Department for Transport

Renewable Transport Fuel Obligation statistics: period 8 2015/16, report 6

About this release

This quarterly release covers the supply of renewable fuels from 15 April 2015 to 14 April 2016, based on final data.

Six reports are published for each annual obligation period as Renewable Transport Fuel Certificates (TFCs) can be issued up to seven months following the close of an obligation period.

Each report will update the previous report for that obligation period with the latest data.

In this publication

The Renewable Transport Fuel Obligation Order (RTFO Order) requires transport fuel suppliers to ensure that a proportion of the fuel they supply comes from renewable sources (biofuels).

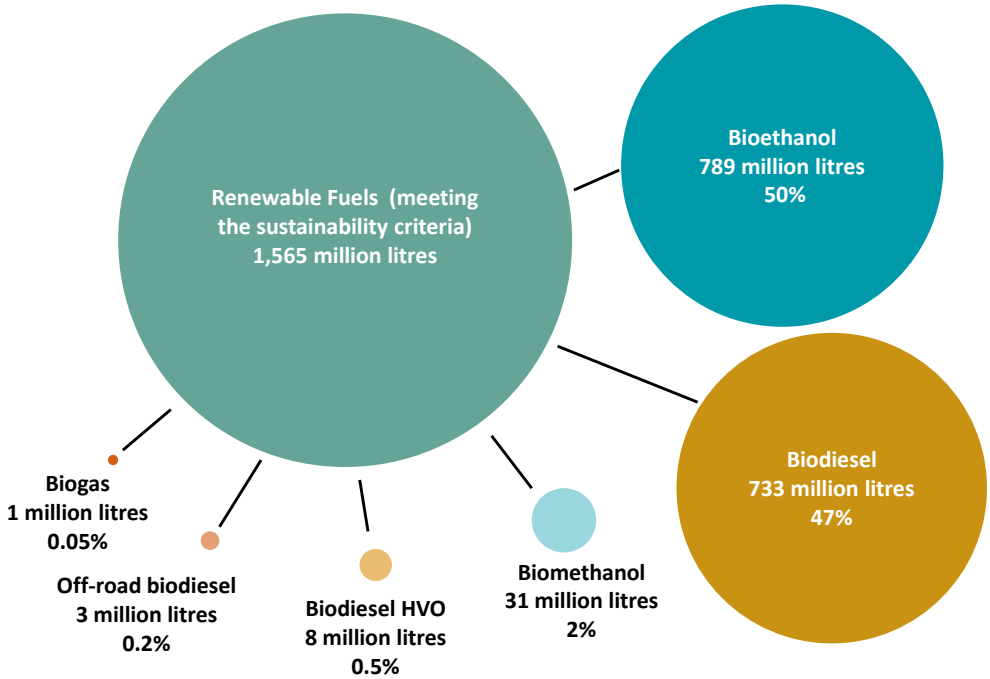
The legislation is of key importance in our efforts to deliver reductions in carbon dioxide emissions from fuels used for transport purposes and non-road mobile machinery (NRMM).

Current returns show 1,565 million litres of renewable fuel have been supplied in period 8, which is 3% of total road and non-road mobile machinery fuel.

1,565 million litres (99.9%) of this renewable fuel has been demonstrated to meet the sustainability requirements.

Of the 1,565 million litres meeting the sustainability requirements, **bioethanol** comprised **50%** of supply, **biodiesel 47%** and **biomethanol 2%.** There were also small volumes of biodiesel HVO, biogas and off-road biodiesel.

Volume of renewable fuels, by fuel type



Note: Figures may not add up to 100% due to rounding

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FURTHER INFORMATION: Media: 020 7944 4833 Public: 020 7944 8555

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Renewable Transport Fuel Certificate

Renewable Transport Fuel Certificate [1] (RTFCs) are awarded to transport fuel suppliers that meet sustainability criteria.

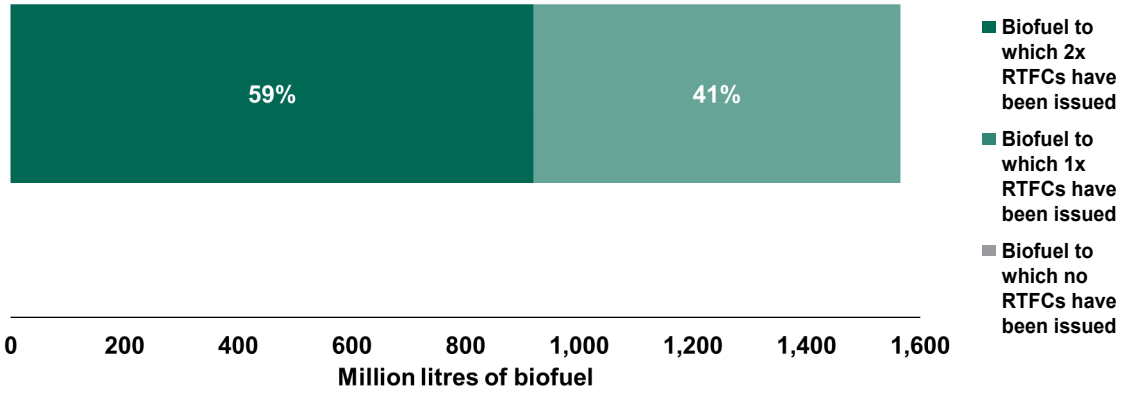
- In Period 8, **2,485 million** RTFCs have been issued for fuel meeting the sustainability requirements.
- This includes **1,840 million certificate** which have been issued to "double counting" feedstocks.

Of the biofuel supplied into the UK in period 8, 99.9% has been demonstrated to be sustainable, of which 59% was eligible for double counted certificates.

What is double counting?

To encourage the use of fuels that offer environmental benefits some biofuels, such as waste-based biofuels and residues, are double counted and issued with twice the number of RTFCs.

Figure 1: Biofuel to which Renewable Transport Fuel Certificates have been issued (table RTFO 02)



Feedstock

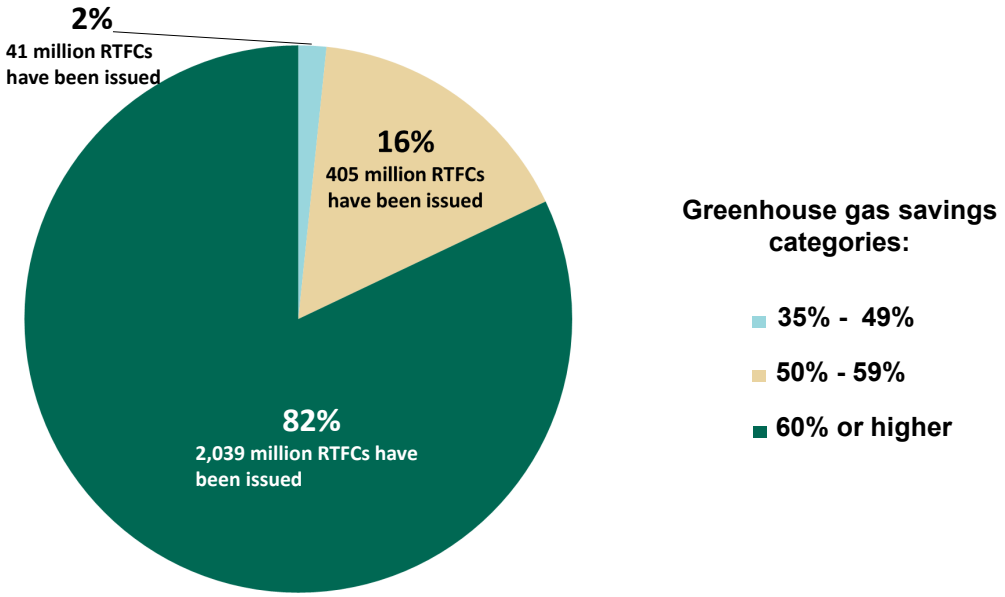
Any renewable, biological material that can be used directly as a fuel, or converted to another form of fuel or energy product.

Sustainability criteria ensure that biofuels deliver minimum greenhouse gas (GHG) savings compared to fossil fuels and that their production does not adversely impact on biodiversity.

Biofuel legislation

To receive Renewable Transport Fuel Certificates, fuels supplied must meet the sustainability criteria set out in the Renewable Energy Directive and the Renewable Transport Fuel Obligations Order 2007.

Figure 2: Renewable Transport Fuel Certificates issued by greenhouse gas savings category (table RTFO 02)



Note on figure

Please note that throughout the publication, figures may not sum to totals due to rounding.

Nearly all (98%) of the RTFCs issued in 2015/16 have been to biofuel that delivered 50% or more GHG savings. This does not include emissions from indirect land-use change (ILUC).

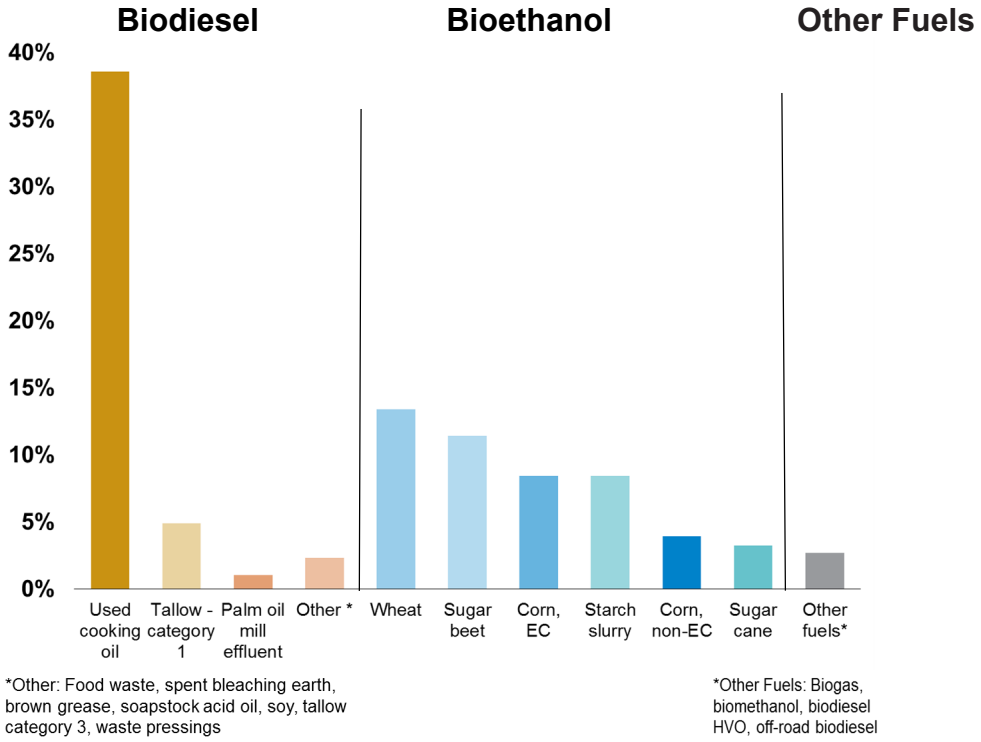
[1] The deadline for applying for RTFCs is 12 August following the obligation period.

Carbon and Sustainability Characteristics

Certain carbon and sustainability criteria have to be met by suppliers in order to receive RTFCs.

Waste feedstocks continue to make-up a large proportion of the overall feedstock mix, with used cooking oil having the largest share at 39%.

Figure 3: Supply of biofuel to the UK by feedstock (table RTFO 05)



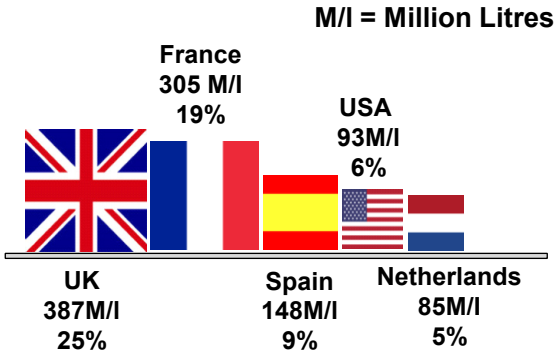
Double counted feedstock

- Of the 1,565 million litres of renewable fuels meeting the sustainability criteria 59% of biofuel was made from a waste/non-agricultural residue (double counting) feedstock.

Country of origin

- The top 5 countries supplying biofuel to the UK make up 65% of total sustainable supply, with UK feedstocks accounting for 25% of the biofuel.

Figure 4: Top 5 countries supplying biofuel to the UK (table RTFO 05)



Statistical Tables

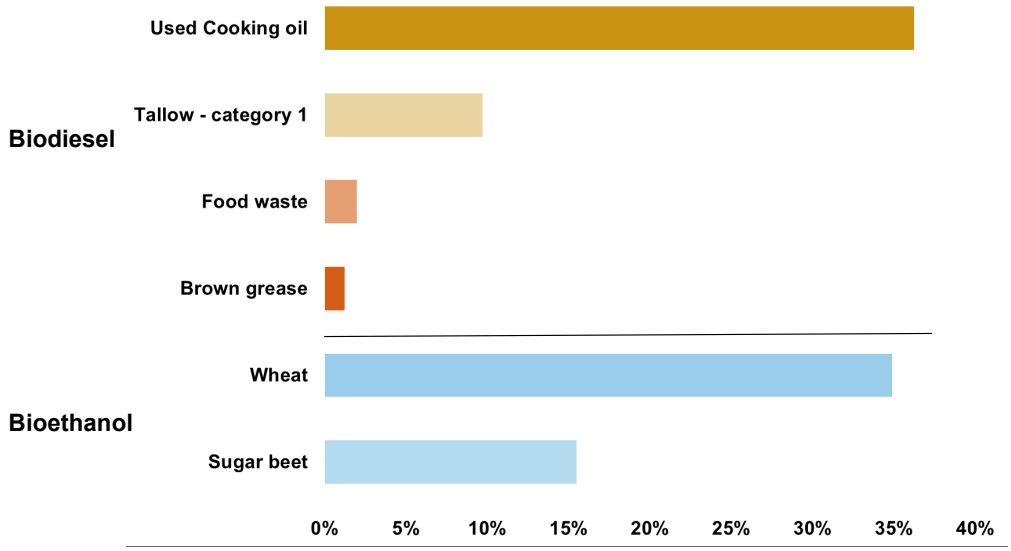
Tables for this release are available online.

- The most widely reported source for biodiesel (by feedstock and country of origin) was used cooking oil from the UK (138 million litres, 9% of total fuel, 19% of biodiesel, 140 million litres if off road biodiesel is included).

- The most widely reported source for bioethanol (by feedstock and country of origin) was wheat from the UK (135 million litres, 9% of total fuel, 17% of bioethanol).

Of all UK origin feedstocks used cooking oil makes up the largest share (36%) while wheat makes up 35%.

Figure 5: UK origin biofuel by feedstock for 2015/16 (table RTFO 05)



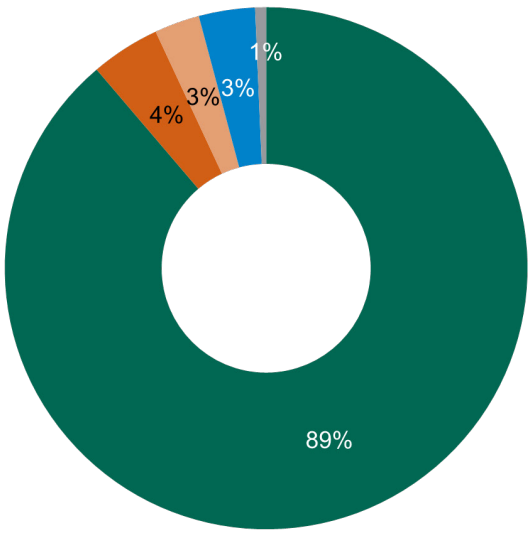
Contribution to greenhouse gas savings

- An aggregate greenhouse gas saving of 74% compared to fossil fuels was achieved in this period. Including emissions from indirect land-use change (ILUC) reduces this to 68%.

Schemes for certification and traceabilit

- Almost all (99%) of biofuel feedstocks have met the sustainability criteria and been supplied using a voluntary scheme.
- From the current voluntary schemes listed, the International Sustainability and Carbon Certification Scheme (ISCC accounts for 89% of biofuel.

Figure 6: Supply of biofuel to the UK meeting a voluntary scheme (table RTFO 06)



Voluntary schemes:

- ISCC
- 2BSVS
- Other
- Abengoa
- No Scheme

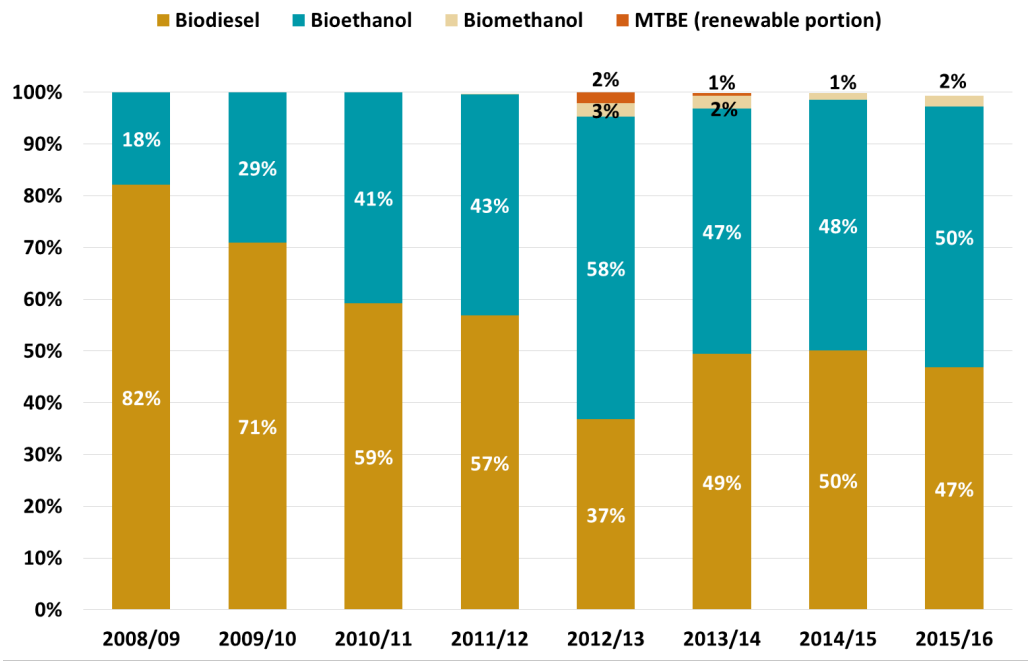
Other includes: NTA 8080 (2%), RSB (1%) and ENSUS (0.4%)

What is a voluntary scheme?

Voluntary schemes verify compliance with the EU's biofuel sustainability criteria, which is a prerequiste for RTFCs to be issued.

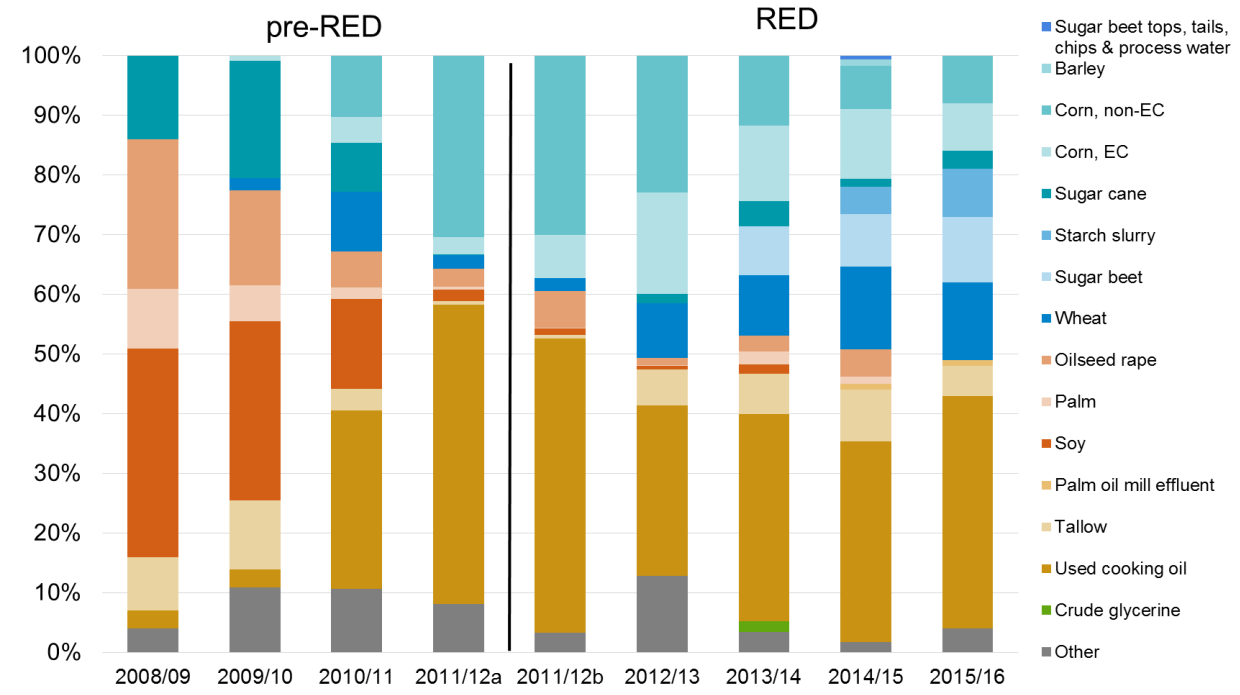
The share of biodiesel amongst all renewable fuels has varied over time and was at 47% for this period. The share of bioethanol has also varied and is now at 50%. There were also small amounts (less than 1%) of biogas and off road biodiesel.

Figure 7: Supply of biofuels in the UK by fuel type, 2008/09 to 2015/16



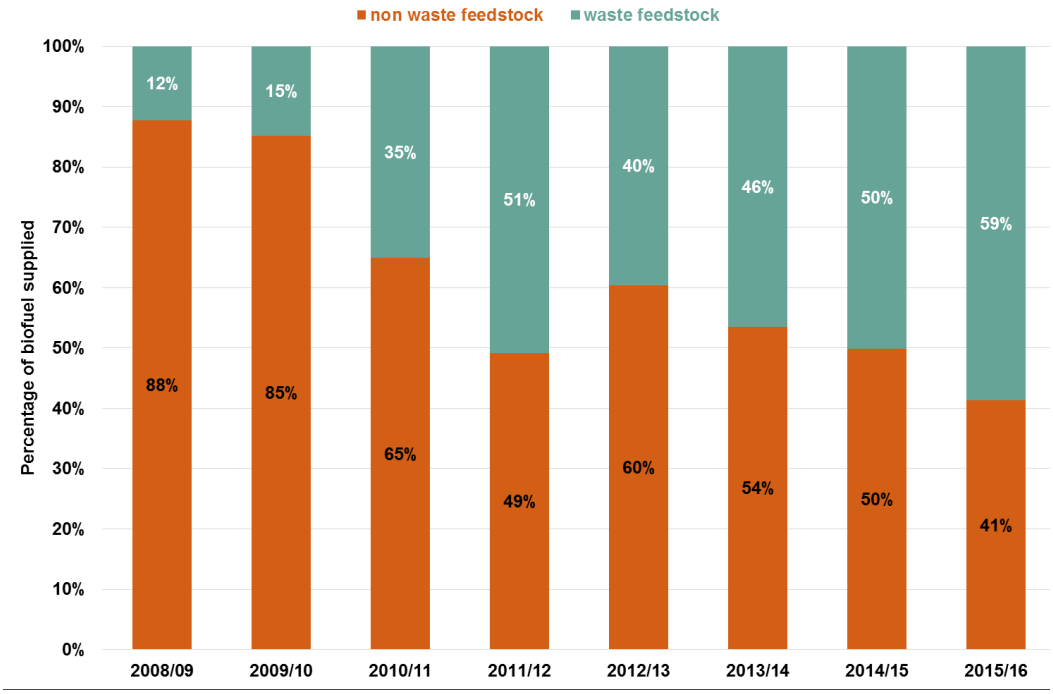
The feedstock mix has also shifted over time, with waste feedstocks making up 59% of total feedstock in this period (see also Figure 9).

Figure 8: Supply of biofuels to the UK by feedstock, 2008/09 to 2015/16



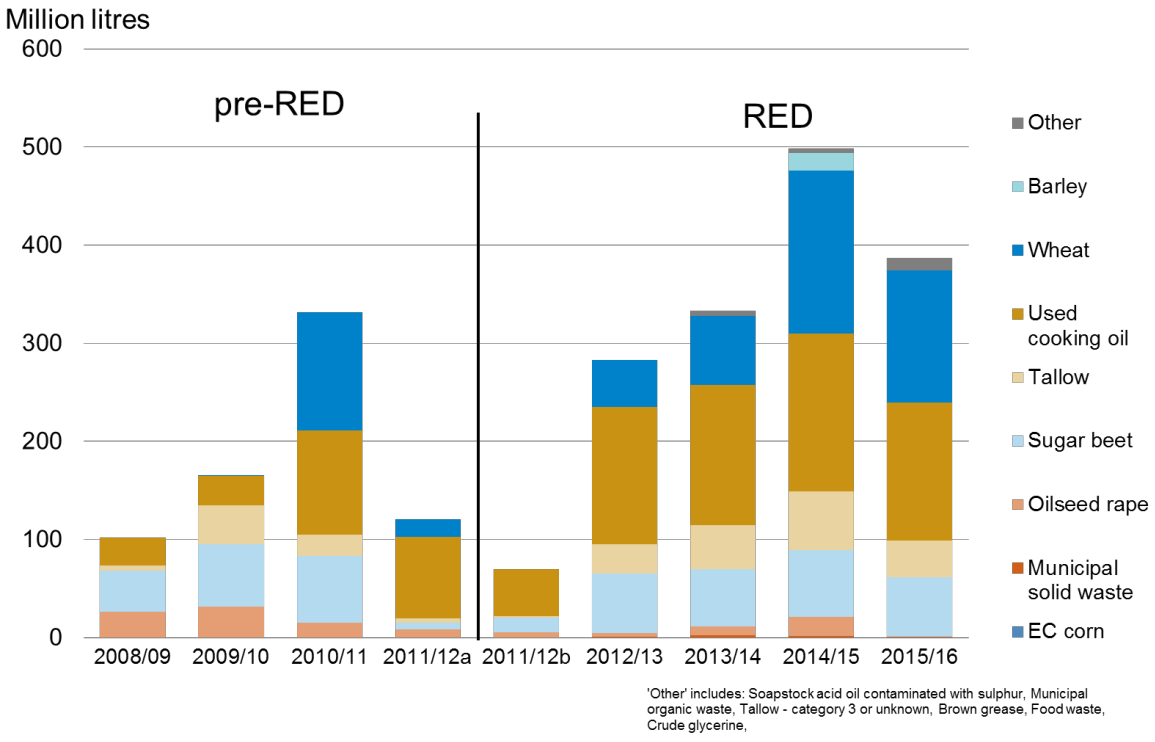
Waste derived fuels which benefit from double counted TFCs have been increasing over time. In 2015/16 wastes account for 59% of the total, up from 50% in 2014/15.

Figure 9: Biofuels from wastes 2008/09 to 2015/16



The volume of biofuels from UK feedstock makes up 25% of total feedstock. Waste derived fuels make up 49% of UK feedstock.

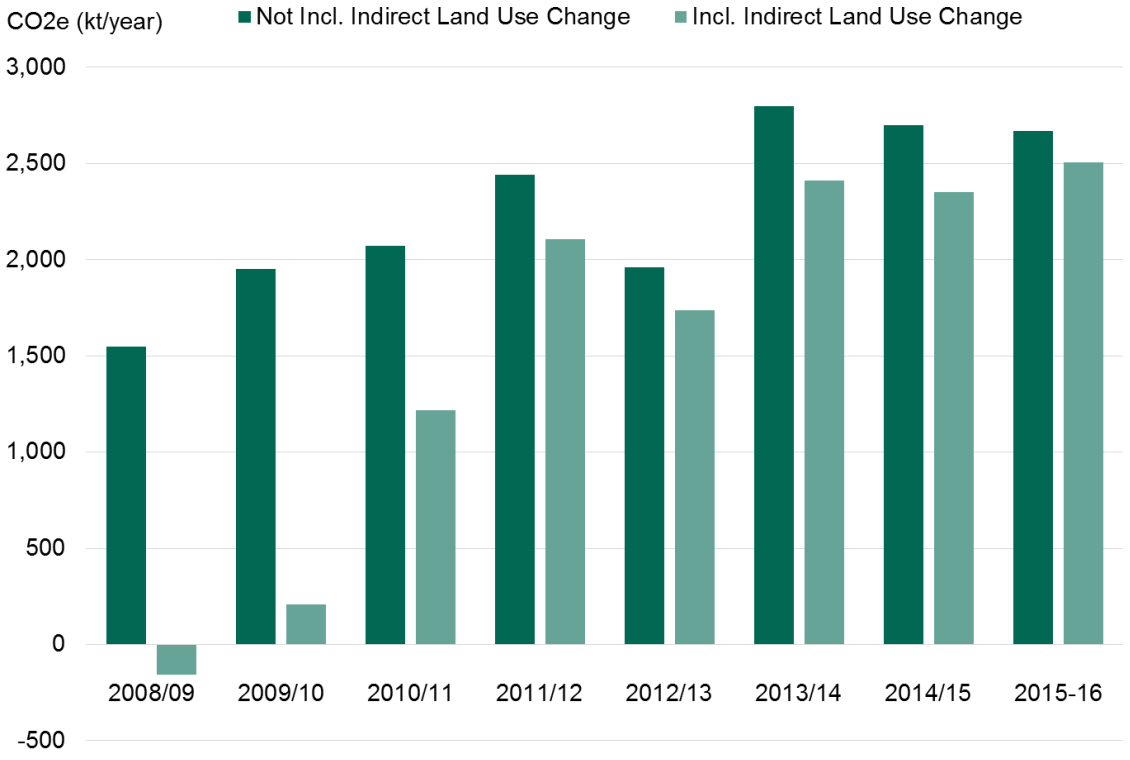
Figure 10: Biofuels from UK feedstock supplied to the UK.



'Other' includes: Soapstock acid oil contaminated with sulphur, Municipal organic waste, Tallow - category 3 or unknown, Brown grease, Food waste, Crude glycerine,

Greenhouse gas savings have improved over time especially when indirect land use change (ILUC) is taken into account.

Figure 11: Greenhouse gas saving delivered by biofuel supplied to the UK

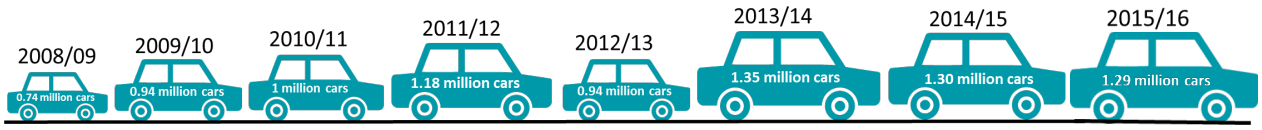


Indirect Land Use Change (ILUC)

Relates to the unintended consequences of changing land use due to biofuel production, for example, the expansion of crop land.

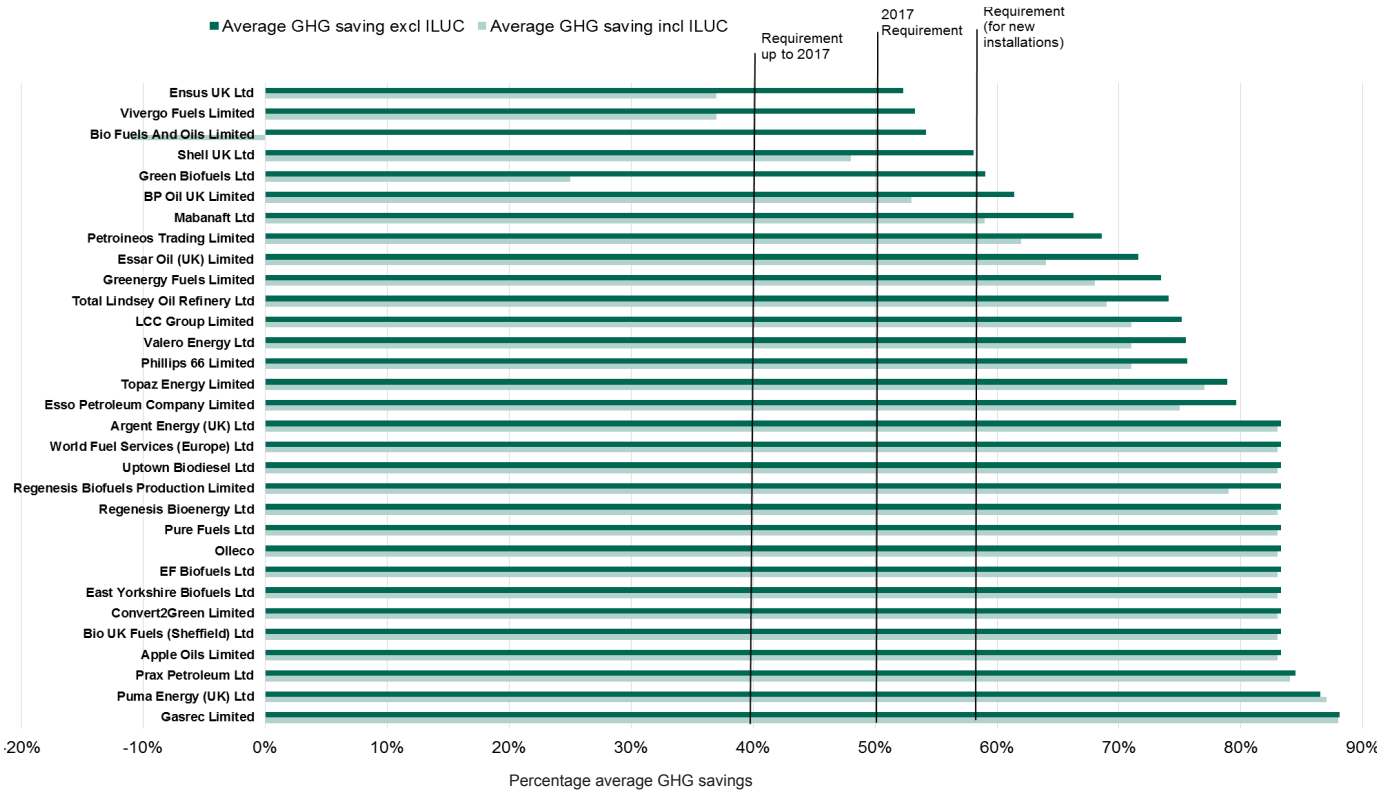
Equivalent number of average cars as a result of greenhouse gas saving

Total greenhouse gas savings this year were the equivalent to taking 1.29 million cars off the road (1.21 million cars if Indirect Land Use Change is included).



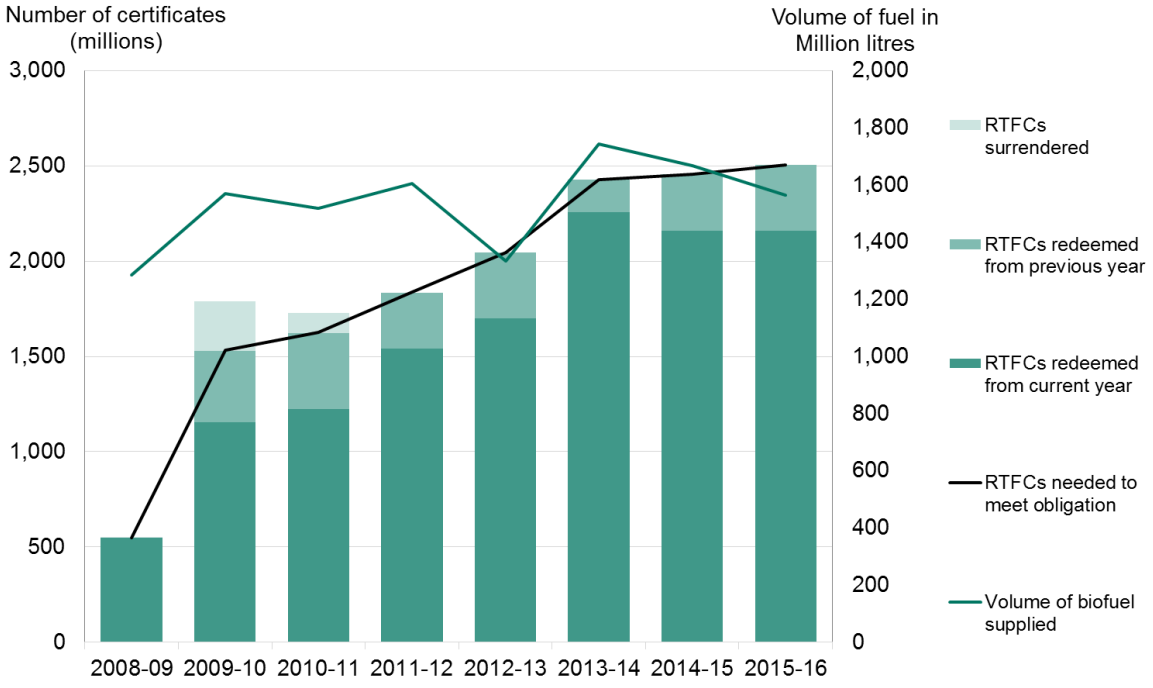
The figure below gives supplier information on greenhouse gas savings.

Figure 12: Average greenhouse gas (GHG) savings by supplier



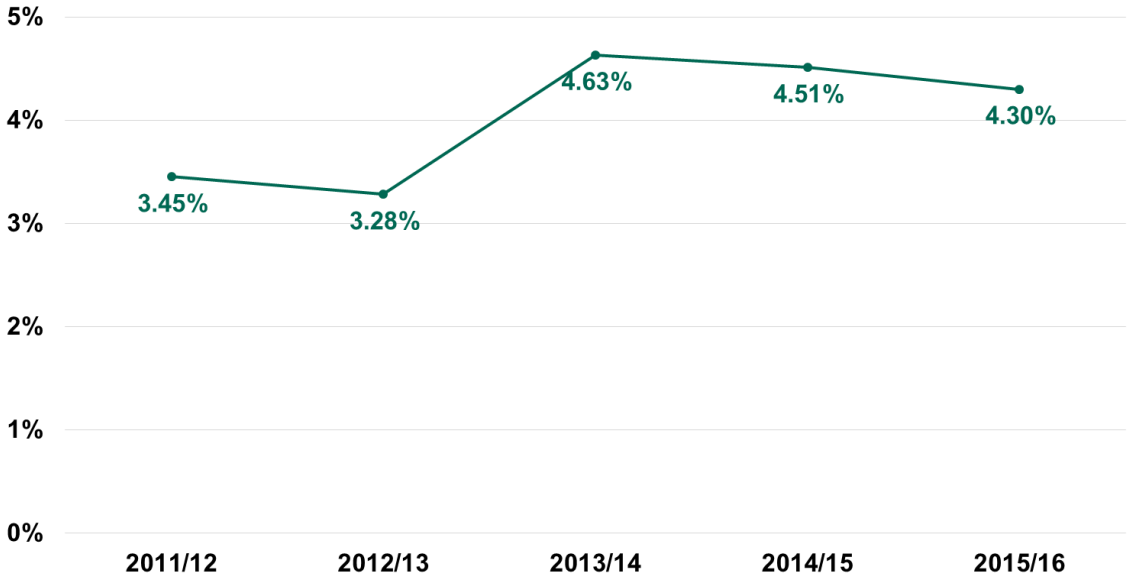
The figure below gives the activity in Renewable Transport Fuel Certificates across years

Figure 13: Activity in Renewable Transport Fuel Certificate



Under the Renewable Energy Directive (RED) the UK has a 10% target for renewables in transport energy by 2020. Progress towards this target includes an allowance for double counting fuels that meet RED requirements.

Figure 14: Supply of renewable fuels against RED transport energy targets

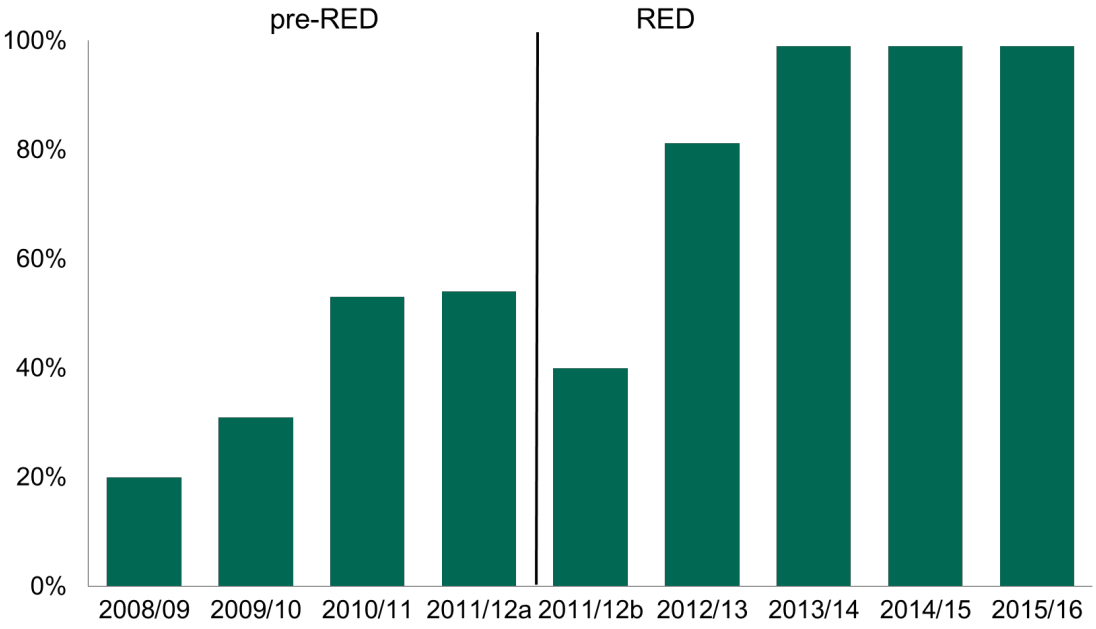


What is RED?

The Renewable Energy Directive (RED) was introduced in 2011/12 and includes sustainability criteria for biofuels.

The uptake of voluntary schemes continues to remain at 99% compared to 20% in the first year of the RTFO.

Figure 15: Biofuels meeting a voluntary scheme

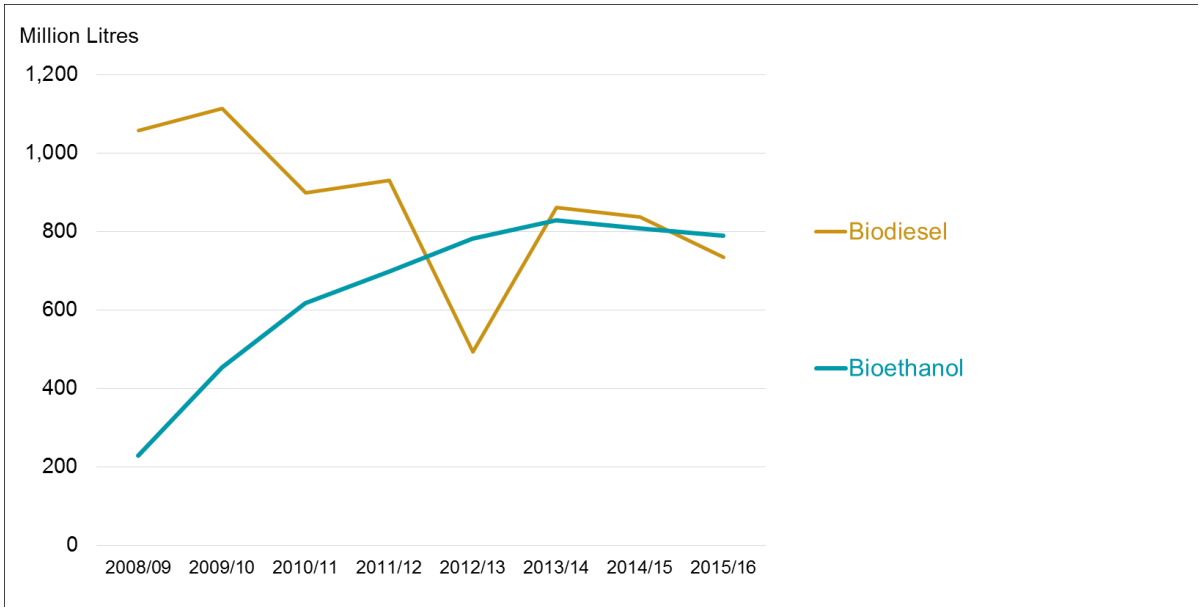


What is a voluntary scheme?

Voluntary schemes verify compliance with EU's biofuel sustainability criteria based on which RTFCs can be issued.

Volumes of bioethanol have seen a slight decrease when compared with the same period last year and may partly be due to a decrease in the supply of petrol. Volumes of biodiesel have fallen during the last two years.

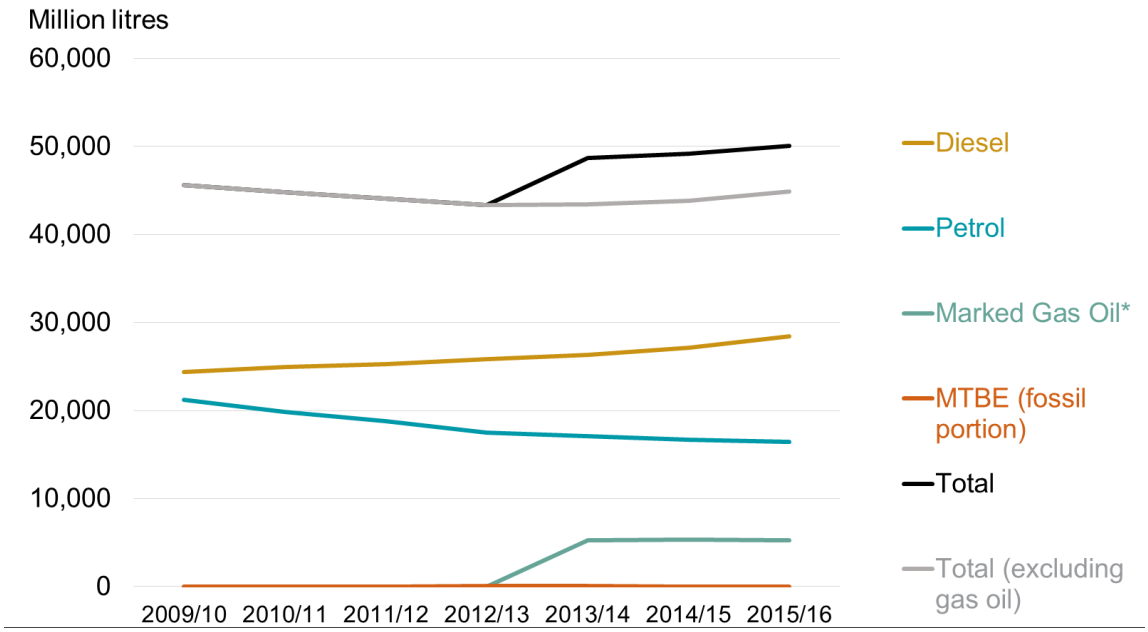
Figure 16: Trends in the supply of renewable fuels



Note: Small amounts of other fuels are also present. These have been omitted from the chart.

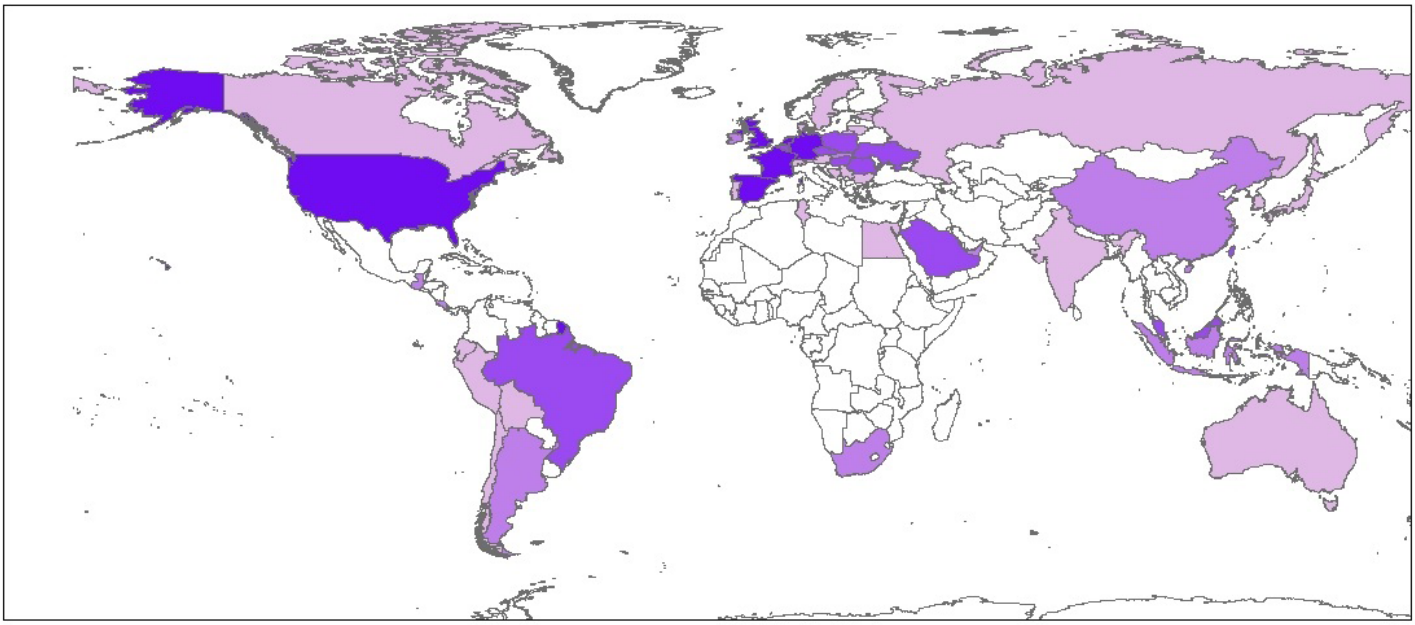
Amongst fossil fuel supply, volumes of petrol are falling slowly while diesel volumes are increasing.

Figure 17: Trends in the supply of fossil fuels



* Marked biodiesel for off road use

Global supply of biofuel to the UK



Supply in million litres

- Under 6
- 6 - 15.9
- 16 - 70
- Over 70

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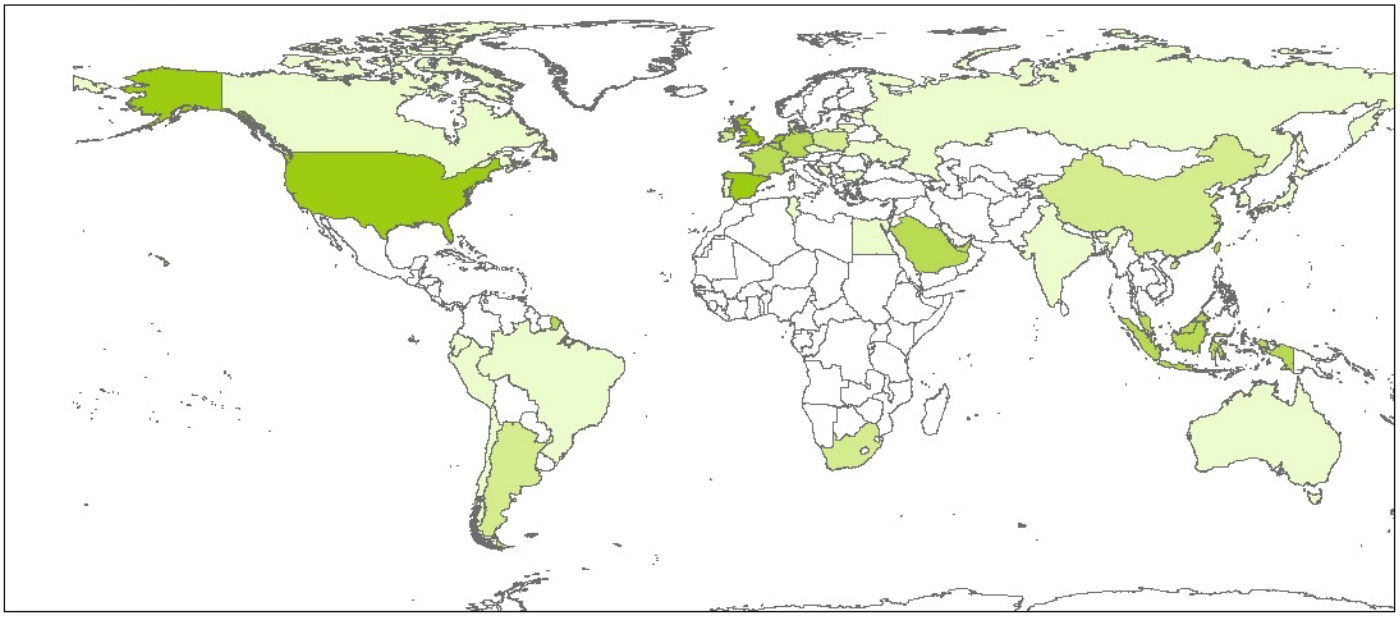
Global supply of biodiesel to the UK



Supply in million litres

- 0 - 5
- 6 - 10
- 11 - 49
- Over 50

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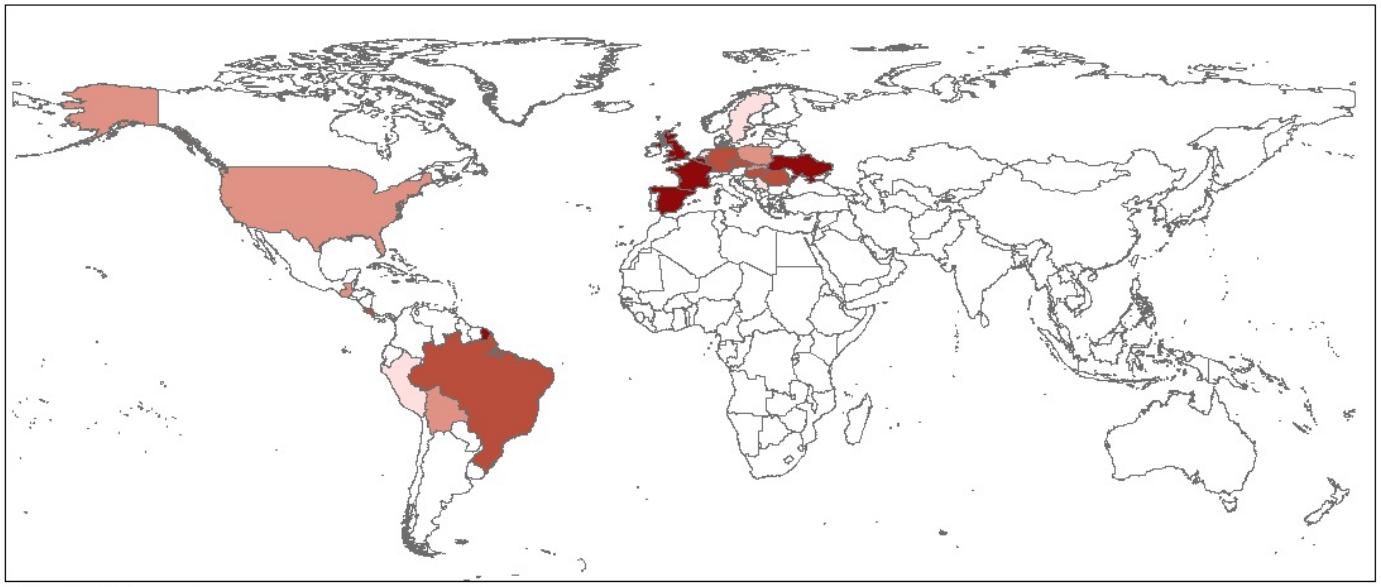
Global supply of bioethanol to the UK



Supply in million litres

- 0 - 5
- 6 - 10
- 11 - 40
- Over 40

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Sources of data in this report

Data on volumes of fuel, Renewable Transport Fuel Certificates (TFCs) (issues, redemptions, surrenders, transfers) and Carbon & Sustainability (C&S) are held by the Renewable Transport Fuel Obligation (RTFO) Administrator on the RTFO Operating System (ROS).

Fuel volume data is submitted on a monthly basis by fuel suppliers to the RTFO Administrator and validated against HMRC duty payment data.

C&S data is submitted as part of a supplier's RTFC application. As suppliers may choose when to apply for RTFCs, and if the application is not approved the renewable fuel is not regarded as sustainable, C&S data is only reported on once RTFCs have been issued. There will therefore be a difference between the volume of biofuel supplied and the number of RTFCs issued/C&S data available. This difference will decrease over time until the final deadline for issuing TFCs has passed (15 November following the obligation period). The final report for an obligation period will show the fina position.

Data on RTFCs (issues, redemptions, surrenders, transfers) is recorded in ROS as all are issued, traded and tracked electronically.

Further Details

Further information on the data can be found in the Notes and Definition .

Strengths and weaknesses of the data

The Administrator validates volume data submitted by fuel suppliers against that held by HMRC regarding fuel duty liabilities. This data may change over time even after validation against HMRC data as suppliers make amendments to the volumes of fuel they have supplied (and duty liabilities).

C&S data is verified by independent verifiers and is also checked against th RTFO Guidance by the Administrator.

Whilst the Administrator validates volume data against HMRC data at a company level, there is not an exact match between the volume of fuel reported in this report and the volume of fuel reported in HMRC's Hydrocarbon Oils bulletin. Reasons for this include:

Related Information

Previously published reports can be found on the DfT website: https://www.gov.uk/government/organisations/department-for-transport/series/biofuels-statistics.

The publication timetable can be found at Annex A.

- Road duty is paid on fuel that is later proven to be for non-road use;
- Differences between how fuel is categorised under the RTFO and by HMRC, in particular, the RTFO requires recording of fuels on the basis of their renewability but this is different than the categories HMRC use for duty coding (e.g. petrol used as denaturant in ethanol is recorded as ethanol by HMRC and petrol under the RTFO);
- Accidental recording of fuel against the incorrect duty codes by suppliers;
- Calendar month and quarterly duty payments being recorded against different supply periods under the RTFO and by HMRC (these are typically a month different);
- Differences in when adjustments in duty payments are recorded. HMRC record these in the month the adjustment occurs: whilst this practice is usually followed under the RTFO there are exceptions around the change in obligation period.

Official Statistic

Official Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. They undergo regular quality assurance reviews to ensure they meet customer needs.

Details of ministers and officials who received pre-release access to these statistics up to 24 hours before release can be found in the pre-release access list.

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Annex A: RTFO statistics reporting timescales and contents

Reports are published quarterly.

The last report for the obligation period (number six) will report on the carbon and sustainability performance of individual suppliers. These reports are available online at:

https://www.gov.uk/government/organisations/department-for-transport/series/biofuels-statistics

Table 1 – content of RTFO reports

		Report					
Table	Description	One	Two	Three	Four	Five	Six
RTFO 01	Volume of fuel supplied	Yes	Yes	Yes	Yes	Yes	Yes
RTFO 02	Volume of fuel to which RTFCs issued and number of RTFCs issued	Yes	Yes	Yes	Yes	Yes	Yes
RTFO 03	RTFC balances by obligation period	Yes	Yes	Yes	Yes	Yes	Yes
RTFO 04	RTFC trades to date by company type	Yes	Yes	Yes	Yes	Yes	Yes
RTFO 05	RTFO wide carbon and sustainability data	Yes	Yes	Yes	Yes	Yes	Yes
RTFO 06	RTFO wide voluntary scheme data	Yes	Yes	Yes	Yes	Yes	Yes
RTFO 07	Performance against obligation by supplier	No	No	No	No	No	Yes
RTFO 08a	Feedstock by supplier as a percentage of their supply	No	No	No	No	No	Yes
RTFO 08b	Country of origin by supplier as a percentage of their supply	No	No	No	No	No	Yes
RTFO 09	Percentage of renewable fuel that was sustainable by supplier	No	No	No	No	No	Yes
RTFO 10	Carbon and sustainability data by supplier	No	No	No	No	No	Yes
RTFO 11	RTFO wide fuel supply by volume and energy	No	No	No	No	No	Yes
RTFO 12	Civil penalties and other non-compliance	No	No	No	No	No	Yes
RTFO 13	Performance against GHG reporting Requirements	No	No	No	No	No	Yes

Table 2 – Publication dates and contents of each report

		Publication Date									
		2-Feb-17	4-May-17	3-Aug-17	2-Nov-17	1-Feb-18	3-May-18	2-Aug-18	1-Nov-18	7-Feb-19	7-May-19
Obligation period 8 2015/16	Quarter 1	Report 6									
	Quarter 2	Report 6									
	Quarter 3	Report 6									
	Quarter 4	Report 6									
Obligation period 9 2016/17	Quarter 1	Report 2	Report 3	Report 4	Report 5	Report 6					
	Quarter 2	Report 2	Report 3	Report 4	Report 5	Report 6					
	Quarter 3		Report 3	Report 4	Report 5	Report 6					
	Quarter 4			Report 4	Report 5	Report 6					
Obligation period 10 2017/18	Quarter 1				Report 1	Report 2	Report 3	Report 4	Report 5	Report 6	
	Quarter 2					Report 2	Report 3	Report 4	Report 5	Report 6	
	Quarter 3						Report 3	Report 4	Report 5	Report 6	
	Quarter 4							Report 4	Report 5	Report 6	
Obligation period 11 2018/19	Quarter 1								Report 1	Report 2	Report 3
	Quarter 2									Report 2	Report 3
	Quarter 3										Report 3
	Quarter 4										