

Response to:

**Consultation on proposals to implement Articles 7a to 7e of the EU Fuel Quality Directive (FQD) (Directive 98/70/EC as amended by 2009/30/EC) requiring suppliers to reduce the lifecycle greenhouse gas intensity of transport fuels and introducing sustainability criteria for biofuels**

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# 1. Foreword

This document sets out a summary of the responses received to the Department for Transport's "Consultation on proposals to implement Articles 7a to 7e of the EU Fuel Quality Directive (FQD) (Directive 98/70/EC as amended by 2009/30/EC) requiring suppliers to reduce the lifecycle greenhouse gas intensity of transport fuels and introducing sustainability criteria for biofuels" and the Government's comments on those responses.

Directive 2009/30/EC was adopted on 23 April 2009 and amends the Fuel Quality Directive (Directive 98/70/EC) on the quality of petrol, diesel and gas oil.

The consultation covered proposals to implement Articles 7a to 7e of the FQD.

This consultation sought views on outline proposals for new regulations to implement the greenhouse gas (GHG) saving elements of the Directive. The options presented were intended to stimulate discussion about the proposals, and our objective was to obtain consultees' views to help us fully understand the impacts of the proposals, particularly on obligated suppliers.

The consultation period began on 10 March 2011 and ran until 2 June 2011. The consultation was published on the Department for Transport website:

<http://www.dft.gov.uk/consultations/dft-2011-04>

A summary of the responses received to that consultation was published on 9<sup>th</sup> September 2011.

This consultation ran in parallel with the consultation on the Renewable Energy Directive (RED) 'Consultation on the implementation of the transport elements of the Renewable Energy Directive', which can be found at:

<http://www.dft.gov.uk/consultations/dft-2011-05>

We would like to thank all those who took the time to respond to this consultation, and the consultation on the RED that ran in parallel. It is crucial that the Department has had opportunity to understand the concerns of not only those involved in the biofuels

industry, the fossil fuel market and related supply chains, but also environmental groups and the wider public.

Biofuels policy is a complex and controversial area that has developed quickly over a relatively short time with biofuels winning and losing supporters along the way. Now, with GHG emission reduction targets, the development of advanced biofuels and better understanding of issues such as indirect land use change (ILUC) we can expect this area to go through yet more change. As Government, we want to be able to take advantage of the opportunities these changes will bring whilst always ensuring that biofuels are developed, produced and supplied in a sustainable manner.

A number of responses, both from members of the public and from environmental groups, called for all biofuel targets to be scrapped. However, the UK must, in law, comply with both the FQD (which requires suppliers to deliver a 6% reduction in lifecycle GHG emissions from many transport and related fuels by 2020), and the RED, which requires the UK to increase its use of renewable energy. Moreover, sustainable biofuels play a key role in our efforts to tackle climate change and reduce GHG emissions from the transport sector, which is why we are committed to delivering the targets set out in the FQD and RED.

None the less, the Government fully accepts that there are legitimate concerns about the sustainability of some biofuels, and that there is some uncertainty about how best to deploy biofuels across transport sectors. We also recognise that there are understandable concerns that increased use of some biofuels can lead to an increase in GHG emissions rather than a reduction. This effect is due to ILUC. We take the issue of ILUC very seriously and have called on the European Commission to work with Member States to develop detailed options to address ILUC which can be subjected to full impact assessments. We expect the European Commission to make its decision on options for addressing ILUC soon.

The nature and range of these issues demonstrate why it is so important that we continue to engage with the full range of people and organisations interested in biofuels and why we value the useful comments made on this consultation. We look forward to continuing this dialogue with stakeholders over the coming months and years.

## 2. Executive Summary

### 2.1. Summary of respondents

There were 50 responses received from a cross section of industry, individuals and organisations that are interested in the policy area. Table 1 provides a summary of those who responded.

**Table 1. Summary of those who responded**

Category of interest	Number of responses
Academic	4
Agriculture	3
Connected with the biofuel industry	21 <sup>1</sup>
Members of the public	3
NGOs	5
Connected with the oil industry	6
Rail	1
Road	2
Maritime	3
Other	3
<b>Total</b>	<b>51</b>

Part One of this document summarises the responses to the questions posed in the consultation and the Government's Response.

Part Two summarises more general comments that were received outside of the formal structure of the consultation questionnaire. These views were taken into account when analysing the responses to specific consultation questions.

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<sup>1</sup> To note that, in order to correct an administrative error, an additional response to those summarised in the 'Summary of Responses to: Consultation on proposals to implement Articles 7a to 7e of the EU Fuel Quality Directive (FQD) (Directive 98/70/EC as amended by 2009/30/EC) requiring suppliers to reduce the lifecycle greenhouse gas intensity of transport fuels and introducing sustainability criteria for biofuels' document published on 9<sup>th</sup> September 2011 is now recorded in this document.

Part Three provides a list of those organisations that responded to the consultation.

## **2.2. Summary of final policy for FQD implementation**

Our final policy on implementation is described in full detail under the relevant sections in Part One of this document but, in summary, we will:

- Designate fuel suppliers as responsible for reporting on the performance of the fuels they supply.
- Require reporting on the volume/amount and type of all fuels supplied on an annual basis;
- Require that reported data relating to the sustainability of biofuel supplied must be verified by an independent auditor;
- Appoint the Secretary of State for Transport as administrator of the FQD scheme (in practice the RTFO Unit will administer the scheme);
- Require the FQD Administrator, so far as practicable, to undertake validation of the amount of each type of fuel supplied – where not practicable suppliers will need to submit a further verifier's report;
- Require that all verification reports meet the requirements of limited assurance as set out in the International Standard on Assurance Engagements 3000, or meet a similar level of verification;
- Treat any biofuel that does not meet the sustainability criteria as fossil fuel;
- Introduce civil penalties to ensure compliance;
- Expand the scope of the RTFO Order 2007 to include fuels used in NRMM;
- Place a duty on the Secretary of State to keep under review whether further measures are necessary to ensure delivery of the FQD requirements.

The FQD introduces the requirement for fuel suppliers to reduce the lifecycle GHG emissions of the fuel they supply by 6% in 2020, relative to the EU wide 2010 fossil fuel baseline. As proposed in our consultation, we will not set intermediate GHG reduction obligations for meeting this requirement.

However, in a change from the approach proposed in the consultation, we have decided not to transpose the 2020 obligation into UK law at this time. This is because there remain uncertainties at European level in a number of key areas - including the ongoing development of measures to address ILUC and measures to account for the GHG intensity of fossil fuels - which will in turn alter a) the calculation of the lifecycle emission values for biofuels, b) the final methodology that will be used to calculate the lifecycle emission values for fossil fuel, and c) the baseline figure against which the 6% GHG intensity reduction will be measured. We do not feel it would be meaningful to obligate suppliers until these uncertainties are resolved and we can better understand what any such obligation would mean in practice.

We will place an ongoing legal duty on the Secretary of State to determine whether any further measures are necessary to ensure delivery of the FQD, in particular for the period from 2014 – 2020. We will rely on the amended Renewable Transport Fuel Obligation (RTFO) to deliver the GHG savings necessary under the FQD for the period up to 2014.

Through an amendment to the RTFO, we will place an obligation on suppliers of fuel/energy for use in road vehicles, non-road mobile machinery (including inland waterway vessels when not at sea), agricultural and forestry tractors, and recreational craft when not at sea. Except for road vehicles, these end uses are collectively referred to as “NRMM” in this document. Further details of this policy are detailed in the Government response to “Consultation on the implementation of the transport elements of the Renewable Energy Directive – Non Road Mobile Machinery”, which was published in July 2012 and can be found here: <http://assets.dft.gov.uk/consultations/dft-2011-05/government-response-16072012.pdf>.

## **2.3. Timing to implementation**

In 2011, Government decided to prioritise implementation of the RED over that of Articles 7a to 7e of the FQD. This approach



enabled mandatory sustainability criteria for biofuels to be introduced, ensuring that financial reward is no longer provided to those biofuels that do not meet the RED sustainability criteria.

The RED sustainability criteria were introduced through amendment of the UK's RTFO on 15 December 2011. Most of what will be delivered through our implementation of the FQD is already being delivered through the amended RTFO.

Additional time has been taken to consider how best to implement those parts of the FQD that can be implemented now, in the absence of final measures that continue to be developed at the European level. In particular, our consultations revealed a number of concerns regarding expansion of the RTFO to include fuels used in NRMM (a measure necessary to ensure full implementation of the FQD), and it was necessary to carefully consider the issues raised.

The Department is now ready to introduce new regulations to transpose those outstanding requirements of the FQD which are sufficiently clear to be transposed now, in particular new annual reporting requirements for fossil fuels and biofuels. We aim for these new regulations to come into force during the autumn of 2012, and for the new reporting requirements to begin in January 2013. We will of course keep stakeholders informed of our progress.

## **2.4. Contact details**

If you have any questions regarding this response, please contact:

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## **3. Introduction**

### **3.1. The Fuel Quality Directive**

The FQD introduces the requirement for suppliers of fuel/energy for use in road vehicles and NRMM to reduce the lifecycle GHG emissions per unit of energy (the “GHG intensity”) of the fuel they supply by 6% in 2020 relative to the EU wide 2010 fossil fuel baseline. In the years prior to 2020 suppliers must reduce the GHG intensity of their fuels as gradually as possible in readiness to meet the 2020 target.

The FQD envisages that the reduction is achieved through:

- the increased supply of sustainable biofuels and alternative fuels/energy with lower GHG intensity; and
- reductions in the emissions associated with the extraction and refining of fossil fuels.

### **3.2. The Renewable Energy Directive**

The RED requires the UK to ensure that 15% of the energy used in electricity, transport, heating and cooling is from renewable sources in 2020. The RED also requires all Member States to ensure that the share of energy from renewable sources in all forms of transport is at least 10% in 2020.

If biofuels are to count towards the RED targets, they must meet minimum sustainability criteria. These criteria address issues such as the minimum GHG savings delivered by biofuels and ensure that biofuels are not produced from areas of high carbon stock or high biodiversity.

The RED also aims to incentivise the supply of biofuels produced from wastes, residues, non-food cellulosic material and ligno-cellulosic material. Such biofuels are counted twice towards the RED transport target.

### **3.3. Links between the Fuel Quality Directive and the Renewable Energy Directive**

There are many links between the FQD and the RED.

Our analysis suggests that, given the practical constraints on the contribution of other sources of GHG reduction in the timeframe to 2020, the reduction in GHG intensity of fuels required by the FQD will come largely from the increased supply of the same sustainable biofuels that will simultaneously make up the majority of the renewable energy required to meet the transport target imposed by the RED. We recognise that the two Directives have a slightly differing scope. However, it has been our intention that implementation measures for these two Directives should mirror each other as far as possible which, in practice, means implementing them both through an amended Renewable Transport Fuel Obligation (RTFO) where possible.

Proposals for transposition of the RED were the subject of a separate consultation, which also ended on 2 June 2011. That consultation proposed that the RED is implemented into UK legislation through amendments to the RTFO Order, which regulates the supply of biofuels in the UK.

That consultation, together with the Government Response, can also be found on the Department's website at:

<http://www.dft.gov.uk/consultations/dft-2011-05>

In our consultations on the RED and FQD we proposed to implement the FQD, in part, through amendment to the RTFO. Specifically, we proposed to expand the scope of the RTFO such that the obligation to supply renewable transport fuel is extended to include fuels used in NRMM. This expansion was proposed because read together Articles 1 and 7a of the FQD explicitly require that suppliers of fuels for use in NRMM reduce the GHG intensity of the fuels they supply.

A separate Government response has been published, in parallel to this response, setting out how the RTFO will be expanded to include fuels used in NRMM. We have published that response on the Department's website at:

<http://www.dft.gov.uk/consultations/dft-2011-05>

### **3.4. High level overview of proposals to implement the FQD**

In our consultation, we set out our preferred approach for implementing the FQD. We proposed to:

- Set a 6% GHG reduction obligation for 2020;
- Require suppliers to report on the GHG performance of the fuels/energy they supply (on an annual basis);
- Establish rules for grouping;
- Appoint an administrator to administer the scheme;
- Introduce a suite of civil penalties for failure to comply with the new regulations (aligned with those of the current RTFO);
- Rely on an amended RTFO, in combination with the minimum GHG savings required by the common sustainability criteria, to deliver GHG savings until 2014; and
- Put an obligation on the Secretary of State for Transport to propose at a later date measures necessary to ensure the delivery of the FQD for the period 2014 to 2019, once there is a greater evidence base regarding biofuel sustainability and deployment issues.

## 4. Part One: Summary of responses to specific questions and Government Response

### 4.1. Proposed approach

#### Summary of proposal

We proposed to put in place a 6% GHG saving obligation for 2020, and to delay setting intermediate mandatory targets.

Under this proposal we would rely on the RTFO to deliver the required GHG savings up to 2014 and other measures would then be introduced to deliver the FQD requirements for the period 2014–2020.

In the consultation we suggested three high-level approaches for implementing the FQD. These are summarised here to aid interpretation of the responses that are presented in this document.

**Approach A:** do nothing;

**Approach B:** set a trajectory of GHG savings up to 2020;

**Approach C:** put in place a 6% 2020 GHG saving obligation and delay setting a trajectory of intermediate mandatory targets.

#### 4.1.1. Question 1: Do you have any comments on our analysis of the three proposed approaches?

#### Summary of responses

Yes:	37
No:	1

#### Main messages from respondents

Of those respondents that made comments, ten supported Approach C, six supported Approach B and none supported Approach A.

Nine respondents from across the supply chain commented that our preferred approach did not incentivise the use of “better” biofuels enough. Four of these (both fuel suppliers and biofuel producers) also disagreed with our analysis that it would be more cost effective to supply greater volumes of lower GHG saving biofuel rather than supplying lesser volumes of higher GHG saving biofuel.

Five respondents (representing both fuel suppliers and biofuel producers) wanted a certificate trading scheme based on GHG savings.

Three environmental groups and one non-departmental public body emphasised the importance of accounting for GHG emissions from the extraction and refining processes for fossil fuels and suggested that GHG savings from these processes should be encouraged.

Three biofuel producers raised the blend wall issue; one asked for more work to be done in this area, another mentioned that the blend wall could be resolved through the use of biofuel with greater GHG savings and/or advanced biofuels.

### **Individual responses/detailed points**

- One fuel supplier commented that because the RTFO will only have targets out to 2014, it would be more sensible not to set targets beyond 2014 under the FQD.
- A biofuel interest group commented that our analysis did not sufficiently take into account that the biofuels industry needs certainty in order to grow and expand.
- A biofuel producer stated that our analysis omitted consideration of the option of requiring higher GHG savings than the RED under Approach B, and the impact of not incentivising better biofuels under Approach C.
- A biofuel producer representative group warned that Approach C could end up being the most expensive option as costs would be delayed until targets were eventually set.
- A fuel retailer association felt that the Impact Assessment did not consider the impact of proposals on fuel retailers.

- A biofuel producer thought interim targets should not be set until more is known about the availability of RED compliant fuels, the blend wall issue and ILUC.

#### **4.1.2. Question 2: Do you have any additional evidence you would like to share with the Department?**

##### **Summary of responses**

Yes: 19  
No: 8

##### **Main messages from respondents**

One biofuel producer and one biofuel producer representative group made reference to the recent Committee on Climate Change Renewable Energy Review<sup>2</sup> and suggested that omitting evidence from this review in the Impact Assessment resulted in our assessments being unbalanced.

A fuel supplier requested that the 2009 work by LowCVP, which recommended a dual certificate scheme be taken forward, should be reconsidered in implementing the FQD and RED. A biofuel producer, fuel supplier and fuel supplier representative group pointed towards the JEC Biofuels Programme report<sup>3</sup> that outlined various ways to meet the 10% RED target.

A local transport provider estimated that, from their experience, if B30 (a diesel containing 30% biodiesel) was used in all freight transport, the 10% RED transport target would be met. This comment was supported by a biofuel producer representative group that thought that heavy goods vehicle (HGV) fleets and NRMM users would be instrumental as they do not face the same blend wall issues as other road transport users.

A fuel supplier thought that more work is necessary to tackle blend wall issues and that a common approach to this issue should be developed at a European level. An agricultural sector

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<sup>2</sup> <http://www.theccc.org.uk/reports/renewable-energy-review>

<sup>3</sup>

[http://ies.jrc.ec.europa.eu/uploads/jec/JECBiofuels%20Report\\_2011\\_PRINT.pdf](http://ies.jrc.ec.europa.eu/uploads/jec/JECBiofuels%20Report_2011_PRINT.pdf)

representative requested information on why the blend wall is an issue in the UK but not other Member States.

A biofuel producer and a biofuel producer representative group pointed to their own analysis that 80% of the UK biofuel target could be met using biofuel produced in the UK.

### **Individual responses/detailed points raised**

- A biofuel producer noted that if the UK adopted clear GHG reduction targets the industry would respond and pointed to recent policy decisions and actions in the United States.
- A biofuel producer thought that the Impact Assessment underestimated current UK ethanol GHG savings and that the Department for Energy and Climate Change (DECC) oil price projections were too low.
- One fuel supplier thought that only renewable electricity should count under the FQD and that any buy-out paid for missing the GHG criteria under the FQD should be equal to the EU Emissions Trading Scheme average price for that year, rather than equal to the cost of abatement through supply of biofuel.
- A fuel supplier estimated that the double counting for wastes and residues (under the RED) would lead to a reduction of about 30% in the overall volumes of biofuel being produced/supplied, which would then have an impact on the GHG savings achieved.
- A biofuel producer representative group provided details of their own analysis that concluded that there is sufficient biofuel feedstock available to meet the 2020 FQD and RED targets.
- Another biofuel producer thought that, in order to achieve the 10% target in the most practical manner, the Government should:
  - start planning for an E85 (petrol containing 85% bioethanol) infrastructure now, including incentivising flex fuel vehicle purchases;



- prove the viability of advanced bioethanol manufacture; and
- ensure road transport fuels are taxed according to their GHG emissions and energy content (rather than by volume).

### **4.1.3. Question 3: Do you agree with our proposal to do the minimum necessary to implement the FQD now whilst continuing to improve our evidence base?**

#### **Summary of responses**

Yes: 23  
No: 12

#### **Main messages from respondents**

Those that agreed were mainly fuel suppliers, environmental groups and groups representing transport users that thought that the evidence and methodologies available now are not sufficient to set future targets.

Those that disagreed were mainly biofuel producers and their representative organisations. In addition, one fuel supplier objected to Approach C, suggesting that this approach was overly cautious and would lead to missed opportunities to deliver GHG savings.

Five fuel suppliers and a representative group stated that, while they supported our approach, we should provide more information on: what evidence we will be gathering; what the Secretary of State's obligation to review entails; and how we will tackle blend wall issues.

Four biofuel producers and a biofuel producer representative group stated that the RED sustainability criteria are sufficient to guarantee that the biofuel supplied is sustainable and therefore the UK should not delay setting intermediate GHG reduction targets.

Two biofuel producers and a biofuel producer representative group thought that by pursuing Approach C the UK would not fully introduce the FQD's requirement that GHG savings are made "as gradually as possible".

A number of respondents also focussed on the need for incentives to promote biofuels with higher GHG savings.

Two biofuel producers, a fuel supplier, a retail representative organisation and an interest group warned that Approach C would reduce investment in the biofuels sector.

A biofuel producer representative group thought our proposed approach did not take into account GHG reductions that would take place as a result of the EU Emissions Trading Scheme and stated that the GHG performance of fossil fuels should be reported as well as that of biofuels.

### **Individual responses/detailed points raised**

- A biofuel producer asked us to consider the evidence within the E4Tech<sup>4</sup> and Committee on Climate Change<sup>5</sup> reports.
- A biofuel producer commented that the industry in the United States has experience in producing ethanol on a large scale without experiencing issues related to ILUC.
- A local transport provider stated that more research to encourage waste-derived biofuels was necessary and that more focus should be put on biomethane.
- One biofuel supplier commented that under Approach C, it would be challenging for industry to make long-term investment decisions in the knowledge that the legislation will be reviewed within 2 years.

#### **4.1.4. Government Response**

Taking into account the fact that Approach C was the most supported option, we will continue with our proposed approach not to set intermediate GHG reduction obligations for now.

However, in a change from the approach proposed in the consultation, we have decided not to transpose the 6% GHG reduction obligation for 2020 into UK law at this time. There are currently considerable uncertainties at European level, notably the question of how fully to assess the sustainability of biofuels, as

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<sup>4</sup> <http://www2.dft.gov.uk/pgr/roads/environment/research/biofuels/>

<sup>5</sup> <http://www.theccc.org.uk/reports/renewable-energy-review>

well as unfinished deliberations in the European Commission over necessary measures to calculate the GHG intensity of fossil fuels. Many of these concerns were raised by responses to the consultation.

As a result of these uncertainties, we cannot best decide how finally to implement the remaining aspects of the FQD until we have greater clarity in these areas, and will therefore be consulting further on any measures necessary to meet our obligations under the Directive. We therefore did not feel that it was meaningful to obligate suppliers prospectively for 2020, given the current uncertainty as to what this will mean in practice.

We will place a legal obligation on the Secretary of State to determine whether further measures are necessary to ensure delivery of the FQD, and in the interim period rely on an amended RTFO to deliver GHG savings through the requirement to supply renewable transport fuel.

Some respondents raised comments related to the accounting of GHG emissions from fossil fuels. The European Commission is in the process of developing a methodology for the accounting of GHG emissions from fuels/energy other than biofuel. The FQD is clear that this methodology must account for the lifecycle GHG emissions of fuels and, as such, emissions associated with refining and extraction must be included.

Many respondents raised concerns regarding the sustainability of biofuels and the need to resolve these issues. Several respondents specifically urged the Government to move quickly towards understanding and accounting for the indirect effects of biofuels. International research continues to investigate the scale of indirect impacts of biofuel production and how the negative effects can be reduced. While such impacts remain uncertain there is robust evidence that widespread use of some biofuels can lead to significant indirect GHG emissions. The UK has pressed the European Commission to come forward with proposals that will address consistently across all Member States the indirect impacts of biofuels used in Europe, regardless of the origin of the fuel or feedstock. We expect the European Commission to come forward with such a proposal soon.

Some respondents urged us to take into account the findings of the Committee on Climate Change who have advised that while a

10% renewable energy in transport target is achievable, only 8% of renewable energy should be sourced from biofuels.<sup>6</sup> The Government is considering the Committee's advice and is also considering the Committee's report on the best use of bioenergy across sectors.<sup>7</sup> Further evidence will also be drawn from the results of the Department's research into the best use of biofuels across transport modes<sup>8</sup> and the Department's consultation on the future of sustainable aviation: "The Aviation Policy Scoping Document".<sup>9</sup> The Government is also developing a bioenergy strategy which will look at the use of sustainable bioenergy across transport, heat and power, as well as its impacts on other sectors.

Delivery of the FQD is clearly linked to biofuel policy as the majority of GHG savings are likely to be delivered through use of sustainable biofuels. Until we have a more robust evidence base, we cannot confidently set biofuel targets beyond those established under the current RTFO and consequently will refrain from setting GHG reduction targets under the FQD. When appropriate, we intend to consult on possible changes to the percentage of biofuel that will be required to be supplied for the period 2014 to 2020.

The UK has raised concerns with the European Commission and Member States regarding the need to ensure that the EU road vehicle fleet in 2020 is compatible with fuels that will be supplied to meet the mandatory targets set out in the RED and FQD. It is clear that a harmonised approach is required across Europe and we will continue to push for work to be undertaken at the EU level.

## **4.2. Potential impact on resilience and security of supply in the UK market**

### **4.2.1. Question 4: What are the potential impacts of pursuing Approach C on the resilience and security of the UK market?**

#### **Summary of responses**

Commented: 26

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<sup>6</sup> <http://www.theccc.org.uk/reports/renewable-energy-review>

<sup>7</sup> <http://www.theccc.org.uk/reports/bioenergy-review>

<sup>8</sup> <http://www.dft.gov.uk/topics/sustainable/biofuels/research/>

<sup>9</sup> <http://www.dft.gov.uk/consultations/dft-2011-09>

## Main messages from respondents

Four biofuel producers and a biofuel producer representative group stated that our preferred approach risks discouraging investment in the biofuel industry. A fuel supplier stated that as the legislation will be in force for only 2 years before a review is undertaken it will be challenging for those wishing to make long-term investment decisions.

Two transport user representative groups, a biofuel producer, three fuel suppliers and their representative group thought Approach C would be beneficial in terms of security of supply in the UK. However, a biofuel interest group thought that Approach C would reduce the stability of the UK biofuels market because of the absence of future targets. In addition an agricultural sector representative and biofuels interest group thought that Approach C would weaken UK resilience because the biofuel industry would shrink and so reliance on biofuel imports would increase.

## Individual responses/detailed points raised

- One fuel supplier, though supporting Approach C, thought it imperative that the current uncertainties regarding the FQD be resolved as soon as possible at the European level.
- One biofuel producer raised concerns that Approach C would lead to the creation of fewer “green” jobs in the UK.
- One fuel supplier commented that the contribution of biofuels to the current UK fuel supply decreased the UK’s market exposure to supply shortages, price volatility and carbon intensive fuels. The fuel supplier thought that our proposed approach would send a negative signal to biofuel investors making it more difficult to improve the GHG intensity of fuel production (both biofuel and fossil fuel) and to improve the traceability of fossil fuel supply chains. In addition, they believed that our preferred approach would reduce investment in sustainable agriculture and make it difficult to develop supply chains for waste-derived biofuel.
- An environmental group stated that it is imperative to follow our proposed approach until sustainability issues such as ILUC are addressed. The group also made comments related to the accounting of GHG emissions from fossil fuels

and thought that obligatory reporting on transport fuel feedstocks should be implemented in order to gain information about upstream emissions.

- One trade representative group thought that Approach C would allow new biofuels (that are yet to be developed) onto the market more easily.
- A biofuel producer representative group reiterated comments made in response to the consultation on proposals to implement the RED, focussing on proposed verification requirements under the amended RTFO.

#### **4.2.2. Government Response**

This question was asked in order to gather evidence on the potential impacts on the resilience and security of supply of the UK market under Approach C.

Biofuel producers commented that Approach C would undermine investments in UK biofuel production and as such would lead to a reduction in the overall resilience and security of supply in the UK. Conversely, three fuel suppliers and a fuel supplier representative group believed that pursuing Approach C represented the best approach in order to minimise impact on resilience and security of supply.

Taking respondents' views into account and considering the need to ensure that biofuel policy is sustainable and robust going forward, we will proceed with Approach C (though as modified by section 4.1.4. above).

#### **4.3. Determining who is obligated under the FQD**

##### **Summary of proposal**

We proposed to obligate suppliers of fuel/energy for the following specified end uses:

- Road vehicles;
- Non-road mobile machinery (including inland waterway vessels when not at sea);

- Agricultural and forestry tractors; and
- Recreational craft when not at sea.

#### **4.3.1. Question 5: Do you agree with our proposal to mirror the RTFO approach in determining who is an obligated supplier?**

##### **Summary of responses**

Yes: 21  
No: 0

##### **Main messages from respondents**

Most respondents agreed with our proposal, and commented that it made sense to align implementation of the FQD with implementation of the RED through an amended RTFO. It was felt that this approach would reduce administrative burden and maintain consistency between implementation of the FQD and RED.

##### **Individual responses/detailed points raised**

- An industry representative group commented that while it is necessary to align who is obligated under the FQD and RED, it will be important to ensure that this action does not result in unnecessary complication and administrative burden for the downstream supply of liquefied petroleum gas (LPG).

#### **4.3.2. Government Response**

On the basis of the responses received we will proceed with our proposal to mirror the RTFO approach in determining which entities are obligated suppliers under the FQD. We will also work with the industry when developing FQD guidance so that we avoid unnecessary complications and burdens for suppliers.

### **4.4. Minimum Threshold**

##### **Summary of proposal**

As part of our consultation on proposals to implement the RED, we wanted to understand the opportunities and impacts of changing the RTFO minimum threshold. As part of the consultation on

proposals to implement the FQD we wanted to understand the possible impact of introducing a minimum threshold to any regulations transposing the FQD.

We invited comments from stakeholders in order to develop our evidence base regarding this issue.

#### **4.4.1. Question 6: Would the application of the same minimum threshold to both the RED and FQD significantly reduce the burden on the industry?**

##### **Summary of responses**

Yes: 15  
No: 5

##### **Main messages from respondents**

The majority of respondents that provided an answer to the question agreed that introducing the same minimum threshold to both the RED and the FQD would reduce the burden on industry, in particular on small suppliers.

Eight respondents, comprising fuel suppliers and transport users, commented that it is logical to align the FQD with the RTFO and suggested that the same minimum threshold should apply under both obligations.

A fuel supplier, a fuel supplier representative group and a biofuel producer all thought that there should be a minimum level or other mechanism to ensure that fuel additive producers are excluded from the obligation. The same group, and an additional fuel supplier and biofuel producer, disagreed that the application of the minimum threshold would reduce the burden on the industry.

#### **4.4.2. Question 7: Would the introduction of a minimum threshold set at 450,000 litres introduce any significant perverse impacts?**

##### **Summary of responses**

Yes: 1  
No: 15



## Main messages from respondents

Fourteen respondents, from all parts of the supply chain, thought that the introduction of a 450,000 litre minimum threshold would not introduce significant perverse impacts. Three of these respondents pointed out that the FQD does not allow for a minimum threshold to be set. Other respondents reiterated comments that were made in response to the consultation on proposals to implement the RED.

A group representing small biofuel producers thought that setting the minimum threshold at this level would introduce significant perverse impacts and that, therefore, the threshold should be set at 10 million litres.

## Individual responses/detailed points raised

- One fuel supplier reiterated comments made in response to the consultation on proposals to implement the RED. Specifically, that respondent reiterated that applying a minimum threshold could reduce the burdens associated with non compliance of small companies that are not part of the mass fuel market; and that raising the threshold could allow the RTFO administrator to be more targeted in their approach to enforcement/compliance while having little effect on the overall impact of the RTFO and delivered GHG savings.

### 4.4.3. Question 8: Would the introduction of a minimum threshold set at 10,000,000 litres introduce any significant perverse impacts?

#### Summary of responses

Yes:	12
No:	6

## Main messages from respondents

Six respondents comprising two biofuel producers, two respondents with an interest in the marine/inland waterway sector and a fuel retailer representative body thought that putting in place a 10 million litre minimum threshold would not introduce any significant perverse incentives. Two of these respondents thought the adoption of a 10 million litre minimum threshold would only

have a minimal impact on the total amount of GHG emission reductions delivered under the FQD.

Eleven respondents from across the supply chain believed that the introduction of a 10 million litre minimum threshold would result in significant perverse impacts. Ten of these respondents thought that such a high minimum threshold would lead to suppliers splitting their operations into small businesses just below the threshold thereby avoiding their obligation to reduce the GHG intensity of the fuels they supply. One respondent commented that a 10 million litre threshold would lead to missed opportunities to deliver GHG savings.

#### **Individual responses/detailed points raised**

- One biofuel representative organisation expressly requested that the minimum threshold be set at 10 million litres.
- A fuel supplier thought that this higher threshold could deter small biofuel businesses from starting up, particularly those thinking of producing biofuel from wastes and residues.

#### **4.4.4. Government response**

In our consultations on proposals to implement the RED and FQD we explained that we wished to seek information on the likely opportunities and impacts of possible changes to the RTFO minimum threshold.

Most respondents agreed that introducing a minimum threshold to the FQD would reduce burden to industry, particularly small businesses. Respondents also agreed that any minimum threshold should be aligned as between the regulations transposing the FQD and the RTFO Order.

The FQD does not explicitly allow Member States to introduce a minimum threshold. However, the issue of putting in place a minimum threshold has been discussed at European level, as negotiations on implementing measures for Article 7a of the FQD continue. We are also of the view that the application of the EU law principle of proportionality is sufficient to permit the creation of a minimum threshold in the meantime.

While these negotiations continue, we will retain the current RTFO minimum threshold and introduce a similar threshold to the

regulations transposing the FQD into UK legislation. Suppliers of less than 450,000 litres of fuel per year will not be obligated under regulations transposing the FQD. All suppliers that supply more than 450,000 litres of fuel per year will be obligated under our implementation of the FQD and will be required to report on the performance of all the relevant fuels they supply.

We will continue to keep the issue of the minimum threshold under review and will ensure that it is aligned with any new minimum threshold agreed at the European level during negotiations on Article 7a implementing measures.

## **4.5. Fuels that would fall under the FQD obligation**

### **Summary of proposal**

We proposed that the reporting requirements and obligation are applied to the supply of all road-grade automotive petrol, diesel, low sulphur gas oil (irrespective of its end use), compressed natural gas (CNG), liquefied petroleum gas (LPG) and biofuel unless the supplier can prove that the fuel was supplied for uses other than the specified end uses (road vehicles and NRMM).

### **4.5.1. Question 9: Do you agree with our proposal to obligate GHG reductions for all road-grade diesels and all low-sulphur gas oil?**

#### **Summary of responses**

Yes:	18
No:	7

#### **Main messages from respondents**

Seventeen respondents agreed with our proposal to obligate GHG reduction for all road-grade diesels and all low-sulphur gas oil. Three respondents requested that the Department work with industry to define what would constitute proof that fuel was not used in road vehicles or NRMM. One respondent suggested that delivery notes stating the fuel standard (e.g. BS2869 for heating/category D use) could be sufficient. Another respondent suggested that the exclusion of low-sulphur gas oil used in non NRMM applications should be set out in legislation.

Eight respondents (mainly biofuel producers and maritime industry representatives) were concerned about the possible lack of biofuel free gas oil for NRMM uses and requested that the Department made clear to suppliers that it would be permissible to supply biofuel free gas oil under the framework of the FQD.

Seven respondents did not agree with our proposed approach. These respondents comprised two fuel suppliers, a fuel retailer representative group, a biofuel producer, an agricultural representative organisation and organisations representing the marine/inland waterway and rail sectors. Two respondents raised concerns regarding long-term storage of gas oil containing biofuel and the risk of microbial contamination. Two other respondents commented that we should not oblige suppliers to blend biofuel with diesel/gas oil, citing concerns related to the sustainability of biodiesel and issues with the storage of blended products.

### **Individual responses/detailed points raised**

- A fuel supplier commented that the RED only obligates gas oil used in rail and inland waterways rather than gas oil used in all NRMM and that this difference should be retained.
- Storage capabilities were a concern with a fuel supplier representative group suggesting that more work should be done to ensure that all blended fuels have a minimum storage life of two years.
- One maritime industry representative group requested that the Department make it clear to suppliers that they are not mandated to supply gas oil blended with biofuel and that low-sulphur gas oil for sea-going marine use should not be included in the obligation due to safety risks.
- A transport provider representative group emphasised the extra burden this would place on the rail sector.

### **4.5.2. Government response**

The FQD is clear that suppliers of fuel for use in the specified end uses must reduce the GHG intensity of those fuels. As such, the UK must oblige suppliers of fuel for use in NRMM to reduce the GHG intensity of the fuels they supply.

We understand the concerns raised by some respondents regarding the use of biofuel in fuel used for marine and standby power generation. Discussions with the oil industry, marine and (some) standby generation stakeholders in early March 2011 confirmed that 1000ppm sulphur gas oil with no biofuel content continues to be available for standby and sea-going marine applications. In practice this is a single grade of fuel which meets both the BS 2869 D and ISO 8217 standards. The ISO 8217 standard is intended for sea-going marine fuel and explicitly prohibits biodiesel content.

We do not propose to mandate that suppliers reduce the GHG intensity of fuel supplied for use in sea-going marine applications, for use on tidal sections of rivers or for use in standby power generation. Thus the amended RTFO will not place any requirements on suppliers specifically to reduce the GHG emissions of 1000ppm sulphur gas oil.

Further information regarding the expansion of the scope of the RTFO is provided in the Government Response to “Consultation on the implementation of the transport elements of the Renewable Energy Directive – Non Road Mobile Machinery”, details of which are given in section 2.2 above.

The FQD reporting requirements will be imposed on all suppliers of fuels/energy for use in the specified end uses (road vehicles and NRMM). Given that implementing measures for Article 7a of the FQD are yet to be agreed at the European level, for the time being we will require suppliers to report on the GHG intensity of all the fuel/energy they supply using a pre-determined fossil fuel baseline figure for all fossil fuels. In addition, in the absence of implementing measures related to the accounting of the contribution of electricity used in road vehicles towards the reduction obligation, it is not possible for us to include measures related to the use of electricity in our implementation of the FQD at this time. Therefore, the FQD regulations will only require that suppliers report the following information:

- Total amount of each type of fuel and/or energy supplied as volume of fuel supplied (litres of liquid fuel, kg of gaseous fuel) and amount of energy (MJ);
- Type of fuel and/or energy;

- Lifecycle GHG intensity of each type of biofuel and fossil fuel (in gCO<sub>2</sub>e/MJ);
- Details of how any biofuel supplied meets the sustainability criteria;
- A verifier's opinion that the reported data is correct (see section 4.8 for further information regarding verification).

These reporting requirements will apply to all petrol, road-grade diesel, low-sulphur gas oil and renewable transport fuels (i.e. biofuels) (in each case irrespective of its end use, unless suppliers can prove that the fuel was supplied for uses other than the FQD specified end uses, i.e. heating, stationary equipment, etc.) as well as CNG, LPG and hydrogen.

The regulations will make clear that award of an RTFC under the RTFO is sufficient to allow the original supplier to demonstrate compliance with the sustainability criteria and the verification requirements associated with demonstrating the sustainability of the renewable transport fuel.

## 4.6. Partially Renewable Fuels

### Summary of proposal

We proposed to recognise fuels that are made partly from fossil feedstocks and partly from renewable feedstocks under the FQD and that only the renewable portion of these fuels must meet the biofuel sustainability criteria.

We also proposed that only biofuels produced from biodegradable renewable feedstocks will be required to meet the sustainability criteria (though the GHG intensity of fuels made from non-biodegradable renewable feedstocks will still need to be accounted for).

### 4.6.1. Question 10: Do you agree with our proposals regarding partially renewable fuels?

#### Summary of responses

Yes:	20
No:	1

## Main messages from respondents

Those that agreed with our proposals were spread across the range of respondents.

Three respondents (a biofuel producer, a fuel supplier and one agricultural sector representative) agreed with our proposed approach but noted that this proposal was not inline with that of the RED and as such could lead to unnecessary administrative burden.

An agricultural sector representative reiterated comments made in response to our consultation on proposals to implement the RED and urged the Department to press the European Commission to deal with this issue at the European level to ensure consistency across all Member States.

Only one respondent (a biofuel producer representative group) disagreed with our proposed approach.

## Individual responses/detailed points raised

- A biofuel producer supported our proposal stating that it would enable a wide range of fuels to be rewarded on the basis of their actual GHG intensity.
- Another biofuel producer stated that the renewable aspect of a feedstock for biofuel is more important than the biodegradable aspect.

### 4.6.2. Question 11: Does our proposed approach to biofuels produced from non-biodegradable feedstocks present any significant difficulties?

## Summary of responses

Yes:	6
No:	14

## Main messages from respondents

The majority of respondents that answered this question did not think our approach posed any significant problems. Those that did were two fuel suppliers, a fuel supplier representative group, a

biofuel producer, a biofuel producer representative group, and a biofuel interest group.

Four comments made by those that agreed recognised that difficulties with this proposal remained due to the slight difference of approach between the RED and the FQD.

Two fuel suppliers and a fuel supplier representative organisation disagreed with our proposal as they feel it goes beyond the requirements of the RED. Specifically, this group thought that fuel produced from non-biodegradable feedstock should not be eligible for Renewable Transport Fuel Certificates (RTFCs) which are awarded per litre of biofuel supplied in the UK in order to demonstrate compliance with the RTFO. However, one of these stated that if the Department convinced the European Commission and other Member States to adopt this approach then they would not object further.

### **Individual responses/detailed points raised**

- A biofuel interest group was concerned that the practical difficulty associated with identifying the fraction of non-biodegradable renewable feedstock in mixed waste would be disproportionate.
- One fuel supplier and a biofuel producer commented that differentiating between biodegradable and non-biodegradable feedstocks would be difficult and could not be achieved by the carbon-14 physical testing method that can be used to assess the renewable portion of a partially renewable fuel.
- An environmental group emphasised that they would agree with our proposal but only if the non biodegradable feedstocks were co-products or waste from other production chains.

### **4.6.3. Government response**

Having taken into account the comments received under this consultation and the consultation on proposals to implement the RED, we have decided to proceed with our proposals. There will be no requirement for non-biodegradable renewable feedstock to meet the sustainability criteria; however, the GHG intensity of fuels



made from non-biodegradable renewable feedstocks will still need to be accounted for. Under the regulations transposing the FQD this will, in practice, mean that the non-biodegradable portion of the fuel will be treated as fossil fuel (please see section 4.7). Depending on the final outcome of negotiations with the European Commission on implementing measures under Article 7a of the FQD, however, these provisions may be amended in the future to allow such feedstocks to be specifically accounted for.

In order to minimise the burden on industry the Department will provide guidance on what proportion of relevant feedstocks may be reported as non-biodegradable.

## **4.7. Accounting of biofuel that does not meet the sustainability criteria**

### **Summary of proposal**

We proposed to treat any biofuel supplied that does not meet the sustainability criteria as fossil fuel, except where the GHG performance of those biofuels is shown to be worse than the EU-wide 2010 fossil fuel baseline ('the baseline').

We proposed that any biofuel that does not fulfil the requirements of the sustainability criteria, but is demonstrated to have a GHG intensity less than the baseline, would be assigned a GHG intensity equivalent to the baseline.

Any biofuel that does not fulfil the requirements of the sustainability criteria but has GHG intensity greater than the baseline would be assigned the actual GHG intensity in order that the supplier of that unsustainable and GHG intensive biofuel would have to account for those GHG emission increases.

### **4.7.1. Question 12: Do you agree with our proposed approach for the accounting of unsustainable biofuel?**

#### **Summary of responses**

Yes:	19
No:	6

#### **Main messages from respondents**

The majority of respondents that answered this question agreed with our proposed approach for the accounting of biofuel that failed to meet the sustainability criteria. Those that agreed were mainly biofuel producers and their representative groups, transport user groups and biofuel interest groups.

Five fuel suppliers, a fuel supplier representative group and a biofuel producer disagreed with part of our proposals. All these respondents suggested that any biofuel that failed to meet the sustainability criteria should be treated as fossil fuel and, as such, the GHG intensity of that unsustainable biofuel should be counted as equal to the fossil fuel it would have replaced or the EU-wide fossil fuel baseline.

### **Individual responses/detailed points raised**

- A biofuels interest group felt that our proposal had merit; however, the group was concerned that the approach had the potential to restrict development of new biofuels that might initially not meet the sustainability criteria, but have the potential to meet the criteria as further developments are made.
- A non-departmental government body with an interest in environmental issues agreed with our proposal and suggested that there should be a limit to the level of net GHG emissions for biofuels and that poor performing biofuels (with respect to GHG emission) should be discouraged.

### **4.7.2. Government Response**

Taking into account the comments received and that the majority of respondents supported our approach, we will continue with our proposal.

A significant group disagreed with part of our proposal (to use the actual GHG intensity of an unsustainable biofuel where it is more carbon intensive than the fossil fuel baseline). Though we understand that the burden on suppliers would be less if all unsustainable biofuel were to be accounted as having a GHG intensity equivalent to fossil fuel (or the EU-wide fossil fuel baseline) we think that it is important to discourage and penalise supply of biofuel that does not meet the sustainability criteria,

whether that be the minimum GHG saving threshold or any of the land criteria.

Biofuel supplied that does not meet the sustainability criteria will be accounted as having a GHG intensity equivalent to the EU-wide 2010 baseline (“the baseline”), except where the GHG performance of those biofuels is shown to be worse than the baseline. As such, biofuel not meeting the sustainability criteria and demonstrated (with appropriate verification) to have a GHG intensity lower than the baseline will be accounted as having a GHG intensity equal to the baseline. Any biofuel not meeting the sustainability criteria and demonstrated (with appropriate verification) to have a GHG intensity greater than the baseline, will be accounted as having the actual GHG intensity reported.

Nonetheless, we do not think it likely that significant amounts of biofuel with a GHG intensity greater than that of the EU-wide baseline will be supplied to the market. In practice, we would not expect suppliers to be able to provide verification reports stating the actual GHG intensity of biofuels that do not meet the sustainability criteria (most likely because suppliers and their verifiers will not be able to provide key information, for example land use). In the absence of a verification report stating the actual GHG intensity of the biofuel, the biofuel will be considered to have a GHG intensity equal to the baseline.

## **4.8. Verification of reported information**

### **Summary of proposal**

We proposed that all data in suppliers’ annual reports should be verified by an independent auditor; this requirement would extend to verification of the volumes/amounts of fuel/energy supplied.

Verification reports will be considered of an adequate standard provided that the verifier and the report comply with the International Standard on Assurance Engagements 3000 limited assurance standard promulgated by the International Auditing and Assurance Standards Board.

### **4.8.1. Question 13: Do you agree that the International Standard on Assurance Engagements 3000 limited assurance**

## **standard is a suitable standard for verification under the proposed scheme?**

### **Summary of responses**

Yes: 19  
No: 0

### **Main messages from respondents**

Those who responded (from across the supply chain) agreed that the International Standard on Assurance Engagements (ISAE) 3000 is suitable.

Two fuel suppliers, a fuel supplier representative group and two biofuel producers thought information verified according to other Member State requirements should also be accepted under the UK's implementation of the FQD.

Three fuel suppliers, a fuel supplier representative and a biofuel producer suggested that a list of verifiers would be helpful and three of these respondents asked for a check list of "key points" that verifiers should check.

Several respondents commented that the verification requirements under the FQD should be aligned with those of the RED. A biofuel producer representative group and a fuel supplier commented that the FQD proposal did not allow other equivalent standards to be used (as was the case in the RED proposals). The biofuel producer representative group suggested that the legislative requirements for verification should be aligned with those of the amended RTFO and that the legislation should make clear that alternative, equivalent, standards of verification would be accepted.

### **Individual responses/detailed points raised**

- A fuel supplier stated that recourse and appeal procedures ought to be clear and that an independent, non departmental authority/ombudsman should be responsible for administering the appeal process.

#### **4.8.2. Question 14: Are there any other assurance standards that we should consider?**

##### **Summary of responses**

Yes: 2  
No: 15

##### **Main messages from respondents**

Only two respondents answered “yes” to this question and these respondents requested that consideration was given to other standards accepted by other Member States, noting that ISAE 3410<sup>10</sup>, AA1000<sup>11</sup> and ISO 19011<sup>12</sup> were other suitable standards.

Five comments, from fuel suppliers, a fuel supplier representative group and a biofuel producer, emphasised the importance of there being a consistent approach across Member States but did not suggest any other specific standards.

#### **4.8.3. Question 15: Do you foresee any difficulties in verifying data (including volumes of fuel/energy supplied, sustainability data, and GHG intensity)?**

##### **Summary of responses:**

Yes: 12  
No: 5

##### **Main messages from respondents**

Three fuel suppliers, a fuel supplier representative group and two biofuel producers thought that each operator should be exclusively responsible for their own operations, with operators providing verified sustainability data at the point of transfer to the obligated supplier. The same group also stressed the importance of all

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<sup>10</sup> This is a proposed standard dealing with both limited and reasonable assurance engagements on greenhouse gas reporting.

<sup>11</sup> AccountAbility's AA1000 series are principles-based standards for helping organisations become more accountable, responsible and sustainable.

<sup>12</sup> An International Organisation for Standardisation standard related to conformity audits for environmental management systems, greenhouse gas emission validation and verification, and product certification systems.

Member States accepting biofuel as compliant where it has met the carbon and sustainability criteria of other Member States (the principle of mutual recognition).

Three fuel suppliers, a fuel supplier representative group and a biofuel producer also suggested that there could be a UK national verification scheme where all fuels would be accepted as verified where provided under this scheme, while keeping the option of self-verification open. The majority of the same group also warned that there will not be sufficient time between publication of the sustainability criteria and introduction of the legal requirement for suppliers to prepare to meet those criteria. The same group also commented that there is a risk that there will not be enough verifiers in the UK, as many of the current UK verifiers will be in demand in other Member States that have not required verified sustainability information in the past.

Three fuel suppliers mentioned that it was difficult to take a view on this until more details are known (one respondent commented that Member States are still awaiting implementing measures related to the reporting of GHG emissions for fuels other than biofuels) while a biofuel producer and biofuel producer representative group thought that the baseline fossil fuel comparator needed to be established by the European Commission without further delay.

### **Individual responses/detailed points raised**

- A biofuel producer suggested that where mixed waste feedstocks are used there may be difficulties in GHG accounting for advanced biofuels derived from wastes.
- A maritime industry representative thought that the verification and reporting of exact fuel content is important information to be passed on to those that use the fuel.
- A biofuels interest group thought that there would be no difficulty in obtaining this data as long as the FQD Guidance was detailed enough.
- One respondent commented that effective verification of biofuel sustainability and GHG intensity is a near impossibility, especially given the lack of a methodology for taking account of ILUC.

- A fuel supplier viewed the RED timeframe for verification as too short, and was concerned about penalties for non-compliance.
- A maritime industry representative group mentioned that the process should be the least burdensome possible; this was echoed by a trade organisation.
- A biofuel producer thought the costs assigned to verification were too low in the Impact Assessment.
- One fuel supplier raised concerns regarding the possible GHG accounting methodology for fossil fuels. The fuel supplier believed that the FQD is the wrong instrument to use to regulate GHG intensity in the production and refining of fossil fuels. Furthermore, the fuel supplier felt that the methods suggested by the European Commission to obtain the GHG intensity data were unviable and would lead both to distortion across the market and potential carbon leakage.

#### **4.8.4. Government response**

We acknowledge that the proposed standard of verification under our FQD proposals was not aligned with our RED proposals and understand the importance of ensuring consistency between these two schemes.

Taking into account the responses received under both this consultation and the consultation on proposals to implement the RED, we propose that for the FQD reported information must be verified to meet the requirements of limited assurance as set out in ISAE 3000, or to a similar level of verification, and will ensure that the legislation is explicit in this requirement.

This revised approach will ensure alignment with the amended RTFO<sup>13</sup> and the closely related Renewables Obligation<sup>14</sup>.

The FQD Administrator will have a duty to validate, so far as reasonably practicable, the total amount of each type of fuel and/or energy supplied and the type of fuel and/or energy supplied. This

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<sup>13</sup> <http://www.legislation.gov.uk/ukxi/2011/2937/contents/made>

<sup>14</sup> Information regarding the Renewables Obligation can be found at: <http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/Pages/RenewablObl.aspx>

approach mirrors that of the RTFO, where it is the RTFO Administrator that validates the volumes of fuel supplied. However, where the FQD Administrator determines that it is not able to validate this information, they will have the power to require suppliers to provide a verified report on the volume and type of the fuel/energy supplied.

In order for the FQD Administrator to validate information related to the total amount of each type of fuel and/or energy supplied, we will establish a new legislative information sharing gateway between the FQD Administrator and HM Revenue and Customs. This legislative gateway will substantially mirror the existing RTFO Administrator–HM Revenue and Customs gateway.

We do not propose to publish a restrictive list of approved verifiers. However, the FQD Guidance will provide more detail on the verification process, including information on how to appoint a verifier.

Under the current RTFO, it is the supplier of the renewable fuel that is responsible for reporting on the sustainability of their fuel. We do not propose to change this arrangement as we introduce the RED and FQD. We firmly believe that the fuel supplier, at the end of the supply chain, should have complete oversight of that supply chain and must ultimately be responsible for ensuring and demonstrating that the fuel they supply complies with the sustainability criteria.

We understand that a level playing field across Europe is important for the UK and European markets to operate efficiently. As such, we support the approach of mutual recognition across Europe and so will accept consignments of biofuel assessed as meeting the RED sustainability criteria by other Member States (and a verifier may rely on this in producing their verification report for the UK supplier). However, a consignment of biofuel cannot count under a renewable energy scheme in more than one Member State; therefore a supplier will be required to withdraw fuel from any other Member States' renewable energy scheme before it can be recognised in the UK. We will also work closely with other Member States as they implement the FQD to ensure that the level of verification required in relation to the GHG intensity of fuels/energy other than biofuel is inline with that of other Member State requirements.



Further comments regarding verification in relation to the sustainability of biofuel are provided in the Government's Response to the RED consultation.

## 4.9. Coming into force date

### Summary of proposal

We proposed that the regulations transposing the FQD will commence on the same day that the amended RTFO comes into force (i.e., the 15<sup>th</sup> day of the earliest month possible) though the FQD reporting cycle will run on a calendar year basis.

#### 4.9.1. Question 16: Do you support the proposal for the FQD GHG Regulations to come into force on the same date as the amended RTFO comes into force?

### Summary of responses

Yes:	23
No:	0

### Main messages from respondents

Those that supported the proposal were from across the supply chain.

Four fuel suppliers, a fuel supplier representative group and a biofuel producer asked that the reporting years for the RTFO and FQD were aligned to avoid administrative burden. One fuel supplier suggested that they should be aligned to both begin in April 2012; others thought that they should be aligned to cover calendar years.

One fuel supplier, two biofuel producers and a biofuel producer representative group asked that the draft legislation is published to allow public scrutiny. Two of this group added that the Department should make it clear that it will not be acceptable to simply not comply with the GHG reductions required by the FQD until 2020 and then pay a civil penalty.

### Individual responses/detailed points raised

- One fuel supplier supported the proposal subject to wider concerns over implementing the Directive at all whilst so many uncertainties remain.
- A biofuel producer supported the proposal and asked that the Directive is implemented as soon as possible to ensure that UK and European biofuel companies are not disadvantaged.

#### **4.9.2. Government response**

In October 2011, Government announced that it was prioritising implementation of the closely related RED over that of the FQD. This approach ensured that financial reward was no longer provided to those biofuels that do not meet the RED and FQD sustainability criteria. Most of what will be delivered through our implementation of the FQD is already being delivered through our implementation of the RED via the amended RTFO that came into force on 15 December 2011.

We will soon be ready to introduce new regulations introducing new annual reporting requirements for fossil fuels and biofuels. We aim for these new regulations to come into force in the course of Autumn 2012, and will keep stakeholders informed of our progress.

Suppliers will be required to report on an annual basis, starting on 1 January 2013, with FQD reporting periods running from 1st January to 31st December.

#### **4.10. Impact Assessment**

We invited comments on the analysis of costs and benefits provided in the Impact Assessment, giving supporting evidence wherever possible.

##### **4.10.1. Question 17: Do you agree that the Impact Assessment correctly identifies the likely economic impacts?**

##### **Summary of responses**

Yes:	3
No:	11

## Main messages from respondents

Those that agreed comprised a fuel supplier, a biofuel producer and a biofuel producer representative group. Those that disagreed comprised biofuel producers, a biofuel producer representative group, an agricultural sector representative, three maritime representative groups, two respondents with an interest in energy and one fuel supplier.

Two maritime sector representatives thought that the costs of our proposals on operators in the inland waterway and maritime sectors could be much higher if biofuel free gas oil does not remain available for use in these sectors. Another respondent representing similar interests stated that the possibly significant costs of dealing with microbial contamination were not taken into account in the Impact Assessment.

Several comments were made regarding assumptions made about likely GHG savings of biofuels. One biofuel producer suggested that likely GHG savings from current UK wheat–ethanol plants should be used in the Impact Assessment. Another biofuel producer commented that adjustment of the ratio of bioethanol to biodiesel blended into fossil fuels could deliver greater reductions in overall GHG intensity and that bioethanol has higher GHG savings than biodiesel (through having a lower ILUC impact).

## Individual responses/detailed points raised

- A biofuel producer commented that the value of domestic biofuel production was not monetised in the Impact Assessment (this view was supported by a biofuel producer representative group that commented on the potential impacts in terms of UK trade balance and employment). This fuel supplier provided additional, more detailed information, regarding the potential benefits to UK trade of meeting the 2020 target. The biofuel producer also raised concerns regarding assumptions made as to the amount of biofuel that could be imported into the UK in the future.
- A fuel supplier commented that the Impact Assessment did not use the most recent biofuel supply data and believed that use of these data would enable better estimates of the likely impacts of double counting of waste-derived biofuels under

the RED and consequential impacts on costs and sustainability.

- A biofuel producer representative group raised concerns that the Impact Assessment did not draw on recent cost estimates made by the International Energy Agency (the same criticism was made of impact assessments that accompanied our consultation on proposals to implement the RED). The respondent continued by noting that, by not establishing trajectories now, the up-take of biofuels is likely to have to happen at an accelerated rate at the end of the decade which will cost more than if a gradual trajectory was established now.
- A biofuel producer thought that the assessment for Approach C should include a greater price for biofuels than for Approach B. The respondent argued that Approach C would lead to the UK being reliant on more expensive imports owing to this approach leading to a lack of investment in UK biofuel production.
- An energy interest group disagreed with the assumption that the FQD targets will mainly be met through biofuel use.
- An agricultural sector representative reiterated concerns raised regarding the likely impacts of including low sulphur gas oil in the obligation to reduce GHG intensity and requested that further work was undertaken to ensure undesired impacts are avoided.
- An energy interest group thought the Impact Assessment should have considered the option of sequestering carbon dioxide from fossil fuel or first or second generation biofuels.
- A fuel supplier commented that it was difficult to judge the accuracy of the impact assessments as they were based on fuel prices that are very volatile.
- One biofuel producer provided eighteen detailed comments on specific paragraphs in the Impact Assessment; these are not summarised here, but have been taken into account.

#### **4.10.2. Question 18: Do you have any further evidence you would like the Department to**

## **consider in relation to the Impact Assessment?**

### **Summary of responses**

Yes: 10  
No: 11

### **Main messages from respondents**

The following comments were received:

- A local transport operator suggested that the link between fossil fuel emissions and air quality should be considered.
- An environmental group requested that the carbon emissions associated with producing fossil fuels is taken into account under the FQD, as well as similar emissions from biofuels.
- A fuel supplier suggested that assumptions regarding the GHG savings of biofuels were too low when compared to preliminary data reported under the 2010/2011 RTFO obligation year.
- Respondents from the marine/inland waterway sectors raised concerns that the presence of biofuels in marine fuel could present a significant safety risk and that this issue is not addressed in the Impact Assessment. These respondents were also concerned that the risks associated with microbial contamination of fuel were not sufficiently accounted for.
- An energy think tank did not support the GHG accounting methodology for biofuels and asked that the Department consider a discussion paper produced by the think tank that provided details of an alternative methodology.
- A trade association representing fuel distributors stated that social impacts needed to be included as part of the Impact Assessment.

### **4.10.3. Government response**

The proposed policy option for FQD transposition places an obligation on the Secretary of State to determine whether further

measures are necessary to ensure the outstanding aspects of the FQD are implemented (i.e. those where deliberations are currently ongoing in Europe). Before such measures are put in place, further detailed analysis will be developed that will aim to address stakeholder concerns where possible.

## Sustainability Issues

As mentioned in the Impact Assessment that accompanied the consultation document, we are waiting for publication by the European Commission of methodologies to take account of the ILUC and social impacts of biofuels, and will update our analysis of these issues as they become available.

## Economic benefit (to the UK) of a larger biofuels industry

The potential economic benefits to the UK of increased domestic biofuels production were discussed in the published Impact Assessment, although it was not possible to monetise these benefits due to a lack of robust data. We are grateful to consultation respondents for submitting evidence on this subject, which will inform the Department's ongoing analysis in this area.

## Impact of RTFO double counting

The impact of double counting of waste-derived biofuel has been captured in a separate Impact Assessment<sup>15</sup> (accompanying the Government Response to the consultation on the RED) which is dedicated to this aspect of the RED.

## Biofuel Cost Estimates

The biofuel cost estimates used in the published Impact Assessment were generated using the OECD FAO Aglink-Cosimo model and Department of Energy and Climate Change oil price projections. The Department routinely performs sensitivities on and adopts new data to enhance its central assumptions.

## Non-biofuel abatement options

Non-biofuel abatement options were not specifically included in the published analysis, although the Department acknowledges that they may be potentially viable. Further analysis of these options

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<sup>15</sup> The double counting impact assessment can be found at <http://www.dft.gov.uk/consultations/dft-2011-05>

would be undertaken before any further target trajectories are consulted on.

### Lifecycle GHG emissions

Analysis of GHG emissions is based upon lifecycle values for both fossil fuel and biofuel. GHG emission defaults for fossil fuels are taken from the RED. Biofuel GHG assumptions were set out in annexes 15 and 16 of the published Impact Assessment.

### Updated fossil fuel and biofuel price projections

Government routinely updates its fossil fuel and biofuel price projections. These updated projections will be used to revise our analysis prior to consultation on any additional measures.

## **5. Part Two: General responses**

Outside of the formal structure of the consultation questionnaire respondents offered comments on both the wider debate around the sustainability of biofuels, and issues of FQD implementation and administration. These comments are summarised below and were taken into account when formulating the Government's Response to the consultation.

### **5.1. Wider debate on biofuel sustainability**

- Biofuel producers and trade bodies were concerned that it was not proposed to increase biofuel obligation levels through the setting of biofuel supply and GHG reduction trajectories (annual obligations) up to 2020.
- There was a perception that the above risked inhibiting investment in new biofuel technologies, and hindered both the development of low carbon energy supply for transport and compliance with the Directives.
- It was also suggested in this context that the proposals for implementing the FQD and further analysis should concentrate on how best to incentivise higher performing biofuels in terms of their contribution to GHG reductions, and should encourage the supply of biofuels going beyond the mandatory sustainability requirements.
- Conversely, Non-Governmental Organisations (NGOs) and other environmental advisory and campaigning organisations warned against too rapid an expansion of biofuel supply and generally supported adoption of Approach C (see questions 1 to 3). Similar concerns around the environmental and social sustainability of biofuels were raised by three members of the public.
- Concerns were also raised regarding the effects of use of biofuel on food security, land rights of local people, biodiversity and their wider environmental impact.
- Some respondents suggested that other sustainable means of reducing GHG emission should be explored, such as reducing car use.



- There was general support for the Government's position that strong sustainability criteria and a robust lifecycle GHG analysis are necessary to ensure that biofuels deliver real GHG reductions.
- An advisory group and fuel suppliers commenting on the longer-term strategy of decarbonising road transport suggested that a variety of transport fuel solutions and policy interventions would be needed. In this context it was also noted by one fuel supplier that the proposed revisions in Approach C would encourage LPG production.
- It was also suggested by a trade body that rapid change in biofuels policy may not be helpful. The trade body stated that clarity was needed around biofuel blend specifications in order that vehicles could be correctly calibrated to accept the new fuels. In addition, harmonisation across Europe was urgently needed as fuels are marketed across Europe. The Government was urged to take the opportunity to learn from the good and bad experiences of introducing new biofuel products in other Member States.
- A fuel supplier and a trade body were of a view that there is a need for coordinated action at EU level to align both biofuel specifications and the implementation schemes of all Member States. These respondents suggested that further work at EU level was needed before committing to a firm plan for the UK to implement the FQD out to 2020.
- Several respondents raised concerns about the ILUC impact of biofuels and the need for quick resolution across Europe.

## 5.2. FQD administration

- There was broad agreement that the methodology used by the administrator of the FQD in assessing GHG emissions associated with feedstocks and energy sources should be comprehensive, and consistent with other schemes.
- An energy provider also explained that a consistent methodology should ensure that fair comparisons of emissions can be made for all vehicle types, including electric vehicles, in a way that can be understood by consumers.

- Some fuel suppliers queried whether the projected costs associated with audits required for verification were too conservative.
- An advisory body and biofuel suppliers supported a certificate trading scheme and opposed “grouping” under which companies may agree to achieve targets jointly.

## **6. Part Three: List of organisations that responded**

Argent Energy (UK) Ltd

Association of Train Operating Companies

Biofuelwatch

BP Oil UK Limited

British Association for Chemical Specialities and UK Cleaning Products Industry Association

British Sugar

Butamax Advanced Biofuels LLC

Cargill

Conidia Bioscience Ltd

ConocoPhillips Limited

Downstream Fuel Association

E3 Foundation

EcoNexus

EDF Energy

Ensus

Esso Petroleum

European Biodiesel Board

Federation of Petroleum Suppliers

Friends of the Earth

Greenenergy Fuels Ltd

Greenpeace

GreenSpeed  
Ineos Refining  
Ineos Bio  
Low Carbon Vehicle Partnership  
Mabanaft UK Ltd  
Merseytravel  
National Farmers Union  
Northeast Biofuels  
Nuffield Council on Bioethics  
Oil Firing Technical Association  
Passenger Boat Association  
Renewable Energy Association  
Royal Society for the Protection of Birds  
Scottish Environment Protection Agency  
Scottish Natural Heritage  
Shell UK  
Society of Motor Manufacturers and Traders  
The Cruising Association  
Total UK Ltd  
UK Petroleum Industry Association  
UK Renderers' Association also representing the Foodchain & Biomass  
Renewables Association  
UK Sustainable Biodiesel Alliance  
UKLPG  
United Kingdom Major Ports Group and British Ports Association

Vireol Bio-Industries PLC

Vivergo Fuels Ltd

Wyton Energy Consulting