

**EXPLANATORY MEMORANDUM TO THE
BIOFUEL (LABELLING) REGULATIONS 2004**

2004 No. 3349

1. This explanatory memorandum has been prepared by the Department for Transport and is laid before Parliament by Command of Her Majesty.
2. **Description**
 - 2.1 The Regulations provide for the labelling of filling-station pumps, when they are used to dispense motor fuels containing more than 5% by volume of biofuel.
 - 2.2 Biofuel is non-mineral oil, produced from biodegradable material.
 - 2.3 Clear labelling will protect consumers from unknowingly filling their vehicles with fuel that may be unsuitable for their vehicle and that could invalidate their warranty.
3. **Matters of special interest to the Joint Committee on Statutory Instruments**
 - 3.1 None
4. **Legislative Background**
 - 4.1 The Regulations transpose Article 3.5 of Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels or other renewable forms for transport. Article 3.5 imposes specific labelling obligations at the point of sale for fuel blends containing more than 5% biofuel.
 - 4.2 The House of Commons European Scrutiny Committee debate occurred on 1 May 2003. This was followed by regular meetings of the Council Working Group, culminating in the Energy Council meeting of Ministers on 7 June 2003, where the text of the Directive was agreed.
 - 4.3 The instrument will be laid in both Houses of Parliament and subject to annulment by resolution in either House.
5. **Extent**
 - 5.1 This instrument applies to all of the United Kingdom

6. European Convention on Human Rights

6.1 Not applicable.

7. Policy background

7.1 The main objectives of Directive 2003/30/EC are to reduce life-cycle emissions of carbon dioxide from transport across Europe, and to reduce the EU's future reliance on external energy sources.

7.2 Article 3.5 of the Directive imposes a requirement that biofuel blends in excess of 5 percent should be clearly labelled at the point of sale. This is to protect consumers from unknowingly filling their vehicles with fuel that may be unsuitable for their vehicle and that could invalidate their warranty.

7.3 There is no statutory requirement to consult but there has been considerable consultation with various stakeholders, including consultation on the draft regulations.

7.4 The Government's public consultation document "Towards a UK Strategy for Biofuels" was published on 26 April 2004. The consultation was sent to nearly 100 consultees who had expressed an interest including oil producers and retailers, vehicle manufacturers, environmental groups, county councils and academics.

7.5 The consultation sought views on plans for implementing the EU Biofuels Directive including the associated 2005 target, developing the UK strategy for biofuels to 2010 and beyond and options for achieving any targets.

7.6 Comments were invited by 16 July 2004. There was a good response, with 129 responses from a wide range of stakeholders, including over 30 responses from the public.

7.7 The consultation paper included 19 key questions for response, including ones on labelling.

7.8 Nearly all the respondents were very eager to see clear labelling at forecourts. Many commented on the lack of understanding of biofuels amongst the public.

8. Impact

8.1 A Regulatory Impact Assessment is attached to this memorandum.

8.2 There is no impact on the public sector.

9. Contact

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Regulatory Impact Assessment on Government Proposals for Labelling Biofuels

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Introduction and summary

Directive 2003/30/EC on the promotion of biofuels includes a requirement for Member States to ensure by 31 December 2004 specific labelling at sales points, where the percentages of biofuels, blended in mineral oil derivatives, exceed 5% of fatty acid methyl ester (FAME), or 5% of bioethanol.

This assessment covers the regulatory impact of the mandatory labelling of biofuels above 5% by volume. It concludes that the proposed Regulations would impose no or very minimal additional costs to fuel retailers, associated with labelling pumps.

It concludes that the legislation should require a simple label to be placed on pumps at retail forecourts where they contain biofuel blends in excess of 5%. This would advise motorists that the fuel may not be suitable for their vehicle, and that they should consult their manufacturer before use.

Purpose and intended effects of the measures

Objective

The Government has ambitious commitments to reduce carbon dioxide and has said that the transport sector must contribute. Achieving savings in this sector is proving particularly problematic however compared to others, and the costs are generally higher.

Biofuels are one option that can achieve carbon savings, but they cost more to produce than their fossil fuel equivalents and their promotion therefore would require Government intervention.

The main objectives of the Biofuels Directive (Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003) are to reduce life-cycle emissions of carbon dioxide from transport across Europe, and to reduce the EU's future reliance on external energy sources.

Article 3.5 of the Directive imposes a requirement that biofuel blends in excess of 5% should be clearly labelled at the point of sale. This is to protect consumers from unknowingly filling their vehicles with fuel that may be unsuitable for their vehicle and that could invalidate their warranty.

Background

At present, most car manufacturers do not warrant their diesel vehicles to run on blends in excess of 5% "FAME" (biodiesel produced to BS EN 14214). This is due to concern about possible engine and fuel pump damage.

Manufacturers have not warranted vehicles to run on bioethanol blends. However, since a maximum of 5% ethanol is allowed by the fuel quality directive 98/70/EC and the EN standard for petrol (EN 228), it is implicit that warranties cover blends of up to 5% bioethanol. percentage blends of 5-30% bioethanol would appear to be prohibited by directive 98/70/EC, but >30% blends would fall outside its scope and could be marketed.

There is currently no legal requirement in the UK to label any vehicle fuel at the point of sale. However, the oil companies in the UK do generally market fuels which comply with the relevant British Standard for a particular fuel and provide labelling to that effect. These Standards mandate and/or recommend marking requirements for each fuel. They have recently reached agreement to standardise nozzle colours, to recommend hose colours and to improve the clarity of labels for the main retailed fuels which are advertised as meeting BS

228 (premium unleaded) BS 780 (super) or BS 590 (diesel including biodiesel up to 5 % FAME) as shown in the following table:

Fuel Type	Pump Colour
Unleaded Petrol	Green
Diesel (including up to 5% FAME)	Black

These arrangements are to be phased in over two years so are unlikely to be widespread by the time the biofuels labelling requirements must be introduced.

The draft BS EN standard for 100% FAME biodiesel includes labelling requirements for retail pumps and colour coding. It advises that the nozzle colour forward of the grip should be orange. There is no agreed label, colour-coding or fuel standard for >5 to 99% FAME.

New standalone regulations will be required for labelling biofuels above 5%. It is envisaged that these will be made under section 2(2) of the European Communities Act.

The provision should result in clear labelling of biofuels (in excess of a 5% blend), at the point of sale, i.e. on fuel pumps at filling stations.

Risk assessment

Currently, most biofuel products on the market are a blend of 95% mineral fuel to 5% biofuel. These should meet the current British standard, BS EN 590, in order that they do not compromise engine manufacturers' warranties. Most manufacturers have concerns about the use of vegetable oils in their engines in a higher than 5% blend, owing to concerns about the potential for mechanical problems such as gumming up of the fuel injection system and cold start problems. Little if any biofuel is sold at retail outlets in excess of a 5% blend, but this could increase in the future.

Options

We have identified three approaches to the issue of biofuels' labelling:

No labelling requirement for biofuels of any blend

Requiring the labelling of biofuels above 5% with a simple warning

Requiring the labelling of biofuels above 5% including information on the precise blend and specifying colour coding for hoses and nozzles.

Option 1

Under this option, and to act as a baseline against which the other options should be judged, the Government would not impose any labelling requirements. However, taking this route would risk contravening the Directive's requirements if blends of >5% biofuels were put on sale. There would also be a risk of engine damage if motorists unwittingly used inappropriate fuels for their vehicles, which could lead to legal and other action, against the Government and/or fuel retailers. The risk is currently low, but could increase in coming years.

Option 2

This option would mandate a label to be placed on the pump which would state "Not suitable for all vehicles: consult vehicle manufacturer before use". There could be a risk consumers miss the label and just look at the hose/nozzle colour. However, the label would be prominent, and as few garages are likely to sell blends above 5%, the overall risk is low.

Option 3

This option would require specific labelling, including information on the precise blend and specifying colour coding for hoses and nozzles, as summarised in the following table:

Fuel Grade	Type	Hose and Nozzle Colour	Nozzle Marking	Minimum Dispenser Marking
Bioethanol >5%	>E5-E85	White*	Exx*	Exx* Ethanol Petrol Blend
Biodiesel >5%	>B5%-B100 FAME	Orange*	Bxx*	Bxx* Biodiesel

*xx = percentage of biofuel in the fuel blend

Under this option, it is suggested that for biodiesel blends of >B5 to B100 the hose and nozzle would be orange. For bioethanol blends of >E5 to E85, the colour for hose and nozzle would be white.

The label on the nozzle and pump would specify the blend as Bxx biodiesel - the 'xx' standing for the approximate percentage of FAME in the product. The actual percentage of biodiesel being dispensed from a pump must be within 5% of, but not higher than, the blend stated on that pump's label.

For example, B30 would mean the pump dispensed a fuel blend containing not less than 25%, and not greater than 30%, FAME. The remainder must be conventional mineral diesel. FAME is biodiesel produced to BS EN 14214, and is the only type of biodiesel this labelling requirement would refer to. The regulations would need to state that any biofuel which is not FAME must not be labelled as 'biodiesel'.

For bioethanol blends of >E5 to E85, the suggested mandatory colour for hose and nozzle would be white. As with biodiesel, the actual percentage of bioethanol being dispensed from a pump must be within 5% of, but not higher than, the blend stated on that pump's label. The regulations would need to state that any fuel which is not bioethanol must not be labelled 'bioethanol'.

Responses to our consultation and further discussion with stakeholders indicate a number of potential risks with this approach discussed below.

Costs and benefits

Option One - No labelling requirement

There would be no costs associated with this option

Option Two - Requirement to label

The only business sector directly affected by this option would be fuel retailers. There would be the very minimal cost for the retailer of placing a label on the biofuel pump

Costs for a typical retailer are unlikely to exceed £10 per annum

Option Three - Requirement to label including colour-coding

The only business sector directly affected by this option would be fuel retailers. In addition to the minimal cost of placing a label on the biofuel pump, there are costs related to colour coding.

For a typical retailer the average cost of a fuel dispenser hose, manufactured to BS/EN 1360 has been estimated as £30 - £40. Hoses have been designed specifically for biofuels and these are costed at the same price as conventional petrol/diesel hoses. The cost of an industry-standard ZBA fuel nozzle is approximately £100. If labour costs are also considered, a total cost of £350-500 would seem appropriate. There are no regulations on the replacement of hoses but fuel hoses are probably replaced every 6-8 years depending on their condition with possibly longer replacement periods at lower throughput sites.

An alternative approach would be to use coloured hose sleeves - a common practice in other European countries but less so in the UK. These are normally fitted during manufacture of the hose assembly. These sleeves cost a few pence, although to retrofit in the field would involve disconnection of the hose assembly from the nozzle. A total cost for retrofitting a colour sleeve to a hose, including labour, could be around £100.

The benefits of labelling

As set out above, clear labelling will protect consumers from unknowingly filling their vehicles with fuel that may be unsuitable for their vehicle and that could invalidate their warranty.

Assumptions

It is assumed that no fuel retailer would be required to market fuel with above 5 % biofuel blends.

Enforcement and sanctions

As part of the existing regime for road transport fuel quality checks, trading standards officers will be responsible for ensuring any biofuel sold in England and Wales in blends over 5% is labelled appropriately. In Scotland, enforcement is the responsibility of the Procurator Fiscal, and in Northern Ireland it is the responsibility of trading standards officers or the Director of Public Prosecutions.

Equity and fairness

The only key group that could be adversely affected by these biofuel labelling regulations are independent fuel retailers. But as the costs identified are very small in relation to general operating costs, the costs would not be prohibitive.

Small firms impact test

No impacts on small firms have been identified.

Competition assessment

Any costs resulting from the implementation of any of the options for labelling are not expected to be significant, or to fall disproportionately within any affected market. Therefore, no competition issues have been identified.

Consultation

The Department consulted on labelling provisions as part of our biofuels consultation. The general response to the questions in the consultation on colour-coding (option 3) was positive. However, some concerns were expressed about imposing extra costs on retailers and there was not such broad agreement on the proposed colours. White for bioethanol in particular was highlighted as a potential problem due to 'housekeeping' reasons. More generally there was concern about the potential for confusion resulting from a proliferation of colours.

In addition, there was disagreement on a number of other issues including appropriate tolerances for the blends, i.e. if the blend was labelled B20, how close to 20 per cent biodiesel it would need to be, whether within 5% as proposed in our consultation, or a fraction of a percent.

The conclusion drawn from further informal consultation was that, given the very few numbers of retailers selling higher blends, and the lack of consensus on issues such as appropriate colours, legislating for a highly detailed label including colour coding was considered premature at this time. However, the British Standards Institute (BSI) may develop standards, labels and colours for biodiesel and ethanol blends in due course.

The full consultation is available at www.dft.gov.uk/roads/biofuelsconsultation.

Monitoring and review

The sales of biofuels above 5% will be monitored and the legislation reviewed accordingly. As stated above, if necessary the BSI may develop labelling, standards and colours for biodiesel and ethanol blends in the future.

Summary and recommendation

Option 2 of mandating a simple label to be placed on the pump is preferred. Option one (no labelling) is rejected as this would risk contravening the Directive. Option three (prescribing a label covering issues including the precise blend and colour-coding) is rejected as there are very few fuel retailers selling biofuel in blends above 5% and there is no current cross-industry agreement on a number of issues, including the most suitable colours to use. An inexpensive but clear label as specified in option two is considered the most practical and sensible labelling choice at this time.

Ministerial declaration

I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Signed by the responsible Minister

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Date.....

Contact point

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03 December 2004

DEPARTMENT FOR TRANSPORT

**TRANSPOSITION NOTE FOR
DIRECTIVE 2003/30/EC OF THE EUROPEAN PARLIAMENT AND OF THE
COUNCIL OF 8TH MAY 2003 ON THE PROMOTION OF THE USE OF
BIOFUELS OR OTHER RENEWABLE FUELS FOR TRANSPORT**

DIRECTIVE PROVISION ARTICLES	OBJECTIVES	IMPLEMENTATION	RESPONSIBILITY
Article 1	Sets directive's aims	Does not require transposition	N/a
Article 2	Definitions	Such definitions as are required are enacted in regulation 2 of the Biofuels (Labelling) Regulations 2004	Secretary of State for Transport
Article 3.1	Indicative national targets for proportion of fuel should be biofuel	Administrative announcement of the targets will be made before the required date	Secretary of State for Transport
Article 3.2	Forms of biofuels which may be made available	Not required to be transposed into legislation	N/a
Article 3.3 and 3.4	Monitoring of effect of biofuels and emissions	Monitoring will be achieved by administrative means while compliance with EC emissions limits imposed by other directives will be implemented by transposing instruments as required with general provisions such as Motor Vehicles (Tests) Regulations 1981 [S.I. 1981/1694] - Road Vehicles (Construction and	Secretary of State for Transport

		Use) Regulations 1986 [S.I.1986/1078]	
Article 3.5	Specific labelling at sales points	Regulations 3 and 4 of the Biofuels (Labelling) Regulations 2004	Secretary of State for Transport
Article 4.1	Member States to report on measures taken to European Commission	Legislation not required	Secretary of State for Transport
Article 4.2 to article 6	Evaluation reports and adaptation of directive to technical standards	N/A	These provisions pertain to the European Commission
Article 7.1	Obligation to transpose	By enacting the Biofuels (Labelling) Regulations 2004	Secretary of State for Transport
Article 7.2	Member state to communicate implementation measures to European Commission	Communication to the Commission will be made administratively	Secretary of State for Transport