

**Contents**

	Page
Executive summary	2
RTFO graphs	4
RTFO trends	12
RTFO summary data	15
RTFO detailed data	18
Notes on data	19
Glossary	24

**RFA Monthly Report 16: 15 April 2009 - 14 August 2009**  
**Executive Summary**

1.7 billion litres of biofuel have been supplied under the RTFO in the first 16 months.

This report covers the supply of biofuels under the Renewable Transport Fuel Obligation<sup>1</sup> from 15 April 2009 to 14 August 2009. The headline figures<sup>2</sup> are:

In the first four months of the 2009/10 obligation period, 450 million litres of biofuel have been supplied, which is approximately 2.8% of total road transport fuel reported to the RFA against an annual target of 3.25%<sup>3</sup>. More biodiesel (82%) has been supplied than bioethanol (18%).

The feedstock is known for 90% of fuel supplied. Both the feedstock and country of origin are known for 83%. The most widely reported source of biodiesel was soy from Argentina (20% of biodiesel supplied). The most widely reported source of bioethanol was sugarcane from Brazil (81% of bioethanol supplied).

Over the period, 33%<sup>4</sup> of biofuels met an environmental standard, compared to a target of 50%<sup>5</sup>.

The majority of feedstock has been imported; 11% of the biofuel was reported as coming from UK feedstocks. 99% of the fuel reported as coming from UK feedstocks met environmental sustainability standards.

Greenhouse gas savings of 47% were achieved against a Government target of 45%. This figure may not include all emissions from direct land use change and excludes the emissions from indirect land-use changes considered in the Agency's 'Gallagher Review'.

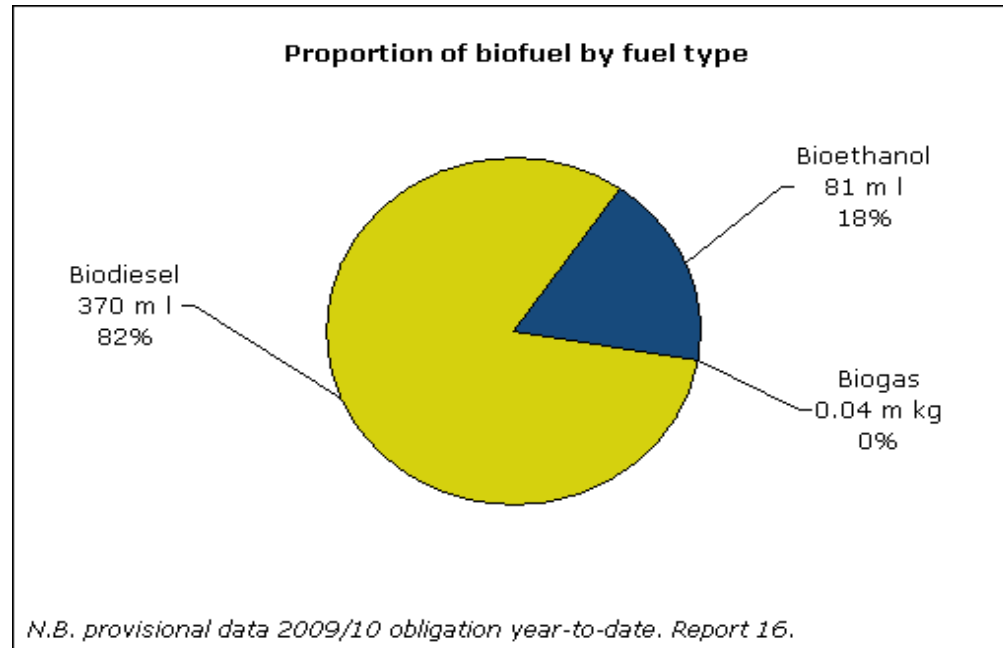
## RFA Monthly Report 16: 15 April 2009 - 14 August 2009

### Executive Summary

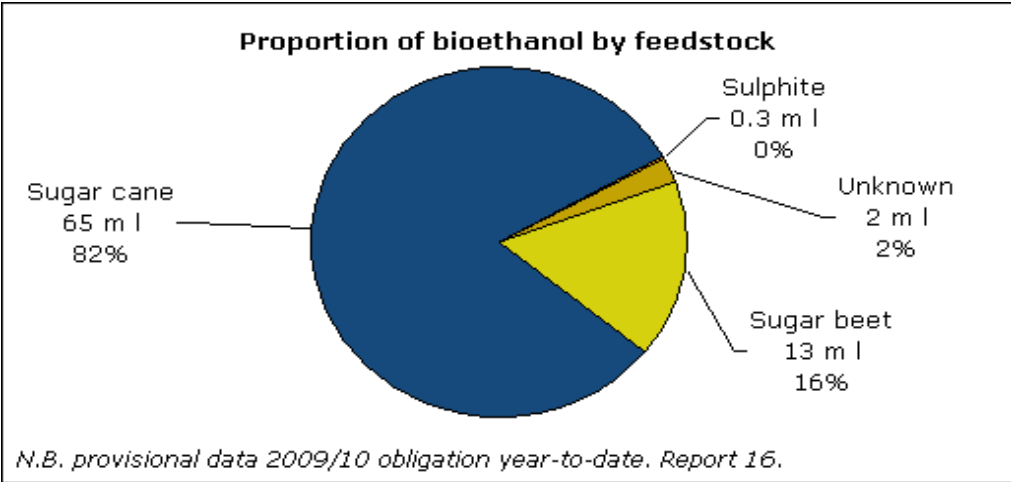
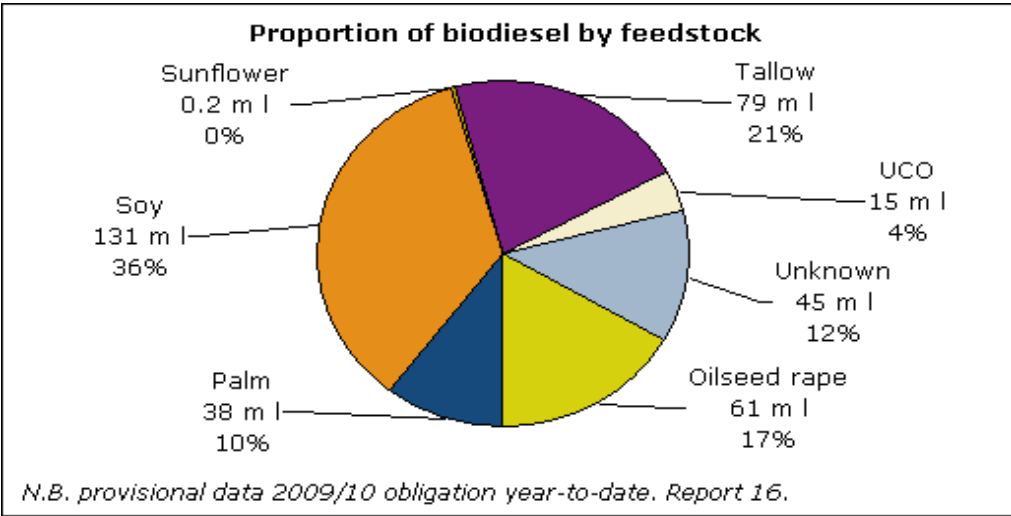
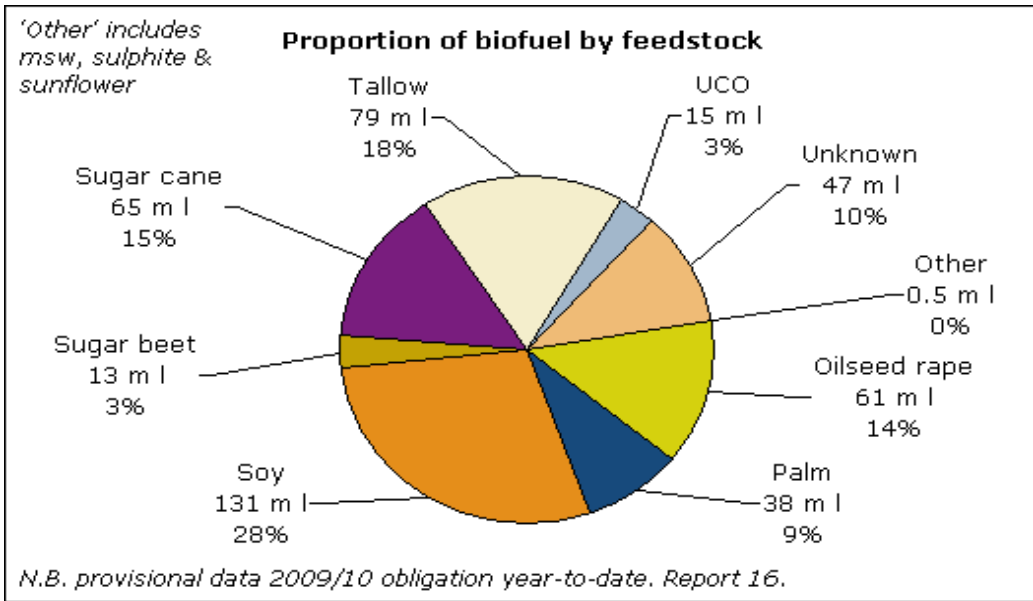
#### Notes

1. The RTFO applies to road transport across the whole of the UK. Refiners, importers and any others who supply more than 450 000 litres of relevant hydrocarbon oil for road transport annually to the UK market are obligated by it.
2. Data comes from monthly reports submitted by fuel suppliers to the RFA. The RFA performs checks on the data, which for suppliers of over 450 000 litres of biofuel is also subject to an annual verification process by independent auditors. The RFA will publish a final, fully verified dataset after the end of each obligation year.
3. Obligated suppliers can meet their volume obligation either by surrendering the appropriate number of RTFCs to the RFA and/or by paying into a buy-out fund. The RTFCs can be obtained by supplying their own biofuels or by purchasing RTFCs from other biofuel suppliers. A quarter of their obligation can be met by surplus RTFCs from the previous obligation year.
4. Under the RTFO Order, these reports must not contain information from which the volumes of fuel being reported by individual suppliers might be derived. To protect the volumes of individual suppliers, in previous months certain quantities of fuel reported as meeting the Qualifying Standard or RTFO Meta-Standard have been removed from the overall RTFO figures. In this report, all fuel meeting the Qualifying Standard or Meta-Standard has been included in the overall RTFO figures, but some has still been excluded from the reporting by feedstock and country. The figures by country and feedstock do not therefore tally exactly with the overall figures.
5. 50% of feedstocks should meet environmental sustainability standards in the year 2009-10. The ability of suppliers to source certifiably sustainable fuels is currently limited by the lack of operational sustainability standards for several feedstock/country combinations. Certified sustainable feedstock is expected to become increasingly available over time, as feedstock standards develop in response to the demand created by the RTFO and growing concern about the sustainability of agricultural commodities more widely. Suppliers can arrange their own audits against the RTFO Meta-Standard.
6. Once per quarter we publish an extended report that identifies the carbon and sustainability performance of individual companies. These reports are available on our website at:  
[www.renewablefuelsagency.org/rtfo](http://www.renewablefuelsagency.org/rtfo)

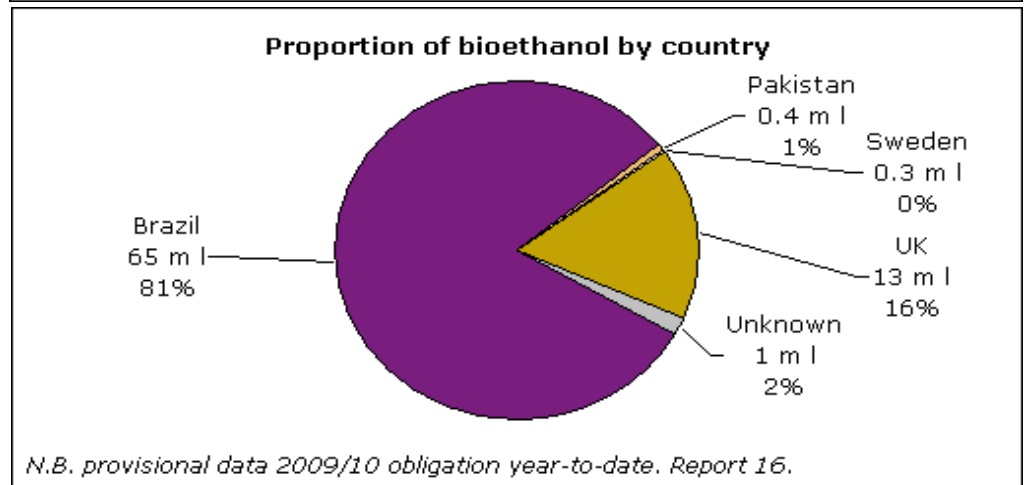
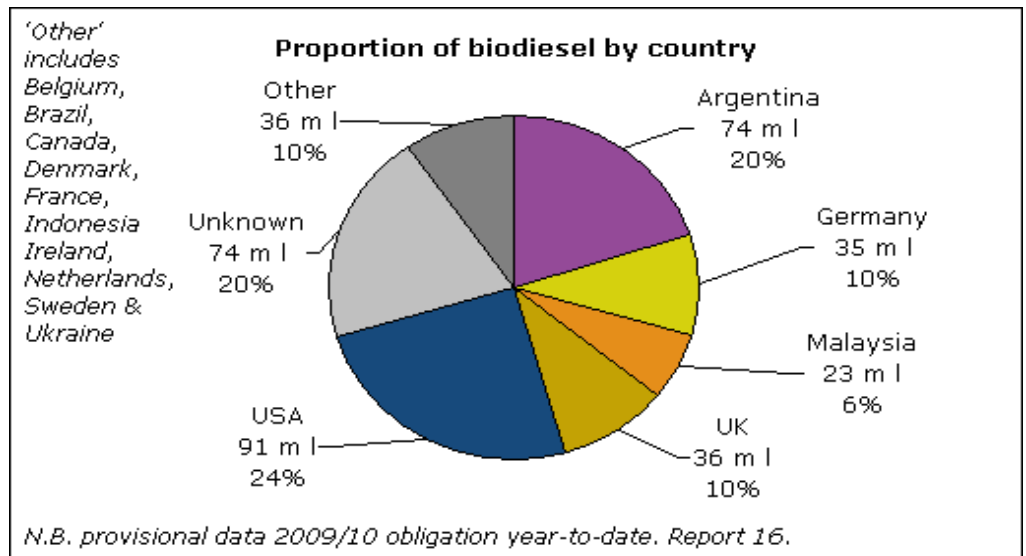
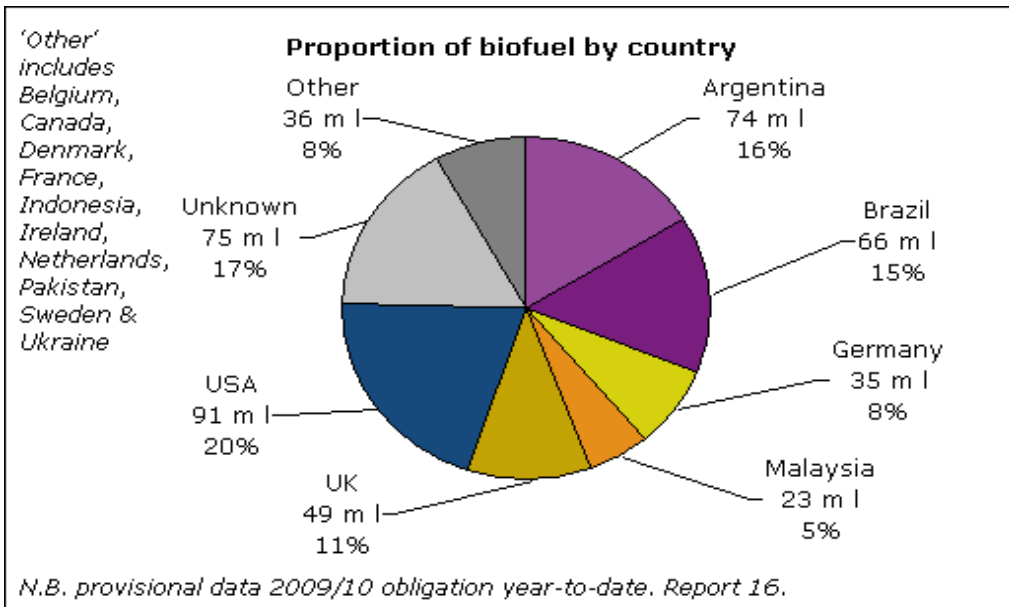
## Volumes and proportions by fuel type



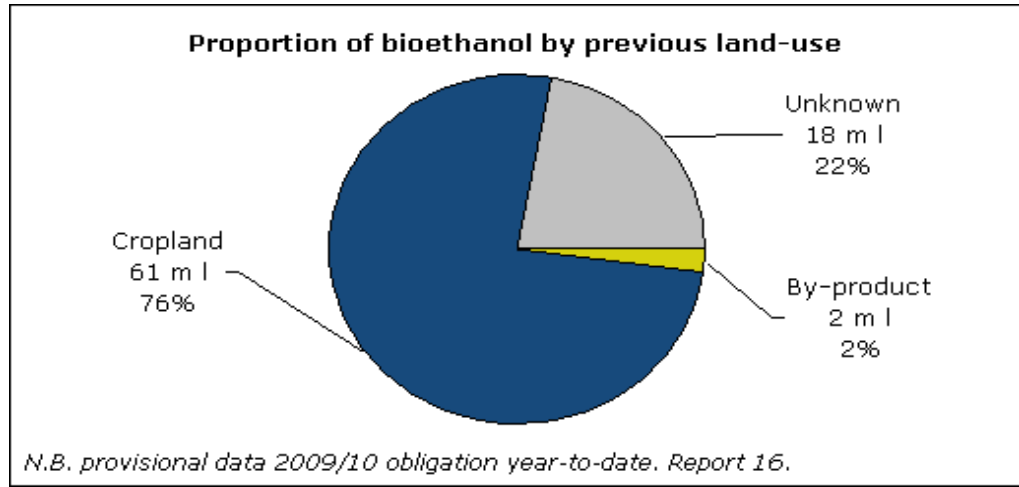
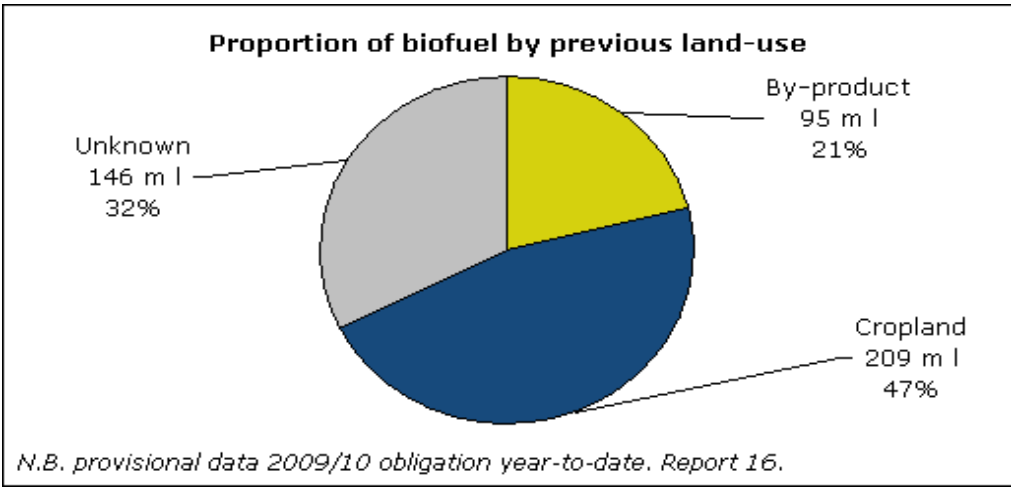
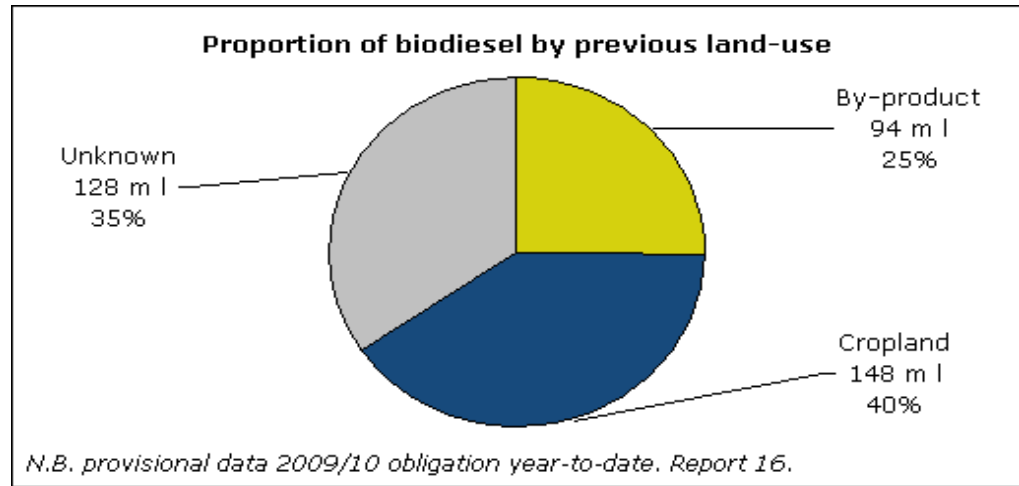
**Proportions by feedstock**



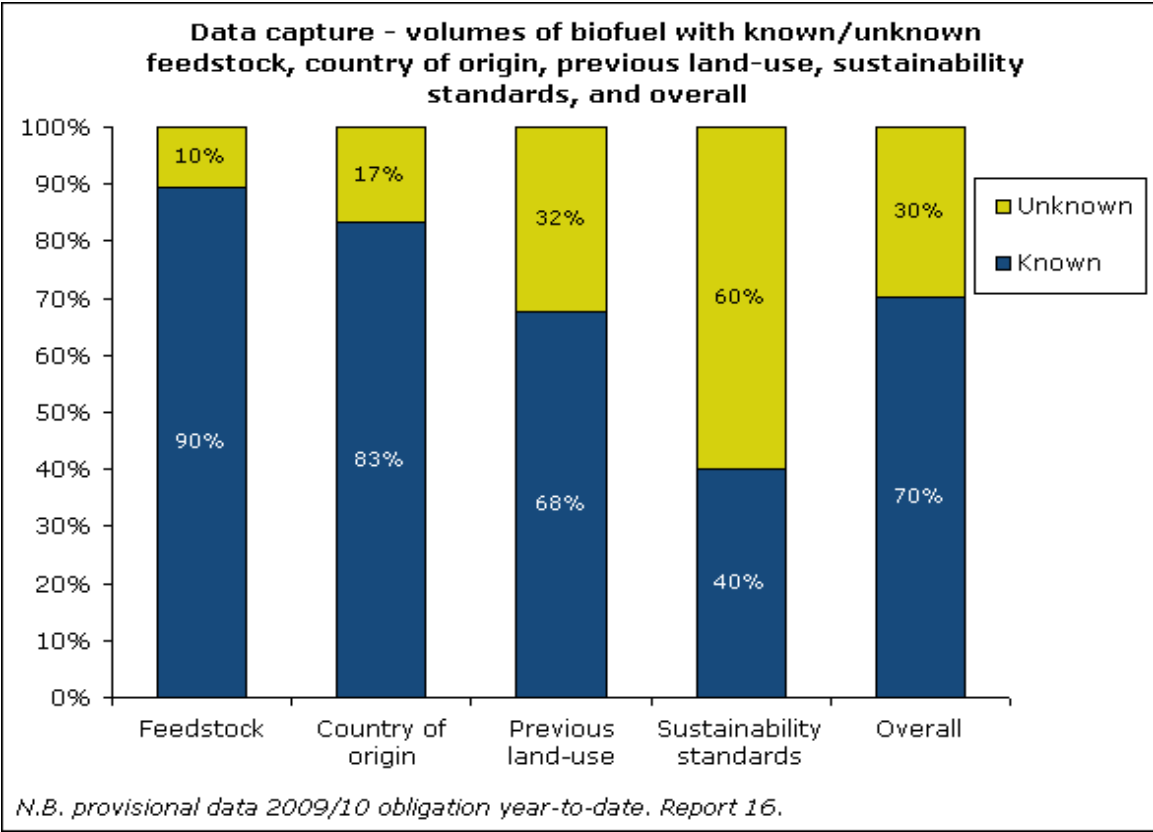
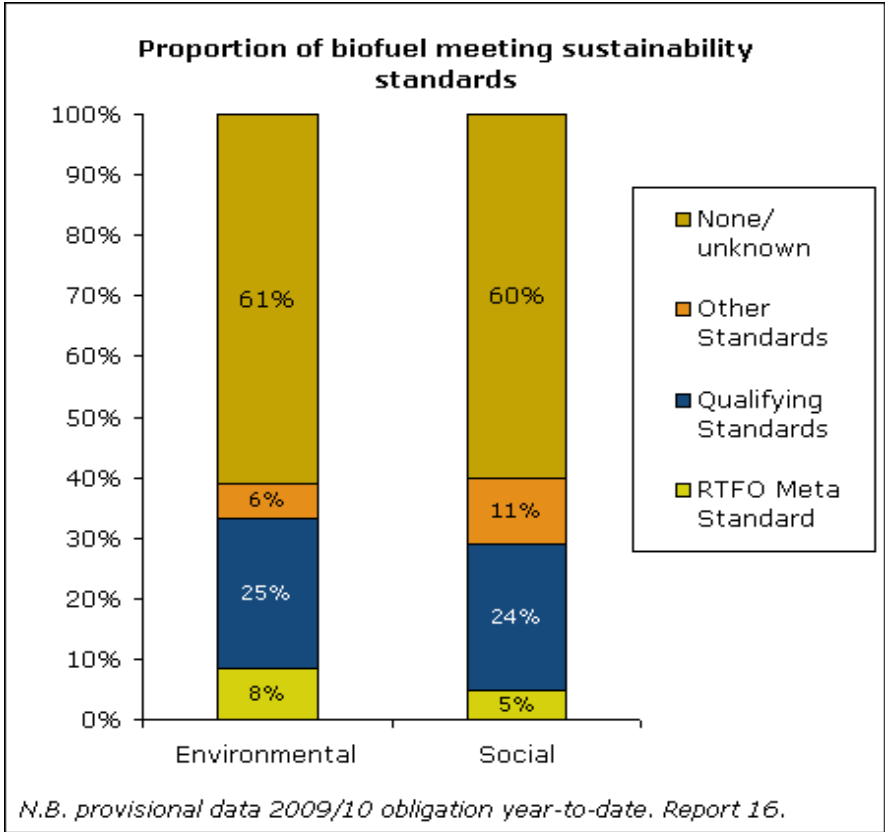
**Proportions by country**

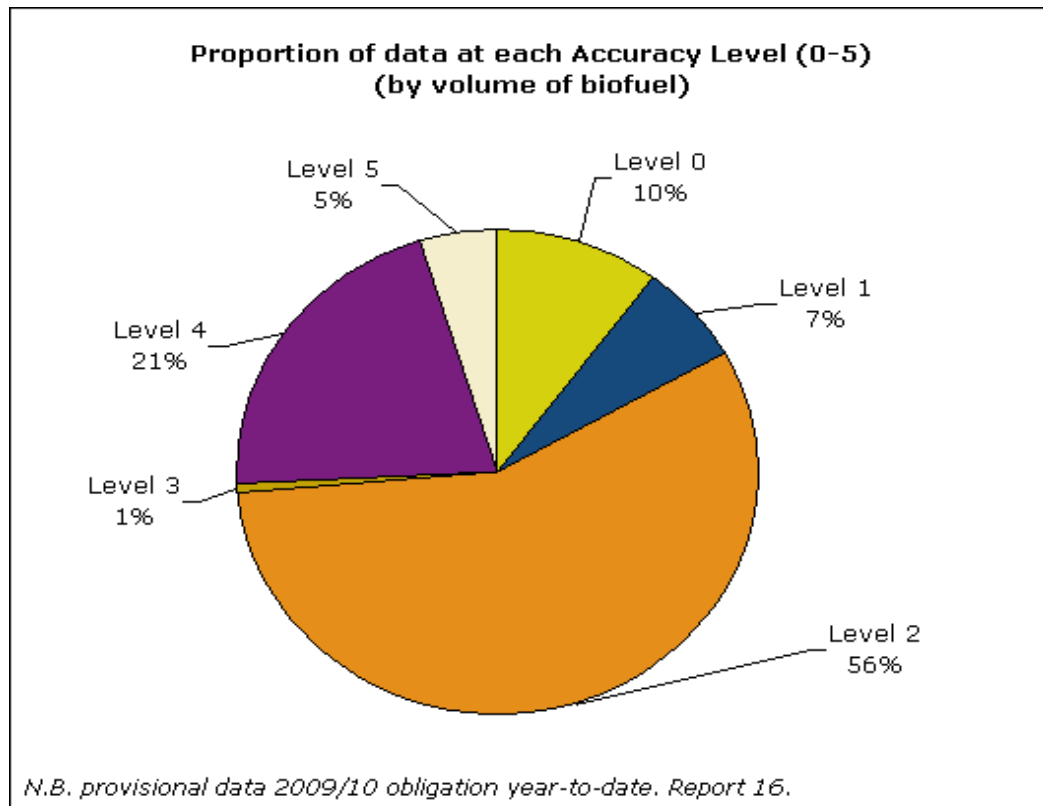


**Proportions by previous land-use**

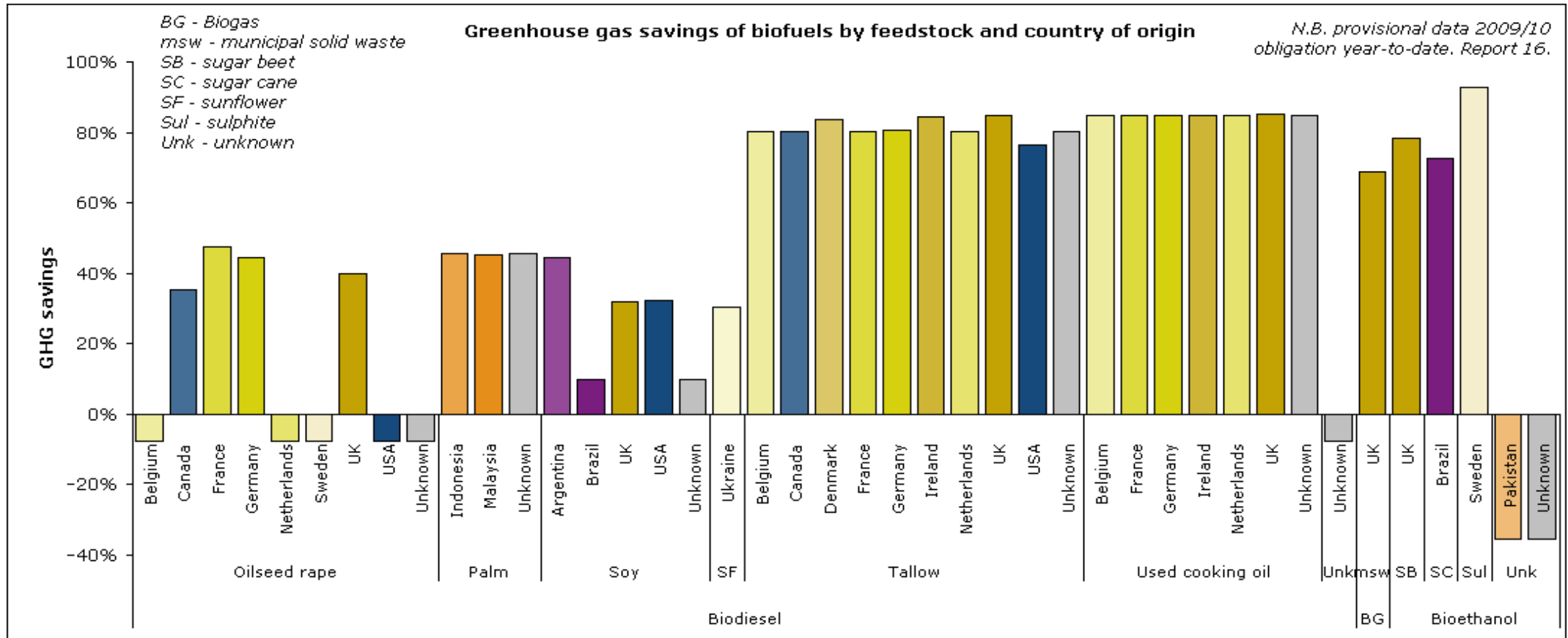


**Sustainability, data-capture and accuracy**

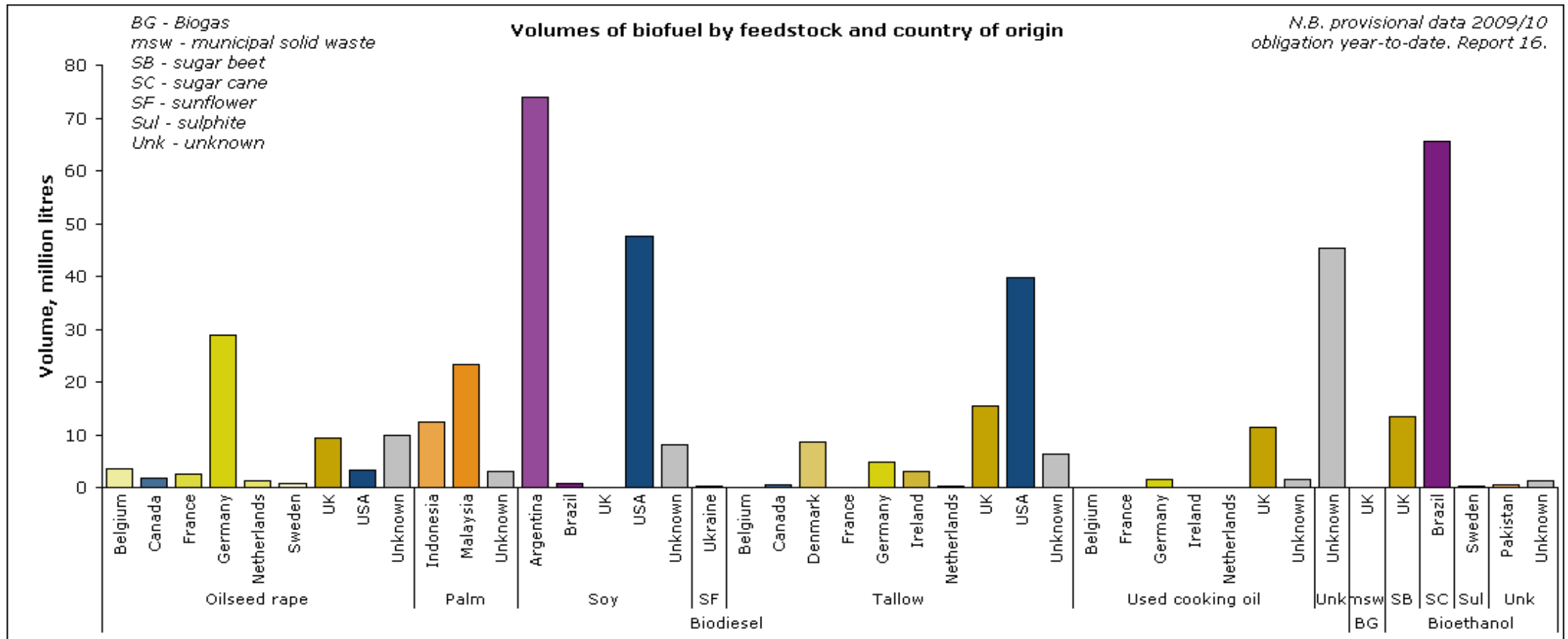




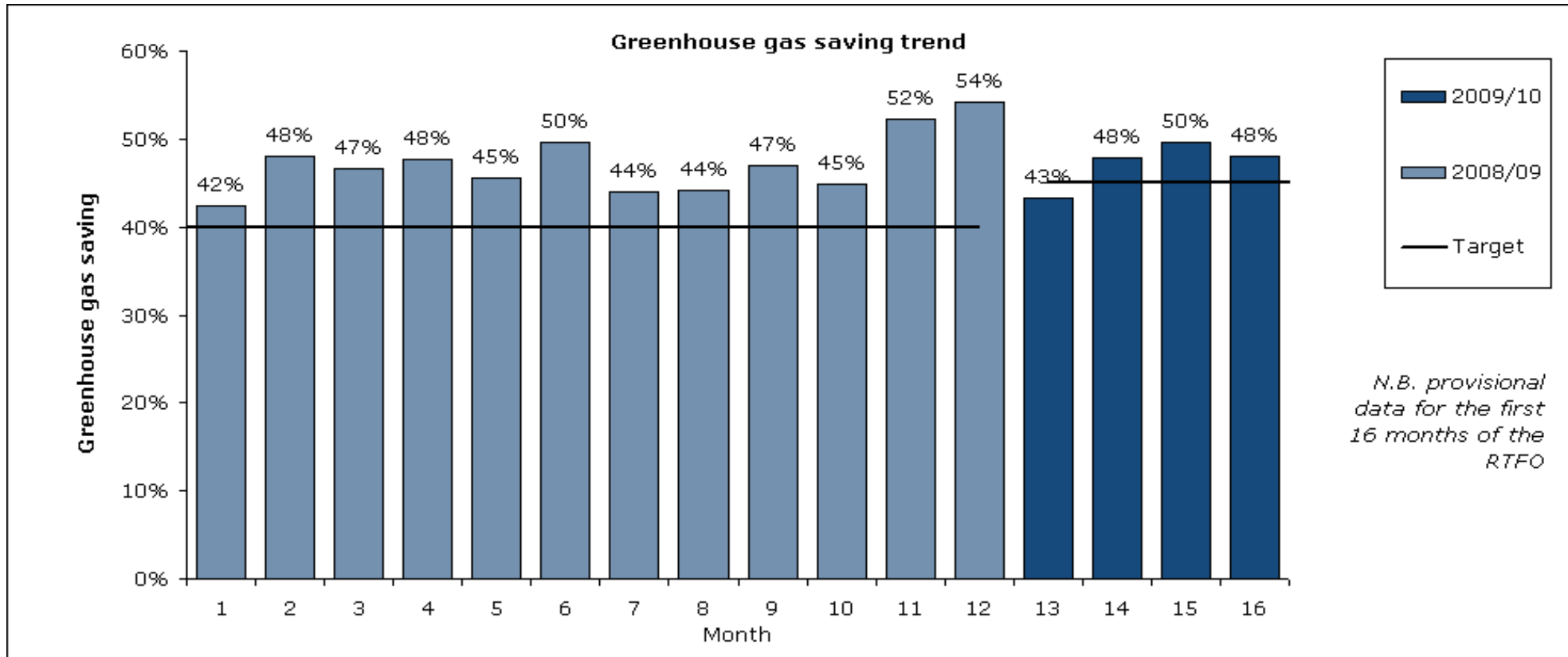
## Greenhouse gas savings



## Volume by feedstock and country

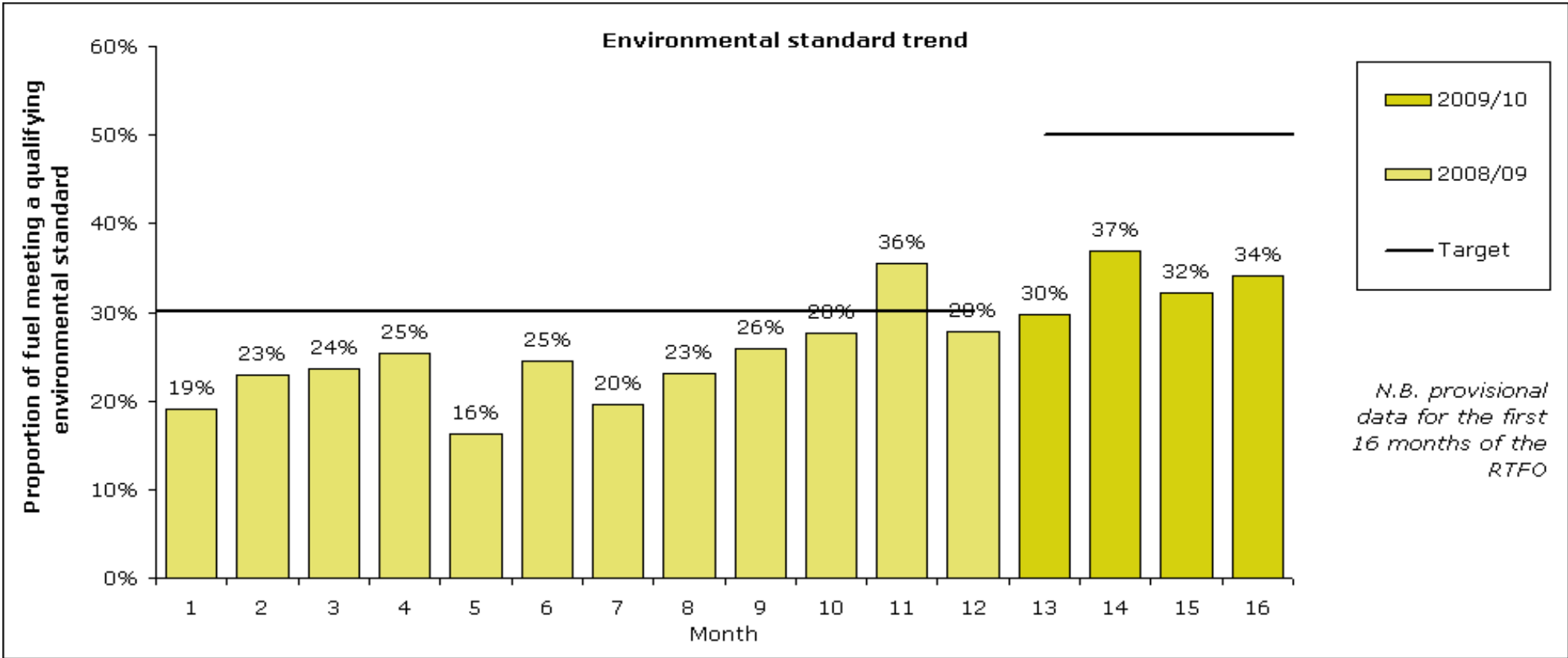


**Performance trends against the RTFO's targets**

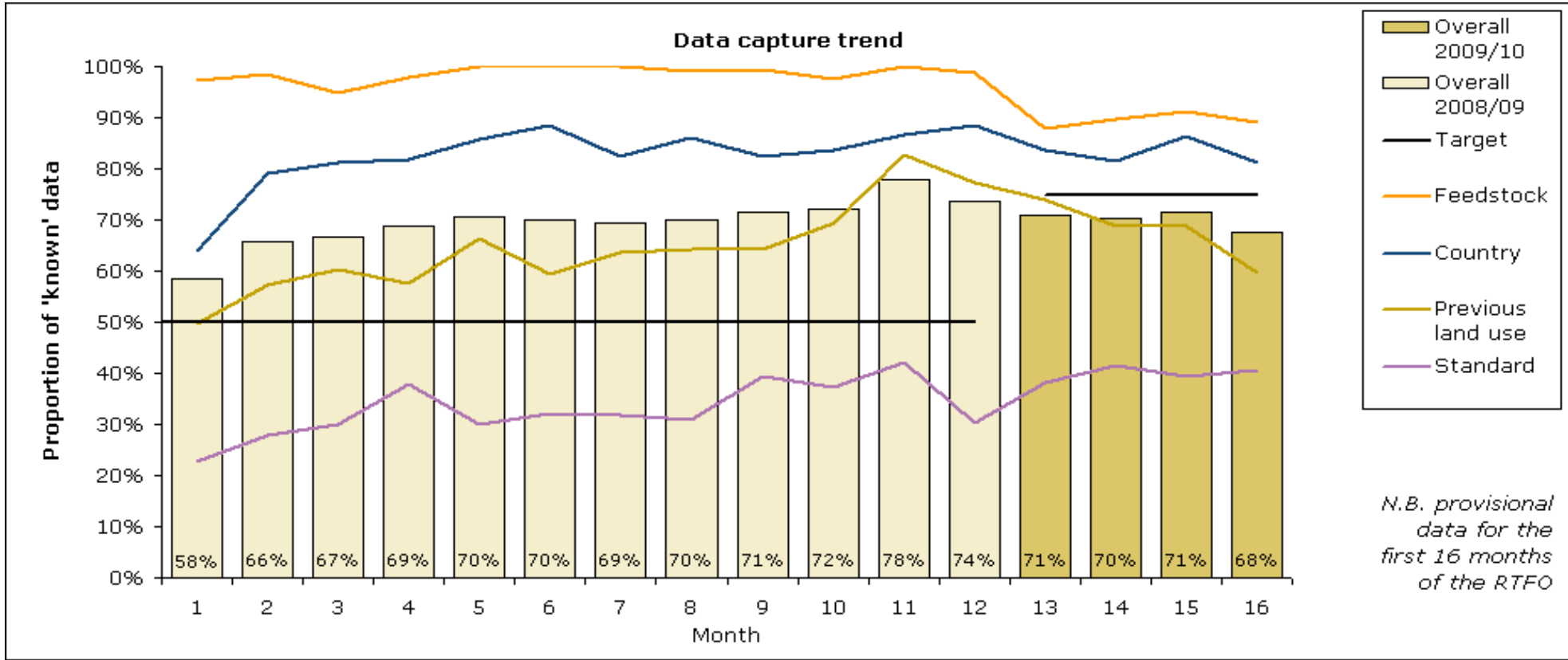


The CI defaults for biofuels from an unknown country and/or feedstock have been set more conservatively from the second reporting year of the RTFO (Month 13). This is to encourage suppliers to obtain data on the origin of their biofuels.

# Performance trends against the RTFO's targets



## Performance trends against the RTFO's targets



The data for the first 12 months comes from our fourth quarterly report. The data from the current obligation year is based on the data as at the last date on which certificates were awarded.

Fuel suppliers are encouraged to revise their data where they are able to provide more accurate information later in the year - for instance adding information if they found out the previous land use of a biofuel plantation, or removing information if they had reason to believe that a sustainability standard might have been incorrectly reported. These data may not therefore correspond exactly to the data in previous RFA reports. All data is subject to final verification at the end of the year.

Refer to the notes and glossary for further information about terms in the darker shaded boxes

**Table 1: Volume of biofuels supplied for road transport under the RTFO.**

		Volume, million l, or million kg	Fuel type	Volume, million l	Biofuels as a proportion of total road transport fuels supplied
Fuel type	Biodiesel	370	Diesel	8,107	4.36%
	Bioethanol	81	Petrol	7,552	1.06%
	Biogas	0.04			
	<b>Total</b>	<b>450</b>		<b>15,659</b>	<b>2.80%</b>
	<b>Annual target</b>				<b>3.25%</b>

**Table 2: Carbon and sustainability data of biofuels by fuel type.**

		Volume, l or kg	Volume, million l or million kg	Volume, %	Proportion meeting an environmental standard				Proportion meeting a social standard				Carbon intensity, g(CO <sub>2</sub> e)/MJ	Greenhouse gas saving, %	Accuracy level, (0-5)
					RTFO	Qualifying Standards	Other standards	None/ unknown	RTFO	Qualifying Standards	Other standards	None/ unknown			
Fuel type	Biodiesel	369,504,496	369.5	82%	2%	30%	7%	61%	0%	29%	10%	61%	50	42%	2.0
	Bioethanol	80,736,551	80.7	18%	14%	3%	0%	83%	0%	0%	16%	83%	24	71%	3.5
	Biogas	36,500	0.04	0%	0%	100%	0%	0%	0%	0%	100%	0%	27	69%	5.0
	<b>Total</b>	<b>450,277,547</b>	<b>450.3</b>	<b>100%</b>											
	<b>Mean</b>				<b>4%</b>	<b>25%</b>	<b>6%</b>	<b>65%</b>	<b>0%</b>	<b>24%</b>	<b>11%</b>	<b>65%</b>	<b>45</b>	<b>47%</b>	<b>2.3</b>

Refer to the notes and glossary for further information about terms in the darker shaded boxes

Table 3: Carbon and sustainability data of biodiesel from different feedstocks, countries, and according to the previous land-use.

		Volume, l	Volume, million l	Volume, %	Proportion meeting an environmental standard				Proportion meeting a social standard				Carbon intensity, g(CO <sub>2</sub> e)/MJ	Greenhouse gas saving, %	Accuracy level, (0-5)
					RTFO	Qualifying Standards	Other standards	None/unknown	RTFO	Qualifying Standards	Other standards	None/unknown			
Feedstock	Oilseed rape	61,373,762	61.4	17%	11%	4%	42%	43%	0%	0%	57%	43%	62	28%	2.3
	Palm	38,483,949	38.5	10%	0%	19%	0%	81%	0%	19%	0%	81%	47	45%	2.2
	Soy	130,519,673	130.5	35%	0%	5%	0%	95%	0%	5%	0%	95%	54	38%	2.2
	Sunflower	202,455	0.2	0%	0%	0%	0%	100%	0%	0%	0%	100%	60	30%	2.0
	Tallow	78,989,367	79.0	21%	0%	100%	0%	0%	0%	100%	0%	0%	17	80%	2.5
	UCO	14,530,369	14.5	4%	0%	100%	0%	0%	0%	100%	0%	0%	13	85%	2.4
	Unknown	45,404,921	45.4	12%	0%	0%	0%	100%	0%	0%	0%	100%	93	-8%	0.0
	<b>Total Mean</b>	<b>369,504,496</b>	<b>369.5</b>	<b>100%</b>		<b>2%</b>	<b>30%</b>	<b>7%</b>	<b>61%</b>	<b>0%</b>	<b>29%</b>	<b>10%</b>	<b>61%</b>	<b>50</b>	<b>42%</b>
Country of origin	Argentina	73,944,670	73.9	20%	0%	5%	0%	95%	0%	5%	0%	95%	48	44%	2.0
	Belgium	3,569,408	3.6	1%	0%	2%	0%	98%	0%	2%	0%	98%	91	-5%	2.0
	Brazil	758,888	0.8	0%	0%	0%	72%	28%	0%	0%	72%	28%	78	10%	2.0
	Canada	2,369,389	2.4	1%	0%	26%	0%	74%	0%	26%	0%	74%	46	47%	2.0
	Denmark	8,609,363	8.6	2%	0%	100%	0%	0%	0%	100%	0%	0%	14	84%	2.0
	France	2,744,546	2.7	1%	0%	5%	0%	95%	0%	5%	0%	95%	44	49%	3.1
	Germany	35,180,608	35.2	10%	0%	18%	74%	8%	0%	18%	74%	8%	42	51%	2.0
	Indonesia	12,279,249	12.3	3%	0%	3%	0%	97%	0%	3%	0%	97%	47	46%	2.0
	Ireland	3,088,965	3.1	1%	0%	100%	0%	0%	0%	100%	0%	0%	13	84%	2.0
	Malaysia	23,249,167	23.2	6%	0%	30%	0%	70%	0%	30%	0%	70%	47	45%	2.4
	Netherlands	1,615,911	1.6	0%	0%	19%	0%	81%	0%	19%	0%	81%	78	10%	2.0
	Sweden	754,546	0.8	0%	0%	0%	0%	100%	0%	0%	0%	100%	93	-8%	2.0
	Ukraine	202,455	0.2	0%	0%	0%	0%	100%	0%	0%	0%	100%	60	30%	2.0
	United Kingdom	36,111,370	36.1	10%	18%	80%	0%	1%	0%	74%	25%	1%	23	73%	2.9
	United States	90,943,852	90.9	25%	0%	47%	0%	53%	0%	47%	0%	53%	43	50%	2.9
Unknown	74,082,109	74.1	20%	0%	11%	0%	89%	0%	11%	0%	89%	81	6%	0.4	
<b>Total Mean</b>	<b>369,504,496</b>	<b>369.5</b>	<b>100%</b>		<b>2%</b>	<b>30%</b>	<b>7%</b>	<b>61%</b>	<b>0%</b>	<b>29%</b>	<b>10%</b>	<b>61%</b>	<b>50</b>	<b>42%</b>	<b>2.0</b>
Previous land-use	By-product	93,519,736	93.5	25%	0%	100%	0%	0%	0%	100%	0%	0%	17	81%	2.5
	Cropland	147,512,891	147.5	40%	2%	11%	18%	69%	0%	9%	21%	69%	54	38%	2.4
	Unknown	128,471,869	128.5	35%	3%	0%	0%	97%	0%	0%	3%	97%	70	19%	1.3
	<b>Total Mean</b>	<b>369,504,496</b>	<b>369.5</b>	<b>100%</b>		<b>2%</b>	<b>30%</b>	<b>7%</b>	<b>61%</b>	<b>0%</b>	<b>29%</b>	<b>10%</b>	<b>61%</b>	<b>50</b>	<b>42%</b>

Refer to the notes and glossary for further information about terms in the darker shaded boxes

**Table 4: Carbon and sustainability data of bioethanol from different feedstocks, countries, and according to the previous land-use.**

		Volume, l	Volume, million l	Volume, %	Proportion meeting an environmental standard				Proportion meeting a social standard				Carbon intensity, g(CO <sub>2</sub> e)/MJ	Greenhouse gas saving, %	Accuracy level, (0-5)	
					RTFO	Qualifying Standards	Other standards	None/unknown	RTFO	Qualifying Standards	Other standards	None/unknown				
Feedstock	Sugar beet	13,283,355	13.3	16%	84%	16%	0%	0%	0%	0%	0%	100%	0%	18	78%	4.0
	Sugar cane	65,492,606	65.5	81%	0%	0%	0%	100%	0%	0%	0%	100%	0%	23	73%	3.5
	Sulphite	266,167	0.3	0%	0%	100%	0%	0%	0%	0%	100%	0%	0%	6	93%	2.0
	Unknown	1,694,423	1.7	2%	0%	0%	0%	100%	0%	0%	0%	100%	0%	115	-36%	0.3
	<b>Total Mean</b>	<b>80,736,551</b>	<b>80.7</b>	<b>100%</b>	<b>14%</b>	<b>3%</b>	<b>0%</b>	<b>83%</b>	<b>0%</b>	<b>0%</b>	<b>16%</b>	<b>83%</b>	<b>24</b>	<b>71%</b>	<b>3.5</b>	
Country of origin	Brazil	65,492,606	65.5	81%	0%	0%	0%	100%	0%	0%	0%	100%	0%	23	73%	3.5
	Pakistan	434,409	0.4	1%	0%	0%	0%	100%	0%	0%	0%	100%	0%	115	-36%	1.0
	Sweden	266,167	0.3	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	6	93%	2.0
	United Kingdom	13,283,355	13.3	16%	84%	16%	0%	0%	0%	0%	100%	0%	18	78%	4.0	
	Unknown	1,260,014	1.3	2%	0%	0%	0%	100%	0%	0%	0%	100%	0%	115	-36%	0.0
<b>Total Mean</b>	<b>80,736,551</b>	<b>80.7</b>	<b>100%</b>	<b>14%</b>	<b>3%</b>	<b>0%</b>	<b>83%</b>	<b>0%</b>	<b>0%</b>	<b>16%</b>	<b>83%</b>	<b>24</b>	<b>71%</b>	<b>3.5</b>		
Previous land-use	By-product	1,696,357	1.7	2%	0%	16%	0%	84%	0%	16%	0%	84%	0%	22	74%	2.0
	Cropland	61,248,276	61.2	76%	18%	4%	0%	78%	0%	0%	22%	78%	0%	22	74%	3.6
	Unknown	17,791,918	17.8	22%	0%	0%	0%	100%	0%	0%	0%	100%	0%	34	60%	3.4
	<b>Total Mean</b>	<b>80,736,551</b>	<b>80.7</b>	<b>100%</b>	<b>14%</b>	<b>3%</b>	<b>0%</b>	<b>83%</b>	<b>0%</b>	<b>0%</b>	<b>16%</b>	<b>83%</b>	<b>24</b>	<b>71%</b>	<b>3.5</b>	

**Table 5: Carbon and sustainability data of biogas from different feedstocks, countries, and according to the previous land-use.**

		Volume, kg	Volume, million kg	Volume, %	Proportion meeting an environmental standard				Proportion meeting a social standard				Carbon intensity, g(CO <sub>2</sub> e)/MJ	Greenhouse gas saving, %	Accuracy level, (0-5)	
					RTFO	Qualifying Standards	Other standards	None/unknown	RTFO	Qualifying Standards	Other standards	None/unknown				
Feedstock	MSW	36,500	0.0	100%	0%	100%	0%	0%	0%	0%	100%	0%	0%	27	69%	5.0
Country of origin	United Kingdom	36,500	0.0	100%	0%	100%	0%	0%	0%	0%	100%	0%	0%	27	69%	5.0
Previous land-use	By-product	36,500	0.0	100%	0%	100%	0%	0%	0%	0%	100%	0%	0%	27	69%	5.0

Refer to the notes and glossary for further information about terms in the darker shaded boxes

Table 6: Carbon and sustainability data for biofuels by fuel type, feedstock, country of origin and previous land-use.

Fuel Type	Feedstock	Country of origin	Previous land-use	Volume, l or kg	Volume, million l or million kg	Volume, %	Proportion meeting an environmental standard				Proportion meeting a social standard				Carbon intensity, g(CO <sub>2</sub> e)/MJ	Greenhouse gas saving, %	Accuracy level, (0-5)
							RTFO	Qualifying Standards	Other standards	None/unknown	RTFO	Qualifying Standards	Other standards	None/unknown			
Biodiesel	Oilseed Rape	Belgium	Cropland	3,482,281	3.5	1%	0%	0%	0%	100%	0%	0%	0%	100%	93	-8%	2.0
		Canada	Cropland	1,752,875	1.8	0%	0%	0%	0%	100%	0%	0%	0%	100%	56	35%	2.0
		France	Cropland	2,601,278	2.6	1%	0%	0%	0%	100%	0%	0%	0%	100%	45	47%	3.2
		Germany	Cropland	28,331,095	28.3	6%	0%	0%	92%	8%	0%	0%	92%	8%	48	44%	2.0
		Germany	Unknown	615,769	0.6	0%	0%	0%	0%	100%	0%	0%	0%	100%	48	44%	2.0
		Netherlands	Cropland	1,304,862	1.3	0%	0%	0%	0%	0%	0%	0%	0%	100%	93	-8%	2.0
		Sweden	Cropland	754,546	0.8	0%	0%	0%	0%	0%	0%	0%	0%	100%	93	-8%	2.0
		United Kingdom	Cropland	5,152,595	5.2	1%	57%	43%	0%	0%	0%	0%	100%	0%	52	40%	5.0
		United Kingdom	Unknown	4,202,145	4.2	1%	88%	0%	0%	12%	0%	0%	88%	12%	52	39%	4.7
		United States	Cropland	3,419,816	3.4	1%	0%	0%	0%	100%	0%	0%	0%	100%	93	-8%	2.0
	Unknown	Cropland	15,769	0.0	0%	0%	0%	0%	0%	0%	0%	0%	100%	93	-8%	2.0	
	Unknown	Unknown	9,740,731	9.7	2%	0%	0%	0%	100%	0%	0%	0%	100%	93	-8%	1.0	
	Palm	Indonesia	Cropland	9,228,660	9.2	2%	0%	4%	0%	96%	0%	4%	0%	96%	47	46%	2.0
		Indonesia	Unknown	3,050,589	3.1	1%	0%	0%	0%	100%	0%	0%	0%	100%	47	46%	2.0
		Malaysia	Cropland	17,219,898	17.2	4%	0%	41%	0%	59%	0%	41%	0%	59%	47	45%	2.6
	Soy	Unknown	Unknown	6,029,269	6.0	1%	0%	0%	0%	100%	0%	0%	0%	100%	47	46%	2.0
		Unknown	Unknown	2,955,533	3.0	1%	0%	0%	0%	100%	0%	0%	0%	100%	47	46%	1.0
		Argentina	Cropland	31,747,654	31.7	7%	0%	11%	0%	89%	0%	11%	0%	89%	48	44%	2.0
	Soy	Unknown	Unknown	42,197,016	42.2	9%	0%	0%	0%	100%	0%	0%	0%	100%	48	44%	2.0
		Brazil	Cropland	215,484	0.2	0%	0%	0%	0%	100%	0%	0%	0%	100%	78	10%	2.0
		Brazil	Unknown	543,404	0.5	0%	0%	0%	100%	0%	0%	100%	0%	0%	78	10%	2.0
		United Kingdom	Cropland	19,078	0.0	0%	0%	0%	0%	100%	0%	0%	0%	100%	59	32%	4.0
		United States	Cropland	42,064,545	42.1	9%	0%	7%	0%	93%	0%	7%	0%	93%	59	32%	2.8
	Sunflower	Unknown	Unknown	5,620,521	5.6	1%	0%	0%	0%	100%	0%	0%	0%	100%	58	32%	3.0
		Unknown	Unknown	8,111,971	8.1	2%	0%	0%	0%	100%	0%	0%	0%	100%	78	10%	1.0
		Ukraine	Cropland	202,455	0.2	0%	0%	0%	0%	100%	0%	0%	0%	100%	60	30%	2.0
		Belgium	By-product	31,522	0.0	0%	0%	100%	0%	0%	0%	100%	0%	0%	17	80%	2.0
		Canada	By-product	616,514	0.6	0%	0%	100%	0%	0%	0%	100%	0%	0%	17	80%	2.0
	Tallow	Denmark	By-product	8,609,363	8.6	2%	0%	0%	100%	0%	0%	0%	100%	0%	14	84%	2.0
		France	By-product	20,937	0.0	0%	0%	0%	100%	0%	0%	0%	100%	0%	17	80%	2.0
		Germany	By-product	4,815,390	4.8	1%	0%	0%	100%	0%	0%	0%	100%	0%	17	81%	2.0
		Ireland	By-product	3,080,265	3.1	1%	0%	0%	100%	0%	0%	0%	100%	0%	13	84%	2.0
		Netherlands	By-product	178,079	0.2	0%	0%	0%	100%	0%	0%	0%	100%	0%	17	80%	2.0
		United Kingdom	By-product	15,468,696	15.5	3%	0%	0%	100%	0%	0%	0%	100%	0%	13	85%	2.0
		United States	By-product	39,838,970	39.8	9%	0%	0%	100%	0%	0%	0%	100%	0%	20	76%	3.2
		Unknown	By-product	6,329,631	6.3	1%	0%	0%	100%	0%	0%	0%	100%	0%	17	80%	1.0
		Belgium	By-product	55,605	0.1	0%	0%	0%	100%	0%	0%	0%	100%	0%	13	85%	2.0
		France	By-product	122,331	0.1	0%	0%	0%	0%	0%	0%	0%	100%	0%	13	85%	2.0
	UCO	Germany	By-product	1,418,354	1.4	0%	0%	0%	100%	0%	0%	0%	100%	0%	13	85%	2.0
		Ireland	By-product	8,700	0.0	0%	0%	0%	0%	100%	0%	0%	0%	100%	13	85%	1.0
		Netherlands	By-product	132,970	0.1	0%	0%	0%	100%	0%	0%	0%	100%	0%	13	85%	2.0
		United Kingdom	By-product	11,268,856	11.3	3%	0%	0%	100%	0%	0%	0%	100%	0%	13	85%	2.6
		Unknown	By-product	1,523,553	1.5	0%	0%	0%	100%	0%	0%	0%	100%	0%	13	85%	1.0
	Unknown	Unknown	45,404,921	45.4	10%	0%	0%	0%	100%	0%	0%	0%	100%	93	-8%	0.0	
	Bioethanol	Sugar beet	United Kingdom	Cropland	13,283,355	13.3	3%	84%	16%	0%	0%	0%	0%	100%	0%	18	78%
Sugar cane		By-product	1,430,190	1.4	0%	0%	0%	0%	100%	0%	0%	0%	100%	25	71%	2.0	
		Brazil	Cropland	47,964,921	48.0	11%	0%	0%	0%	100%	0%	0%	0%	100%	23	73%	3.5
		Unknown	Unknown	16,097,495	16.1	4%	0%	0%	0%	100%	0%	0%	0%	100%	25	71%	3.7
Sulphite		Sweden	By-product	266,167	0.3	0%	0%	0%	100%	0%	0%	0%	100%	6	93%	2.0	
Unknown	Pakistan	Unknown	434,409	0.4	0%	0%	0%	0%	0%	0%	0%	100%	115	-36%	1.0		
	Unknown	Unknown	1,260,014	1.3	0%	0%	0%	0%	0%	0%	0%	100%	115	-36%	0.0		
Bioogas	MSW	United Kingdom	By-product	36,500	0.0	0%	0%	0%	0%	0%	0%	100%	0%	27	69%	5.0	
<b>Total Mean</b>				<b>450,277,547</b>	<b>450.1</b>	<b>100%</b>	<b>4%</b>	<b>25%</b>	<b>6%</b>	<b>65%</b>	<b>0%</b>	<b>24%</b>	<b>11%</b>	<b>65%</b>	<b>45</b>	<b>47%</b>	<b>2.3</b>

**RFA Monthly Report 16: 15 April 2009 - 14 August 2009<sup>1</sup>**  
**Notes on data**

## **Introduction**

To encourage the sourcing of sustainable biofuels, the RFA requires fuel suppliers claiming Renewable Transport Fuel Certificates to submit monthly reports on the lifecycle greenhouse gas (GHG) saving and the sustainability of the biofuels they supply.

Reporting is also seen by the Government as an essential 'stepping stone' towards a mandatory assurance scheme. The EU's Renewable Energy Directive includes mandatory sustainability requirements. The Directive was published on 5 June 2009 and should be implemented into UK law by 5 December 2010.

This report provides information on the carbon and sustainability performance of renewable fuels supplied under the RTFO. The data is derived from the monthly reports on biofuels provided by individual fuel suppliers. At the end of the reporting year fuel suppliers are required to provide an independent verifier's opinion<sup>2</sup> on their information, and this verified information will be published in the January following each obligation year.

The carbon and sustainability data covers the *direct* impacts arising from biofuel cultivation. The RFA will separately monitor the potential *indirect* impacts of biofuel production such as indirect land-use change or changes to food and other commodity prices (e.g. *The Gallagher Review of the indirect effects of biofuels production* which was published on 8 July 2008).

**RFA Monthly Report 16: 15 April 2009 - 14 August 2009<sup>1</sup>**  
**Notes on data**

**Sustainability and the RTFO Meta-Standard**

The RTFO is built around seven sustainability principles; five environmental and two social. These seven principles have been used to define the RTFO Sustainability Meta-Standard. A meta-standard approach enables existing schemes, such as the UK's Assured Combinable Crops Scheme, to be assessed against the RTFO principles.

No schemes currently meet all of the environmental and social principles; although two schemes meet all of the environmental principles. Any scheme that meets an adequate number of criteria is considered a 'qualifying standard', and fuel companies can report these to the RFA. Fuels from wastes (e.g. used cooking oil and tallow<sup>3</sup>) are automatically considered to meet the qualifying level. Suppliers are also permitted to set up their own auditing procedures to demonstrate that feedstocks meet the RTFO Meta-Standard. Other standards can also be reported to the RFA and count towards the data capture target; these include standards that have not yet been benchmarked against the RTFO Meta-Standard, or standards that have been benchmarked, but do not meet sufficient criteria to be awarded the qualifying level status.

While there are currently several qualifying standards for the RTFO, these are mostly either under development or only newly established; the ACCS is the only well established certification scheme, and is only applicable to UK crops. This currently limits the ability of fuel suppliers to source certifiably sustainable feedstocks. The market is developing, and suppliers have been putting in place procedures to track information about sustainability through their supply chains. It is intended that by creating a market for sustainable crops, the RTFO will support the development and expansion of these certification schemes, and that suppliers will be able to source their feedstocks increasingly sustainably.

**RFA Monthly Report 16: 15 April 2009 - 14 August 2009<sup>1</sup>**  
**Notes on data**

**Content of this report**

The information in this report includes:

- volumes of fuel by fuel type (e.g. biodiesel, bioethanol);
- volumes of fuel by feedstock (e.g. used cooking oil, soy);
- volumes of fuel by country of origin (e.g. UK, Brazil);
- volumes of fuel meeting sustainability standards;
- lifecycle greenhouse gas savings of fuels.

The information is provided in four sets of Excel sheets:

RTFO graphs

Illustrates key data graphically and includes: volumes and proportions of fuel by fuel type, feedstock, and country of origin; data on the sustainability of the biofuels supplied; and percentage data capture for each category.

RTFO trends

Presents data on RTFO performance over time against the three Government targets.

RTFO summary data

Provides five tables with summaries of all the road transport biofuel supplied to the UK for each fuel type, feedstock, country of origin, and previous land-use.

**RFA Monthly Report 16: 15 April 2009 - 14 August 2009<sup>1</sup>**  
**Notes on data**

RTFO detailed data

Table 6 provides more detailed data broken down by fuel type, feedstock, country of origin and previous land-use. So, for example, data is provided on the volumes of fuel and the C&S information of bioethanol from Brazilian sugar cane, or biodiesel obtained from oilseed rape grown in the UK on cropland, and also meeting a Qualifying Standard.

**Provisional data**

This data is based on information submitted monthly to the RFA by fuel suppliers. If we have reason to believe that a piece of data may have been misreported we will challenge companies to check and if necessary revise their data. Where this process is ongoing, our reports are based on the data exactly as reported to us. The final verification<sup>2</sup> of this data occurs annually (by 28 September each year in respect of the previous financial year's data).

Each Monthly Report released by the RFA will contain data from the reporting year<sup>1</sup> to date on biofuels entering the UK market from those companies that are registered with the RFA.

The exact timing of the months that the data covers is different for major and minor fuel suppliers, due to the way they report data on volumes of fuel to HM Revenue and Customs (HMRC):

- Large fuel companies (typically fossil fuel suppliers) report to HMRC on a 15<sup>th</sup> to 14<sup>th</sup> of the month basis.
- Smaller fuel companies (typically biofuel suppliers) report by calendar month or quarter.

**RFA Monthly Report 16: 15 April 2009 - 14 August 2009<sup>1</sup>**  
**Notes on data**

**C&S reporting targets**

The Government has set targets for three key aspects of the reporting scheme. The targets are not mandatory (and there is no penalty for failing to meet them), but illustrate the level of performance which the Government expects from fuel suppliers over the obligation year. The targets increase each year. The Government has said that the targets will be subject to review in the light of suppliers' performance and other developments.

Annual Supplier Target	2008-09	<b>2009-10</b>	2010-11
Percentage of feedstock meeting a Qualifying Environmental Standard	30%	<b>50%</b>	80%
Annual GHG saving of fuel supplied	40%	<b>45%</b>	50%
Data reporting of renewable fuel characteristics	50%	<b>70%</b>	90%

The RFA expects, and Government targets recognise the need for, continuous improvement so that by 2010 comprehensive sustainability data is provided for almost all biofuels supplied to the UK.

**Footnotes**

<sup>1</sup> The second reporting or obligation year runs from 15 April 2009 to 14 April 2010. This report contains data from 15 April 2009 to 14 August 2009 for large fuel companies, and from 15 April 2009 to 30 July 2009 for those smaller companies that report by calendar month or quarterly.

<sup>2</sup> Suppliers applying for < 450 000 renewable transport fuel certificates are not required to submit a verifier's opinion.

<sup>3</sup> Recent research has called into question the overall environmental benefits of using tallow as a feedstock for biofuels:

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

**RFA Monthly Report 16: 15 April 2009 - 14 August 2009**  
**Glossary**

**Obligated company**

- An obligated company is one that supplies > 450 000 litres/year of relevant hydrocarbon oil road transport fuel.
- Obligated companies supply > 95% of the biofuels in the UK market.
- Obligated suppliers must:
  - supply biofuels; or
  - purchase certificates from other companies supplying biofuels; or
  - pay into a buy-out fund; or
  - a combination of any of the above.

**Non-obligated company**

- Non-obligated companies are those that either supply < 450 000 litres/year of relevant hydrocarbon oil road transport fuel, or only supply biofuels.
- Non-obligated companies are not required to register with us, but can choose to do so and earn one Renewable Transport Fuel Certificate (RTFC) for every litre of biofuel supplied.

**Sustainability standards**

- Sustainability assurance schemes are divided into Environmental and Social Standards and these are split into three levels:
  1. RTFO Meta-Standard (RTFO) - this is a higher standard than most existing sustainability standards and covers seven key environmental and social principles.
  2. Qualifying Standards (QS) - meet the majority of the environmental and/or social criteria defined under the RTFO Meta-Standard.
  3. Other Standards - these have either not yet been benchmarked, or have been benchmarked against the RTFO Meta-Standard, but do not meet sufficient criteria to be awarded QS status.
- None/unknown should be reported where the feedstock was not certified against a standard, or the data is unavailable.

**RFA Monthly Report 16: 15 April 2009 - 14 August 2009**  
**Glossary**

- Suppliers can report a Benchmarked or Qualifying Standard and conduct supplementary audits to meet a QS or the RTFO Meta-Standard, respectively.
- Suppliers producing biofuels from by-products have little or no control over how the source feedstocks were produced. Biofuels from by-products are automatically credited to the Qualifying Standard.

**Previous land-use**

- This is the use of the land on which the feedstock crop was grown prior to 30 Nov 2005. There are five categories:
  1. unknown;
  2. cropland;
  3. grassland, agricultural use;
  4. grassland, non-agricultural use;
  5. forestland.
- By-products (e.g. used cooking oil and tallow) do not require any additional land.
- The previous land-use affects greenhouse gas emissions due to release of carbon stored in the soil and plants when the land is cleared and ploughed up for biofuel crops.

**Feedstocks**

- Ch - cheese by-product
- Mol - molasses
- msw - municipal solid waste
- UCO - used cooking oil
- SB - Sugar beet
- SC - Sugar cane
- SF - sunflower
- Sul - sulphite

**RFA Monthly Report 16: 15 April 2009 - 14 August 2009**  
**Glossary**

**Carbon intensity**

- Carbon intensity is a measure of the greenhouse gas (GHG) emissions of the fuel chain from 'field-to-wheel'.
- Different GHGs have different potencies (some make a greater contribution to global warming than others).
- To account for this, all GHGs are expressed in terms of their strength relative to carbon dioxide, called carbon dioxide equivalent (CO<sub>2</sub>e).

**Greenhouse gas emissions**

- Greenhouse gas (GHG) emissions of different biofuels can vary significantly depending on the system of cultivation, processing, and transportation of feedstock.
- The data collected takes into account GHG emissions of the fuel chain from 'field to wheel' incorporating data on feedstock, country of origin and land-use change.
- GHG saving refers to the reduction in GHG emissions due to replacing fossil fuels with biofuels. A negative value means that more GHGs have been emitted by using the biofuel than if the fossil fuel was used.

**Accuracy level**

- Accuracy level is a measure of the amount of data provided by the supplier on a particular batch of biofuels.
- This data is used for calculation of the greenhouse gas emissions of the fuel chain.
- It ranges from 0 to 5 where 5 is the highest:
  - 0 - unknown feedstock or country of origin
  - 1 - known feedstock or country of origin
  - 2 - known feedstock AND country of origin
  - 3 - data input based on RFA-defined defaults
  - 4 - data input based on industry-defined defaults
  - 5 - 'real' data input to the fuel chain e.g. information on fertiliser inputs and crop yield of the source feedstock.

**RFA Monthly Report 16: 15 April 2009 - 14 August 2009**  
**Glossary**

**C&S reporting targets**

- The Government has set targets for three key aspects of the reporting scheme. The targets are not mandatory (and there is no penalty for failing to meet them), but illustrate the level of performance which the Government expects from fuel suppliers. The Government has said that the targets will be subject to review in the light of suppliers' performance and other developments.

Annual Supplier Target	2008-09	<b>2009-10</b>	2010-11
Percentage of feedstock meeting a Qualifying Environmental Standard	30%	<b>50%</b>	80%
Annual GHG saving of fuel supplied	40%	<b>45%</b>	50%
Data reporting of renewable fuel characteristics	50%	<b>70%</b>	90%

- The data reporting of renewable fuel characteristics target refers to the amount of data provided by transport fuel suppliers as opposed to reporting 'unknown' against the four sustainability components:

1. biofuel feedstock
2. feedstock country of origin
3. sustainability standard
4. land-use on 30 November 2005.

- Whilst 'unknown' reporting is permitted, suppliers are encouraged to identify and report accurate information about the feedstocks used. Where 'unknown' or 'none' is reported this does not count towards the data capture target.

- Where a by-product has been used as the feedstock, reporting 'by-product' for the sustainability information fields will be counted as a completed report.

- Reporting a non-Qualifying Standard is also counted as a completed data field for the 'standard' field.