key factors influencing the cost of this policy are the cost of the biofuels and the cost of conventional fuels.

Our best estimates of future resource costs of biofuels are presented in Table 1 below.

Table 1: Resource Costs of Biofuels (£/litre, 2007 prices)

	Bioethanol	Biodiesel
2010	0.38	0.52
2020	0.31	0.37

These cost estimates include operating costs of biofuel supply, as well as the cost of the inputs and retail margin. The estimates are based on the assumption that new 'second generation' technologies become available by 2020 and the cost of production falls to around two thirds of its 2006 cost.

Cost of conventional fuels

Central, low and high oil price forecasts to 2020 were converted into petrol and diesel prices using the DfT fuel price forecasting model. The pre-tax petrol and diesel price forecasts under each oil price scenario are given in Table 2 below.

Table 2: Resource costs of conventional fuels in 2007 prices (£/litre)

	Low oil price (\$25/barrel)		Central oil price (\$53-57/barrel)		High oil price (\$70-80/barrel)	
	Petrol	Diesel	Petrol	Diesel	Petrol	Diesel
2010	0.16	0.18	0.28	0.32	0.34	0.37
2020	0.15	0.17	0.27	0.30	0.38	0.42

Renewable fuels tend to be more expensive to produce than fossil fuels. The present value of the total resource cost is estimated to be £2,145m to £5,762m. The duty incentive and the buy-out price combine to encourage suppliers to overcome this.

Fuel efficiency

Based on recent advice from DfT engineers a lower energy content has been factored in for all biofuel blends. This increases the total amount of fuel needed to travel the same amount of miles, and hence reduces the overall emissions savings achieved. This is estimated at 1.68% more petrol or 0.45% more

diesel. For an average car travelling 9,000 miles p.a., this equates to £15-£20 per petrol car, or £4-5 for diesel.

BENEFITS OF THE RTFO

The benefits of achieving a 5% level of biofuel sales can broadly be summarised as:

- Significant reduction in CO₂ emissions in the transport sector;
- Improved fuel security through diversity of fuel supply;
- New development opportunities for UK agriculture.

Along with delivering these benefits, a 5% level of biofuel sales would also help to:

- Meet Kyoto targets for reduction in greenhouse gas emissions;
- Meet self-imposed targets for reducing CO₂ emissions;
- Meet the targets set by the UK under the EU Biofuels Directive for biofuel usage in transport.

Reduced emissions of CO₂ and other greenhouse gases

The benefits of renewable fuels are primarily their carbon savings compared with the use of conventional fossil fuel (petrol and diesel) – see Annex A.

The carbon savings from the use of renewable fuels are usually quantified as *net* i.e. in terms of their fossil-CO₂ emissions relative to conventional petrol and diesel. Thus, if a renewable fuel is produced, for example, using little fossil fuel derived energy, it might provide 85% *net* emission savings relative to conventional road fuels. If it is produced using a lot of fossil fuel, it might provide only 25% *net* emission savings.

There can also be a significant variance in the net emission savings associated with renewable fuels depending upon the feedstocks used. Table 3 below presents the emissions saved assuming that the average net CO₂ savings are currently around 50% and grow to 75% over time (though it is important to note that actual variance is potentially far wider). Table 4 presents gross savings in the transport sector (i.e. not taking account of CO₂ emissions from the production of renewable fuels).

Use of biofuels is likely to have a small beneficial effect on emissions of particulate matter (PM10) from diesels. There may also be a small negative impact on NO_x emissions. These potential air quality impacts have not been quantified.

Other assumptions include:

- Demand forecasts for petrol and diesel are taken from the DfT National Transport Model.
- A price elasticity of -0.25 has been used in the analysis to take account of motorists responding to a fuel price increase by using less fuel.

Table 3 below summarises the estimated net present value of the RTFO. It includes the benefits from the emission savings, according to the assumptions set out in the notes below the table. It also includes the increased costs of the fuels, as well as the start-up and administrative costs for both government and the fuels industry. The first row presents the results from the central oil price scenario, with the low and high oil price scenario results presented in the second row.

Table 3: Estimated net carbon savings, costs and benefits (assuming 5% renewable fuels penetration)

	Annual Savings of Carbon Dioxide (MtCO ₂)		Annual Savings of Carbon (MtC)		Net Present Value, £m		Cost-effectiveness, £/tC saved
	2010	2020	2010	2020	2010	2020	
Central oil price scenario	2.7	3.6	0.7	1.0	-1,092	-3,080	380
Low/High oil price scenarios	2.6 to 3.0	3.4 to 3.9	0.7 to 0.8	0.9 to 1.1	-1,504 to -910	-5,109 to -1,594	246 to 537

Notes: Total fuel sales in the counterfactual are assumed to be 48 billion litres in 2010 and 46 billion litres in 2020. The 'net present value' is the sum of increased fuel costs, value of welfare loss due to fuel cost increase, costs to Government and costs to industry less the benefits of CO₂ emission reduction, all discounted at a rate of 3.5% per year.

Table 4: Estimated gross carbon savings, costs and benefits (assuming 5% renewable fuels penetration)

	Annual Savings of Carbon Dioxide (MtCO ₂)		Annual Savings of Carbon (MtC)		Net Present Value, £m		Cost-effectiveness, £/tC saved
	2010	2020	2010	2020	2010	2020	
Central oil price scenario	5.3	5.1	1.4	1.4	-942	-2,479	227
Low/High oil price scenarios	5.2 to 5.6	4.9 to 5.3	1.4 to 1.5	1.3 to 1.4	-1,354 to -760	-4,509 to -992	144 to 331

Following responses to the consultation in February, a sensitivity analysis has also been conducted to assess how the results of the net CO₂ saving scenario would change if a 'well-to-wheel' approach was taken in calculating the emission savings. This approach takes into account all the emissions associated with the production of fuels (rather than just those emitted from the tailpipe).

Table 5: Estimated net emission savings, costs and benefits (assuming 5% renewable fuels penetration) and using a 'well-to-wheel' approach

	Annual Savings of Carbon Dioxide (MtCO ₂)		Annual Savings of Carbon (MtC)		Net Present Value, £m		Cost-effectiveness, £/tC saved
	2010	2020	2010	2020	2010	2020	
Central oil price scenario	3.2	4.3	0.9	1.2	-1,066	-2,916	320
Low/High oil price scenarios	3.1 to 3.6	4.1 to 4.6	0.8 to 1.0	1.1 to 1.2	-1,475 to -885	-4,932 to -1,438	207 to 453

Non-monetised Benefits

Improved fuel security

Wider use of biofuels will result in a rise in the number of countries from which the UK sources road fuel. While around 90% of UK crude oil is imported from just two countries (Norway & Russia), the supply of vegetable oils is more diffuse. Four countries (Papua New Guinea, Indonesia, Malaysia & Colombia) provide around 85% of the UK's imports of palm oil and four countries (France, Belgium, Finland and the Netherlands) provide over 90% of the UK's imports of rape oil.

Potential opportunities for UK agriculture

The UK currently has the capacity to produce 334 million litres of fuel at major plants, not including small plants. Facilities currently under construction would add a further 774 million litres by 2008.

It has been estimated that a 100 million litre biodiesel processing plant would create/sustain 200 jobs in farming and 62 jobs at the plant itself.³ If the plants above are supplied entirely by feedstock produced in the UK, this would equate to 2200 farming jobs and 682 jobs at the plants.

Innovation

The policy is likely to have a positive impact on innovation as new and cheaper ways of producing biofuels and improving carbon savings are developed.

Congestion

A small increase in pump prices is likely to have some impact on the amount people drive and may therefore reduce traffic congestion.

³ Research carried out on behalf of the East of England Development Agency (EEDA). Further information available via www.eastofenglandobservatory.org.uk/

Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	<i>Results in Evidence Base?</i>	<i>Results annexed?</i>
Competition Assessment	No	Yes
Small Firms Impact Test	No	Yes
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	No	No
Other Environment	No	No
Health Impact Assessment	No	No
Race Equality	No	No
Disability Equality	No	No
Gender Equality	No	No
Human Rights	No	No
Rural Proofing	No	No

Annexes

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Annex B	Competition Assessment	page 14
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Annex A – Introduction to Biofuels

Biodiesel, bioethanol and biogas (referred to in the draft Order as “natural road fuel gas...,produced wholly from biomass”) are the only biofuels currently available to the UK road transport fuel market.

Biodiesel can be made from any vegetable oil, with rape seed, palm and used cooking oil being the most common. Although chemically different, it has similar properties to mineral diesel when burnt in a compression diesel engine. However, it can damage parts of an engine and consequently engine manufacturers only warrant their vehicles for use with 5% blends.

Bioethanol can be made from wheat, corn or sugar cane / beet. As with potable alcohol, it can be made from virtually any organic substance (grass, wood, green bits of municipal solid waste), but the technologies for doing so are not proven at commercial scale. In Europe it is used in a 5% blend in petrol (E5), allowing its use without any engine modification. At low blending levels of 5% or less, it is not anticipated that mechanical considerations are a significant obstacle to ethanol up-take. There are significant distribution issues for bioethanol which mean that it is usually blended with petrol as they are loaded into road tankers for distribution to forecourts.

Biogas is just like compressed natural gas (CNG), except that it is generally produced by collecting the methane which is naturally emitted from landfill sites or other forms of rotting vegetation. It is only suitable for use in CNG-powered vehicles (of which there are only 800 or so in the UK).

Virtually all biofuels offer some emission savings, because the CO₂ that is emitted into the atmosphere when they are burned is offset by the CO₂ that the crop has absorbed as it grows. In this sense they are different from fossil fuels, which emit into the atmosphere CO₂ which has been safely locked away under the earth's surface for millions of years. The CO₂ savings from biofuels are, however, offset by the energy that is needed for cultivation, harvesting, processing and transportation. The best biofuels are those which are produced using the least energy (eg low inputs of fertiliser, processed in an energy-efficient way and transported short distances). The worst biofuels can theoretically result in greater lifecycle CO₂ emissions than fossil fuels (ie more energy is needed to produce them than is saved by using them).

Biofuels at 5% by volume may slightly reduce the overall fuel economy performance of a vehicle, so the total volume of fuel consumed will increase.

Annex B – Competition Assessment

Promotion of biofuels through either regulation or fiscal incentives would, if successful, result in fossil fuels for road transport being substituted for renewable fuels. It should therefore have a significant impact on the current markets. However, it is not anticipated that the effects would negatively affect the competitiveness of the fossil fuel or emerging biofuel markets.

The UK oil market is highly competitive. Traditionally it has been dominated by the UK's major oil companies, but in recent years the 'independents', have gained market share, particularly in the retail sector. In particular the sector has been affected by the entry into the market of the major supermarkets which has intensified competition. The independents have led on the introduction of biofuels into the UK market, with the supermarkets in particular increasing the availability of biofuels at the retail end of the market.

The biofuel market in the UK is very new and makes up a very small proportion of overall fuel sales (approaching 1%). The majority of biofuel sales are currently from imports, brought in by the independents, but there is also growing UK capacity, particularly for biodiesel. This currently consists mostly of a small cottage industry, but three major plants are in operation and a number of others are in the development or construction stages.

Measures to promote biofuels further are likely to further develop and mainstream the biofuel market in the UK, and lead to both increased imported biofuels and domestic capacity. As with any new and emerging market, the cottage industry is likely to be replaced in time with large scale industry. This should return benefits from economies of scale and investment capacity for technological developments.

In July 2007, the European Commission published an impact assessment analysing the impact of increased biofuels use on agricultural markets across the EU. The assessment specifically referred to the 10% 2020 biofuels target outlined in the Presidency Conclusions of the European Council in March 2007 but its conclusions can be usefully applied to increased use of biofuels more generally. The analysis notes that since agricultural production serves food, feed, industrial and renewable energy use, these will all compete for arable land. However, the analysis concludes that the impact of increased biofuels use on land use is likely to be relatively modest, given the assumption that set aside land would provide capacity on which to grow energy crops.

Some products which can be used as biofuels also have other uses and therefore potential impacts on existing markets (resulting from any substitution into biofuels) should also be considered. Some biofuels suppliers with alternative non-energy markets may benefit from a degree of competition for their products, however there may then be price impacts in these non-energy markets.

It is not anticipated that the market will restructure significantly in response to an RTFO or increased fiscal incentives, as all of the current actors in the fuels market have (or can attain) the capacity to deliver biofuels through the existing supply chains. Biofuels are readily available on the world markets as well as through increasing domestic capacity, and can be blended with today's fossil fuels at up to 5% by volume within current technical standards.

However, new links will need to develop between the oil companies and the biofuels and farming sectors, and in the longer term new patterns of ownership could emerge. For example, one oil major already has a significant stake in a company that is developing an advanced biofuel technology and production capacity. A growing biofuel market should provide new opportunities for suppliers to compete, for example in developing cheaper biofuels and other renewable fuels. This should aid the technological development of renewable fuels, benefiting both the consumer and the environment.

In response to the consultation on the RTFO in 2007, some consultees did note that the proposed definition of an obligated supplier, together with the chemical and taxation restrictions on the movement of the petrol component of E5 petrol, would mean that the customers for bioethanol would be increasingly limited to the major refiners and importers. This is because a refiner would be unwilling to supply RBOB (the petrol variant needed for blending with bioethanol) and hence incur an obligation, so any non-refinery/importing fuel seller would not be able to source UK RBOB.

Annex C – Small Firms Impact Test

There are three types of small firms impacted by the RTFO:

- Small firms that retail petrol through one or more forecourts;
- Small renewable fuel producers; and
- Farmers producing crops for fuel (feedstock).

The retailers are impacted by the need for a one-off clean of their tanks and other measures, as described in the costs section.

The renewable fuel producers and the producers of feedstock crops should see an expanded market for their products. Biofuel sales could increase from the current level of approximately 300 million litres per annum to 2,400 million litres a year by 2010-11 and the obligation ensures a level of demand at that level for future years. Most of this fuel will be sold to be blended into petrol and diesel by the major oil companies, who will be able to choose how they source their fuels, which may include importing. Nevertheless, this represents a significant opportunity for both farmers and biofuel producers.

Those producers that sell their fuels across the duty point will also be able to earn certificates, which may have a market value for obligated suppliers.

They will have to register with the Administrator and comply with the reporting and auditing requirements if they wish to earn and trade certificates. They will be able to comply with all these requirements electronically. Inspections will be risk-assessed ensuring that small firms are not unduly burdened with compliance activity.

The Department for Transport sent out enquiries to four business federations prior to the consultation in February 2007, to gather their concerns or issues, but received no replies.

The Federation of Small Businesses replied to the consultation. Their major concern was the planned decrease in the duty incentive, which is a matter for the Chancellor of the Exchequer.

Annex D – Operation of the RTFO

Core Scheme Design

Obligated suppliers would be fossil fuel suppliers who supply more than 450,000 litres of fossil fuel across the duty point of fuel during a year. This “de minimis” threshold would exempt small suppliers and those paying duty on small amounts of fuel for purposes other than road transport e.g. engine testing and racing. Suppliers of additives would also be exempt.

The obligation level is set out in the RTFO order as follows:

Obligation rates for each period

Period	Obligation Rate
2008-9	2.5%
2009-10	3.75%
2010-11	5%
Thereafter	5%

and will be amended by order if necessary.

The obligation can be met by either presenting Renewable Transport Fuel (RTF) Certificates, which will be awarded for the supply of biofuel across the duty point, or by paying an amount known as the “buy-out” (see below).

By focusing on the fuel crossing the duty point, the scheme narrows its scope to a relatively small number of fuel suppliers and simplifies scheme administration and compliance. By obliging suppliers who supply fuel across the duty point, rather than those that pay duty, the large refiners, who will have the obligation for approximately 95% of the fuel, will be able to meet the obligation without any additional impact on their operations and planning and with a minimised administrative burden.

The complex nature of the fuel supply chain would have meant that other definitions of the obligation point would have made administering the obligation much more complex for the administrator and the suppliers.

Other definitions of obligated suppliers and volumes have been proposed, including obligating duty payers, as proposed in the 2005 feasibility study, which received support from a number of stakeholders in the consultation.

The RTFO would be regulated and enforced by an organisation known as the “Office of the Renewable Fuels Agency”. The Office will be responsible for communicating the nature of the obligation and for informing suppliers of the available options for meeting their obligation. It will also be responsible for registering suppliers, awarding certificates and ensuring that the obligation has been met by all the obligated suppliers. It will administer the collection and recycling of “buy-out” funds (see below).

Together with the requirements in the draft Order, the Department for Transport has developed a draft set of operating processes for the Administrator, which are summarised below. It will be for the Administrator to finalise these processes and issue guidance to obligated suppliers and others wishing to be account-holders. The legislation also allows the Administrator some flexibility in how the scheme is managed.

1. Opening an RTF account. Obligated suppliers would be required to register with the Office to open an RTF account. The Office will be able to require any transport fuel suppliers to provide information, if it requires them to prove that they are not obligated or to provide information about fuel supplied in order to verify the data supplied by obligated suppliers. Suppliers of renewable fuels will be able to register in order to be awarded certificates. People wishing to act as traders in certificates will also be able to register. Registration will be largely an on-line process, except for the submission of some documentary proofs of identity.
2. Obligated suppliers, and other suppliers to be determined by the Office, will be required to make a monthly return of data. Using the secure website provided by the Office, they will be required to supply information relating to their supply volumes and duty payments so that the Office can validate their reports fully and correctly calculate their obligation. However, the volume information

required is all currently collected by the suppliers, or by tax warehouse keepers on their behalf, so there is no additional data gathering burden. The data will have to be submitted within two weeks of monthly duty returns to HMRC. No paper forms or physical evidence are required at this stage, unless the Office has reason to believe the data may be inaccurate or incorrect.

3. Awarding RTF Certificates. Suppliers who supply renewable fuels across the duty point, and on which duty is paid, will be eligible to claim RTF certificates from the Office. They will have to submit:

- information about the volume of renewable fuels supplied across the duty point
- information about the carbon saving of the renewable fuels supplied
- information about the sustainability impact of the renewable fuels supplied.

Both obligated and non-obligated suppliers will be able to apply for RTF certificates in the manner described. This data must also be submitted to the Office within two weeks of the monthly return to HMRC. The Office will consider the data submitted and whether further evidence is required to support the volume data supplied, all of which is likely to take approximately one month.

4. Once the Office is satisfied as to the accuracy of the data, certificates will be awarded, at one certificate for every litre of renewable fuel (or for every kilogramme of biogas). Certificates will be awarded by a credit to an account on the Office's system. Suppliers will be able to see the balance in their account, as well as volumes of other fuels submitted. Certificates will be allocated to a specific obligation period.

5. Trading. Suppliers will be able to trade certificates, but the pricing and financial aspects of the trade will be outside the Office's scope and systems. Suppliers wishing to trade certificates may request to have their contact details published on the Office's website. A supplier wishing to execute a sale of certificates will need to provide the Office with details of the purchaser's account, the volume of certificates, the obligation period of the certificates and the date on which the transaction should take place.

6. At the end of a compliance period, an obligated supplier will be able to meet its obligation by one or more of these options:

- Redeeming RTF certificates awarded during the current or previous period (allowing suppliers to smooth production across periods)
- Redeeming RTF certificates that have been bought from another supplier
- Paying a "buy-out" price for each litre of obligation that has not been fulfilled by a certificate.

7. Suppliers will notify the Office, via an electronic form, of how they wish to meet the obligation. The Office will set out an annual timetable, in accordance with the process set out in the order, for the finalisation of volumes, calculation of obligations, presentation of certificates and payment of buy-out funds.

8. Any buy-out funds received will be "recycled" to all fuel suppliers in proportion to the number of certificates they have earned and have opted to redeem against an obligation or to "surrender" for a share of the buy-out. This recycling aspect has been deemed an acceptable State Aid by the European Commission.

9. Suppliers will be able to bank un-redeemed certificates to be used in the following obligation period. This allows them greater flexibility in how they meet their obligation over a longer timeframe. The order will limit the amount of certificates from the previous period that can be used to meet a current obligation to 25% of the current obligation. Suppliers may not "borrow" from future certificates in order to meet a current obligation.

Compliance

The Office will use risk-based assessment to manage compliance and enforcement activity. The Office will work closely with other regulating bodies, where permitted, to share compliance performance information about regulated suppliers. The risk assessment will consider:

- the impact on the achievement of policy of evasion / incorrect reporting by a particular supplier i.e. fossil and biofuel volumes;

- the supplier's track record of compliance with the scheme;
- the supplier's track record of compliance with other regulations;

as well as other factors to be determined by the Office as the scheme matures.

The data provided by the suppliers will allow extensive cross-checking to validate all the figures. This provides the Office with reassurance on a monthly basis that volumes have been accurately reported.

All suppliers who have submitted volume data to the Office will be required to supply an opinion from an external auditor that states that the volumes reported to the Office are the same as those reported to HMRC for duty payment purposes, for the relevant fuels. This will be required during the period after the end of an obligation period when the Office is finalising the obligations of the suppliers prior to the presentation of certificates. This auditor's opinion will provide further assurance as the HMRC's extensive powers of inspection and imposition of penalties ensure accurate reporting to themselves. An exemption from this requirement will be possible if the supplier instead provides HMRC with a letter that gives consent for HMRC to share the relevant duty return information with the Office.

Carbon and Sustainability Impacts

The RTFO is likely to save 2.6 - 3.0 million tonnes of CO₂ per year. Requiring fuel suppliers to report the carbon intensity of their fuels allows the Office to measure whether the policy is being successful.

It is also important that the fuels supplied come from sustainable sources, for example that rain forest is not being destroyed in order to grow plantations that provide biomass for renewable fuels. The requested sustainability data allows the Office to measure the impacts of the fuels being supplied.

Currently, the global fuel supply chains do not reliably transmit all the desirable information on carbon and sustainability (C&S) that the Office would like to receive. Work is currently underway with stakeholders to trial information collection systems, with a view to implementing deliverable, practical requirements that suppliers can meet. It is expected that the information requirement on sustainability will increase over time, as the global supply chains pass more information more consistently. This evolution in the reporting requirement will be done in full consultation with stakeholders and with appropriate notice of changes.

Scheme Performance Reporting

The Office will publish a set of standard monthly reports that describe the performance of the scheme, carbon savings achieved and the sustainability of the fuels, where known. A more detailed annual report will describe how individual suppliers have met their obligation, without disclosing sensitive market share or volume data, as well as a broader report on the impact of the RTFO. It is intended that this publication will encourage suppliers to improve the carbon savings attributable to the fuels they supply, and to ensure that the fuels come from proven sustainable sources.

The Office will also report on its effectiveness as a regulator, the advice it provides, known levels of fraud or evasion and other relevant performance indicators.

Annex E Selection of the Administrator

The establishment of the Office

The Energy Act 2004 set out that the Secretary of State could appoint as the Administrator either an existing body created by enactment or a new body. This prevents the Secretary of State setting up a team in the Department for Transport or one of its agencies.

A number of existing bodies were asked if they wished to carry out the role of Administrator, now known as the Office of the Renewable Fuels Agency. HMRC, who already collect the required data, declined. Ofgem, who run the similar Renewables Obligation, also declined. The Environment Agency (EA) was the preferred candidate for the role. However, the EA only has jurisdiction in England and Wales, and no satisfactory legal or political solution could be found in the time available. As such, the EA could no longer be considered for the role.

The DfT's existing executive NDPBs (the Civil Aviation Authority, the British Transport Police, and Passenger Focus) have roles that are too different from those of the Administrator of the RTFO.

No other bodies with the rights skills, experience and powers were found.

The RTFO will therefore be run by a new Non-Departmental Public Body, the Office of the Renewable Fuels Agency.

Annex F Estimate of compliance costs for obligated suppliers

1. Estimate included in Partial RIA published in Feb 2007.

The cost calculations used the estimates of employee costs shown in Table F1

Table F1: Estimates of employee costs

Employee Grade	Annual salary (estimate)	Total employment costs (estimated 35% uplift)	Hourly equivalent (estimate 1800 hours per year)
Middle Management	£40,000	£54,000	£30
Senior Executive	£80,000	£108,000	£60
Director	£160,000	£216,000	£120

The calculation of the costs used the following estimates of the work needed to complete the required tasks, including external costs such as auditors, is shown in Table F2.

Table F2: Estimate of work required

Task	Middle Manager Hours	Senior Manager Hours	Director Hours	Frequency	External Costs
(a)	4			One-off	
(b)	2				Monthly
(c)	16	4	1	Annual	£1,000
(d)	40	400		Annual	
(e)					£7,500

The tasks were:

- (a) One-off registration with the Administrator
- (b) Monthly return of volume data to the Administrator
- (c) Annual reconciliation of volume data including an auditor's check if necessary
- (d) Monthly collection and submission of C&S data and work with suppliers on an ongoing basis to improve the quality and collection of C&S data
- (e) Validation of annual C&S report by external consultants

2. Revised calculations following responses to the consultation

UKPIA estimated an average fully-inclusive employment cost of £100,000. All tasks have been reworked to calculate all work at this rate, and the rate has been broken down as shown in table F3

Table F3: Estimates of employee costs

Employee Grade	Annual salary (estimate)	Total employment costs	Hourly equivalent (estimate 1800 hours per year)
All	n/a	£100,000	£55.55

UKPIA identified some further tasks that should be included in the compliance costs. The work required to complete the other tasks has also been revisited.

Table F4: Revised estimate of work required

Task	Hours required	Frequency	Annual Internal cost (@£55.55)	External Costs	Total
(a)	8	One-off	£444	-	£444
(b)	80	One-off	£4,440	-	£4,440
(c)	40	One-off	£2,220	-	£2,220
Total		One-off			£7,104
(d)	4	Monthly	£2,666	-	£2,666
(e)	80	Annual	£4,440	£1,000	£5,440
(f)	16	Monthly	£10,666	-	£10,666
(g)	240	Annual	£13,332	-	£13,332
(h)	80	Annual	£4,444	£15,000	£19,444
(i)	160	Annual	£8,888	-	£8,888
(j)	40	Annual	£2,220	-	£2,220
Sub-total		Annual recurring			£62,656
(k)	20%	Annual recurring			£12,531
Total		Annual recurring			£75,187

The tasks were:

- (a) One-off registration with the Administrator
- (b) Development of new working procedures
- (c) Training staff
- (d) Monthly return of volume data to the Administrator
- (e) Annual reconciliation of volume data including an auditor's check if necessary
- (f) Monthly collection and submission of C&S data and
- (g) Work with suppliers on an ongoing basis to improve the quality and collection of C&S data
- (h) Validation of annual C&S report by external consultants
- (i) Continuing development of the RTFO
- (j) Ongoing training and process improvement
- (k) 20% allowance for other unidentified tasks that do/may arise