

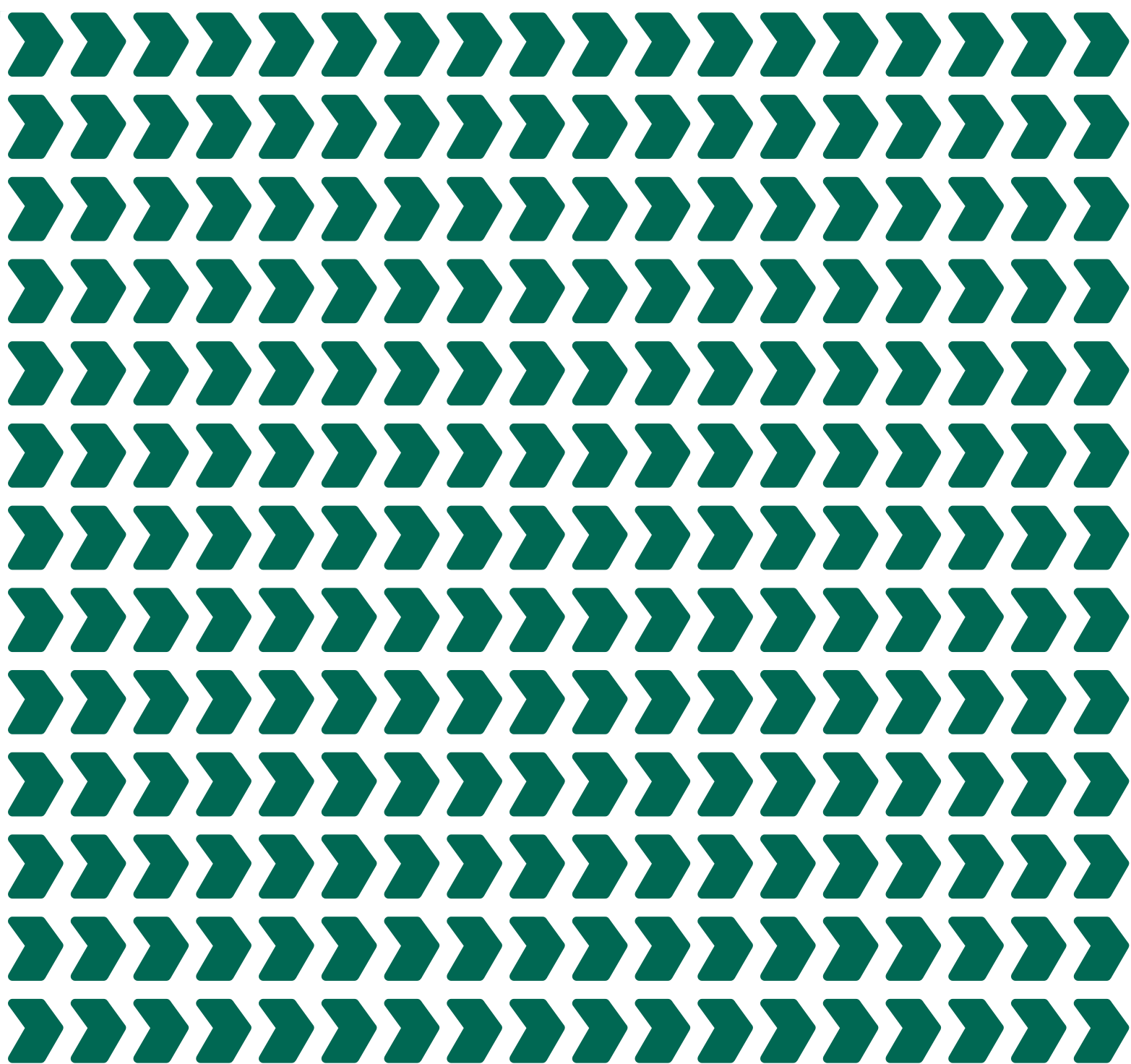


Department
for Transport

E10 petrol, consumer protection and fuel pump labelling

Supporting renewable transport fuels and protecting consumers

Moving Britain Ahead



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Department for Transport
Great Minster House
33 Horseferry Road
London SW1P 4DR
Telephone 0300 330 3000
Website www.gov.uk/dft
General enquiries: <https://forms.dft.gov.uk>



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Foreword

Reducing greenhouse gas emissions from transport will be vital to achieving the UK's commitments on climate change. Electric vehicles and other dedicated low carbon transport modes will provide some of these emissions savings, particularly in the medium to long term. Nonetheless, there is an immediate and ongoing need to decarbonise the traditional road fuels used by the vast majority of existing vehicles.

With that need in mind, the Government has recently increased the targets under the Renewable Transport Fuel Obligation scheme (RTFO), which requires fuel suppliers to ensure minimum volumes of renewable fuels are supplied. These targets are predominantly met by blending renewable fuels such as biodiesel and bioethanol into the regular diesel and petrol bought at filling stations across the country.

Currently, petrol sold in the UK contains no more than 5% bioethanol, a blend known as E5. Blending up to 10%, known as E10, could help deliver the RTFO more cost effectively, provide significant carbon savings compared to E5 and support UK bioethanol producers.

However, the introduction of E10 petrol presents some challenges, particularly in relation to compatibility with older vehicles. The vast majority of vehicles in use today are approved by to be fuelled with E10, but a small proportion of older vehicles will need to continue to use E5. These include classic or cherished older vehicles; but also include a significant number of cars and motorbikes which are less than 25 years old and still regularly used.

The Government is keen to harness the potential benefits of introducing E10, while also ensuring that motorists who still need to purchase standard E5 petrol can do so without having to pay for higher priced 'Super' grades (more expensive higher octane petrol).

To support the latter aim, we are proposing to introduce a 'protection grade' that requires larger filling stations to continue to stock the standard Premium 95 petrol in an E5 grade (95 E5), should they decide to stock E10. This will guarantee that consumers have access to the same E5 petrol they currently use if and when E10 is introduced.

Introducing this type of protection grade clearly bears the risk of dissuading a market-led introduction of E10. It is unlikely that suppliers will want to change their Super grade to E10, as the comparatively low volumes sold will not support meaningful progress towards their RTFO targets. In this context, we are keen to explore options for ensuring a managed transition to E10 in a way that minimises disruption to consumers. This consultation therefore includes a call for evidence inviting stakeholders to contribute ideas as to how E10 could be introduced alongside the continued availability of Premium E5.

The consultation also sets out proposals to introduce standardised fuel labelling. These labels will help motorists select the correct fuel for their vehicle regardless of where they are filling up. For petrol and diesel, the labels must clearly indicate the maximum renewable fuel content, thus supporting the communication of any future introduction of E10 petrol.

Executive summary

- 1 This document has two main parts. The first contains a consultation on proposals to ensure that standard Premium 95 E5 unleaded petrol¹ remains available in the UK, and a call for evidence on how E10 could best be introduced to the UK market.
- 2 The consultation proposes to protect motorists by ensuring the continued supply of 95 E5 through amendments to the Motor Fuel (Composition and Content) Regulations 1999. This would ensure 95 E5 is available as a 'protection grade' if and when E10 petrol is introduced.
- 3 The call for evidence acknowledges the challenges associated with introducing E10, particularly while ensuring 95 E5 remains available. It asks industry for feedback on how E10 can be best introduced in these circumstances and requests evidence, particularly in relation to costs, on a proposal that would require the availability of E10 at large filling stations with sufficient underground storage facilities (fuel tanks) to offer consumer choice on which fuel to use.
- 4 The second part of the document is a consultation on introducing new standardised fuel labels at fuel filling stations and on new vehicles. This is part of the ongoing transposition of the EU Alternative Fuels Infrastructure Directive. We consulted on the first stage of transposition in October 2016, with the Government response published in September 2017².
- 5 The new fuel labels will provide consumers with a standard method of identifying different fuels across the UK and Europe. They will apply to all regular petrol and diesel grade fuels as well gaseous fuels such as liquid petroleum gas (LPG) and hydrogen.
- 6 As part of our work to implement new fuel labels and ensure E10 petrol can be introduced smoothly, we are also consulting on a revision to the consumer message associated with E10 petrol. The Biofuel (Labelling) Regulations 2004 (as amended) already include a requirement to display a message where E10 is sold. This consultation proposes to update the message in light of improvements to vehicle compatibility since its introduction.
- 7 The consultation proposals aim to provide a package of measures which ensure consumers have continued access to the fuels they need, while also providing clearer information on fuel availability and compatibility.
- 8 The call for evidence on introducing E10 complements these measures and seeks industry input to help develop further Government policy in this area.
- 9 This consultation and call for evidence may be of particular interest if you are:

¹ 'Premium 95 E5 Unleaded petrol' is the current standard cheaper petrol available at all filling stations in the UK. This document will refer to it as 95 E5. The 95 is the octane rating and is different to the more expensive high octane 'Super 97-99 unleaded petrol' which is available at larger petrol stations.

² Consultation on Transposition of Directive 2014/94/EU on alternative fuels infrastructure. Available at: <https://www.gov.uk/government/consultations/transposition-of-directive-201494eu-on-alternative-fuels-infrastructure>

- a. A transport fuel supplier or retailer;
 - b. A motor vehicle manufacturer or dealer;
 - c. The owner of an older petrol vehicle that is not E10 compatible;
 - d. A supplier of renewable fuels to the transport sector;
 - e. A motoring or consumer representative organisation.
- 10 This consultation and call for evidence may also be of interest to other parties and all are welcome to respond.

Geographic Coverage

- 11 This consultation and the proposed amendments to each of the Statutory Instruments listed above apply across the whole of the United Kingdom.

Legal disclaimer

- 12 This consultation document seeks to explain how the UK intends to transpose the requirements of the Directive into UK law. However, it is not a legal document and should not be relied upon as a primary source of rights or obligations, nor as an interpretative tool.
- 13 While the UK has voted to leave the European Union the UK currently remains a full member and all the rights and obligations of EU membership remain in force. As a result we are still required to negotiate, implement and apply EU legislation. The outcome of these negotiations will determine what arrangements apply in relation to EU legislation in future once the UK has left the EU.

How to respond

The consultation period began on 20/07/2018 and will run until 23:45 on 16/09/2018. Please ensure that your response reaches us before the closing date. If you would like further copies of this consultation document, it can be found at <https://www.gov.uk/dft#consultations> or you can contact the Department if you need alternative formats (Braille, audio CD, etc.).

An official response form is provided at Annex D, please submit your responses using this form.

When responding, please state whether you are responding as an individual or representing the views of an organisation. If responding on behalf of a larger organisation, please make it clear who the organisation represents and, where applicable, how the views of members were assembled.

Please send consultation responses to:

Tim Simon

Department for Transport Great Minster House

33 Horseferry Road

London

SW1P 4DR

LowCarbonFuel.Consultation@dft.gov.uk

Confidentiality and data protection

The Department for Transport (DfT) is carrying out this consultation to gather evidence on E10 petrol, consumer protection and fuel pump labelling. The consultation is being carried out in the public interest to inform the development of policy. If your answers contain any information that allows you to be identified, DfT will, under data protection law, be the Controller for this information.

As part of this consultation we're asking for your name and email address. This is in case we need to ask you follow-up questions about any of your responses and to keep you informed as to the outcome of the consultation. You do not have to give us this personal information. If you do provide it, we will use it only for the purpose of asking follow-up questions and keeping you informed.

You can withdraw your consent at any time by emailing

LowCarbonFuel.Consultation@dft.gov.uk.

DfT's privacy policy has more information about your rights in relation to your personal data, how to complain and how to contact the Data Protection Officer. You can view it at

<https://www.gov.uk/government/organisations/department-for-transport/about/personal-information-charter>.

To receive this information by telephone or post, contact us on 0300 330 3000 or write to Data Protection Officer, Department for Transport, Ashdown House, Sedlescombe Road North, St Leonards-on-Sea, TN37 7GA

Freedom of Information

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the Freedom of Information Act 2000 (FOIA) or the Environmental Information Regulations 2004.

If you want information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence.

In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

The Department will process your personal data in accordance with the Data Protection Act (DPA) and in the majority of circumstances this will mean that your personal data will not be disclosed to third parties.

1A. Ensuring the supply of E5 petrol: Motor Fuel Composition & Content Regulations

Context

- 14 The recent changes to the Renewable Transport Fuel Obligation (RTFO) have increased the obligations on fuel suppliers to supply renewable transport fuels, such as biofuels, in the UK. These changes are designed to help the UK meet our domestic and international climate change commitments³.
- 15 One way suppliers can meet their RTFO targets is by blending bioethanol into petrol. The current petrol fuel standard, EN228, permits fuel suppliers to supply two types of petrol, containing either up to 5% ethanol (known as E5) or up to 10% ethanol (E10). To date, no supplier has sold E10 petrol on the UK market. However, it is widely available across much of the EU, the United States, Australia and Brazil, and more countries are expected to introduce it in the coming years.
- 16 Following the increase to targets to supply renewable fuels under the RTFO, the option to supply E10 would help suppliers meet their obligations cost-effectively. However, possible incompatibility of E10 with some older vehicles means that the transition to the new fuel grade needs to be managed carefully, in particular by ensuring that E5 petrol remains available for those who need it.
- 17 There are around one million petrol cars registered in the UK today for which the manufacturer has not approved the vehicle for use with E10. There is also a significant number of motorbikes and scooters, as well as other petrol-powered equipment, which would need to continue being fuelled with E5.
- 18 While many of the vehicles affected are classic or cherished vehicles (over 25 years old), a significant proportion are still used as a main household vehicle. Figures suggest that at present around 450,000 of these cars are less than 25 years old, but this number will decrease rapidly as many such vehicles are expected to reach the end of their economic life over the next few years.
- 19 The Government is keen to ensure that, for as long as a significant number of these vehicles remain in regular use, motorists should continue to have access to the current standard petrol grade if E10 is introduced.
- 20 The standard grade of petrol supplied at all filling stations is Premium Unleaded 95 octane E5 (known as 95 E5). Many larger filling stations supply a second, more expensive grade with a higher octane, known as the 'Super' grade. This grade of fuel also typically contains 5% ethanol. Super grade fuels typically have an octane between 97 and 99, and are sold

³ The Government Response to the consultation on changes to the RTFO can be accessed here - <https://www.gov.uk/government/publications/renewable-transport-fuel-obligations-order-government-response>

around 8-10ppl above the 95 E5 price.

- 21 Previously the Motor Fuel (Composition and Content) Regulations 1999 (as amended) placed a requirement on petrol retailers which supply two grades of petrol and supplied more than 3 million litres of fuel (petrol and diesel) in the preceding calendar year to continue to supply Super E5 petrol with an oxygen content of no more than 2.7% by volume if they also supplied E10. This requirement, often referred to as the 'protection grade', expired on 1 January 2017.

Proposal

Option 1: Preferred

- 22 The Government's preferred option is to ensure that consumers retain access to 95 E5 petrol while a significant number of E10 incompatible vehicles remain on UK roads. This would be achieved by amending the Motor Fuel (Composition and Content) Regulations 1999 (as amended) to re-introduce a protection grade.
- 23 The protection grade would require larger filling stations to ensure that 95 E5 remains available should E10 also be sold. The requirement would only apply to those filling stations that supply at least two grades of petrol, and supplied at least 3 million litres of fuel⁴ in the previous calendar year.
- 24 This proposal is intended to ensure that consumers who need to use E5 to fuel vehicles incompatible with E10 would continue to have access to 95 E5 petrol (which is cheaper than the Super grade of petrol). This would be a change to the previous protection grade requirement, which allowed suppliers to use the more expensive Super grade as the protection grade. An implication of this proposal is that a complete market switch to E10 as the only 95 octane fuel, such as seen in Belgium in 2017, would not be an option in the short term.
- 25 We propose that this protection grade would apply until 31 December 2020 inclusive. This provides the short term protection for consumers while also allowing us to consider how protection will interact with developments on E10.

Future protection

- 26 We anticipate that beyond 2020 a protection grade will continue to be required to ensure that consumers with incompatible vehicles have access to E5 petrol. How any protection grade that might operate post 2020 will be dependent on progress in relation to E10 as well as the continued reduction in incompatible vehicles. We plan to review the protection grade as part of further any consultation on E10 that would follow the call for evidence in part 1B of this document.

Option 2: Alternative

- 27 An alternative protection grade would allow fuel retailers the flexibility to choose which petrol grade was maintained as E5 should they also sell E10. This approach would ensure that E5 remained available for consumers whilst providing suppliers with flexibility that might be more conducive for a market-led introduction of E10.
- 28 The risk with this approach is that suppliers could (and probably would) choose to offer E5 only in the Super grade if they decided to introduce E10, effectively forcing some

⁴ The 3 million litres refers to fuel sales of both petrol and diesel fuels at that filling station.

consumers to buy more expensive fuel. This could add 8-10 pence per litre to fuel bills of affected drivers, who would also in most cases not see the benefit of the higher octane fuel, given the age of the cars. This option would therefore miss one of the Government's key policy objectives to protect consumers.

Previous expired requirement

- 29 The previous protection grade requirement was introduced in 2013 by the Motor Fuel (Composition and Content) Amendment Regulations 2013 (SI 2897 / 2013) and expired on 1 January 2017. Details of the consultation for that amendment can be found at the following web address:

<https://www.gov.uk/government/consultations/proposed-amendment-to-the-motor-fuel-composition-and-content-regulations-1999>

Questions

- 1. Do you favour option 1, option 2 or an alternative means of ensuring ongoing E5 availability? Please provide your reasoning.**
- 2. Do you agree that a protection grade for Premium unleaded 95 octane should initially run until 31 December 2020? If not, what date would you recommend?**
- 3. Do you agree that the protection grade should apply to filling stations that supply two grades of petrol and more than 3 million litres of all fuel (petrol and diesel) in the previous calendar year? If not, please explain whether you disagree with the volume or if there are better ways of distinguishing which forecourts it should apply to.**

In each case please set out the reasons for your answer and if applicable, alternative proposals.

1B. Call for Evidence: Introduction of E10 fuel in the UK

Context

Increasing targets and RTFO flexibility

- 30 The recent changes to the Renewable Transport Fuel Obligation Order (RTFO) have increased the obligations on suppliers to supply renewable transport fuels in the UK. These changes are designed to help the UK meet domestic and international climate change commitments.
- 31 The RTFO is a market-based mechanism which is designed to allow suppliers to meet their obligations in a cost-effective manner, minimising the financial impact on consumers. While suppliers can meet their RTFO targets in a variety of ways, the main routes are blending bioethanol into petrol and biodiesel into diesel. Most of the increase in targets will be met via these fuels.
- 32 Currently, all petrol supplied in the UK contains no more than 5% ethanol, and is known as E5. The UK petrol fuel standard (BS EN 228) permits petrol to contain up to 10% ethanol (E10). However, whilst E10 has become widely available in several other European countries and elsewhere, no supplier has yet sold E10 in the UK.
- 33 Increasing the proportion of bioethanol in petrol to between 5% and 10% could be a useful tool for suppliers in meeting their increased obligation. In the absence of E10, most of the increase to the RTFO would need to be met through increased biodiesel blending. There are a number of risks to this approach:
 - The availability of waste-based biodiesel may become limited, leading to pressure on prices;
 - Any lack of competitively priced waste-based biodiesel could lead to the use of crop-based biodiesel with lower greenhouse gas savings and associated concerns around deforestation;
 - It may be challenging to achieve high levels of biodiesel blending whilst maintaining fuel quality during cold winter conditions;
 - Suppliers may choose to 'buy out' of the obligation, reducing progress towards Climate Change targets.
- 34 As a result, without E10 as a viable option in the fuel mix, the RTFO might not operate as effectively as it could, both in terms of cost and carbon savings. While E10 is not currently being supplied in the UK because of barriers to its commercial introduction, the benefits of E10 would go beyond its effect on the RTFO.

Benefits of E10

- 35 Using E10 in place of E5 reduces the net greenhouse gas emissions of a petrol vehicle by around 2%. While the 'tailpipe' emissions remain broadly the same, more of the CO₂ released relates to the short term carbon cycle and is not derived from fossil fuels. The CO₂ from bioethanol will have been recently sequestered from the atmosphere before being released again when the fuel is burnt, thereby having a lower impact on net CO₂ emissions compared to fossil fuel derived petrol.
- 36 Decarbonising petrol can help to reduce the carbon penalty associated with petrol cars compared with equivalent diesel cars, whilst also delivering the air quality benefits of petrol and petrol hybrid cars. In regards to air quality, E10 is generally acknowledged to make a negligible difference in tailpipe emissions compared to the current E5 grade⁵. E10 has also been the reference fuel for new car type approval for fuel consumption and emissions standards since 2016.
- 37 Under the RTFO in reporting year 2016-17, UK grown feed-wheat was the main feedstock used in the production of bioethanol. As a result, E10 introduction could provide a boost to UK industry and agriculture, particularly to the large bioethanol producers in the North East. Crop derived bioethanol is associated with relatively limited land-use change impacts, comparatively strong carbon savings and a low impact on food prices. As a result, it is considered preferable to the supply of crop-based biodiesel, which is more prone to negative indirect impacts associated with biofuel supply.

Barriers to E10

- 38 The main barrier preventing suppliers introducing E10 is its incompatibility with some petrol vehicles and the consumer messaging that must therefore accompany its sale (as proposed for revision in part 2B of this document). While the vast majority of petrol vehicles in use today are fully approved for use with E10, there is a challenge in communicating this to the public. Furthermore, there are around a million cars in use in the UK that are not compatible with E10 fuel. Around half of these are day to day use vehicles that will eventually be scrapped; however, there will always be some classic and cherished vehicles that are not advised to buy E10.
- 39 This combination of factors means that individual retailers are reluctant to introduce E10 while competitors continue to market E5. A single supplier switching to E10 would be concerned about falling sales while consumers could purchase E5 from competitors with no concerns around compatibility. Accurate and consistent messaging around E10 will also be a vital part of any introduction. As a result, many in the industry have called for Government to ensure any introduction of E10 is co-ordinated and applies to the whole sector.
- 40 In addition, the proposal to ensure that consumers have ongoing availability to Premium grade E5 in part 1A of this document is likely to present a further barrier to a market-led introduction. Most larger filling stations currently offer two grades of petrol: 95 E5 and a Super grade⁶. By requiring these filling stations to continue to offer 95 E5, the only current grade it could be introduced to is their Super grade. As sales of Super represent a relatively small market share (around 5% of total petrol sales), increasing the bioethanol

⁵ This study for the European Commission concludes that increasing the bio content of transport fuels "will not negatively impact air pollution" (page 11). 'Impact of higher levels of bio components in transport fuels in the context of the Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998, relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC Final report' <https://publications.europa.eu/en/publication-detail/-/publication/ec1f67bd-5499-11e7-a5ca-01aa75ed71a1/language-en/format-PDF>

⁶ Super grade is the term for a higher octane petrol (97-99 octane), normally sold at around 8-10 pence per litre more than 95 E5.

content of this grade would not significantly help suppliers meet their RTFO target.

- 41 Given these market challenges, we think it is unlikely that E10 will become available in the UK in the near term without Government facilitating its introduction.

Policy aim

- 42 This call for evidence seeks input to help the Department design an effective policy that **facilitates the introduction of E10 petrol in the UK while ensuring that consumers with older vehicles are protected**. The initial introduction is seen as the first stage of a potential eventual transition to E10 as the main petrol grade, as the compatibility of day to day use vehicles improves.
- 43 The protection grade proposed in part 1A of this document delivers the protection to those that need to continue using 95 E5 in the short term, but also acts, along with the other barriers discussed, to prevent a commercial E10 introduction. We therefore need a complementary policy that overcomes these barriers to ensure E10 becomes available in the UK.

Proposal

- 44 We are considering a requirement to ensure E10 is available at larger forecourts that have sufficient underground storage facilities, in addition to 95 E5. This would provide consumers with additional choice in the fuels they purchase, while also ensuring the introduction of E10 can be managed positively and marketed as a new green fuel.
- 45 This approach would be similar to the situation in some other EU countries such as France where consumers can choose between 95 E5, 95 E10 and a higher octane Super grade petrol.
- 46 The UK fuel supply system has in recent years been optimised around supplying two grades of petrol. Ahead of any potential regulatory changes, we need to gather detail on the challenges and costs associated with expanding the current fuel offering across the sector.
- 47 While many filling stations may not have the infrastructure to offer an additional grade of fuel, we understand a significant number of larger sites would have sufficient fuel storage to make E10 available from some dispensers alongside their current fuel range.
- 48 We envisage that any requirement would work in tandem with the proposed protection grade (part 1A), and that certain filling stations would need to offer both 95 E5 and E10. Whether E10 was in addition to their current offering, or replaced their Super grade, would be at the retailer's discretion.
- 49 As many larger filling stations offer up to four different fuels from their regular fuel dispensers (Premium petrol, Super petrol, diesel and Super diesel) a minimum of five tanks would be needed for a filling station to offer an additional fuel grade at some fuel dispensers on the forecourt, without needing to install additional equipment.
- 50 While we understand many filling stations have more than four tanks, we need to build a more detailed picture of the distribution and number of sites as well as the challenges this type of approach would bring.
- 51 We also recognise that the challenges would not be limited to the forecourt. In this context we are requesting evidence from across the fuel sector as to the impacts of supplying E10 at forecourts with more than four tanks. We anticipate this could involve those involved in

petrol refining/blending, storage and distribution.

- 52 We understand that the distribution of filling stations with more than four tanks will not be uniform across the UK. We are therefore keen to gain a clearer picture of the distribution of this type of filling station and any specific areas where no, or very few such sites, are located, particularly in relation to Northern Ireland or remote areas of the UK.

Questions

The questions below may not apply to all respondents. Please answer as many as are applicable to you or your business.

4. **What are the commercial barriers to introducing E10 in the UK?**
 5. **Do you agree in principle that supplying E10 could make delivery of the RTFO more cost effective?**
 6. **Do you agree that requiring the introduction of E10 as an additional choice for consumers would be an effective way to introduce E10 in the UK?**
 7. **Could filling stations with more than four tanks supply E10 as well as 95 E5? If not, why, and what would the appropriate number of tanks be that would permit this?**
 8. **Is the number of tanks the best way to define filling stations that could supply E10 alongside their current fuel range? If not, what would be a more appropriate metric?**
 9. **What would the challenges and costs be to fuel retailers to sell an additional grade of fuel at appropriate filling stations?**
 10. **Would a requirement to sell E10 at appropriate filling stations affect fuel refiners/blenders? What would the challenges and costs be?**
 11. **Would a requirement to sell E10 at appropriate filling stations affect storage and distribution? What would the challenges and costs be?**
 12. **Would a requirement to sell E10 at filling stations with more than four tanks have significant geographical discrepancies and challenges, particularly in relation to Northern Ireland? If so, what would be the challenges and how could they be mitigated?**
 13. **Given the need to keep 95 E5 available, do you agree with the general approach of making E10 available at suitable filling stations? If not, what would be your preferred solution?**
- 53 Any further proposal on E10 introduction will be subject to a full consultation with an accompanying impact assessment. The information gathered in this Call for Evidence would help inform this assessment to ensure decision making is robust. As a result it is important that stakeholders provide full, detailed and clear responses that can aid us in progressing our policy in this area.

2A. Fuel pump and vehicle labelling: Alternative Fuel Infrastructure Regulations

Context

- 54 European Union Directive 2014/94/EU on the deployment of alternative fuels (the Alternative Fuels Infrastructure Directive - AFID) introduces, for the first time, requirements around the provision, accessibility and design standards of infrastructure related to the deployment of alternative fuels.
- 55 The AFID covers a wide range of measures, some of which have already been transposed into UK law via the Alternative Fuels Infrastructure Regulations (2017) (AFIR⁷). A previous consultation by the Department for Transport on these measures was launched in October 2016, with the Government response published in September 2017⁸.
- 56 The original consultation explained that certain elements of the AFID, particularly in relation to 'User Information' could not be transposed at that time as the required technical standards were still under development by the European standards organisations. The Department committed to consulting again once the standards were available⁹. This consultation covers the transposition of some of the outstanding elements of User Information from Article 7 of the AFID, specifically those covered by paragraphs 7.1 and expanded on in 7.2 for which the required standards have now been developed.
- 57 In summary, paragraphs 7.1 and 7.2 require member states to adopt standardised fuel labelling. These fuel labels need to be provided on public fuel dispensers for petrol, diesel and other alternative fuels. They also need to be provided on the filler caps of new vehicles as well as in vehicle manuals and at dealerships for each fuel with which that vehicle is compatible. The full wording is provided below.
- 7.1: *Without prejudice to Directive 2009/30/EC, Member States shall ensure that relevant, consistent and clear information is made available as regards those motor vehicles which can be regularly fuelled with individual fuels placed on the market, or recharged by recharging points. Such information shall be made available in motor vehicle manuals, at refuelling and recharging points, on motor vehicles and in motor vehicle dealerships in their territory. This requirement shall apply to all motor vehicles, and their motor vehicle manuals, placed on the market after 18 November 2016.*
 - 7.2: *The supply of information referred to in paragraph 1 shall be based on the labelling provisions regarding fuel compliance under standards of the ESOs setting the technical specifications of fuels. Where such standards refer to a graphical*

⁷ Alternative Fuels Infrastructure Regulations (2017) - www.legislation.gov.uk/uksi/2017/897

⁸ Consultation on Transposition of Directive 2014/94/EU on alternative fuels infrastructure. Available at:

<https://www.gov.uk/government/consultations/transposition-of-directive-201494eu-on-alternative-fuels-infrastructure>

⁹ Paras 1.69 to 1.72 of the Consultation on Transposition of Directive 2014/94/EU on alternative fuels infrastructure (October 2016)

expression, including a colour coding scheme, the graphical expression shall be simple and easy to understand, and it shall be placed in a clearly visible manner.

- (a) on corresponding pumps and their nozzles at all refuelling points, as from the date on which fuels are placed on the market;
- (b) on or in the immediate proximity of all fuel tanks' filling caps of motor vehicles recommended and compatible with that fuel and in motor vehicle manuals, when such motor vehicles are placed on the market after 18 November 2016.

58 Paragraph 7.7 on the geographic location of refuelling points was previously transposed into the AFIR¹⁰. Additionally, paragraph 7.3 which covers the display of comparative fuel pricing is still awaiting a suitable European standard to be developed and so cannot be transposed at this time. Transposition of this requirement will be consulted on in the future.

Industry standards for fuel labelling.

- 59 Following agreement of the AFID, the European Committee for Standardisation (CEN) developed the standard EN16942 'Fuels-Identification of vehicle compatibility-General expression for consumer information', published on 12 October 2016.
- 60 The British Standards Institute (BSI) subsequently published the UK specific standard, BS EN 16942. This standard sets out harmonised labelling requirements for marketed liquid and gaseous fuels. It requires fuel identifiers to be placed on fuel nozzles at filling stations, on new vehicles and in their manuals as well as in vehicle dealerships. The standard also includes larger labels incorporating the identifier and extra information to describe the fuel that should be placed on the fuel dispenser at filling stations.
- 61 This consultation covers the implementation of the standard and those obligated to adhere to it.
- 62 The standard sets out the format and scale of graphical identifiers for the three classes of transport fuel:
- Circle for petrol based fuels;
 - Square for diesel based fuels;
 - Diamond for gaseous fuels.
- 63 Within the identifier a standard text format differentiates the various fuels. For petrol and diesel fuels this is generally a letter that refers to the biofuel blended into that fuel and a number specifying the maximum percentage volume of that biofuel according to the relevant fuel standard. For gaseous fuels this is an abbreviated text to refer to the fuel. Examples of the mandatory identifiers are provided below accompanied by a list of the current fuels to which the labels would apply.

¹⁰ Article 6 of the Alternative Fuels Infrastructure Regulations (2017)



Figure 1. Graphical identifier examples for E5 petrol, B7 Diesel and LPG.




Type of fuel / identifier	Text	Comment	Fuel standard specification
Petrol 	E5	Current UK unleaded petrol blend. Contains up to 5% ethanol. Available in different octane grades.	EN 228:2012 [2], Table 1
	E10	Alternative petrol grade with 10% ethanol. Not currently available in UK.	EN 228:2012 [2], Table 2
	E85	Automotive ethanol. 85% ethanol blend. Not available in the UK.	CEN/TS 15293 [8]
Diesel 	B7	Current UK diesel consumer blend containing up to 7% bio-diesel.	EN 590 [3]
	B10	Diesel blend containing up to 10% bio-diesel. Available for certain commercial vehicles in the UK.	EN 16734 [9]
	B20	Diesel blend containing up to 20% bio-diesel. Available for certain commercial vehicles in the UK.	EN 16709:2015 [10], Table 1
	B30	Diesel blend containing up to 30% bio-diesel. Available for certain commercial vehicles in the UK.	EN 16709:2015 [10], Table 2
	B100	100% bio-diesel. Available for certain commercial vehicles in the UK.	EN 14214 [11]
	XTL	Paraffinic Diesel. Not currently available in the UK.	EN 15940 [12]
Gaseous 	LPG	Liquid Petroleum Gas. Available at public refuelling points.	EN 589 [13]
	CNG	Compressed Natural Gas. Commercial vehicle fuel available in the UK.	prEN 16723-2 [14]
	LNG	Liquefied Natural Gas. Commercial Vehicle fuel available in the UK.	prEN 16723-2 [14]
	H2	Hydrogen. Available at public refuelling points.	ISO 14687-2 [15]

Table 1. Current fuels and standards to which the Regulations would apply

- 64 The standard defines the minimum scale of the labels for the different applications and also sets out additional information to be included as part of a more comprehensive label on fuel dispensers.
- 65 The aim of the labels is to ensure consumers can select the correct fuel for their vehicle regardless of which retailer they choose or where across Europe they refuel. The fuel identifiers must be placed near the filler cap of new vehicles, usually on the inside of the filler flap, and include all of the fuels with which that vehicle is compatible. The identifiers must also be placed on the dispensers of all publicly available filling stations. This provide consumers with an additional tool to ensure they can select the correct fuel for their vehicle and minimise instances of mis-fuelling.

- 66 The labels will also allow for the easy identification of different fuels within the same type. This will be particularly relevant if and when E10 petrol (petrol with up to 10% ethanol) becomes available on the UK market. E10 is currently available in various EU countries as well as around the world. It is likely that the fuel will be supplied in the UK in future, and a clear standardised labelling system to differentiate between E10 and the current E5 blend will be a useful tool for motorists. Part 1B of this document sets out a call for evidence on E10 introduction in the UK.

Proposal

- 67 To avoid introducing complexity in amending the AFIR we intend to introduce separate secondary legislation to implement the fuel labelling requirement of the AFID. Where possible, the new legislation will reproduce the definitions and enforcement principles set out in the AFIR.

Fuel labelling

- 68 There are two main elements of the BS EN 16942 standard. First are the graphical identifiers contained in Annex A of the standard (examples shown in Figure 1 above). Second are the labelling requirements for petrol and diesel on fuel dispensers contained in National Annex NA and NB of the standard. The regulations will require compliance with the standard in relation to the placement of the identifiers and fuel dispenser labels and the scale at which they are reproduced.
- 69 Broadly, the standard requires a minimum 13mm identifier to be placed on filling station fuel nozzles, near the filler cap of new vehicles and in those vehicle's manuals.
- 70 On fuel dispensers the standard requires a minimum 30mm identifier. For petrol and diesel type fuels specifically, this identifier is part of a more comprehensive label that includes additional information concerning that fuel.
- 71 The additional information is:
- a. the national fuel standard to which that fuel complies;
 - b. the product name for petrol and diesel fuels above the mandatory identifier;
 - c. for petrol fuels only, the grade designation/octane rating;
 - d. any additional consumer message required by The Biofuels (Labelling) Regulations (2004) for that fuel below the mandatory identifier.
- 72 The regulations will require the fuel dispenser labels to include this information with the exception of the national fuel standard. Currently in the UK, fuel needs to comply with the requirements of The Motor Fuel (Composition and Content) Regulations (1999) as amended, and not national fuel standards such as BS EN 228 or BS EN 590. As a result, fuel which does not meet these standards should not be labelled as doing so, but can still be sold in the UK provided it meets the requirements of the applicable regulations. Examples of labels for E5 petrol and B7 diesel are provided in Figure 2 below.
- 73 We are also consulting on the wording of the message for E10 petrol in The Biofuels (Labelling) Regulations (2004) in part 2B of this consultation. The example E10 petrol label shown in Figure 3 below includes the current wording which may be updated.



Figure 2. Fuel dispenser labels for E5 Petrol and B7 Diesel. The labels include the minimum information required.

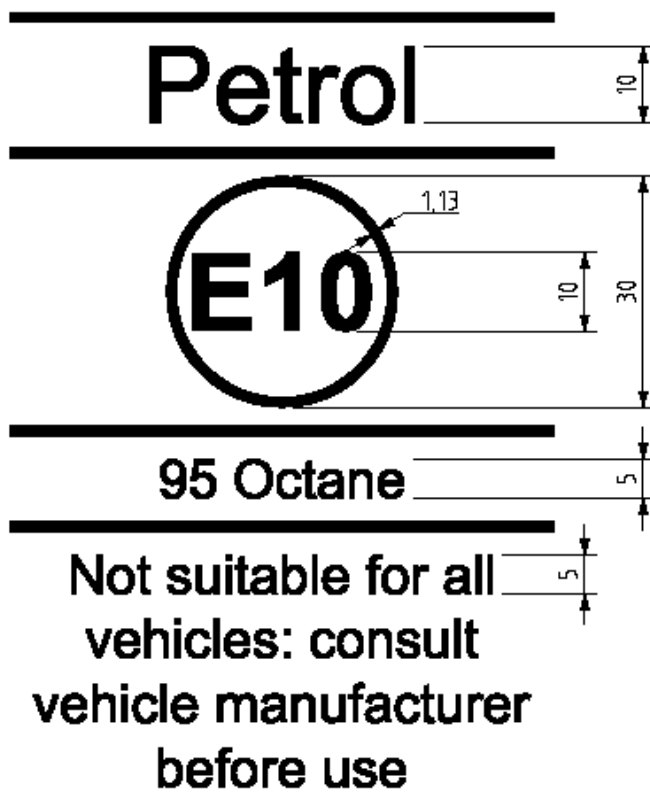


Figure 3. Fuel dispenser label for E10 petrol including the existing message from the Biofuels (Labelling) Regulations (2004). This may be amended as covered in part 2B¹¹.

¹¹ Extracts from British Standards are reproduced with the permission of BSI Standards Limited (BSI)

Obligated Parties

- 74 The Directive requires Member States to ensure that its aims and objectives are achieved. It is left to Member States to determine how best to transpose the requirements, including which parties are best placed to carry out the obligations.
- 75 The Directive as a whole covers a broad range of issues concerned with alternative fuels and as a result, some of the definitions used in the Directive are complex. As we propose to transpose the fuel labelling requirements into a new Regulation, some of the definitions of where and to whom the obligations fall can be simplified.
- 76 Where definitions are proposed in this consultation they may be subject to minor alternation to ensure consistent and accurate legislative drafting. Accordingly, feedback from stakeholders on the definitions proposed is welcomed.

Fuel dispensers and nozzles

- 77 A definition of **Infrastructure Operator** was developed for the original AFIR. We propose to apply to the same definition for the labelling of fuel dispensers and nozzles:

"infrastructure operator" means the person responsible for operating a recharging point or refuelling point, whether as owner or on behalf of a third party;

- 78 The AFIR also includes a definition for refuelling point. We can simplify this because the fuel labelling regulations will only apply to motor vehicles and refuelling points that they can access. We therefore propose:

"refuelling point" means a refuelling facility for motor vehicles which is accessible to the public for the provision of any alternative fuel, through a fixed or mobile installation;

Vehicles and manuals

- 79 No definition is provided in the Directive for precisely where the obligation falls in relation to vehicles as set out in Article 7.1: *'This requirement shall apply to all motor vehicles, and their motor vehicle manuals'*.
- 80 We consider that this obligation most logically relates to **Motor Vehicle Manufacturers**. We will therefore need to define *motor vehicle* and then the *manufacturers* of these vehicles.
- 81 We propose to use the definition of a motor vehicle set out in the Standard.

"motor vehicle", means transport modality that can be fuelled with a marketed fuel at a refuelling point

and therefore:

"motor vehicle manufacturer", means the manufacturer of a motor vehicle

Vehicles Dealers

- 82 The Directive also requires provision of fuel compatibility information in vehicle dealerships. We believe this obligation therefore falls on **Motor Vehicle Dealers**. No definition for a dealer or dealership is provided in either the Directive or the Standard. We therefore propose the following definition:

"Motor vehicle dealer", means the retailer or other person who displays or offers for sale or lease new motor vehicles to end users;

Implementation and compliance timetable

- 83 In order to provide industry with sufficient time to prepare while ensuring the requirements of the Directive are transposed as soon as possible, we are proposing that the labelling requirements would come into force not less than three months after publishing the Government response.

Questions

- 14. Do you agree with our proposal to use the definition of Infrastructure Operator derived from the AFIR?**
- 15. Do you agree with our proposal to use the definition of Motor Vehicle from the Standard?**
- 16. Do you agree with the definitions of a Motor Vehicle Manufacturer and that this is where that obligation should fall?**
- 17. Do you agree with the definitions of Motor Vehicle Dealer and that this where that obligation should fall?**
- 18. Do you understand what the requirements are, for instance if you are an obligated party and what you need to do to comply?**
- 19. Do you anticipate any operational issues with complying provided you have not less than 3 months' notice upon the publication of government response?**

In answering the questions, please include an explanation if you disagree with the proposal and, if possible, suggest alternatives for consideration.

Enforcement

- 84 The previous consultation on transposing other parts of the Directive set out a framework for ensuring the requirements were adhered to. This framework is proposed to be largely mirrored for the enforcement of the fuel labelling requirements in the new legislation¹².
- 85 The key elements of the proposed framework are:
- The assessments of compliance and enforcement of the regulations will be overseen by a suitable body, similar to the current arrangement for enforcement of the AFIR. This will include the checking of a sample of infrastructure installations, vehicles and dealers.
 - The Infrastructure Operator, Vehicle Manufacturer or Dealer may be subject to a civil penalty if the requirements set out in the Statutory Instrument are not met.
 - A compliance notice may be issued in each instance where the requirements of the Statutory Instrument are not met requiring the breach be rectified within a specified period.
 - A civil penalty may be levied when a breach is not remedied within the period given in the compliance notice.
 - The deadline within which the penalty must be paid is 28 days.

¹² Articles 7-19 of the AFIR (2017) cover the current enforcement provisions.

- Upon payment of a civil penalty the relevant infrastructure installation will be re-audited and should it be found that the necessary remedial action has not been taken a new compliance notice will be issued and the process will start again.
 - The level of fines will be proportionate to the severity of the failure but sufficient to provide an active deterrent. The enforcement authority may apply a penalty up to the maximum amounts listed below depending on the individual circumstance of the non-compliance. The following maximum sums are proposed:
 - a. Per non-compliant fuel dispenser or nozzle - up to £500;
 - b. Per non-compliant vehicle filler cap or manual - up to £100;
 - c. Per non-compliant vehicle dealership - up to £100.
 - Offenders will have the opportunity to object to the enforcement body against any penalties in the first instance, and then on appeal to the First Tier Tribunal.
- 86 The enforcement of the requirements relating to refuelling points will require assessments at the locations operated by Infrastructure Operators to ensure compliance. For new vehicles, compliance will need to be assessed between the point of manufacture and the point of sale, with the Vehicle Manufacturer answerable to cases of non-compliance. Vehicle Dealers may also be requested to provide evidence of compliance.
- 87 We will work with the enforcement body to ensure more detailed guidance is issued on how compliance is assessed and enforced ahead of any enforcement action being taken, with a focus on encouraging compliance rather than issuing fines.

Questions

- 20. Are the enforcement proposals for fuel labelling clear and understandable? If not, which parts are not and why?**
- 21. In respect of vehicle labelling, do vehicle manufacturers agree that compliance should be assessed between the point of manufacture and point of sale? Do you have views on how and where best this assessment be carried out?**
- 22. Do you agree with the penalty amounts proposed? If not, why and what levels would you propose?**

2B. E10 information label: The Biofuel (Labelling) Regulations

Context

- 88 Petrol and diesel sold in the UK is blended with biofuel. At present, petrol is typically blended with up to 5% bioethanol and diesel typically contains up to 7% biodiesel.
- 89 The Biofuels (Labelling) Regulations 2004 (as amended)¹³ require a set wording to accompany fuels where the biofuel content is above certain blend levels. This applies to petrol with more than 5% ethanol and diesel with more than 7% biodiesel.
- 90 The current wording of this message is¹⁴:
- “Not suitable for all vehicles: consult vehicle manufacturer before use”**
- 91 This applies because fuels above these blend levels were not previously consistent with the fuel standards for diesel (BS EN 590) and petrol (BS EN 228), and consequently are not compatible with most motor vehicles. However, the fuel standard for EN228 changed in 2012 to include two versions; up to 5% ethanol in petrol (E5) and up to 10% ethanol in petrol (E10). In 2016 E10 became the reference fuel for use in published fuel consumption and emissions figures.
- 92 Most petrol vehicles on UK roads today can use E10 without any compatibility concerns. However, a proportion of older vehicles are not approved for use with ethanol blends above 5%. As a result, The Biofuel Labelling Regulations are in place to ensure appropriate information is provided to consumers if these higher blends are used.
- 93 The wording of the message has not changed since the Regulations were introduced in 2004. Over time, there have been amendments to the Regulations that alter the biodiesel blending levels at which the message should apply¹⁵ as well minor technical amendments¹⁶, but there has been no change to how the message applies to E10 petrol.
- 94 In parallel to introducing the new labelling requirements set out in part 2A of this consultation, we are reviewing the wording of the consumer message with regard to E10 petrol. Updating this message to better reflect today's vehicle parc¹⁷ has been identified as a step which could help prevent unwarranted consumer concerns about using E10 fuel.
- 95 At the end of 2016, over 93% of petrol cars in use were E10 compatible, and the number of incompatible vehicles is reducing each year.
- 96 The current message does not include reference to which vehicles may be compatible.

¹³ Biofuel (Labelling) (Amendment) Regulations available here: <http://www.legislation.gov.uk/all?title=biofuel%20labelling>

¹⁴ Biofuel (Labelling) Regulations (2004) Article 3(2)

¹⁵ Biofuel (Labelling) (Amendment) Regulations 2009

¹⁶ Biofuel (Labelling) (Amendment) Regulations 2005

¹⁷ The 'vehicle parc' is a term to describe all motor vehicles registered for use on the roads in the UK today.

The advice to consult the manufacturer is also disproportionate given that E10 is part of the EN228 fuel standard and the vast majority of vehicles are compatible. There are also more useful and accessible sources of information available to consumers.

- 97 The recent decision to increase The Renewable Transport Fuel Obligation to 2020 and beyond means the introduction of E10 petrol in the UK is now more likely. Increasing the proportion of bioethanol in petrol is one way the suppliers could meet the increased targets.
- 98 As a result, and in tandem with the introduction of the fuel labelling set out in part 2A of this consultation, now is an appropriate time to consider updating the consumer message that would accompany the E10 fuel label. NB we are not proposing to change this message in respect to non-E10 biofuel blends - i.e. blends higher than set out in EN590 and EN228.

Consumer message for E10: Proposal

- 99 We propose to change the text to:
"Suitable for most petrol vehicles registered since 2000".
- 100 Figures from the end of 2016 suggest that, of the cars currently in use in the UK, 87% of those registered in 2000 are compatible with E10 petrol. The overall compatibility of the UK car parc is over 93%.
- 101 This new wording would only apply to the sale of E10 petrol. The current text would remain a requirement for the sale of diesel exceeding 7% biodiesel and petrol exceeding 10% ethanol.

Question

23. Do you agree with the proposed change to the wording? If not, why, and can you suggest a suitable alternative?

Annex A: Impact assessment - Protection Grade

A.1 See separate document.

Annex B: Impact Assessment - Fuel Labelling

B.1 See separate document.

Annex C: Full list of consultation questions

Questions

- 1 Do you favour option 1, option 2 or an alternative means of ensuring ongoing E5 availability? Please provide your reasoning.**
- 2 Do you agree that a protection grade for Premium unleaded 95 octane should initially run until 31 December 2020? If not, what date would you recommend?**
- 3 Do you agree that the protection grade should apply to filling stations that supply two grades of petrol and more than 3 million litres of all fuel (petrol and diesel) in the previous calendar year? If not, please explain whether you disagree with the volume or if there are better ways of distinguishing which forecourts it should apply to.**
- 4 What are the commercial barriers to introducing E10 in the UK?**
- 5 Do you agree in principle that supplying E10 could make delivery of the RTFO more cost effective?**
- 6 Do you agree that requiring the introduction of E10 as an additional choice for consumers would be an effective way to introduce E10 in the UK?**
- 7 Could filling stations with more than four tanks supply E10 as well as 95 E5? If not, why, and what would the appropriate number of tanks be that would permit this?**
- 8 Is number of tanks the best way to define filling stations that could supply E10 alongside their current fuel range? If not, what would be a more appropriate metric?**
- 9 What would the challenges and costs be to fuel retailers to sell an additional grade of fuel at appropriate filling stations?**
- 10 Would a requirement to sell E10 at appropriate filling stations affect fuel refiners/blenders? What would the challenges and costs be?**
- 11 Would a requirement to sell E10 at appropriate filling stations affect storage and distribution? What would the challenges and costs be?**
- 12 Would a requirement to sell E10 at filling stations with more than four tanks have significant geographical discrepancies and challenges, particularly in relation to Northern Ireland? If so, what would be the challenges and how could they be mitigated?**
- 13 Given the need to keep 95 E5 available, do you agree with the general approach of making E10 available at suitable filling stations? If not, what would be your preferred solution?**

- 14 Do you agree with our proposal to use the definition of Infrastructure Operator derived from the AFIR?**
- 15 Do you agree with our proposal to use the definition of Motor Vehicle from the Standard?**
- 16 Do you agree with the definitions of a Motor Vehicle Manufacturer and that this is where that obligation should fall?**
- 17 Do you agree with the definitions of Motor Vehicle Dealer and that this where that obligation should fall?**
- 18 Do you understand what the requirements are, for instance if you are an obligated party and what you need to do to comply?**
- 19 Do you anticipate any operational issues with complying provided you have not less than 3 months' notice upon the publication of government response?**
- 20 Are the enforcement proposals for fuel labelling clear and understandable? If not, which parts are not and why?**
- 21 In respect of vehicle labelling, do vehicle manufacturers agree that compliance should be assessed between the point of manufacture and point of sale? Do you have views on how and where best this assessment be carried out?**
- 22 Do you agree with the penalty amounts proposed? If not, why and what levels would you propose?**
- 23 Do you agree with the proposed change to the wording and if not, why and can you suggest a suitable alternative?**

Annex D: Consultation response form

D.1 See separate document.

Annex E: Consultation principles

The consultation is being conducted in line with the Government's key consultation principles. Further information is available at <https://www.gov.uk/government/publications/consultation-principles-guidance>

If you have any comments about the consultation process please contact:

Consultation Co-ordinator
Department for Transport
Zone 1/29 Great Minster House
London SW1P 4DR
Email consultation@dft.gov.uk