



Department
for Transport

Renewable Transport Fuel Obligation Annual Report 2013-14

March 2015



Renewable Transport Fuel Obligation Annual Report 2013-14

Presented to Parliament
by the Secretary of State for Transport
by Command of Her Majesty

March 2015



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Executive Summary

This report

1. This report has been produced to ensure transparency in the financial reporting of the Renewable Transport Fuel Obligation (RTFO). The RTFO is included in the Department for Transport's budgets, however due to the nature of this income and expenditure it cannot be reported within the Department for Transport's Annual Report and Accounts.
2. The RTFO is one of the Government's main policies for reducing greenhouse gas (GHG) emissions from road transport in the UK. It requires that a certain percentage of road transport fuel supplied is renewable.

Outturn for 2013-14

3. The total value of the RTFO for 2013-14 is £398 million. This is calculated as the difference between the cost of renewable fuels supplied and the fossil fuels they have replaced.

Forecasts

4. The forecast total value of the RTFO for 2014-15 is £349 million. The RTFO budget for 2015-16 is forecast at £354 million.

Scheme outcomes

5. The average GHG saving from the biofuels supplied under the RTFO was 69% in 2013-14 compared to fossil fuels. This represents a total saving of nearly 2.8 million tonnes of CO₂ equivalent for the year. This is equivalent to taking approximately 1.35 million cars off the road for the year.
6. The RTFO is meeting its objective of reducing carbon emissions from road transport. All of the biofuels rewarded under the RTFO meet the mandatory sustainability criteria. The RTFO is designed and managed to ensure a high level of compliance with its requirements.

Signature and audit

7. This report is signed by the Permanent Secretary, Department for Transport. The outturn figure for 2013-14 has been audited by the National Audit Office (NAO).

1. Introduction

Purpose of this report

- 1.1** This report has been produced to ensure transparency in the financial reporting of the Renewable Transport Fuel Obligation (RTFO). The RTFO is classed as an 'imputed tax and spend' measure, and as such is included in the Department for Transport's budgets. Due to the nature of this income and expenditure it cannot be reported within the Department for Transport's Annual Report and Accounts. Inclusion would not be compliant with the Government's Financial Reporting Manual.
- 1.2** After consideration by a number of Parliamentary committees, it was decided that a separate Annual Report would be a suitable alternative means of reporting in order to maintain transparency and the accountability standards expected for public expenditure and taxation.
- 1.3** This report gives an outturn figure for the value of the RTFO for the 2013-14 financial year alongside the outcomes for the scheme. Forecasts are also given for the 2014-15 and 2015-16 financial years. The National Audit Office (NAO) has audited the 2013-14 outturn data within this report, the audit opinion is included on page 8

The RTFO

- 1.4** The RTFO is one of the Government's main policies for reducing greenhouse gas (GHG) emissions from road transport in the UK. The RTFO requires that a certain percentage of fuel is renewable. The scheme started in 2008 and was amended in 2011 to implement mandatory sustainability criteria for the biofuels supplied. These sustainability criteria set a minimum GHG saving which increases over time and aim to prevent other potential environmental damage from production of biofuels.
- 1.5** The RTFO operates with tradable certificates. These are called Renewable Transport Fuel Certificates (RTFCs) and are awarded to suppliers of sustainable biofuel. In order to receive the certificates the supplier must provide information which demonstrates that their fuel meets the sustainability requirements. They must also have this data and the evidence supporting it independently verified.
- 1.6** One RTFC is issued per litre of liquid biofuel derived from crop based feedstocks. Biofuels produced from waste material and certain other sources have an increased incentive of 2 RTFCs per litre. This reflects the lower risk that these materials will cause undesirable impacts such as indirect land use change.

- 1.7** The RTFO operates on an annual basis starting each year on 15 April. Each supplier of fuel to the UK market¹ is required to demonstrate that biofuel has been supplied to cover a set proportion of their overall fuel supply. For the 2013-14 year, this proportion was 4.75%.
- 1.8** Suppliers can meet this obligation by redeeming certificates that they have received for their own biofuel supply, or by redeeming certificates that they have bought from other suppliers of biofuel.
- 1.9** Suppliers also have the option to buy-out of their obligation, paying 30 pence per litre of biofuel for which they have not redeemed an RTFC. This protects consumers from excessive increases in fuel prices by setting a maximum value for RTFCs.
- 1.10** Any money received from suppliers buying out is distributed between suppliers who have redeemed RTFCs and those who have chosen to surrender additional RTFCs for this purpose.
- 1.11** Fuel suppliers can meet up to 25% of their obligation with certificates issued in the previous year. This reduces the impact of unexpected events and provides some protection against year to year volatility of fuel prices.

UK biofuel industry

- 1.12** The UK currently has a total biofuel production capacity of over 1,500 million litres per year. The vast majority of this is in a small number of high-volume facilities, with 3 biodiesel and 3 bioethanol plants having installed capacity of over 50 million litres per year and employing around 500 people directly. Actual production has been significantly below capacity for both bioethanol and biodiesel since 2008.
- 1.13** In addition to the larger biofuel production plants, there are many smaller operators, mostly processing used cooking oil to make biodiesel.

¹ Except those supplying less than 450,000 litres per year

2. Signoff of report

- 2.1** As Accounting Officer for the Department for Transport I am responsible for ensuring that there is a high standard of financial management, including a sound system of internal control and effective financial systems. This responsibility includes the Renewable Transport Fuel Obligation (RTFO). I am content that appropriate financial controls over the RTFO are in place and that sufficient checks and reviews have been made to produce accurate and reliable financial data within this report. The external audit by the National Audit Office relates to the 2013-14 outturn. I have taken all reasonable steps to be aware of and provide necessary information to the auditors and I am not aware of any additional relevant information.

Philip Rutnam

March 2015

Permanent Secretary and Accounting Officer
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3. Audit report

Renewable Transport Fuel Obligation Annual Report Audit Report 2013-14

ASSURANCE REPORT TO THE SECRETARY OF STATE FOR TRANSPORT IN RELATION TO THE DISCLOSURE OF THE ADDITIONAL COST OF BIOFUEL SUPPLIED UNDER THE RENEWABLE TRANSPORT FUEL OBLIGATION

I have audited the disclosure of the outturn related to the additional cost of biofuel supplied under the Renewable Transport Fuel Obligation (RTFO) included as section 4 in Renewable Transport Fuel Obligation Scheme Annual Report for the year ended 31 March 2014.

Subject matter, criteria and limitations

The Secretary of State for Transport is required to prepare an annual report in respect of the RTFO scheme under the Renewable Transport Fuel Obligation Order 2007 (as amended). Included within this report, as section 4, is a disclosure of the outturn related to the additional cost of biofuel supplied under the RTFO scheme for the period 1 April 2013 to 31 March 2014. This disclosure is derived from a model designed by the Department for Transport, with observable inputs.

I have reviewed the output of the model and considered the adequacy with which the model derives a figure for inclusion in section 4, the outturn related to the additional cost of biofuel supplied under the RTFO scheme. I have not considered alternative measurement or evaluation methods. I have considered whether the disclosure has been properly prepared in accordance with the Renewable Transport Fuel Order 2007 (as amended).

My review extended only to providing assurance on the disclosures made for the period 1 April 2013 to 31 March 2014. My historic evaluation is not relevant to future periods due to the risk that the model may become inadequate because of changes in conditions.

Specific purpose of this assurance report

This report has been prepared to provide the Department for Transport with reasonable assurance over whether section 4, the outturn related to the additional cost of biofuel supplied under RTFO, gives a true and fair view for the period 1 April 2013 to 31 March 2014.

Responsibilities

The Permanent Secretary on behalf of the appointed administrator, the Secretary of State for Transport, is responsible for preparing section 4, the outturn related to the additional cost of biofuel supplied under RTFO, and for

being satisfied that this note is true and fair. My responsibility is to audit and express an opinion on section 4, the outturn related to the additional cost of biofuel supplied under RTFO, in accordance with International Standards on Assurance Engagements 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*.

Performance of the engagement in accordance with International Standards on Assurance Engagements 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*

I performed a reasonable assurance engagement in accordance with the principles of International Standards on Assurance Engagements 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information* issued by the International Auditing and Assurance Standards Board. The objective of a reasonable assurance engagement is to perform such procedures as to obtain information and explanations which I consider necessary in order to provide me with sufficient appropriate evidence to express a positive conclusion on the disclosure. No other section of the annual report has been audited under this engagement.

Quality control and compliance with ethical standards

I apply International Standard on Quality Control 1, *Quality Control for Firms that perform audits and reviews of Financial Statements, and other Assurance and Related Service Engagements*. Accordingly, I maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

I have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Summary of work performed

The 2013-14 additional cost of biofuel is estimated using a cost model. My assurance work included an examination of this cost model, to confirm that this is consistent with its intended function and that its inputs are consistent with the underlying source data. I also made enquiries with management as to the controls surrounding the collection of data where it was from internal sources.

Conclusion

In my opinion, section 4 of the RTFO annual report, showing the outturn related to the additional cost of biofuel supplied under the RTFO scheme for the period 1 April 2013 to 31 March 2014, is properly prepared in accordance with the Renewable Transport Fuel Obligations Order 2007 (as amended) and provides a true and fair view of the outturn related to the additional cost of biofuel supplied under the RTFO scheme.

Paul Oliffe
Director

13 March 2015

National Audit Office
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Victoria
London
SW1W 9SP

4. Outturn (audited) for 2013-14

Table 4.1 RTFO outturn 2013-14

RTFO Outturn for 2013-14	£398 million
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Cost estimation methodology and data sources

- 4.1** The RTFO requires road transport fuel suppliers to blend a certain amount of biofuels into fossil fuels. The most significant biofuels deployed through this mechanism are bioethanol (48%), which is blended into fossil petrol and biodiesel (49%), which is blended into fossil diesel.
- 4.2** Biofuels have historically been more expensive than fossil fuels. Fuel suppliers/retailers are likely to pass much or all of these additional costs onto the final consumer. Biofuels also have lower energy content per litre, so the use of biofuels increases the cost of motoring.
- 4.3** This price difference between fossil fuels and biofuels can be observed in the market. The Department receives monthly market reports from 'Platts', a leading global provider of energy, petrochemicals, metals and agriculture information, and an established source of price data for those commodity markets².
- 4.4** We have estimated the cost imposed by the RTFO using monthly volumes of biofuels as reported through the RTFO statistics³ and price differentials as reported through Platts' market reports. To take account of the lower energy content of biofuels, we compare fuel costs in terms of £/MJ and not £/litre, based on energy density factors quoted in the Renewable Energy Directive⁴. Since the biodiesel price varies depending on the feedstock, we have generated separate estimates for biodiesel from different feedstocks. For bioethanol, there is just one market price and no distinction between feedstocks.
- 4.5** For the remaining 3% of biofuels that are not bioethanol or biodiesel, pricing information is not readily available. We have used proxies for these small-volume fuels, based on their closest substitute fuels:
- 4.6** The RTFO reporting year runs from 15 April to 14 April, so there is a slight difference from the financial year. We have not attempted to adjust for this.

² www.platts.com

³ <https://www.gov.uk/government/collections/biofuels-statistics>

⁴ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009L0028>

5. Forecasts

Table 5.1 Future RTFO value	
RTFO forecast for 2014-15	£349 million
RTFO budget for 2015-16	£354 million

Cost estimation methodology and data sources

Forecast for 2014-15

- 5.1** The forecast has been modelled using the same methodology and data sources as the outturn for the current year, with the following exceptions.
- Actual fuel supply volumes for the first 6 months of the year have been used and doubled to give a full year estimate.
 - Actual price data for the first 9 months has been used and assumed to apply to the full year.
 - Insufficient feedstock mix data is available at this time, so an average of the previous 3 years has been used.

Budget for 2015-16

- 5.2** The budget has been modelled based on the 2014-15 forecast plus inflation (as per Treasury official GDP deflators).
- 5.3** An estimate was also made using a range of price estimates and assumptions about fuel supply volumes and feedstock mix. This predicted that the total value of the RTFO for 2015-16 would be £277 million to £438 million. There is some uncertainty about the fuel supply volumes and feedstock mix and very high uncertainty around future fuel prices.

6. Scheme outcomes

Introduction

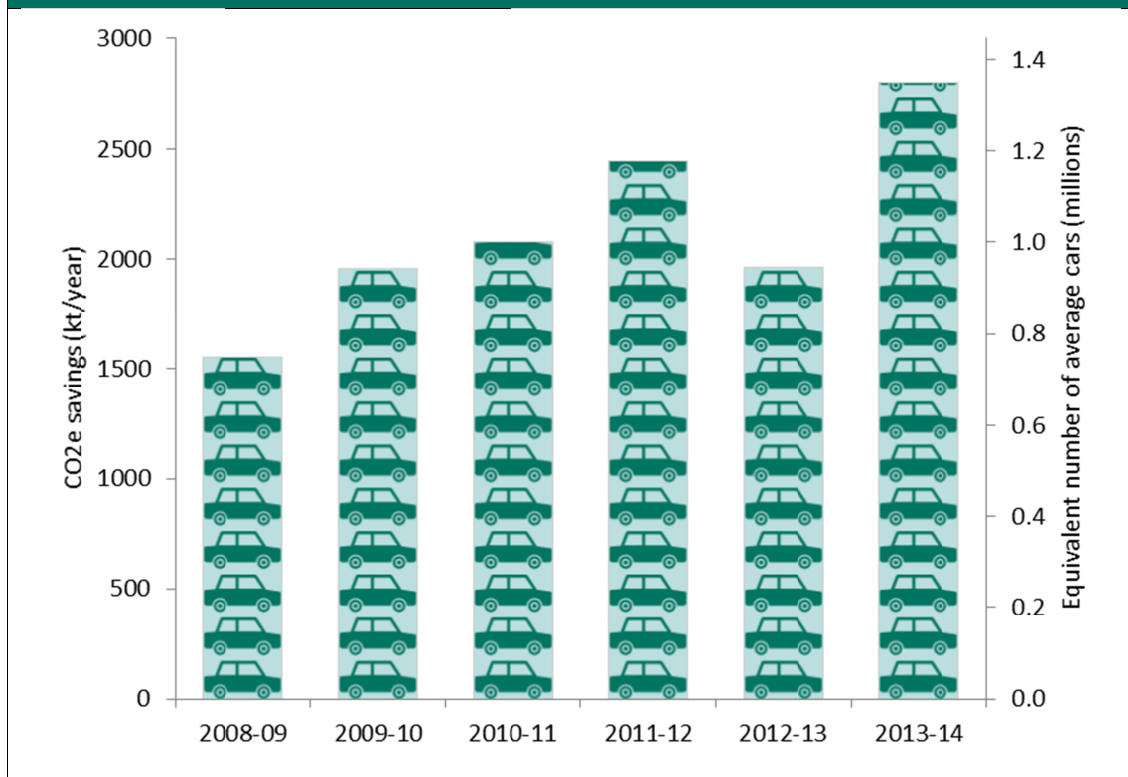
6.1 The main policy objective of the RTFO is to reduce carbon emissions from transport. It aims to do this using biofuels which meet the minimum sustainability criteria.

Greenhouse gas savings

6.2 Under the RTFO GHG savings are calculated using the methodology set out in the Renewable Energy Directive.

6.3 The average GHG saving from the biofuels supplied under the RTFO was 69% in 2013-14 compared to fossil fuels. This represents a total saving of nearly 2.8 million tonnes of CO₂ equivalent for the year. This is equivalent to taking approximately 1.35 million cars off the road for the year. See Figure 6.1.

Figure 6.1 GHG savings from the RTFO

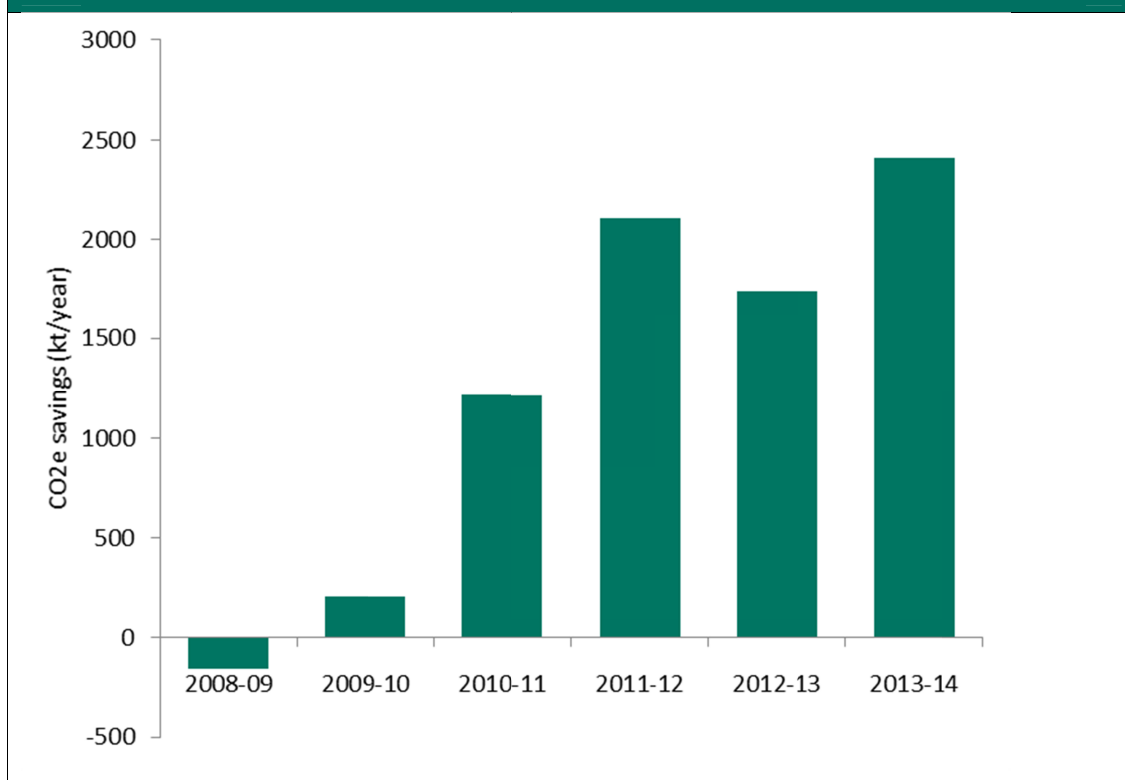


6.4 The general increase in greenhouse gas savings since 2008-09 has been due to a shift towards feedstocks from wastes, which tend to have higher carbon savings than crop-based feedstocks. In 2012-13 there was a reduction in the GHG saving due to lower amounts of biodiesel being supplied.

Indirect land use change

- 6.5** When an existing crop is displaced to enable a biofuel crop to be grown, additional agricultural land may be created to accommodate the displaced crop. This is called 'indirect land use change' (ILUC). If ILUC occurs, there is a risk that there will be a loss of carbon stock from that land and therefore additional carbon emissions.
- 6.6** Under the current RTFO, this issue is not accounted for, however negotiations are underway in the EU to address this risk. A draft Directive includes estimates of the additional emissions associated with each biofuel feedstock. These have been used to calculate the amount of carbon saved by the RTFO taking ILUC into account. See Figure 6.2. In 2013-14, the total carbon saving from the RTFO, including ILUC was just over 2.4 million tonnes of CO₂ equivalent.

Figure 6.2 RTFO Carbon savings including ILUC



- 6.7** In the early years of the RTFO, there was a high proportion of crop based feedstocks. Due to the risk of ILUC from these crops, the total carbon savings for these years was low and is even negative during the first year. Since the introduction of the additional incentive for biofuels from waste based feedstocks in 2011, approximately half of UK biofuels have been made from waste. This reduces the risk of ILUC and therefore gives higher carbon savings when ILUC is accounted for.

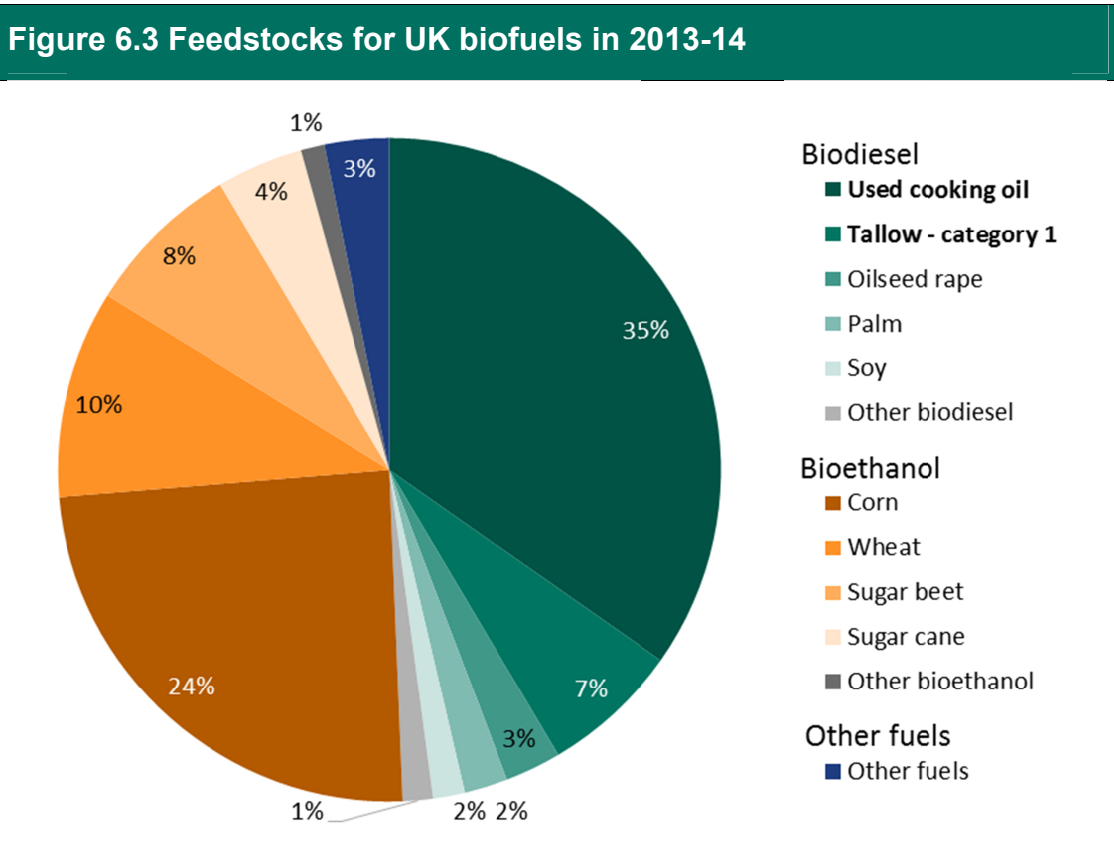
Biofuel sustainability and sources

- 6.8** In order to receive RTFCs suppliers must be able to provide evidence that their biofuels meet the sustainability requirements. For 2013-14, these were:

- The biofuel meets a minimum GHG saving of 35%;
- Growing crops of biofuels does not lead to a loss of biodiversity; and
- Growing crops of biofuels does not lead to a loss of high-carbon stock land such as forest or peatland.

6.9 These sustainability requirements were met for 99.9% of the biofuel supplied into the UK in 2013-14.

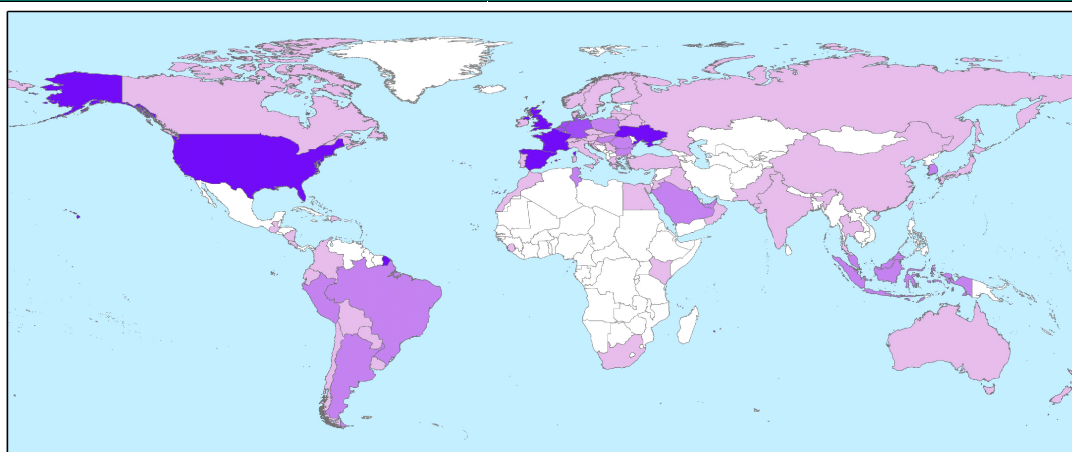
6.10 Figure 6.3 shows the main feedstocks from which the UK's biofuels were made in 2013-14. Waste feedstocks, which have a reduced risk of undesirable impacts, are shown in bold, and represent 46% of biofuels supplied.



6.11 Whilst the well-known feedstocks continued to dominate the supply in 2013-14, there was also a move to new sources of waste, with biofuel from various industrial processing residues being reported for the first time. These currently make up a very small proportion of the overall supply.

6.12 The number of countries where the feedstocks originate has increased significantly since the start of the RTFO. In 2008-09 the feedstocks originated from 18 different countries. In 2013-14, 59 different countries were reported - see Figure 6.4. The UK was the largest individual country, being the country of origin for 19% of the biofuel reported. Approximately three quarters of the feedstock originates in Europe.

Figure 6.4 Global UK biofuel feedstock sources 2013-14



Supply in million litres

- Over 110
- 50 - 110
- 10 - 49.9
- Under 10

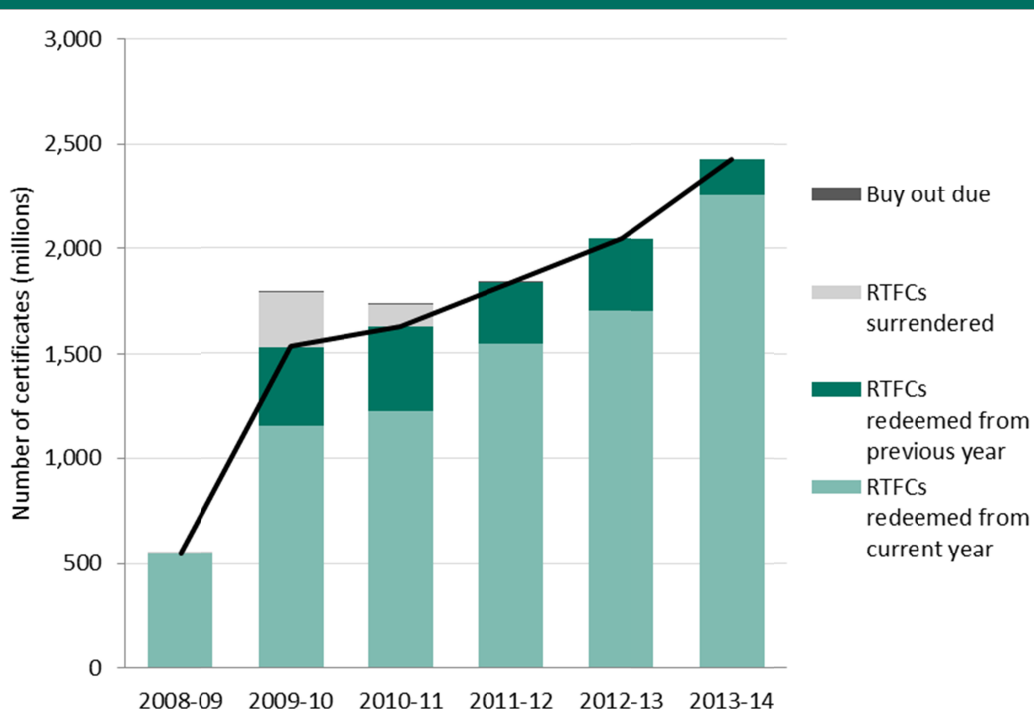
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Meeting the 2013-14 obligation

6.13 All road transport fuel suppliers met their 2013-14 obligations by redeeming RTFCs. In 2013-14, 2,256 million RTFCs were redeemed, of which 171 million, or 8%, related to fuel supplied in the previous year.

6.14 Figure 6.5 shows the number of RTFCs redeemed and surrendered each year.

Figure 6.5 RTFCs redeemed and surrendered



- 6.15** As the Administrator of the RTFO, DfT operates systems and processes designed to prevent and detect fraudulent applications for RTFCs. It also has powers to impose civil penalties if certain requirements of the RTFO Order are not complied with. No RTFCs were revoked due to fraudulent applications during 2013-14 and no civil penalties were imposed.

Conclusion

- 6.16** The RTFO is meeting its objective of reducing carbon emissions from road transport. All of the biofuels rewarded under the RTFO meet the mandatory sustainability criteria. The RTFO is designed and managed to ensure a high level of compliance with its requirements.

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