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LowCVP Car Buyer Survey:
Testing alternative fuel economy labels

Research conducted by Ecolane Consultancy & Centre for Sustainable Energy on behalf of the Low Carbon Vehicle Partnership

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Centre for Sustainable Energy

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LowCVP Car Buyer Survey: Testing alternative fuel economy labels

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1. Executive summary

This survey finds that fuel economy expressed as 'miles-per-gallon' is of more importance to car buyers than CO_2 emissions and Vehicle Excise Duty (VED). It is for this reason that the headline finding of this survey is that fuel economy (expressed in terms of 'miles-per-gallon' or equivalent) is not given sufficient prominence on the current UK Fuel Economy Label. A corollary is that CO_2 emissions are given too much importance in terms of the space and positioning on the existing label.

While the majority of car buyers questioned broadly understood the term 'combined' in relation to fuel economy data presented on the UK label, one concern highlighted by the survey is consumers' lack of trust in the official figures to represent real-world fuel economy. However, this survey provides evidence that car buyers' have a sufficient level of trust in the official figures when used for comparison purposes, one of the key purposes and rationales for providing vehicle information.

The survey reveals a strong preference for fuel economy expressed in imperial as opposed to metric units. This is very much an issue for UK car buyers, and is unlikely to be applicable elsewhere in the EU where other car labels are in use. However, the central finding – that fuel economy is more important to consumers than CO_2 emissions – may well apply in other EU Member States if fuel economy is expressed in local units (e.g. litres/100km).

Regarding model-specific CO_2 emissions and fuel economy information, this report makes two recommendations which would have the effect of reducing the space given to CO_2 information and increasing the prominence of fuel economy information. Not only would these changes accord with the findings of this and previous surveys, it would also make the title of the current label 'Fuel Economy Label' more relevant to the information contained.

Recommendation 1: Tailpipe CO_2 emissions information (expressed as 'g/km') should be given less space and importance than it is on the current UK Fuel Economy Label.

Recommendation 2: Fuel economy information (in terms of 'mpg') should be made more prominent (through better positioning and larger text-size) than it is on the current UK Fuel Economy Label.

When CO_2 emissions are considered by car buyers, they are most commonly perceived as a cost issue. Given this finding, the survey concludes that the presentation of CO_2 emissions, VED band and VED cost on the existing label should be improved by providing more visual cues as to their link. In addition, the 'first year' and 'standard rates' need to be more clearly shown than they are on the current new car label due to very low consumer awareness of their introduction.

Focusing on fuel costs, which are currently estimated on an annual basis, the survey finds that many car buyers would find 'per month' costs of more interest (due to the tendency for households to budget on a monthly basis), with a majority preferring a 'per mile' estimate (due to the simplicity of calculating journey costs by multiplying fuel cost per mile by the journey distance and because the 'per mile' metric makes comparison across different vehicle types more transparent). This report recommends therefore that the fuel costs presented on the current label would be improved by the addition of a 'per mile' and a 'per month' cost estimate.[1]

Due to the availability of current data sets, the only practical option for providing comparative data is to compare cars in the same 'model range'. However, the results show that car buyers have a very poor understanding of what constitutes a 'model range'. Neither do they have an adequate understanding of 'vehicle class', the basis of comparison favoured by the majority of car buyers.

[1] A cost comparison over a period more than a year was not found to be well received by car buyers (3-year period tested).

Regarding the presentation of comparative information, the survey draws three conclusions. Firstly, labels that include comparisons must be clear as to the basis of comparison used, without relying on industry terms – such as 'model range'. Second, all comparative scales should include clearly marked appropriate numerical scales. Third, where appropriate, actual model names should be included alongside the 'most efficient' or 'best' as shown on the scale used.

While fuel economy is the consumers preferred metric, comparing 'mpg' is inherently problematic due to the need to compare different fuel types, the nonlinear nature of the metric (which is based on the inverse of fuel use per unit distance),[2] and the negative reaction of car buyers to viewing ranked information when a model range contains a large number of models. This report therefore recommends against the use of providing a comparison of fuel economy *per se* on the label.

In contrast to 'mpg', fuel costs do scale linearly with fuel use per unit distance, and are therefore more suited to use as a comparator. Fuel cost is also technology neutral. This report therefore recommends that cost metrics be used for comparisons[3] and, based on the popularity of the tested formats, the 'dial' style be used to show fuel cost in 'pence per mile' (using an absolute or relative scale), and total first-year fuel and VED cost be used within the 'Buyer's Guide' format using a scale ranging from the models with the highest to lowest cost of all models in the same range.

Recommendation 3: The link between vehicle CO_2 emissions and VED cost should be made more explicit (through better visual cues) than it is on the current UK Fuel Economy Label.

Recommendation 4: In addition to annual fuel costs, the UK fuel economy label should include an estimate of fuel costs expressed in terms of 'pence per mile' and 'per month' (based on the model's combined fuel economy, an up-to-date average fuel price, and an assumed average mileage).

Recommendation 5: In addition to model specific information, the UK fuel economy label should include a comparison of total first-year fuel and VED tax costs with all models in the same model range. Care should be taken to include numerical values at the end of the scale and text indicating the model with lowest total costs, and technical wording should be avoided (e.g. 'model range').

Linked to the 'trust' issue regarding the official combined fuel economy, the survey finds a significant level of dissatisfaction (among car buyers) regarding the current label's fuel cost estimate. As noted by participants, not only is the average mileage not relevant for a large number of drivers, given the inexorable rise in fuel prices, the estimated fuel costs printed on the label are quickly out of date.

One feasible solution to this problem is to 'hard-link' the fuel economy label to a website on which more up-to-date and personalised estimates can be calculated. Such a technology is the QR Code, which enables a smart phone equipped with a QR Code application to direct its website browser to a target URL.[4] This technology is already used in many contexts including the latest US Vehicle Label.[5]

Although not a statistically large sample, almost all focus group participants were impressed by the ability of the QR Code reader to link a printed label to a 'live' and personalised fuel cost calculator. Given the rapid adoption of similar technologies across most sectors, this report recommends that the next UK fuel economy labels should include a QR Code (or similar technology). Indeed, the authors are of the opinion that omitting to include such a technology would significantly limit the future options for consumer-focused information provision within the automotive sector.

[2] Larrick, R. and Soll, J (2008) The MPG Illusion. Policy Forum, Science Vol. 320, pp1593-1594, 20 June 2008
[3] With the proviso that fuel and VED costs continue to be closely aligned with carbon emissions.
[4] For more information, visit: http://en.wikipedia.org/wiki/QR_Code.
[5] For more information, visit the EPA website. URL: http://www.epa.gov/carlabel/ [Accessed April 2012].

Recommendation 6: In addition to printed information, the UK fuel economy label should include a 'hard-link' (e.g. QR Code) to link the printed label with online model information. The target URL should include some or all of the following: model specific information, a fuel cost calculator, and comparisons with other cars in the 'model range' or 'vehicle class' (depending on data availability).

Regarding the most effective way to convey information on a label designed for electric vehicles (EVs), the survey finds that car buyers have a very poor understanding of watt-hours (Wh) and kilowatt-hours (kWh). As a result, very few of the test participants adequately understood either 'Wh/km' or 'kWh/100km', two of the electricity consumption units trialled on the EV test labels.

In contrast, when electricity consumption figures are presented in terms of 'mpg equivalent',[6] this option is well received (and is the most popular option) due to its high level of comprehension by participants who are able to contextualise the figures and compare them with conventional vehicles. A second popular metric is 'miles-per-kilowatt hour' (Miles/kWh) – possibly indicating that 'miles-per litre' for liquid fuels may gain acceptance as a popular metric in the future.

When presented with test EV labels, many of the survey participants voiced their concerns about some of the limitations of EVs which included: short driving range, the length of time to recharge, and the uncertainty about the location of publicly available recharging points. These were also among the issues most requested to be included on a future EV label as additional information.

On a positive note, when test labels showing EV electricity and tax costs are presented to the test sample, the survey finds that car buyers are generally impressed by the low running costs. With the exception of the electricity consumption units, and the inclusion of additional information, this supports the use of a similar label format for both EVs and conventional vehicles.

Recommendation 7: The scope of the UK fuel economy label should be extended to include electric vehicles. The 'EV label' should: adhere to a similar format as for conventional vehicles; present electricity consumption as 'mpg equivalent' (assuming 8.9 kWh/litre petrol) shown alongside official energy data (in Wh/km or kWh/km), and include information specific to electric vehicles (including: driving range, recharge time, and the location of publically accessible charging points).

Plug-in hybrid electric vehicles (PHEVs) and range-extended electric vehicles (REEVs) also present challenges to the presentation of vehicle information for consumers. Not only are the electricity consumption units not readily understood if expressed in Wh/km, there is the problem of how to present fuel economy information when two fuels can be used simultaneously or independently.

The main finding from the testing of PHEV and REEV labels is that when only 'weighted combined' data is presented, few, if any car buyers, are able to understand either the terminology or the data. The two reasons for this lack of comprehension are the use of metric units, together with the difficulty of comprehending two energy sources simultaneously (symbolised in the test labels by the use of a '+' sign). The resulting experience is one of 'information overload'.

While providing an 'mpg equivalent' figure for the liquid fuel element does increase comprehension, presenting a mixture of imperial and metric units (for electricity use) on the same label creates a new problem; namely only the imperial units are 'seen', the metric units being ignored. The effect is to misrepresent the energy information – for example, instead of the label conveying '235 mpg *and* 130 Wh/km', the label is read as '235 mpg'.[7] Consequently, this information may be not be trusted as car buyers may think it unlikely that such a car would actually cover 235 miles on one gallon of fuel.

[6] Assuming 8.9 kWh/litre petrol.
[7] Official NEDC figures applicable to Vauxhall Ampera REEV.

With regard to this key issue for PHEVs and REEVs, this report concludes that an optimum label would be one that presents both the total 'mpg equivalent' figure for the lay-person and the 'weighted combined' published test data as required by ECE Regulation No. 101. (While Condition 'A' and 'B' energy consumption information would be of interest to many car buyers, the authors believe that a choice has to be made between metrics to avoid information overload.)

Recommendation 8: The scope of the UK fuel economy label should be extended to include plug-in hybrid- and range-extended electric vehicles. The 'PHEV/REEV label' should: adhere to a similar format as for conventional vehicles; present fuel/electricity consumption data as total 'mpg equivalent' (assuming 8.9 kWh/litre petrol) and as 'weighted combined' (fuel: litres/100km and electricity: Wh/km or kWh/km), and include information specific to electric vehicles (including: electric driving range, recharge time, and the location of publically accessible charging points).

Focusing on overall design, there is little doubt that most car buyers recognise the current label's A-M coloured bands used to indicate the VED band. It is therefore a key position of this report that any future development of the fuel economy label should retain the current system of coloured bands. However, the survey provides ample evidence that the current label could be significantly improved.

Of the alternative designs tested, the uppermost part of the test label named 'Dashboard' includes by far the most popular label elements according to the focus groups. The reasons given by participants include its simplicity, modularity and the fact that the key CO_2, 'mpg' and fuel cost per mile data and text can be seen from a distance. The comparison element of the 'Buyer's Guide' label was also found to be an effective format in which to compare combine fuel and VED costs, the most popular version using the scale ranging from the highest to lowest first-year total fuel and VED cost.

Considering all the evidence regarding labels tested, this report concludes that the most effective combination of alternative design elements would be a combination of the following:

- Uppermost section: Dashboard design elements (CO_2, 'mpg' and fuel per mile data);
- Central section: Buyer's Guide designs elements (VED, fuel cost, and model range comparison);
- Lower section: Sources of further information and tools (QR Code, website and phone).

This label, termed **'Dashboard Plus'**, is designed to be semi-flexible; when a model range comparison is not possible or appropriate, the comparison area can be replaced with 'additional information'. Examples include cases where a new technology is employed (such as an EV, PHEV or REEV) or where there is only one model in a range. As a purely *speculative exercise*, a series of Dashboard Plus labels has been constructed based on the findings of the survey as described – and presented in this report.

In the light of these findings regarding the rationale of the 'Dashboard Plus' fuel economy label, this report makes two recommendations which are designed to more effectively convey vehicle model information to consumers, and outline what would be required for a final round of testing should the Dashboard Plus designs be taken forward towards implementation.

Recommendation 9: Based on the evidence presented, a future UK fuel economy label should incorporate the following design elements (collectively known as the 'Dashboard Plus' design): Uppermost section – Dashboard design elements (CO_2, 'mpg' and fuel per mile data); Central section – Buyer's Guide designs elements (VED, fuel cost, and model range comparison); Lower section – Sources of further information and tools (QR Code, website and phone).

Recommendation 10: Before implementation, a future UK fuel economy label based on the 'Dashboard Plus' design should undergo a final round of testing conducted at the household level to assess the potential impact of the new label on car buyer behaviour.

2. Introduction

2.1 EU Labelling Directive

In 1999, the EU issued a **Labelling Directive** [1999/94/EC] requiring standardised fuel economy and CO_2 emissions information to be made available to buyers of new passenger cars in all EU Member States – effective from January 2001. One of the key information sources covered by the 1999 Directive is a Fuel Economy Label for all new passenger cars[8] displayed at the point of sale.

As stated in Appendix I of the 1999 Directive, EU Member States must ensure that all car labels:

- Comply to a standardised format in order to allow greater recognition by consumers; and are of a size of 297 mm × 210 mm (A4)[9]; and contain a reference to the model and fuel type of the passenger car to which they are attached;
- Contain the numerical value of the official fuel consumption and the official specific emissions of CO_2. The value of the official fuel consumption is expressed in either litres per 100 kilometres (l/100 km), or an appropriate combination of these and is quoted to one decimal place. The official specific emissions of CO_2 are quoted to the nearest whole number in grams per kilometre (g/km). Such values can be expressed in different units (gallons and miles) to the extent compatible with the provisions of Directive 80/181/EEC;[10]
- Contain the following text regarding the availability of the guide on fuel consumption and CO_2 emissions: "A guide on fuel economy and CO_2 emissions which contains data for all new passenger car models is available at any point of sale free of charge"; and "In addition to the fuel efficiency of a car, driving behaviour as well as other non-technical factors play a role in determining a car's fuel consumption and CO_2 emissions. CO_2 is the main greenhouse gas responsible for global warming".

As described in Article 2, the 1999 Directive defines the 'official fuel consumption' and the 'official specific emissions of CO_2' as the figures measured and type-approved by the approval authority in accordance with the provisions of Directive 80/1268/EEC and attached to the EC vehicle type-approval certificate or in the **Certificate of Conformity**.[11] The Certificate also includes environmental information related to noise levels, Euro emissions standard, and exhaust emissions for the so-called 'regulated pollutants': CO, NOx, HC and PM_{10}.

The details of how the 'official' fuel economy and emissions are obtained – and which figures must appear in the Certificate of Conformity – are detailed in **ECE Regulation No. 101**[12] which apply to the

"measurement of the emission of carbon dioxide (CO_2) and fuel consumption, and/or to the measurement of electric energy consumption and electric range of category M1 vehicles powered by an internal combustion engine only or by a hybrid electric power train, and to the measurement of electric energy consumption and electric range of categories M1 and N1 vehicles powered by an electric power train only."

[8] Category M1 vehicles as defined in Appendix II to Directive 70/156/EEC(6) and which falls under the scope of Directive 80/1268/EEC. It does not include vehicles falling under the scope of Directive 92/61/EEC(7) and special purpose vehicles as defined in the second indent of Article 4(1)(a) of Directive 70/156/EEC.
[9] Whether the A4 label is displayed as 'portrait' or 'landscape' layout is not specified.
[10] Council Directive 80/181/EEC of 20 December 1979 on the approximation of the laws of the Member States relating to units of measurement and on the repeal of Directive 71/354/EEC (OJ L 39, 15.2.1980, p. 40).
[11] The Certificate referred to in Article 6 of Directive 70/156/EEC.
[12] E/ECE/324, E/ECE/TRANS/505. Rev.2/Add.100/Rev.2, 29 April 2005. URL: http://www.unece.org/fileadmin/DAM/trans/main/wp29/wp29regs/r101r2e.pdf. [Accessed April 2012].

The ECE R101 regulations provide detailed procedures for the measurement of fuel economy and CO_2 emissions of all vehicle types including those: only powered by an internal combustion engine (Appendix 6); electric power-train only (Appendix 7); hybrid-electric power-train, including vehicles that can be externally charged (Appendix 8); and vehicles powered by either an electric power-train or by a hybrid electric power train (Appendix 9).

For each vehicle type, the ECE R101 regulations also specify what data is to appear on the type approval certificate (Appendix 4). With respect to fuel economy, CO_2 emissions and driving range information, Appendix 4 specifies the inclusion of test cycle information (and units in which data must be provided) according to vehicle type as set out in Table 1.

Table 1 Data reporting requirements according to ECE R101

Vehicle type	CO_2 mass emissions (g/km)	Fuel consumption[a] (litre/100km)	Electricity consumption (Wh/km)
Internal combustion engine; and non-externally chargeable (NOVC) hybrid electric	Urban[b] Extra-urban[b] Combined[b]	Urban[b] Extra-urban[b] Combined[b]	
Pure electric vehicles			Combined: Wh/km[b] Electric range (km)
Externally chargeable (OVC) hybrid electric	Condition A[c], combined[b] Condition B[c], combined[b] Weighted[d], combined[b]	Condition A[c], combined[b] Condition B[c], combined[b] Weighted[d], combined[b]	Condition A[c], combined[b] Condition B[c], combined[b] Weighted[d], combined[b] Electric range (km)

[a]Repeat for petrol and gaseous fuel in the case of a vehicle that can run either on petrol or on a gaseous fuel. For vehicles fuelled with natural gas, the unit l/100 km is replaced by m3/km.

[b]Urban, Extra-urban, and Combined cycle (representing urban/extra-urban driving) as defined by the NEDC test cycle.[13]

[c]Condition A test carried out with a fully charged electrical energy/power storage device. Condition B: test carried out with an electrical energy/power storage device in minimum state of charge.

[d]The weighted CO_2/fuel consumption/electricity consumption are calculated using $X = (De \cdot X_A + Dav \cdot X_B)/(De + Dav)$, where: X = CO_2/fuel consumption/electricity consumption (in g/km or l/100 km or Wh/km), X_A = CO_2/fuel consumption/electricity consumption over Condition A, X_B = CO_2/fuel consumption/electricity consumption over Condition B, De = vehicle's electric range, Dav = 25 km (assumed average distance between two battery recharges).

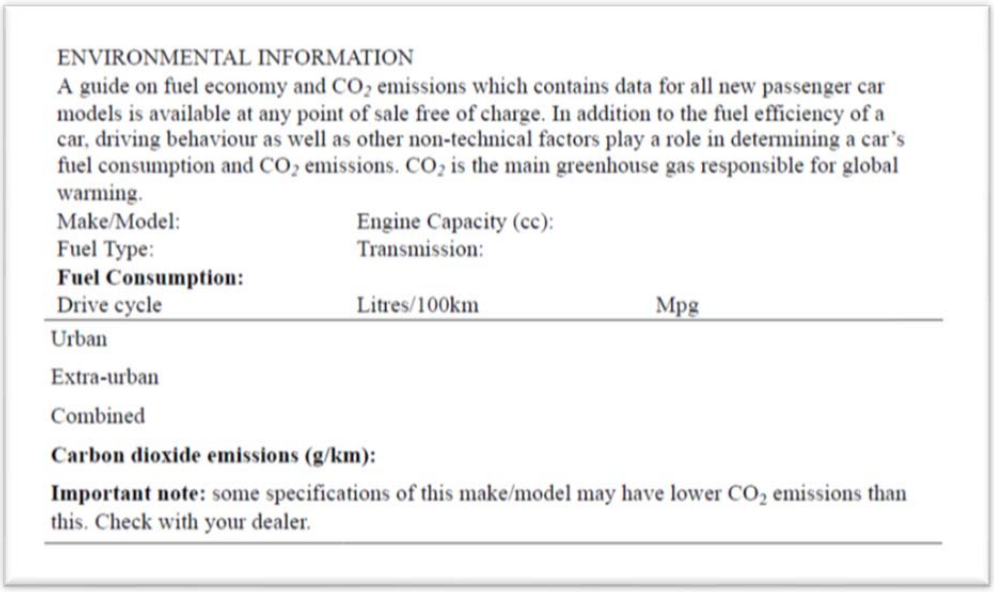
2.2 UK Fuel Economy Label

In the UK, the EU Labelling Directive is implemented by the *Passenger Car (Fuel Consumption and CO_2 Emissions Information) Regulations 2001*, which came into force in November 2001.[14] The Passenger Car Regulations adhere to the 1999 Directive with minor additions such as the provision of fuel economy in units of 'miles-per-gallon' or 'mpg'.

As stated in Schedule 2, in order to allow for ease of recognition by consumers: (1) The label shall be easily legible and shall contain the wording and the relevant data in the categories specified in [the] figure [Figure 1]; and (2) The label shall be printed on A4 size (210×297 mm) material and shall contain text set out in the format specified in the figure [Figure 1] which shall occupy an area of no less than 180 × 125 mm.

[13] DieselNet. URL: http://www.dieselnet.com/standards/cycles/ece_eudc.php [Accessed April 2012]
[14] Legislation.gov.uk. URL: http://www.legislation.gov.uk/uksi/2001/3523/contents/made [Accessed April 2012]

Figure 1 Information required to be displayed by Passenger Car Regulations 2001



ENVIRONMENTAL INFORMATION

A guide on fuel economy and CO_2 emissions which contains data for all new passenger car models is available at any point of sale free of charge. In addition to the fuel efficiency of a car, driving behaviour as well as other non-technical factors play a role in determining a car's fuel consumption and CO_2 emissions. CO_2 is the main greenhouse gas responsible for global warming.

Make/Model: Engine Capacity (cc):

Fuel Type: Transmission:

Fuel Consumption:

Drive cycle	Litres/100km	Mpg
Urban		
Extra-urban		
Combined		

Carbon dioxide emissions (g/km):

Important note: some specifications of this make/model may have lower CO_2 emissions than this. Check with your dealer.

To meet the requirements of the Labelling Directive, in 2005, the LowCVP brokered the design and rollout of a UK Fuel Economy Label which included an energy-efficiency style colour coded fuel economy scale linking CO_2 emissions to VED – see Figure 2 for the current label used for new cars.

As Figure 2 shows, the VED bands are colour-coded using a scale similar to the energy-efficiency rating system used for 'white goods' ranging from green for cars with the lowest CO_2 emissions through the colours of the spectrum to red for the most highly polluting vehicles. The CO_2 emissions figures are measured over a single standard test-cycle and are quoted on a per kilometre basis.

Other information on the label includes: annual fuel cost which is estimated assuming a distance of 12,000 miles and based on the 'combined' fuel economy figure and a UK average fuel price for petrol, diesel and liquefied petroleum gas (LPG); and a 12-month Vehicle Excise Duty rate (now extended to include both First Year and Standard VED Rates). Fuel economy information is also displayed in the lower half of the label measured over three cycles: 'urban', 'extra-urban' and 'combined' and is presented in 'mpg' (miles per gallon) and 'litres/100 km' units.

Since 2005, LowCVP has commissioned and conducted a series of surveys to assess the effectiveness of the UK label with regard to its influence on car purchasing decisions, and to build an evidence-base to inform future label design. The surveys focusing on car buyers include:

- *2010 LowCVP Car Buyer Survey*: Improved environmental information for consumers.[15]
- *2008 LowCVP Car Buyer Survey*: From 'mpg paradox' to 'mpg mirage' – How car purchasers are missing a trick when choosing new cars.[16]

The 2010 Car Buyer Survey made a number of recommendations about how the current label could be improved including:

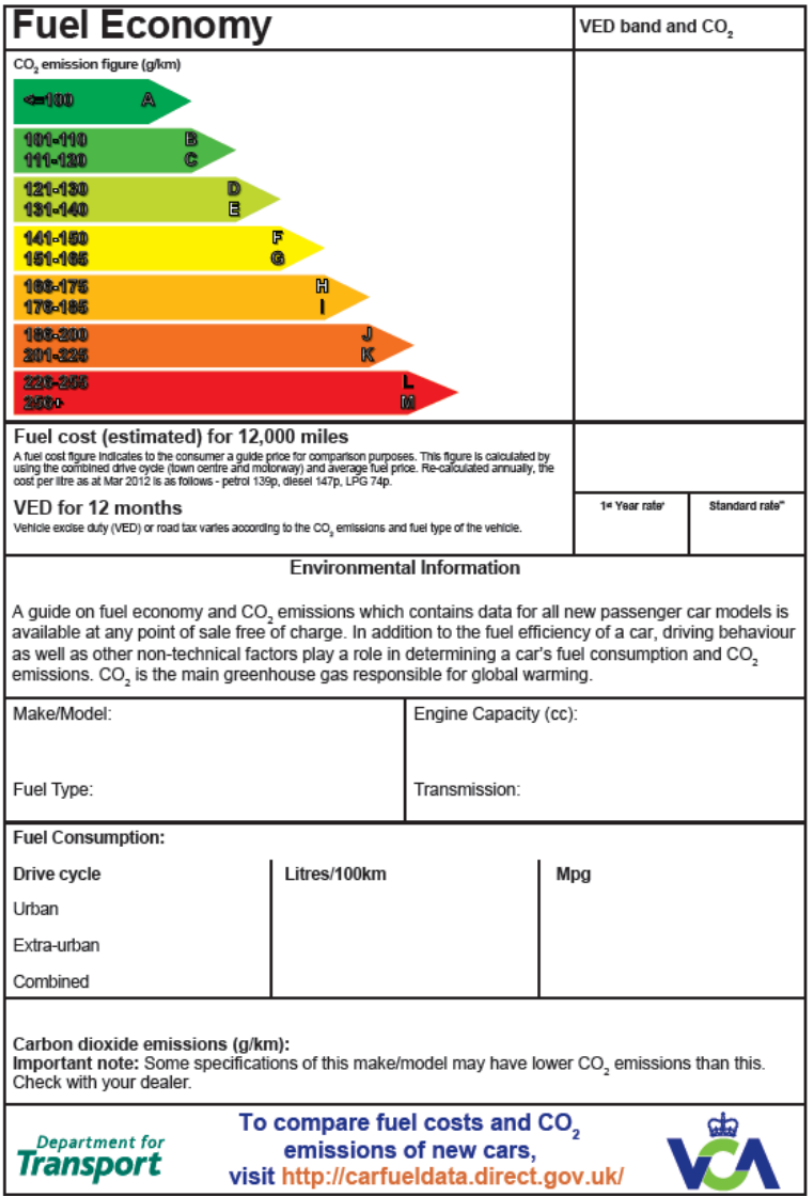
- The fuel economy information (in terms of 'mpg') should be made more prominent (through better positioning and larger text-size) than it is on the current UK Fuel Economy Label;

[15] 2010 LowCVP Car Buyer Survey: Improved environmental information for consumers. Conducted by Ecolane, Sustain, and Robert Gordon University, for LowCVP, 2010.

[16] From 'mpg paradox' to 'mpg mirage': How car purchasers are missing a trick when choosing new cars. Robert Gordon University, Ecolane and Sustain, for LowCVP, 2008.

- Consideration should be given to adding 'best in class' information (with a focus on 'best in class' fuel economy), while at the same time balancing the possible benefits of doing so with the equally important risk of overloading consumers with too much information;
- Further research should be conducted to assess the future potential of using 'hard-links' (e.g. QR Codes) as a consumer tool to link printed with online model information

Figure 2 Current UK Fuel Economy Label (new cars)



In parallel with this ongoing work programme, in the 2011 strategy document, '*Better Choices: Better Deals'* published by the Department for Business Innovation and Skills (BIS) and the Cabinet Office's Behavioural Insight Team,[17] the Low Carbon Vehicle Partnership was asked to:

> *"... bring forward proposals aimed at helping to give consumers much clearer information on how much it will cost them to run a particular car. [The Government] believes that improvements could be made to the current ... fuel economy and emissions label ... so that it gives people much clearer information at the point of sale about ongoing running costs... This could help to shift consumers' behaviour and deliver environmental benefits, for example by making it clear what cost savings are achievable when running more fuel-efficient vehicles."*

[17] Better Choices: Better Deals. Consumers Powering Growth. BIS & Cabinet Office, 2011.

The strategy identified three potential amendments to the existing label which included:

- Improving the presentation of running cost and financial information to demonstrate the benefits of choosing fuel efficient, low CO_2 vehicles;
- Placing greater emphasis on cost related MPG, and less on the emissions metric of CO_2 g/km;
- Providing comparative information of each model with other vehicles 'in the same model range' using MPG, CO_2 emissions, or financial information or combinations of metrics.

In addition to the project input from BIS and the Cabinet Office's Behavioural Insight Team regarding the importance of running costs, members of the LowCVP's Passenger Car Working Group were also keen to use the latest findings from behavioural science to inform the design of the test labels – based advice from the Department for Transport's Social Research and Evaluation team and also academics at University of West of England.[18] These findings include 'loss aversion' theory which highlights the tendency of people to prefer avoiding losses to acquiring gains.[19,20]

To achieve these research objectives, in December 2011, the LowCVP commissioned Ecolane Consultancy and the Centre for Sustainable Energy (CSE) supported by the University of Aberdeen to test a series of alternative fuel economy label designs to explore private car buyers' attitudes regarding the information presented. The project was also designed to explore how a future fuel economy label could accommodate new vehicle types including electric and plug-in hybrid vehicles.

2.3 Project objectives

The primary objective of this project was to test a series of alternative fuel economy label designs to *explore private car buyers' views and understanding of the information presented on the labels – with particular focus on the inclusion of improved/ comparative fuel cost information*.

By identifying which (if any) of the alternative label designs improved on the existing Fuel Economy Label, the research aimed to identify which key metrics – related to fuel economy, fuel costs, and/or environmental data – are preferred by car buyers and how such data is most clearly presented.

The project brief included a number of key secondary objectives including:

- Improving the presentation of running cost and financial information to demonstrate the benefits of choosing fuel efficient, low CO_2 vehicles;
- Placing greater emphasis on MPG, less on CO_2 g/km, and how this should be displayed;
- Provision of comparative information of the vehicle with other vehicles 'in the model range' using CO_2 emissions, MPG, financial information or a combination of metrics;
- The inclusion of a QR code or similar technology and appropriate links to online tools;
- Future-proofing the label to include new technologies such as battery electric vehicles, and plug-in hybrid vehicles.

The project aimed to answer these research questions for recent buyers of new and used cars. All purchases had to have occurred within the previous 24 months (from the survey date). The target sample was chosen to reflect the national demographic for private car ownership in the UK.

[18] Communications with Erel Avineri and E. Owen Waygood, Centre for Transport & Society, Faculty of Environment and Technology, University of the West of England.
[19] Erel Avineri and E. Owen Waygood. Applying valence framing to enhance the effect of information on transport-related carbon dioxide emissions. Paper submitted to Transportation Research Part A (Psychology of Sustainable Mobility), 2012.
[20] Robert Metcalfe and Paul Dolan. Behavioural economics and its implications for transport. Journal of Transport Geography. Article in press.

3. Methodology

The methodology used as its starting point was the approach adopted for the 2010 Car Buyer Survey which proved highly successful in addressing the issues of that study. These included a series of six deliberative focus groups (qualitative),[21] each of 8-10 persons, and a 15 minute web-based survey (quantitative) which was completed by at least 1,000 respondents.

For all methods of data collection, the target population was private motorists with a relatively recent experience of buying a car. Participants were therefore recruited on the basis of:

- Having a full driving licence and living in a household with at least one privately owned car;
- Having joint/main/sole responsibility for making car purchasing decisions for the household;
- Having bought a car for their household within the last two years (i.e. since January 2010).

The sample surveyed was selected to adequately represent the socio-economic groups, level of education, age, gender and location across England, Scotland and Wales. To reflect the fact that Fuel Economy labels are more often displayed on new cars, at least half of the focus group participants recruited has purchased a new car; for the online survey, the ratio of new to used car purchases was approximately 2:1.

As in the 2010 Car Buyer Survey, the research used a series of prototype test labels and stimulus materials. The test labels were created by an information designer[22] working in close two-way co-operation with the survey team. The designer's main input was determined by the two rounds of fieldwork indicated by the project brief. These were denoted as:

- **Round 1**: Initial series of alternative labels created on the basis of existing research;
- **Round 2**: Revised alternative labels created on the basis of findings from Round 1.

Table 2 Project overview

Project 1 only	Focus groups	Web-based survey
Round 1	✓ (6 groups; 58 participants)	✗
Round 2		✓ (1,005)

3.1 Focus groups

The focus group discussion guide (Round 1) is provided in full in Appendix 1.

Six deliberative workshops, each with 8-10 participants, were conducted, each lasting two and a half hours in length. Six groups were held in six UK cities: Birmingham, London, Exeter, Cardiff, Edinburgh and Leeds. In all cases, group discussions were recorded and transcribed in full for later (anonymous) analysis. In return for taking part in the project, each survey participant received a cash reward of £50 or £60 (depending on venue).

Participants were recruited by local fieldwork recruiters in the target areas (initially identified as London, S-England, N-England, Wales, and Scotland). Recruiters were asked to match the sample profile required, ensuring a representative range across age, gender and social-economic groups. Participants were asked to pre-register online before each workshop to provide basic demographic data and details about their recently purchased car. Participants' vehicle information was checked with their car's actual official data sourced using the CarweB database based on a car's Vehicle Registration Mark (provided on a voluntary basis by over 95% of sample).

[21] The term 'deliberative' is used to convey a particular style focus group; one that while being semi-structured, allows participants to control the discussion in terms of its direction and scope.
[22] John Alderson was commissioned by the LowCVP to design alternative labels for this project.

Using a discussion guide, which included visual stimuli, the groups were invited to discuss their attitudes regarding: the most important factors during car purchase; useful information for car buyers; metrics included on the current label and their presentation; alternative ways to present information; the demand for comparative vehicle data; how best to present information for new plug-in vehicles; and the potential for using web-based tools for vehicle comparison.

Adopting the research recommendations of a previous evidence review,[23] the focus group survey design was 'deliberative' – which meant that, while the focus group discussions were structured, the conversation was led to a large degree by the participants, allowing open conversation between the participants themselves, and between the group and the researchers.

3.1.1 Alternative test labels (and visual stimuli)

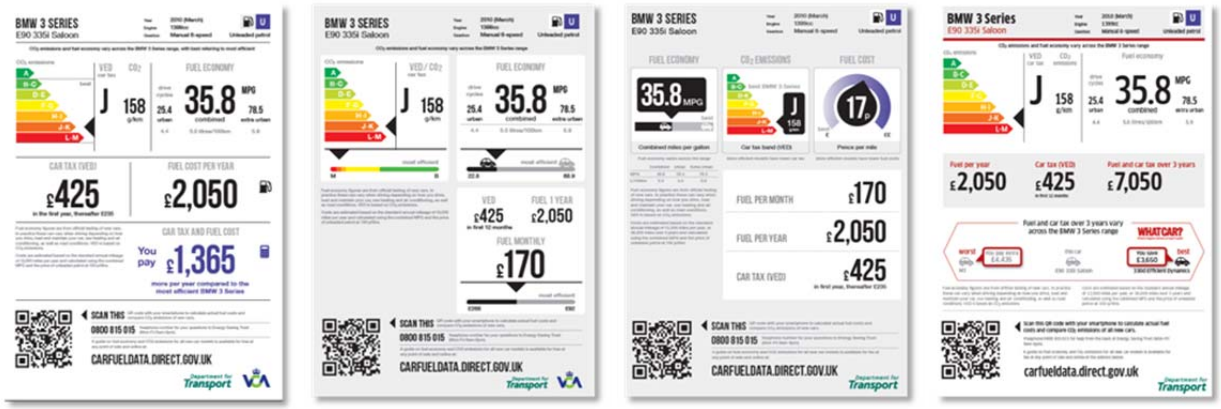
All the test labels (and visual elements) used during Rounds 1 and 2 are provided Appendices 2-3.

For each Round, a series of prototype 'alternative' test labels were created by the information designer. The designs used for Round 1 of the survey were informed from previous research including the work conducted on behalf of LowCVP. Round 2 test labels were created on the basis of findings from Round 1. Figures 3 and 4 show a selection of test labels used during the project.

Based on these prototype labels, a set of stimulus materials was then devised for use in the focus groups. In order to more effectively structure the group discussions, the visual stimuli focused on selected elements of the complete prototype test labels, which (in most cases) included one of the following issues: (i) CO_2 and fuel economy (an example of which is shown in Figure 5); (ii) fuel and VED cost information; and (iii) sources of further information. Broadly speaking, the separate visual elements were taken from the upper, middle or lower third of the prototype labels.

As already indicated, a major revision of the test label designs occurred following Round 1 informed by focus group responses to Round 1 visual materials. The key formatting changes made at this stage in the project included giving increased exposure to the more successful label designs (such as the 'Dashboard' format). Following significant negative feedback from the focus groups, one key change in content was the removal of labels that highlighted 'you pay' or 'you lose' messages – see Section 4.4.2 for results of responses to labels utilising 'loss aversion' theory.

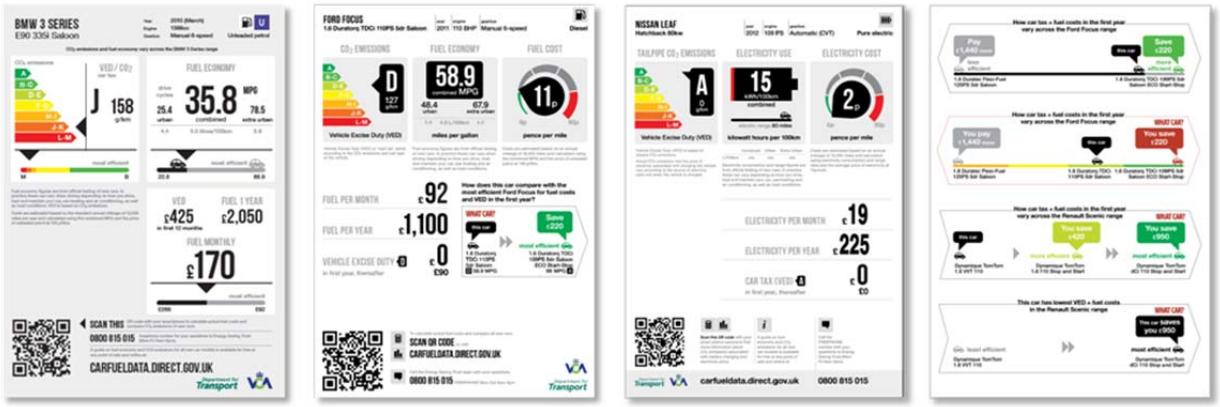
Figure 3 Examples of test labels used during Round 1



'Traditional' 'Slider' 'Dashboard' 'Buyer's Guide'

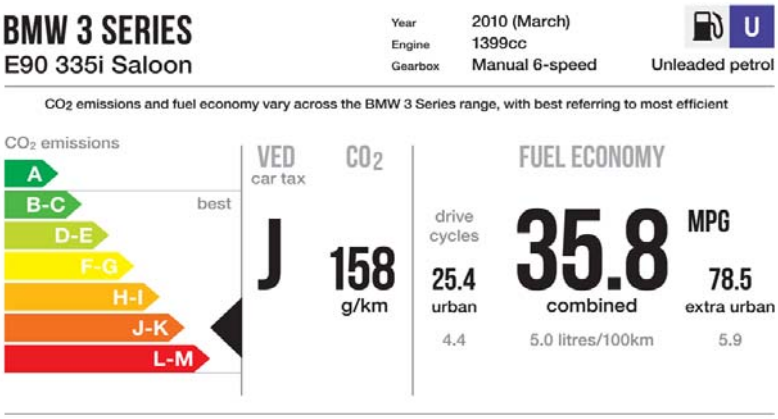
[23] Anable, J, B Lane and T Kelay. *Evidence review of attitudes to climate change and travel behaviour*. DfT, 2006.

Figure 4 Examples of test labels used during Round 2



'Slider' | **'Dashboard ICE'** | **'Dashboard EV'** | **'Buyer's Guide' comparison boxes**

Figure 5 Example of visual stimulus used during Round 1 (A2)



3.1.2 QR Code reader technology

As directed by the LowCVP's project brief, the project investigated the use of 'hard-linking' technology (e.g. QR Code) to deliver additional information to that provided on the printed label.[24] The objective was to explore the potential benefits of using the 'web' as an additional resource – either to provide detailed 'flat' glossary type information for new technologies such as plug-in electric vehicles, or online calculators with which to personalise fuel cost and related information.

In the second half of the focus groups, therefore, a QR Code reader was first demonstrated and then tried by the focus groups participants. Using a camera phone equipped with a QR Code application, the reader scanned the image of the QR Code (as pictured in Figure 6) causing the phone's browser to launch and redirect to the programmed URL.

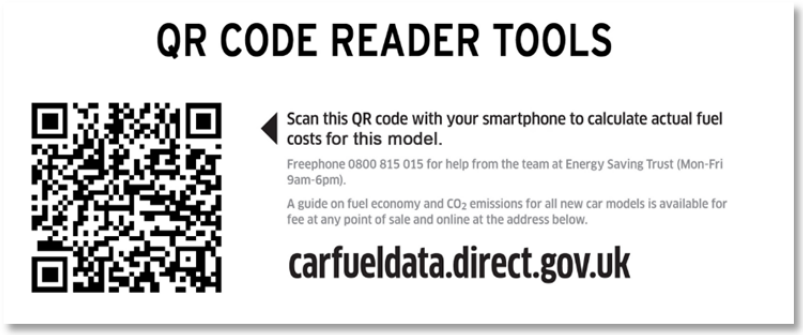
Two target URLs were used for Round 1 of the survey. The first was a web-tool allowing the user to calculate fuel costs for a particular model. In addition to the basis data set as appears on the current fuel economy label (including fuel cost, combined 'mpg' and annual fuel cost for 12,000 miles), the 'fuel cost calculator' tool enabled users to personalise the calculation by inputting their own fuel price and annual mileage, as well as to modify the 'mpg' according to their style of driving – see Figure 7.

[24] For more information, visit: http://en.wikipedia.org/wiki/QR_Code.

The second target URL was a much simpler 'glossary' which provided detailed information regarding a number of terms that appear on a fictitious label for an electric vehicle – see Figure 7. Information contained in the glossary included cost of electricity, CO_2 emissions associated with charging and factors influencing electricity consumption under real world driving conditions. The rationale was that this additional information could be accessed by car buyers as required, instead of being included on the printed label where it may have contributed to information overload.

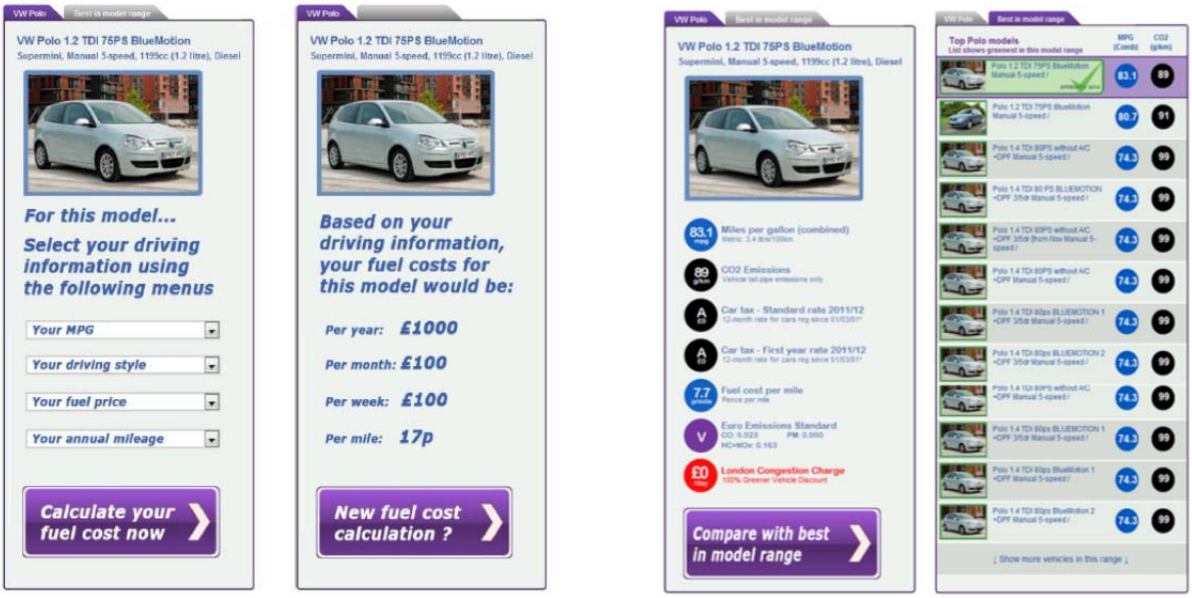
For Round 2, a third tool was tested in a 'mock-up' format rather than as a live test. This was a tool that compared the official combined fuel economy and tailpipe CO_2 emissions of a particular model with other in the same model range. Following a groups' use of the live fuel cost calculator, a visual mock-up of the model range comparator tool was presented to participants for their consideration.

Figure 6 QR Code reader survey test sheet



Hard-link to fuel cost calculator tool (Round 1)

Figure 7 QR Code reader online tools



Fuel cost calculator tool (Round 1) **Model range comparator tool (Round 2)**

Live links to the target URLs can be found at:

- http://www.nextgreencar.com/mobile-calculate/26041/VW-Polo-Diesel-Manual-5-speed;
- http://www.nextgreencar.com/mobile-calculate/26041/VW-Polo-Diesel-Manual-5-speed.

3.2 Online survey

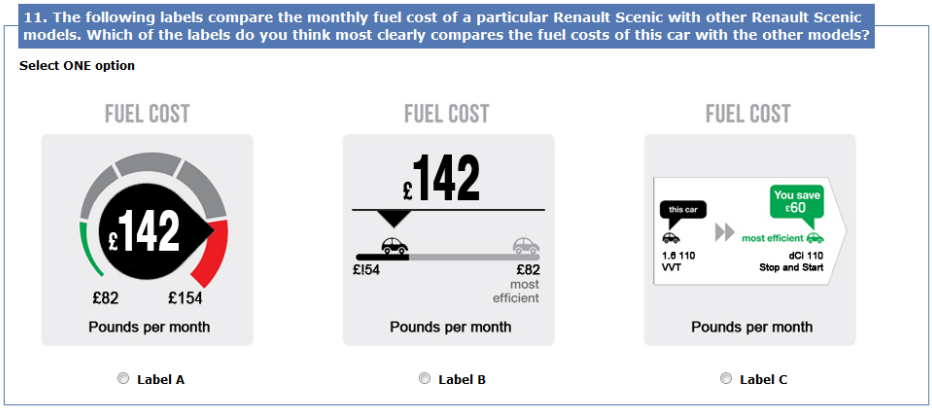
The web-based survey questions are provided in full in Appendix 4.

During Round 2, a web-based survey was conducted of 1,005 car licence holders who had recently purchased a car (using the criteria as already described). Using a web-survey recruitment agency, eligible participants were directed to a dedicated URL to access and respond to the online survey: http://www.carbuyersurvey.co.uk/2012. The web-based survey, which took around 15 minutes to complete, was conducted during April 2012.

At the start of the survey, participants were asked to provide basic demographic data and details about their recently purchased car. As with the focus groups, vehicle information was checked with official data sourced using the CarweB database based on a car's Vehicle Registration Mark (provided on a voluntary basis by over 75% of the online sample).

As with the focus groups, the web-based survey participants were presented with a series of visual elements for their comments and responses; in most cases, these visual stimuli were simplified versions of the focus group test materials. While the main content of the web-based survey shared many elements in common with the focus group discussion guide, it was more oriented to the collection of quantitative data through the use of single- and multiple-response questions. However, open-style responses were also used, the responses being categorised during analysis.

Figure 8 Screenshot of online survey single-response question (Q11)



3.3 Data analysis

Transcripts of key focus group discussions are provided in part in Appendix 5 – Note that the quotes highlighted in yellow in Appendix 5 are the one used to illustrate issues in the main text.

All focus group discussions were digitally recorded and the words transcribed. This evidence forms the central data for qualitative analysis and is structured according to the key issues as revealed during the group conversations. During each group, photographs are also taken to record collective activities such as brainstorming using 'post-it' notes used to capture thoughts, ideas and opinions.

Given the volume of text generated by the focus groups, research tools are used to efficiently code the issues that emerged during conversations with participants. One was the use of NVivo9, a qualitative software tool that simplified the tracking of ideas within the transcribed texts.
For the online survey, all single- and multiple-choice questions, responses were coded and exported using an Excel file for analysis. For open-style questions, responses were first classified using classes as suggested by participants' comments. All numerical analysis was then conducted in an Excel environment. For the majority of questions, the results are shown in the charts in Section 4.

3.4 Survey sample

For the focus group sample, the number of male and female participants was about the same – see Figure 9. For the web-based survey, the number of male participants exceeded the number of female participants by a ratio of approximately 2:1 – see Figure 10. Participants who had recently bought a new car or a used car were both well represented within both samples – with at least half of those in the focus groups and 66% of the online sample buying new.

Figure 9 Gender profile of focus group

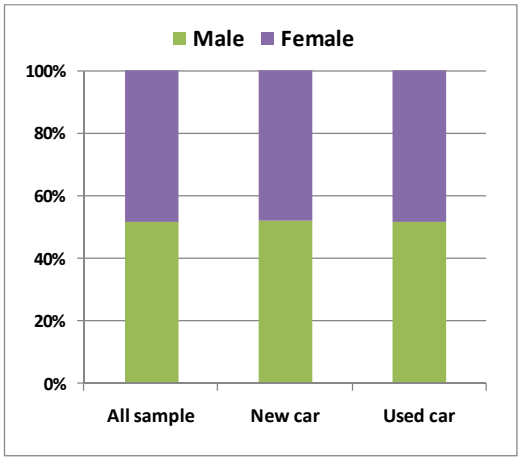
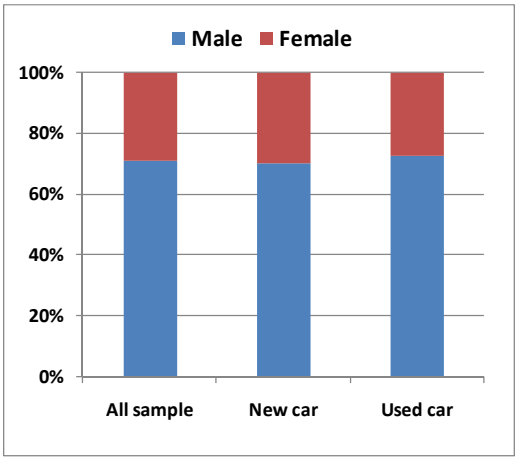
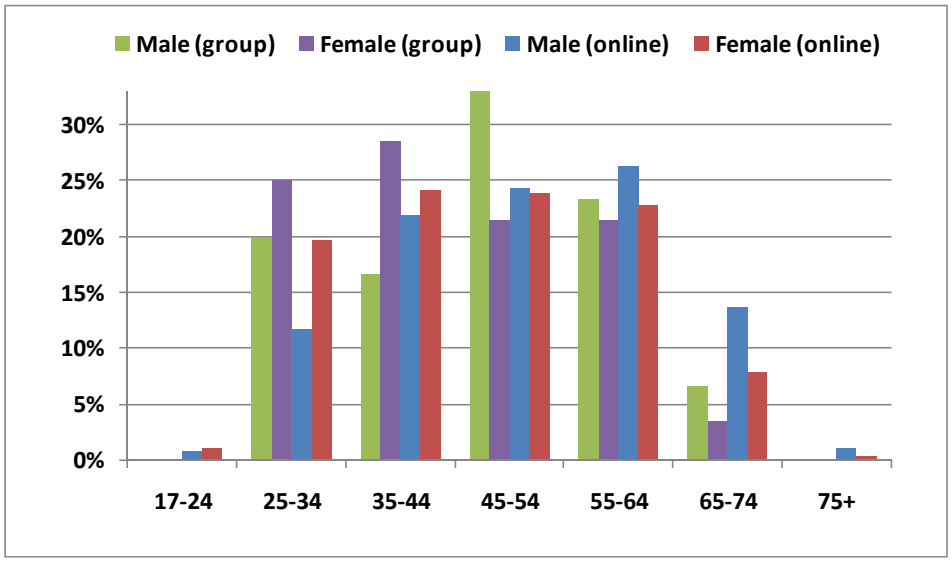


Figure 10 Gender profile of web-sample



Compared with the national age profile of new and used car owning households,[25] the 25-64 age categories were reasonably well represented in the focus group and online samples, with the exception of the 17-24, 65+ age groups which were under-represented – see Figure 11.

Figure 11 Age distribution of web-survey sample by gender

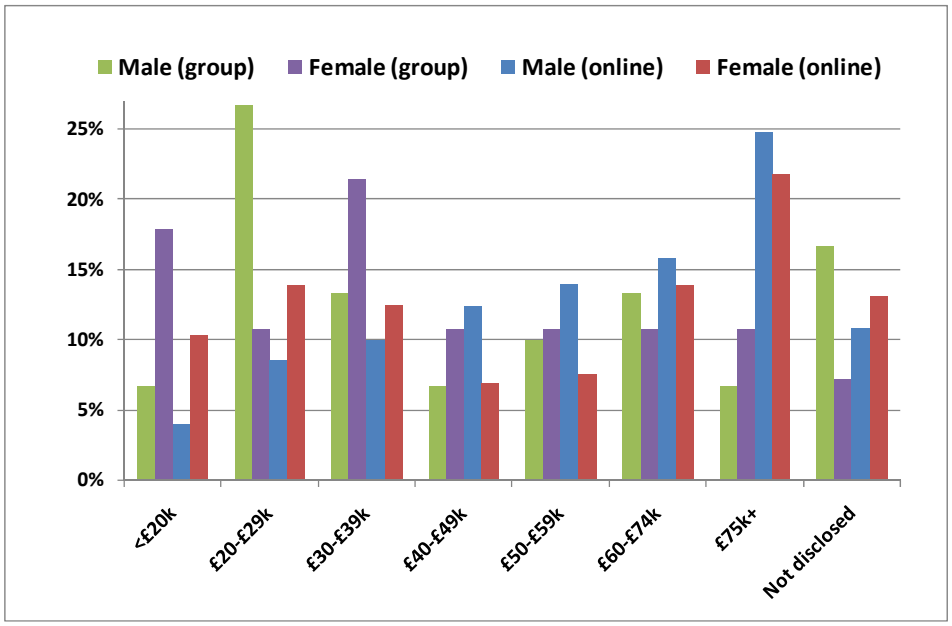


The majority of the web-survey sample were either in full time employment (all: 69%, male: 73%, female: 59%), in part-time work (all: 8%, male: 5%, female: 17%), or retired (all: 18%, male: 18%, female: 16%). The focus groups had a lower proportion of full-time employees (64%), slightly more in part-time work (12%) and a slightly lower proportion in retirement (14%). While all types of employment status groups were well represented in the two samples, the household income profile

[25] Climate change and transport choices: segmentation study final report, Department for Transport, July 2011. URL: http://www.dft.gov.uk/publications/climate-change-transport-choices-segmentation/ [Accessed June 2012].

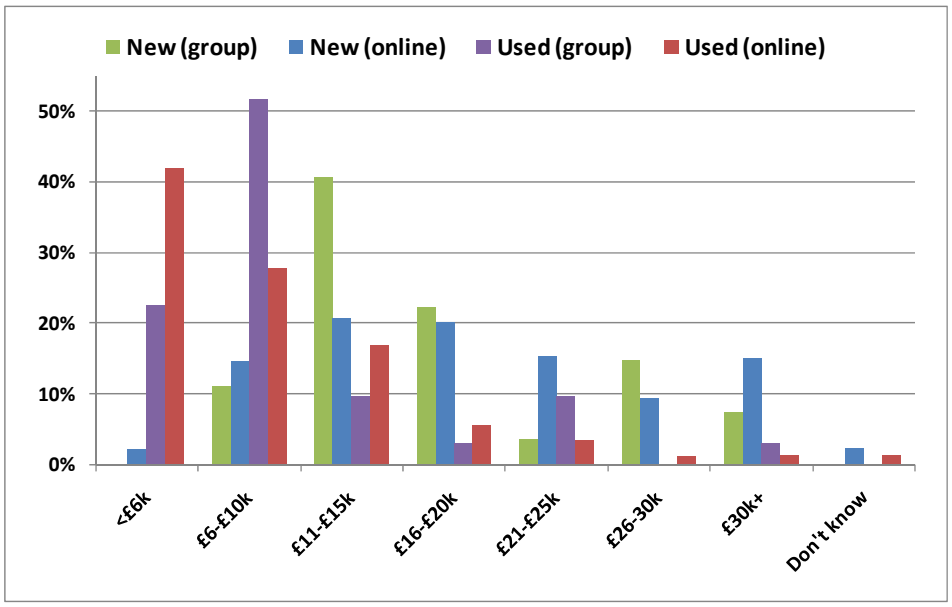
for the online sample was significantly higher than for the focus group participants – for online respondents, the modal income was in the £50,000-£59,000 category; for the focus groups, the modal income was in the £30,000-£39,000 range – see Figure 12.

Figure 12 Household income of focus groups and web-survey samples by gender



As expected, in the web-survey sample, participants who had recently bought a new car had paid substantially more (median in £16-20k range) than those who had purchased used vehicles (median £6-10k) – see Figure 13. The focus group sample showed a similar but less pronounced variation (modal prices in £11-15k versus £6-10k categories). The difference in prices paid for new/used car between the two samples is thought to reflect the higher household income of the online sample.

Figure 13 Price paid for current car for focus group and web-survey samples



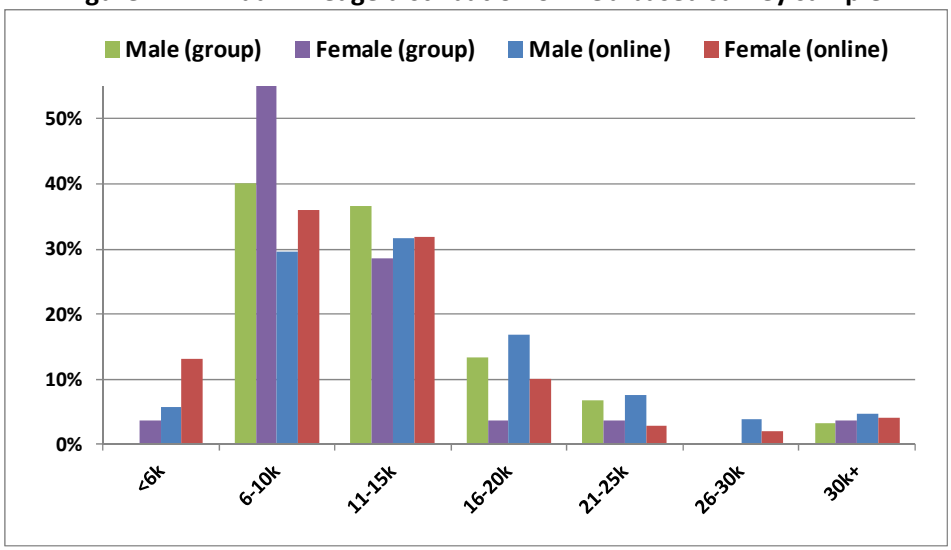
Regarding fuel type of the current cars used by the web-survey sample, petrol cars accounted for 49% (new: 43%, used: 58%) and diesel 50% (new: 55%, used: 40%).[26] Alternative fuels and vehicle

[26] These figures reasonably reflect the current UK new car market in 2011: Petrol 48%, Diesel 51%, Alternative (inc. hybrid) 1% (approx.), SMMT, 2012.

types only accounted for around 2% of the total sample (comprising 16 hybrids and 1 unknown car type). Within the focus groups, petrol cars accounted for 57% (new: 52%, used: 61%) and diesel 43% (new: 48%, used: 39%) with no participants reporting the purchase of an alternative type.

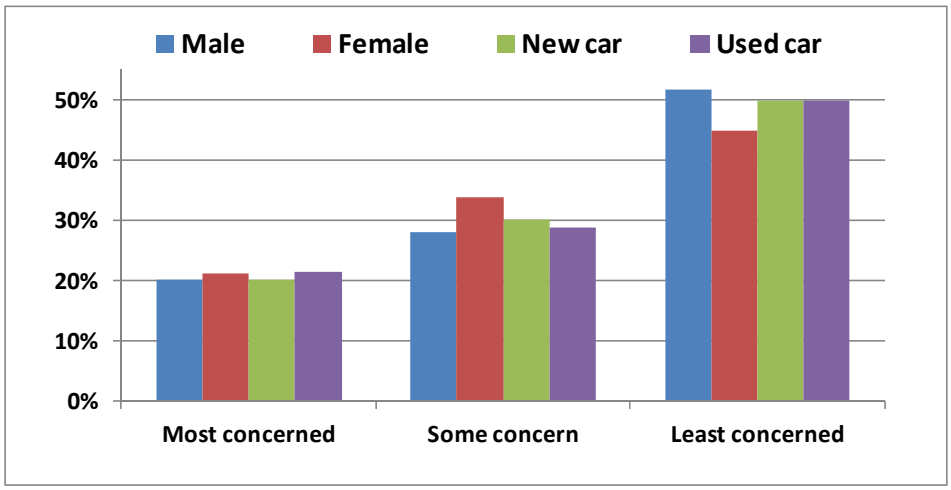
In the web-survey sample, the annual mileage driven by participants varied from below 6k miles per year to over 30k, with a modal annual mileage of 11-15k miles – see Figure 14. While the focus group participants reported a similar range of annual mileages, the average was less than for the online respondents, the group participants having a modal annual mileage in the 6-10k mile range.

Figure 14 Annual mileage distribution of web-based survey sample



In addition to the use of demographic parameters, a simple system of attitudinal segmentation was used to place all participants into one of four attitudinal categories ranging from 'most concerned' about environmental issues (and most willing to act to reduce environmental impact), through to the 'least concerned' (and least willing to act). This was achieved through scoring participants' responses to a series of environment-related statements. By adjusting the threshold scores, the web-survey sample was (intentionally) divided into three equal attitudinal groups as shown in Figure 15.

Figure 15 Percentage breakdown of attitudinal segments within web-survey sample



4. Survey results

The following results are based on the analysis of 1,005 web-surveys completed in April 2012 and the transcripts of six focus groups involving 58 participants, which were held during the first quarter of 2012 in Birmingham, London, Exeter (Round 1), Cardiff, Edinburgh, and Leeds (Round 2).

Due to the high variation in household income and price paid for car purchase between the focus groups and online survey samples, all data has been analysed according to gender, new vs. used car purchase, and level of environmental concern (as measured by a set of segmentation questions).

4.1 CO_2 emissions information

4.1.1 Relevance of CO_2 information

When the issue of vehicle CO_2 emissions is raised during the focus-group discussions, the most common responses indicated a low level of interest and understanding of the CO_2 & VED band information as appears on the fuel economy label. This confirmed the well established low priority given to vehicle emissions when choosing a car.[27]

> *Simply for the same reason... CO_2 emissions and stuff like that really doesn't come into it when I think about buying a car [Female, Round 1, London]*
>
> *I have to say, I'm going to be totally honest – it's not that I don't care about the world and the CO_2 – I don't properly understand it [Female, Round 1, London]*
>
> *Well, I don't know what A to Z is on the vehicle excise duty, but, does anybody else? I mean, there is a J there, what does that indicate? [Male, Round 1, Birmingham]*

CO_2 emissions are given more attention when linked with Vehicle Excise Duty, suggesting that, in the context of vehicle purchasing and information, CO_2 is more commonly perceived as a cost issue rather than as an environmental one.

> *I think 'parking permit costs' and 'road tax' go with 'CO_2' because the CO_2 determines the price of them two attributes [Male, Round 1, London]*
>
> *I just like to see the category and the cost associated. Once you see that related to your car you know your car tax essentially [Male, Round 2, Cardiff]*
>
> *F: ...the one thing we said about the emissions was, you're focussed on whether it's a D or an E or an F or a G, but in terms of road tax is that a major difference? Q: ...first you would like to know the cost? F2: Yeah, the D means nothing to us – we don't know how much car tax is... [Conversation, Round 2, Edinburgh]*
>
> *I think the government would all love us to be interested in green issues but I think in the end we are just more interested in how much it's going to cost us [Male, Round 2, Cardiff]*

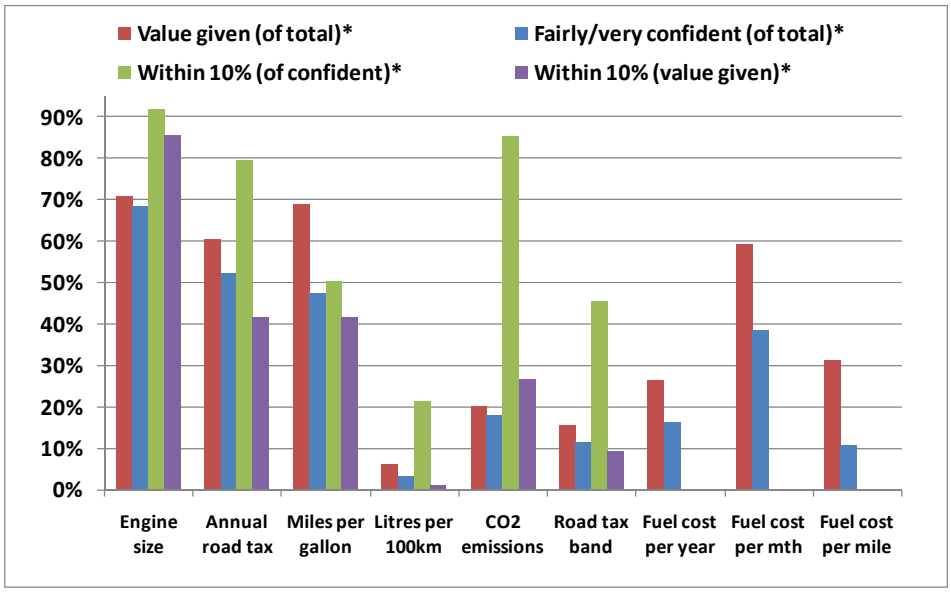
The web-based survey also assessed the level of knowledge of car buyers regarding their car's official performance data (including CO_2 information) by asking participants for 'official figures' for the car recently purchased. The question gave them the opportunity to enter values for the following factors: fuel economy (in 'mpg' and 'litres/100km'), fuel cost (per year, per month and per mile), engine size (litres), CO_2 emissions (g/km) and road tax (VED band and annual cost). Participants' responses were checked with their car's actual official data using the CarweB database based on a car's Vehicle Registration Mark (provided on a voluntary basis by over 75% of the online sample).

The number of responses (correct or otherwise) for each factor, together with the accuracy with which they were answered, was taken to represent the degree to which these factors are 'front of

[27] 2010 LowCVP Car Buyer Survey: Improved environmental information for consumers. Conducted by Ecolane, Sustain, and Robert Gordon University, for LowCVP, 2010.

mind' for consumers. It was assumed that, as most car buyers would know the engine size of their car reasonably accurately, the result for 'engine size' was used as a baseline with which to compare the results for the other metrics. The results are shown in Figure 16.

Figure 16 Car buyer's knowledge of their car's official performance data (web-survey)



*** With the exception of 'annual road tax', percentages shown are either proportion of total sample or of sample giving values which are correct to within 10% of actual value. For 'annual road tax', percentages express proportion of sub-sample which includes only cars paying VED at standard rate.**

Regarding CO_2 information, only 20% of the whole sample was able to volunteer a CO_2 emissions figure for their newly acquired vehicle; a proportion well under the baseline set by knowledge of engine size of around 70%. Of particular significance for this project is the level of CO_2 knowledge as compared to the ability of car buyers to provide a figure for fuel economy (in 'miles-per-gallon') which is around 70% (50% with very or fairly high confidence). The proportion of accurate values given for CO_2 is also significantly less than for 'mpg' – 42% versus 27%. **This question therefore confirms previous findings that CO_2 is a less 'front-of-mind' metric than 'miles-per-gallon'**.

This question shows an interesting second-order result – the minority (18%) of participants who were 'very' or 'fairly' confident about knowing their CO_2 emissions (compared to 48% for 'mpg') were more accurate in their knowledge of CO_2 emissions than 'miles-per-gallon (86% compared to 50% for 'mpg'). One interpretation is that, whereas more car buyers have an idea of their car's fuel economy (through daily use), the value is likely to be different from the 'official' combined figure. In contrast, unable to test CO_2 themselves, they either know their car's official CO_2 emissions (accurately) or they don't, in which case they are unable to even 'guesstimate' a value.

Other issues raised by the data shown in Figure 16 will be discussed in the relevant sections below.

4.1.2 Importance of CO_2 colour bands

The focus group discussion revealed a high level of recognition among participants regarding the current label's A-M coloured bands used to indicate the VED band. Almost all participants had seen the bands in some context, the most common application being their use on 'white goods'. The level of recognition of the coloured bands suggests that they have become brand or logo for 'efficiency'.

> *This reminds me of actually when I went to buy a washing machine, and a ..... and you have basically got triple A – its more or less the same sort of thing like this really. I always look at the green marks – so it's going to be triple A, double A or A – so greener means more A's – the greener the bar the more it reflects*

more environmentally friendly. So, when I look on here, and it's got A there, it's also got 35.8, which I know is what you get to the gallon. And that's the first thing I notice on here [Male, Round 1, London]

I just thought – that, to me, would be stuck on a fridge... That, to me, is what you see when you're doing your, yeah, on household appliances [Female, Round 2, Leeds]

I've just bought a new fridge freezer, and washing machine – and they're all on them [Female, Round 1, Exeter]

The group conversations also indicated strong support for the coloured bands as an information tool. The coloured bands are readily understood in that green is associated with high efficiency ('good'), and red, low efficiency ('bad').

I just know what it means – you know that red is worse than green basically, you know, at the end of the day... [Male, Round 1, Exeter]

Over here now, this 2 was clearer for me, and I didn't need the numbers in this grid, it was quite easy for me to decipher that green was good and red was bad – and that, as it was orange and close to the red, that CO_2 emissions were quite high. I get that really clearly... [Female, Round 1, London]

Well just to say, when you put that poster up there I was just thinking it would be absolutely great to have this kind of information, you know, like you get for electric appliances... [Male, Round 2, Cardiff]

4.1.3 Improving CO_2 design elements

When presented with a selection of visual elements showing CO_2 and VED band information, the focus-groups participants were generally of the opinion that the *dashboard* style (see Appendices 2 & 3) was clearest and the easiest to understand. Indeed, the *removal* of the information defining the CO_2 limits within each band was noted by some participants as an advantage.

M: For us, this one was more informative [current label A1], but this one's clearer [dashboard style] ... [Q: That's interesting. How is A1 more informative for you?] ... M: Well, it's got the... F: ... the emission thing... M: ... down the middle. [Q: What like the bands?] F: Yeah, that doesn't tell me how many are in each band, although I don't know if you'd even need to know how many are in each band... [Conversation, Round 2, Leeds]

The online survey also asked participants to state their preference of three design elements CO_2 and VED band information – see Figure 17. The results clearly showed a strong preference for the dashboard style design over the format used by the current label and a second alternative (named *traditional*) – see Figure 18. On clarity, the dashboard design for CO_2 emissions was over twice as popular as the current fuel economy label.

Figure 17 Q2 Preference for CO_2 emissions design element

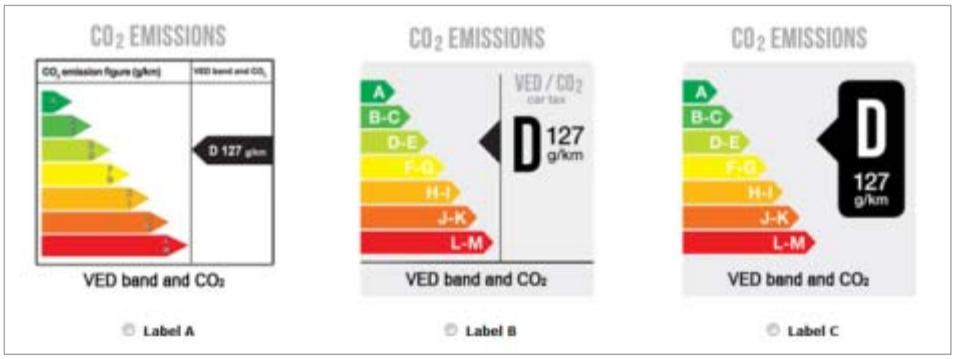
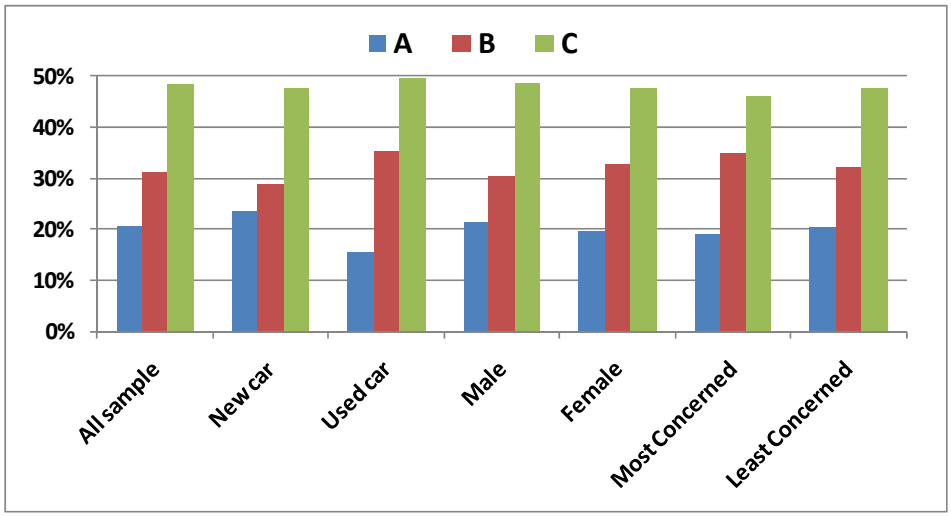


Figure 18 Q2 Preference for CO_2 emissions design element



4.2 Fuel economy information

4.1.1 Importance of fuel economy information

Previous studies have shown that car buyers place great emphasis on fuel economy as a proxy for running costs and environmental impact.[28] The focus group discussions in this survey also revealed that fuel economy expressed as 'miles-per-gallon' was of more importance to car buyers than CO_2 and VED.

> *Q: So is there a consensus that mpg is more important but you are interested in CO_2 as a secondary thing? F: I would do miles per hour [means miles per gallon], tax band, and then CO_2 [Conversation, Round 1, Exeter]*
>
> *I mean just for me, I would go – it's the miles per gallon which is the key information – this is just additional stuff. What I really want to know is miles per gallon [Male, Round 2, Cardiff]*
>
> *Well that's one of the first things I look at, and ask, you know, how many miles per gallon... [Male, Round 1, London]*
>
> *It all confuses me, all these sort of things really. I look at the 35.8 miles to the gallon – that's the biggest thing... [Male, Round 1, Exeter]*

This is also confirmed by results from the online survey. When testing car buyer's knowledge of their car's official data, around 70% of participants were able to provide a figure for fuel economy in 'miles-per-gallon' (50% with very or fairly confidence), as compared to only 20% for CO_2 emissions – see Figure 16. **This confirmed that 'miles-per-gallon' is a more 'front-of-mind' metric than CO_2.**

4.1.2 Terminology used to describe of fuel economy

Of the three fuel economy metrics included on the current fuel economy label, the focus groups highlighted the common confusion created by the use of the terms 'urban' and 'extra-urban', but also highlighted the high level of acceptance of the term 'combined'.

> *F: No, I think urban is fine – that's just town driving... M: Extra-urban is a bit of an odd one... M2: Yeah, it's ambiguous isn't it... M: Yeah [Conversation, Round 1, Exeter]*

[28] 2010 LowCVP Car Buyer Survey: Improved environmental information for consumers. Conducted by Ecolane, Sustain, and Robert Gordon University, for LowCVP, 2010.

I don't think it will make... well, extra, without a doubt I don't really understand what extra-urban is, but, at the end of the day you've got to have a – for these figures to mean anything – you've got to have a set way of measuring it, and I suppose these are set ways [Male, Round 1, Exeter]

Well, I want to know what extra-urban meant, because I don't think that's particularly clear. Because urban is obviously an urban area, but extra is like – it implies it's a heavily populated area, which would mean that your miles per gallon would actually be significantly down. So, I don't really understand what that means [Male, Round 2, Cardiff]

*4.1.3 C*onsumer trust of official fuel economy data

Of greater significance was the level of consumers' lack of trust in the official combined fuel economy figures. Many of the comments made by focus group participants suggested a widespread mistrust of the accuracy of the official information provided by the fuel economy label, with a realisation that the official figures were unlikely to represent 'real-world' fuel economy performance.

M: ... CO_2 emissions and fuel economy mean diddly squat ... I had a Mazda estate and I changed it to a newer one – the newer one was supposed to be more fuel efficient this that and the other – it used more fuel than the old one. Q: So, you don't believe in the figures? M: Not a great deal no [Conversation, Round 1, Exeter]

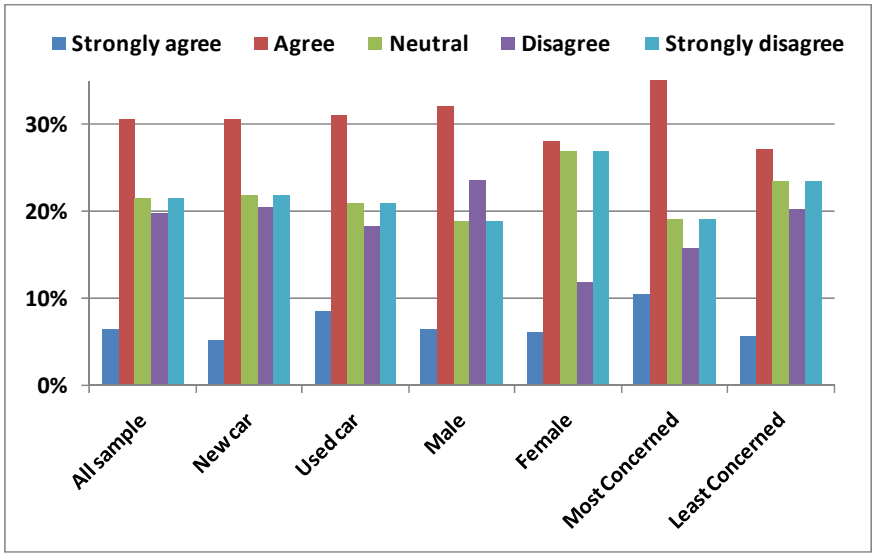
What I will say about the figures is, I think the manufacturers now tune their vehicles to pass these tests, so at a certain point they will do that. But in every day driving, they're not as good [Male, Round 1, Exeter]

Well looking at What Car?, when they test vehicles, what they get out from the average miles per gallon bears no resemblance to the advertisements that you see for that particular car. They are invariably considerably less in real life than what the manufacturer may claim [Male, Round 2, Cardiff]

They usually drive around a test track and we're driving to Tesco's [Male, Round 2, Cardiff]

Given the reported importance of fuel economy information to car buyers, the 'trust' issue was explored in more detail (and quantitatively) in the web-based survey. When asked to agree or otherwise with the statement '*For a particular car, the official 'combined' figure represents the fuel economy achieved by an average UK driver*', only around a third of respondents (37%) agreed, with a higher proportion (44%) disagreeing – see Figure 19.

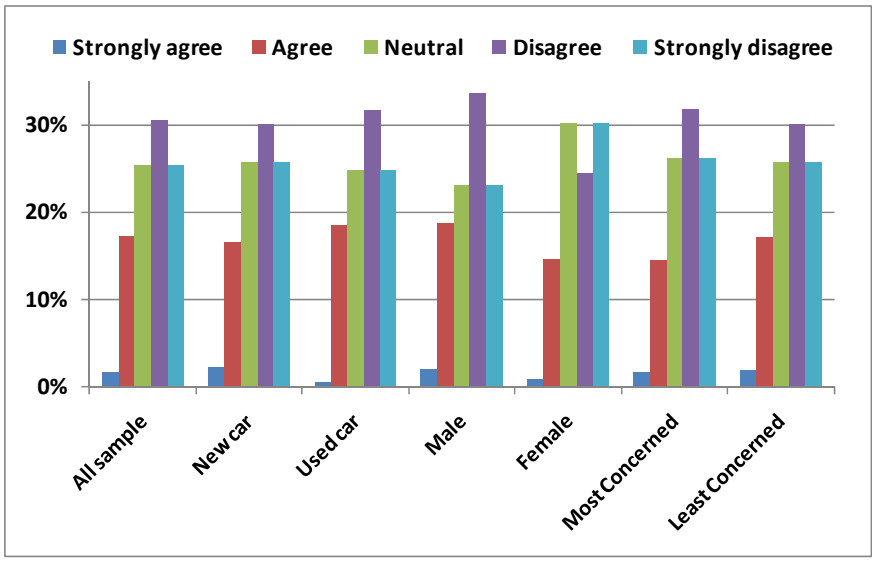
Figure 19 Official MPG achieved by average UK driver



While these results could be of some concern regarding the usability of official fuel economy information, a potentially more negative result relates to the applicability of 'mpg' figures to individual drivers. When asked to agree or otherwise with the statement '*For a particular car, the*

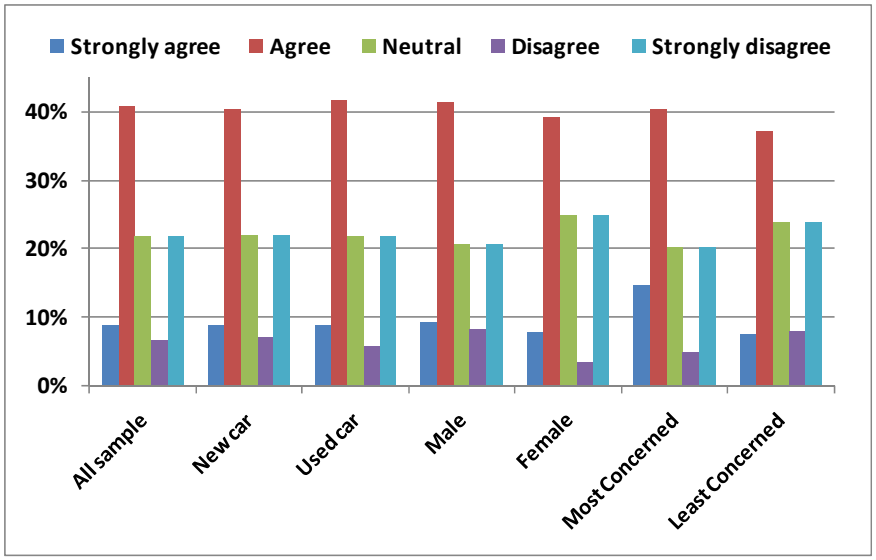
official 'combined' figure represents the fuel economy that I would achieve if I was driving', less than a fifth of respondents (19%) agreed, with over half (55%) disagreeing – see Figure 20.

Figure 20 Official MPG achieved if I was driving



More positively, the online sample showed a greater level of trust in the official figures when used for comparison purposes. When asked to agree or otherwise with the statement '*The official 'combined' figures are a reliable way of comparing the fuel economies of different cars*, half of respondents (50%) agreed, with only around a third (29%) disagreeing – see Figure 21. However, it should be noted that, of those disagreeing, few selected 'disagree', with almost 20% of the sample choosing to 'strongly disagree'.

Figure 21 Official MPG is reliable for comparison



4.1.4 Preferred fuel economy units

Confirming the finding from a previous LowCVP Car Buyer Survey, the focus groups revealed a strong preference for fuel economy expressed in imperial as opposed to metric units.[29] This is very much an

[29] 2010 LowCVP Car Buyer Survey: Improved environmental information for consumers. Conducted by Ecolane, Sustain, and Robert Gordon University, for LowCVP, 2010.

issue for UK (and US) car buyers, and is unlikely to be applicable elsewhere in the EU where other car labels are in use.

> *The big problem is that we are half in decimal, and we're half out. We are still using miles per gallon, I mean out there, people understand miles per gallon, but very few people know, litres per kilometre [Male, Round 1, Birmingham]*

> *I don't know how much a litre is, I only know, you know, I fill my car up and it costs whatever. I don't know, I never look at the litre. I wouldn't have a clue... [Female, Round 1, Birmingham]*

> *F: It's a term that I use, even though I buy in litres, miles per gallon is the phrase I know... Q: What does it mean to you? F: Um, I presume the higher the number the better it is [Conversation, Round 2, Edinburgh]*

While this was very much the majority view, a number of participants did state a preference for metric over imperial units due to the fact that fuel is now priced, sold and dispensed in litres. While this view did highlight a problem, very few of its advocated strongly argued for using 'litres/100km', instead proposing other solutions – some of which will be discussed in later sections.

> *One thing that gets really confusing is, we changed, we went from pence per gallon to pence per litre, but yet, when you look at all the figures, they're all based on per gallon. Why? When we work in litres now [Female, Round 1, London]*

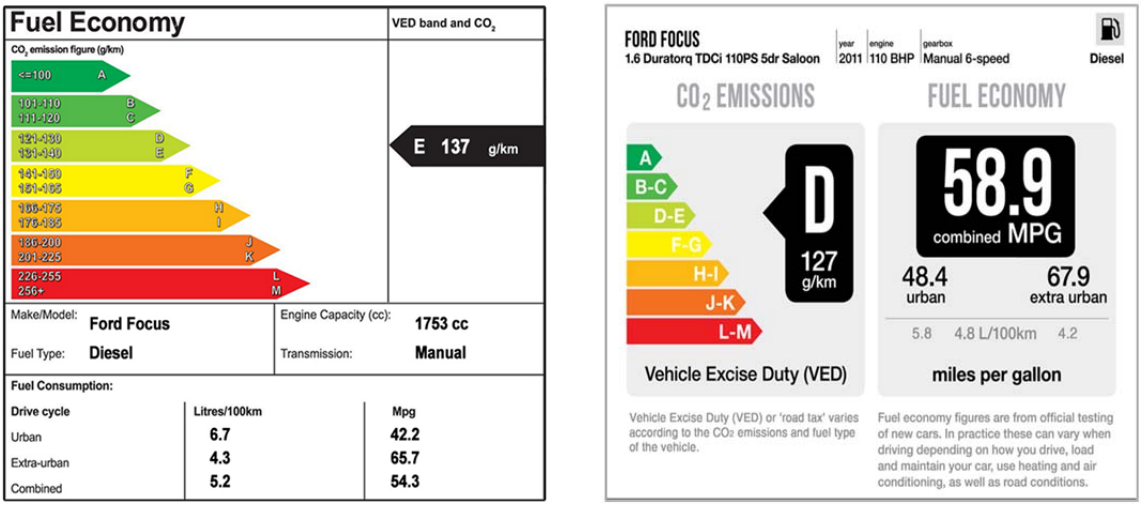
> *It just annoys me because, it says 58.9 miles per gallon – nobody knows what a gallon is. You buy your fuel in litres. I've no idea – I mean I know it's more than a litre, but for me it would be so much easier if it said, 30p a mile on the road, you know, 25p a mile. Then you would actually know what it meant [Female, Round 2, Edinburgh]*

4.1.5 Improving MPG design elements

Car buyers' preference for 'miles-per-gallon' as the key fuel economy metric is accompanied by a strong demand for 'mpg' to be given greater prominence on the fuel economy label; this was one of the recommendations of the LowCVP Car Buyer Survey completed in 2010.

When presented with visual elements based on the current label and on an alternative mock-up – see Figure 22 – the majority of participants prefer alternative versions that present 'mpg' information using a large, clear font, placed alongside the CO_2 emissions figures.

Figure 22 Visual elements of survey test labels (Round 2)



Of the alternatives tested in the focus groups, the dashboard design was particularly well received by all groups – due to the prominence of the 'mpg' information, and also its overall design – see a portion pictured in Figure 22 (right).

F: Yeah, and that's the miles per gallon standing out more... it has actually got just as much information as the big one, which, you've got to – that looks too complicated to read... Q: So for you, A2 [dashboard] is simpler and clearer? F: Yeah [Conversation, Round 2, Leeds]

F It just says it as it is doesn't it. I mean it's... CO_2. It's got a box for CO_2 emissions, and it just tells you that it's J, which isn't very good, and then fuel economy. It just stands out a bit more than... there's too much information here [Female, Round 1, Birmingham]

Q: Which of those do you... just thinking of impact, strength, preference? F: I still like A3 [dashboard]. F2: It just stands out doesn't it. F: Because you've got these boxes [Conversation, Round 1, Birmingham]

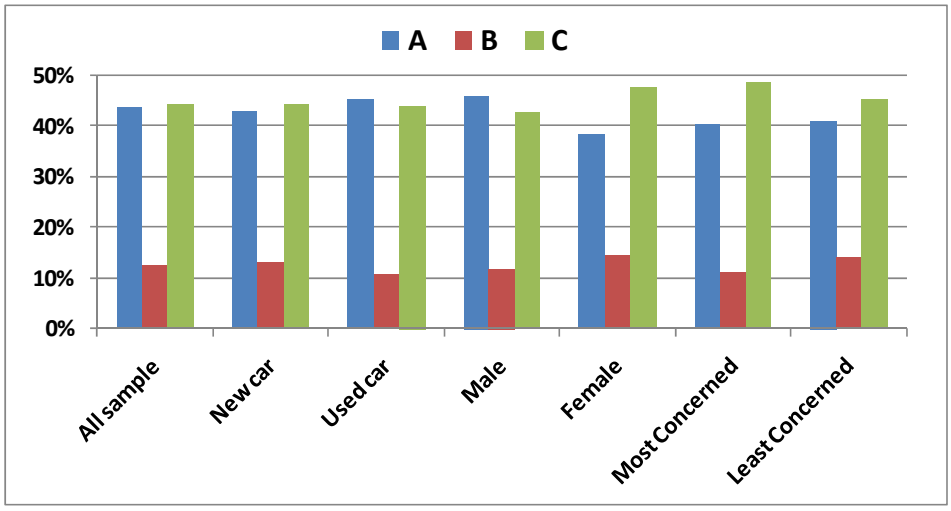
Yeah that's fine – that's not anything to do with it. I think that [A3] [dashboard] is loads clearer – because that's something you walk past and notice and I can see the two main things to me... Visually – that's much clearer. And that's just telling you everything, where they start getting; it just gets a little bit confusing on the rest of it [Female, Round 1, Exeter]

Knowing that the dashboard design was the most popular alternative label for presenting 'mpg' information among focus group participants, the online survey tested three variants of the dashboard layout to more fully understand the strongest visual elements – see Figure 23.

The results show a strong preference for two dashboard designs that present the data using a white-on-black format. While both score equally overall, the results suggest a slight preference based on gender; men preferring the rounded square background, and women the 'oil drop' which is used to represent a liquid fuel – see Figure 24.

Figure 23 Q4 Preference for MPG design element

Figure 24 R4 Preference for MPG design element



4.3 Fuel and tax costs

4.3.1 Relevance of current fuel cost information

Linked to the 'trust' issue regarding fuel economy information are car buyer's attitudes about the assumptions used to calculate annual fuel cost (as presented on the current label), or monthly fuel costs (as presented on some alternative labels). These assume an annual mileage of 10,000 or 12,000 miles, depending on the label tested. Some of the focus group comments suggest a level of dissatisfaction with this approach.

> *Well that was confusing for me, because, I mean, looking at it I think, well how do they know what I'm going to do? How many miles? The print on the bottom is not clear [Female, Round 2, Leeds]*
>
> *That's the bit that's clearer on this, that's not clear really on that. We were really asking ourselves, like, £133 more month if you do what – then we read this tiny little bit at the bottom that said if you do 10,000 – I think that needs to clearer [Male, Round 2, Leeds]*
>
> *The only good thing is that you can compare it with another car, a completely different car, but really, who does exactly 12,000 a year? [Female, Round 1, Birmingham]*
>
> *It's... completely irrelevant to me. I don't drive 10,000 miles a year, I mean, I would rather know what the fuel cost is, how efficient it is and how many miles per gallon [Male, Round 2, Cardiff]*

Another and perhaps more significant complaint about the existing and alternative labels was the assumptions made about fuel price; together with the observation that, given the inexorable rise in fuel prices, these, together with the estimated fuel costs, are quickly out of date.

> *I think it's really good, but I don't understand how they base the one year, when, our petrol changes – the prices change so much through 12 months, and, it's working out what they work that out on, where I can't see how realistic that can be [Female, Round 1, Exeter]*
>
> *Oh that's good, it tells you what... 12,000 miles – the price of what your fuel would be. I'd like to know... is that with fuel not changing in price in the next year [laughing] [Female, Round 1, Exeter]*
>
> *M: The issue, for this car would be out of date as soon as it's public, because the cost of petrol changes so much that no-body is going to be able to, everyone is going to have to re-work out the cost of this car ... Q: Is it helpful that it says in the text underneath what the assumption is? M: It does help, but it does point out the fact of how wrong it is [Conversation, Round 2, Cardiff]*
>
> *It's going to be out of date as soon as you print it really isn't it [Male, Round 2, Leeds]*

4.3.2 Relevance of current VED tax information

Again supporting findings from previous LowCVP surveys, many focus group participants had a poor understanding of 'Vehicle Excise Duty'; its meaning, its relation to 'road tax' or 'car tax', and its link with CO_2 emissions.

> *F: I was saying – what does VED mean?... F2: That's car tax – I learnt that on the last one [Conversation, Round 1, Exeter]*
>
> *Sorry, all I was going to say is, it's obviously the VED band, but who knows what a VED band is? Or they can work it out? Why don't they just say car tax band? [Male, Round 1, London]*
>
> *Q: What's the general thought about... do we as a group understand vehicle excise duty? It's got 127 g/km – do we know what that's going on about? F: I don't [Conversation, Round 2, Edinburgh]*

Related to this low level of understanding is the tendency of car buyers to conceptualise VED is terms of costs rather than in terms of band. This preference seems to be prevalent even when the link between VED band and costs is appreciated.

> *Coming back to what I said earlier on about the J code, it didn't mean anything to a lot of people, but once you put money around it, then people can relate to that [Male, Round 1, London]*

You need to put the road fund licence – the VED pricing in there. There's no point in me telling you it's a D [Male, Round 2, Cardiff]

One thing, is, that even though the road tax is associated with the emissions, I think it should probably display how much road tax it, you know [Male, Round 2, Leeds]

This was also confirmed by results from the online survey. When testing knowledge of their car's official data, car buyers were over four times more able to volunteer a value for annual VED cost than they were VED *band*.[30] Over the whole sample, 42% were able to accurately quote their annual tax (within 10%) compared to only 9% who correctly gave their road tax band.

Despite buyers of new car being well represented in the focus groups, very few participants were able to confidently explain the difference between 'first year' and 'standard rates' of VED.

That's the tax you have to pay on the first, first payment, and when you buy a new car you have to pay that extra on top for, perhaps buying a big cc car. But I don't think you pay that on a smaller, economical car would you? [Male, Round 1, Exeter]

Can I ask, why is the car tax more expensive in year one and then it's going to go down? [Female, Round 1, London]

I wouldn't as, if I was drawing this, writing this – I wouldn't put the car tax as 425, I would put it as 235. It's only the first year and they normally give you that free anyway. Because I would see that – if I read that, I would say that the car tax was 425 every year [Female, Round 1, Exeter]

M: With your road tax, it's saying it £250 first year, then every year after that it goes down to £180. What does that mean? So now I've got two road tax... M: Standard rate – what does standard rate mean? M: I don't understand why, after the first year it goes down. Why would it do that? If it's the same car nothing's going to change is it? [Conversation, Round 2, Leeds]

4.3.3 Alternative cost metrics

One of the central cost issues discussed in the focus groups was the period over which costs are estimated. While fuel and VED costs are currently quoted on an annual basis, the survey team wanted to establish whether other costing periods, in addition to 'per year', would be useful to car buyers. The results stimulated much positive debate, with many participants offering support for one or other of the alternatives discussed.

Q: Is that a reasonable... an estimate of a yearly cost of running a car? F: Yeah, because you know that it is estimates on the 12,000 miles per year – you know if you only do 6,000 miles a year, just to half that cost. But it also on the A2, it also gives you your monthly cost of fuel, per month – which is good because most people will know what they spend a month as opposed to a year, on fuel [Conversation, Round 1, London]

F: I think it could be monthly or weekly, not annual. I mean I would love for my car just to take £170 per month – that would be great. But I think monthly and weekly would be better than annually and monthly... Q: Is that because weekly – that's how you think about your finances, your household finances is it? F: Weekly and monthly more than annually, yeah [Conversation, Round 1 London]

I think it's better to have a shorter period rather than the annual, because as you say, you can relate it to your filling up every two weeks, or whatever. It's easier to relate the figures isn't it [Male, Round 1, London]

F: Change the 'per year' to 'per month' and I'll be happy... F2: Why don't you put them all? Per mile, per month and per year – then everybody's happy [Conversation, Round 2, Edinburgh]

The majority of participants fell into one of two camps – those that supported an additional estimate presented on a 'per month' basis, and those who supported a 'per mile' cost. The main reason cited

[30] While it should be noted that the online survey was completed independently by participants, completion times were monitored to check that participants were not conducting online searches to check official vehicle CO_2 data. Given also the low level of success in the results, there is no evidence that this occurred.

by the 'per month' group was the fact that individual and households tend to budget on a monthly basis. Quoting a monthly fuel cost would therefore work well within this context.

> *Monthly, because I know that it's roughly monthly that I fill the car, and I know that it's roughly monthly, whatever I fill the tank up, it's gone up from say, £65 up to 80 – in the last few months [Female, Round 2, Cardiff]*
>
> *I think, yeah, I think we all kind of think monthly now. We're paid monthly, we've got our monthly, you know, we've got our lump sum each month [Female, Round 1, Exeter]*
>
> *I think it is useful, yeah, I mean you think, if you think in monthly salary, you think in monthly outlay, you think in direct debit – whatever. It brings out a kind of focus for you, or for me anyway [Male, Round 2, Edinburgh]*
>
> *I deal in months, when I'm thinking about petrol, how much is it going to be in a month – I like that... [Male, Round 2, Leeds]*

The main reason given by those supporting 'per mile' costs was the fact that this figure could very easily be linked with particular journeys as distances were often known or could estimated. The proponents indicated that it would be fairly simple to calculate journey fuel costs by multiplying fuel cost per mile by the journey distance to be covered.

> *I prefer to know the per mile – I know what mileage I do [Female, Round 1, Birmingham]*
>
> *Well I would actually, because I think, annually it just varies and so I would like to know when I popping down, out on a visit or on a shop, it's going to cost me roughly so much... [Female, Round 1, Birmingham]*
>
> *I like mile, because when my daughter says to me, mum can you take me somewhere, I can say yeas, it's 5 miles so... petrol money. It relates a little bit more, per mile [Female, Round 1, London]*
>
> *If you look at, if you pull up a journey on Google Maps, it will give you your destination from A to B, and it will tell you how many miles you're covering – so you can then work it out [Female, Round 1, London]*
>
> *Well I take trips to Manchester on a regular basis, then the pence per mile can help me work out how much my trip would cost, and then, it just gives you a better idea of where you're actually spending your money, essentially for me, because it's in trips, rather than doing, because I was a contractor it could be anywhere, so the cost of the trip is more important to me [Male, Round 1, London]*

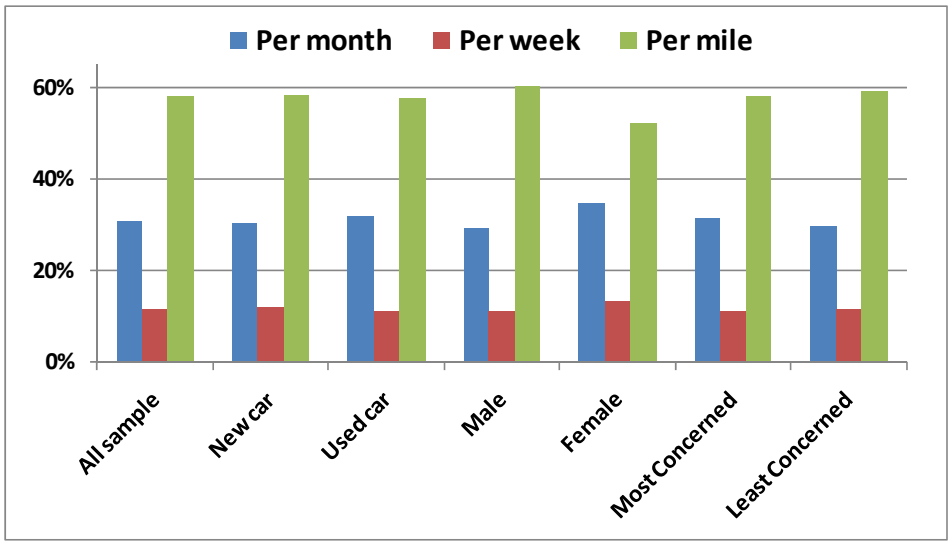
An unexpected consequence of being able to more easily estimate the fuel costs for actual car journeys was the increased motivation to switch travel mode. On several occasions during the series of focus groups, participants reported that if they knew what a particular car journey would cost in terms of fuel, they would be more likely to consider other travel options for that particular trip – possibly using public transport or even not travelling at all.

> *M: I think it's [per mile costs] trying to tell the women that are picking the kids up, that's how much it is costing you to pick up, to do the school run F: That you need to walk F2: Yeah [laughing] [Conversation, Round 1, Birmingham]*
>
> *... you might think well, is it cheaper to go in the car, or cheaper to go on the train. If it was per mile you would know – you could work it out roughly [Female, Round 1, Birmingham]*
>
> *I mean if that's to scare somebody to not use their car so much, 17 pence per mile is brilliant for that [Female, Round 1, Exeter]*
>
> *F2: If it was someone that wanted me to use my car less that probably would work... The fact that it tells you the price per mile. Q: That would incentivise you to use your car less? F2: Yes, possibly... Q: Because it's so shocking? F2: Yes [Conversation, Round 2, Leeds]*

Given the popularity of both monthly and per mile costs, the online survey addressed this issue to more fully understand the most useful costing period in *addition* to the annual one already provided. In response to a multiple-option question, the results show the highest preference is for 'per mile'

with almost 60% of the total sample selecting this option. While very popular, the online survey indicates that the 'per month' option is only of preferred by around 30% – see Figure 25.

Figure 25 Q10 Preference for additional fuel cost metric



It is interesting to note that, when testing car buyer's knowledge of their car's official data, most participants were able to provide a figure for 'per month' fuel costs (59%), followed by 'per mile' costs in second place (31%), and annual fuel costs last (26%) – see Figure 16. Confidence was also highest for monthly estimates (39%) and lowest for 'per mile' estimates (11%). The apparent discrepancy between the results reported above may suggest that while monthly cost may be better known from experience (and may resonate with monthly pay and bill cycles), car buyers would find 'per mile' fuel costs more useful for decision making if the data was available (on the fuel economy label or from other sources).

One last issue to be raised in the context is the 'cost to fill up a tank'. While not a majority, a large number of focus group participants reported thinking of fuel costs in terms of how much they spent when filling their car with fuel rather than in terms of cost per unit of time or distance driven. This observation was also a key finding of previous LowCVP Car Buyer Surveys.[31]

> *The scary thing it that, I mean a lot of people would just go into the garage and put say, £20 worth in, and you've got it in your mind, oh £20 – that's probably so many gallons, but when you do the comparison back you think – god, it's only that. And of course, because it's gone up so much, based on your original thinking, you are thinking, I'm getting so and so to the gallon, but when you work it out you're not getting so many gallons to that £20 – obviously [Male, Round 1, Birmingham]*
>
> *I just go by the cost of filling the tank up basically [Female, Round 2, Cardiff]*
>
> *Q: Do you know what your car is [mpg]? F: Not got a clue – I just know how much it costs to fill it up [Conversation, Round 2, Edinburgh]*

4.4 Comparison issues

4.4.1 Demand for on-label comparisons

Central to all of the focus group discussions – whether they were about fuel economy, CO_2 or costs – was the issue of comparison. Given the potential for providing comparative information on the fuel

[31] From 'mpg paradox' to 'mpg mirage': How car purchasers are missing a trick when choosing new cars. Robert Gordon University, Ecolane and Sustain, for LowCVP, 2008. 2010 LowCVP Car Buyer Survey: Improved environmental information for consumers. Conducted by Ecolane, Sustain, and Robert Gordon University, for LowCVP, 2010.

economy label, the project aimed to identify the consumer demand for comparative data and the most effective way that comparative data could be provided.

The first issue explored was the degree to which car buyers would find comparative information useful. In the context of fuel economy expressed in terms of 'mpg', a significant number of participants supported the provision of comparative data on the label.

> *But it does actually give you something to compare other models with, at a glance. So say if I was there looking at an Audi and I could see what their mpg is, at a glance, I've got something to compare with... [Female, Round 1, Exeter]*
>
> *If you walked into a showroom with loads of different cars, and each car had that in their window, and they were all different sized cars with different sized engines – it would be a quick thing to look at. I'm not saying you know what the comparison is, but it's a good thing to look at, to be able to say, oh, god, well that one's average, that one, god – that's really efficient and that one's not [Female, Round 1, Exeter]*
>
> *Q: Yeah? Anyone want to say a little bit more? Would it change your mind if you knew that there was a more efficient model – not the one that you were just about to buy – would it make any difference to you? M: Yeah F: Yes. It probably would [Conversation, Round 2, Leeds]*

However, a sizable minority did express some misgivings about seeing comparisons on the label, stating that they could do this themselves by comparing different labels.

> *You know when you go into a car dealership, you've got things like this, on the screen or on a stand next to it now. Yeah, so putting that, about another car, could be confusing. I mean, that should only relate to the car that you are looking at [Male, Round 1, Birmingham]*
>
> *My answer is I think that comparison is absolutely useless. Credit us with some intelligence and we will compare them ourselves [Male, Round 1, Exeter]*
>
> *I just don't see the relevance of it. You know it's £133 per month, so it doesn't matter if it's, on that scale – why's that bad and why's that good – I don't know, it's like, you decide for yourself [Male, Round 2, Edinburgh]*

More importantly, many participants were confused by the comparative labels that were discussed, the most common complaint being the lack of clarity regarding the basis of the comparison. This highlighted the importance of more full understanding how best to convey comparative data and which basis of comparison would be most effective for the majority of car buyers.

> *...I would say that it's meaning that this car is about, on A4, on the efficiency, that it's in the worst third of the... but it's taking me some reading to work that out [Male, Round 1, Exeter]*
>
> *Well is that in comparison with other BMW models? If it is, BMW might be rubbish – so what's the good of them being the best of the rubbish? If it's comparing, you know, is that just comparing between BMW, or is it comparing between every vehicle that's on sale? So then if you've got 4WD's lumped in with super-minis – it just doesn't mean anything [Male, Round 1, Exeter]*
>
> *No but why, it isn't clear. I mean, because they've got the bold thing there, and you're given all this 48.4, the 67 – they've got 58.9 standing there, I mean then they've got a little picture with a little line – it doesn't mean anything to me. I don't know what it means [Female, Round 2, Leeds]*

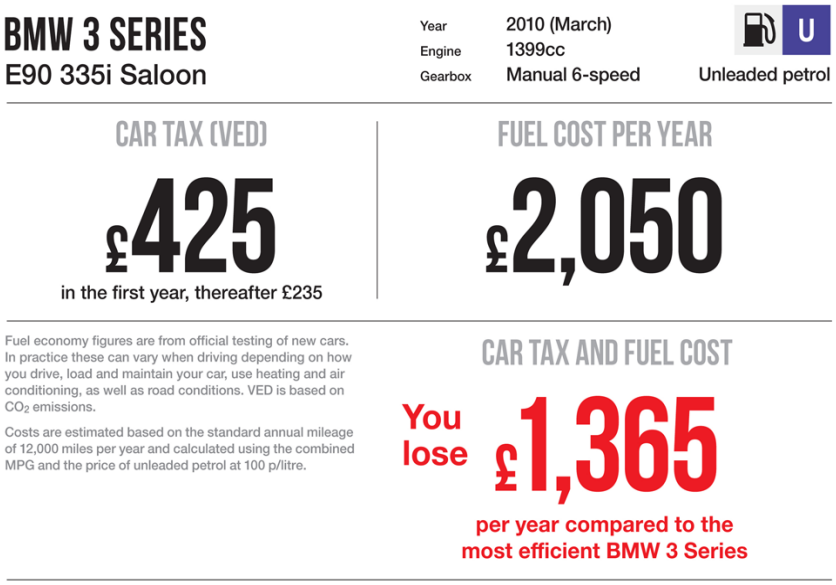
4.4.2 Emotional response to 'loss aversion'

As indicated in Section 2.2, one of the project aims was to apply findings from behavioural science to inform the design of the test labels. In particular, the research team considered how 'loss aversion' theory (which highlights the tendency of people to prefer avoiding losses to acquiring gains) could be applied to increasing the efficacy of label design.

To include this aspect of behavioural science, the Round 1 focus groups were presented with two labels each with a message comparing the annual fuel and tax costs of a particular model with others

in the same model range; one leading with the phrase 'You lose' and the other 'You pay' [more] – see Figure 26 (and also Appendix 2: B1, B2, Traditional 1 ICE, Traditional 2 ICE).

Figure 26 Q7 'You lose' visual test element (Round 1, B1)



Without exception, all three of the Round 1 focus groups collectively reacted very strongly to the 'You lose' label, so much so that its merits particular note in this results section. Almost without exception among the participants involved, the label evoked a strong negative emotional response. When considering the two test labels, many participants were very clear that they wanted the process of buying a car to be a positive experience, albeit an expensive one. Introducing a 'lose' message at this stage was, therefore, not welcomed, even if the message was aimed at saving them money in the longer term.

While not hugely popular in itself, the 'You pay' message was considered more sober and factual, and resonated with their expectation that buying a car would involve a significant level of expenditure. This contrasted with the sentiment of 'losing', which was not considered to be an appropriate way to convey the same information.

Given the strength of this reaction, transcriptions of conversations from each of the three Round 1 focus groups are reproduced at length below.

> *I don't like the way it's saying 'you lose'... Q: Oh, expand on that... Because I don't think that's a good selling point to somebody, if you want to go and buy something, and you're told you are going to lose something already – you understand you've got to pay, because of course, when you buy a car you've got something to pay. But I don't want to be told that I'm going to 'lose'... Q: I appreciate that point... does it explain it clearly what you are going to lose? ... Yeah, well that I'm going to lose car tax and fuel costs, that's what I'm going to lose. ... to me that's also telling me that this car is crap, that some of our other 3 Series are much better than this one... Q: And basically, it sounds like you don't like that... No [laughing] [Female 1, Round 1, London]*
>
> *Q: ... so you're happy for it to say 'you pay'... Yeah you pay more, that's clearer in my head than 'I lose', and it being in red, and just looking like danger, and just steer clear and I would walk straight past and not take any notice of it.... Q: So that would be a turn off basically... Yeah, and this clearly tells me that I am paying more, which would then prompt me to think, Ok, let me look at something that would cost less. [Female 2, Round 1, London]*
>
> *Q: [Holding up the test label B1] What information is it conveying to you? F: It's negative... Q:Negative in a good way or negative in a bad way? F: In a bad way... You're losing money, it's almost like saying – don't*

buy this, to me... M: Yeah... Q: Is it a warning that might be useful to you, or is it just a warning? M: Well you look at it and you think, oh, forget that. You'd go the other way wouldn't you... Q: It's just a turn off? M: Yeah, it's a turn right off... F: It's appalling isn't it... M: You lose... M2: Yeah, I don't think you would look twice at that. [Conversation, Round 1, Exeter]

Q: [Holding up the test label B1] What does that tell you? F: I just think it is a negative comment, and I can't, I can't see the point of advertising that... M: It's supposed to be a negative comment.. Q: So, you feel, I sense there is an emotional reaction to that..? F2 Well... you lose 1,365... I don't think I would even read anymore... F: But you are going into pay something, when you go into buy a car you are going into pay, so... F2: Well you paying 1,365 more, is still the same as... F: I know, it's just a different way of presenting it, but if I read that, straight away, I'm not going into lose anything, I'm going in to pay something, so that to me is worded better... [Conversation, Round 1, Birmingham]

[Later to confirm] Q: ...obviously the whole framing of the 'you lose' as opposed to 'you pay' is very unpopular with people? F: Yes... F2: Yeah... Q: Can we just re-cap why that was? F: It's negative... F2: If you lose anything, you don't really want to be seeing that do you... Q: So, buying a car is a kind of positive experience? F: Yes... F2: Yeah...Q: Something that you look forward to – and then to be confronted with this information is... F: You expect to pay. But you don't expect to lose... F2: Yeah... F3: Because you're already losing money by driving off the forecourt aren't you. [Conversation, Round 1, Birmingham]

The outcome of these very clear and strong negative signals, was that the 'You lose' messaging was not taken forward for further exploration using the test labels in Round 2. As a result, Round 1 labels known as 'Traditional 1 ICE', 'Traditional 2 ICE' as well as visual elements B1 and B2 were not used in Round 2.

There was also evidence that the group participants were not at all clear as to the basis of the comparison used to make the 'You pay' and 'You lose' figures. This issue, which involves an understanding of how models are compared with others in the 'range', is explored more fully in the next section 4.4.2. A related issue, that of ranking models (which also led to strong emotional reactions in the focus groups) will be discussed in 4.4.4.

4.4.2 Bases for comparisons

Due to the availability of current data sets, the only practical option for providing comparative data is to compare cars in the same 'model range'. Practicalities aside, it became apparent from the group conversations that participants were in two minds about whether 'vehicle class' or 'model range' comparison were preferable; some participants changing their opinions after talking through the issues with others.

Well, if you have decided on the type of car, and you want a 3 Series, then you would be more interested in a comparison of the same series wouldn't you, because that's what you have decided you wanted is 3 Series... [Female, Round 1, Birmingham]

In most cases you would perhaps be comparing a Focus and a Golf for instance, something like that. That's the information and the comparison you want to see, not cars in the same range [Male, Round 2, Cardiff]

Q: Would you like similar cars of the same model, would you like all cars or would you like cars of similar size across different models? F: Similar cars, different models. Because when I was looking for my car, I looked at Renault, Volkswagens, Vauxhalls... Q: And how would you define a similar car in your mind? F: Umm, size, engine size... [Conversation, Round 2, Edinburgh]

Going back to Ford – if I'm looking at a Focus, I'm not going to want to compare it to a Fiesta, or a Mondeo because they're the cars are completely – three completely different cars [Male, Round 2, Leeds]

It also became apparent that, while the term 'vehicle class' was understood by the majority of participants, there was much confusion about the meaning of the term 'model range'.

Well you could say that there's a range in manufacturers – they do their 3 Series range that is the 3 Series, but then they would say, you could say a range as in that category of cars, if you bring in other manufacturers – which range of theirs? So would that be compared to a Mondeo, would it be compared to a Audi A4, or what? You know, who knows... [Male, Round 1, Exeter]

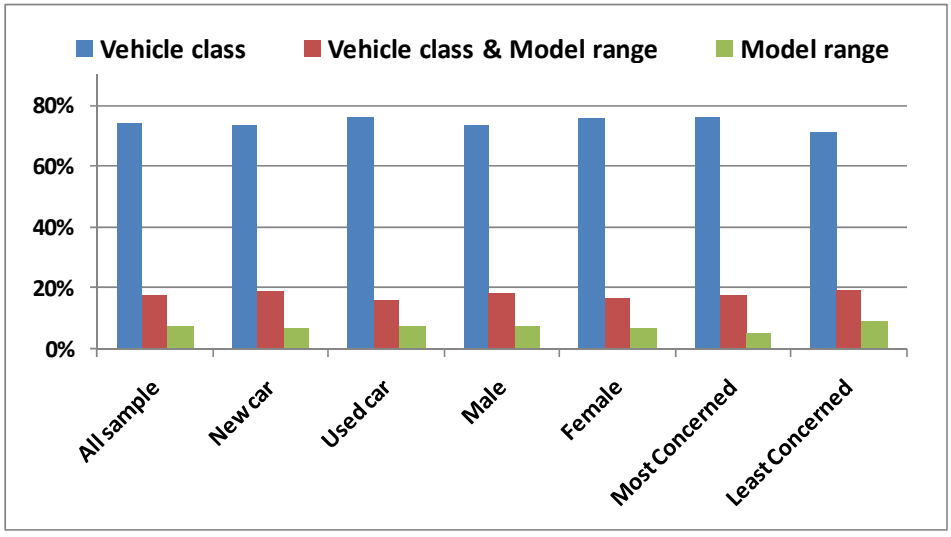
Q: Can I just open that issue about what model range means to you...? F: Maybe it might be some extras on the car? Q: Extras. Yeah, could be extras

I think it's generic. Ford, you know, if you were looking at a Ford Focus it would be that particular size of car across the, you know, not just Ford, other cars [Female, Round 2, Edinburgh]

The model range is, what other cars are similar to this model – not necessarily the manufactures... because the Mondeo isn't the same sort of model range as what I would consider a Focus to be – I would consider other cars, like an Audi A3 or something, to be in the same as a Ford Focus, because it's a similar shape, similar engine sizes... [later] You know what, I don't even agree with what I've just said [Laughing]... I think it's – yeah, Ford Focus ST, Ford Focus.... whatever, all Ford Focus [Male, Round 2, Leeds]

Given that no overall conclusion could be drawn from the focus group discussions regarding the most popular basis for comparison, a series of questions on this issue were included in the online survey. One of these simply asked respondents to selection which option their preferred, 'vehicle class' or 'model range', care being taken to explain the meaning of each term (the response type allowed both options to be selected, and invited suggestion for 'other' options). The results showed an overwhelming majority in favour of comparisons made on the basis of 'vehicle class' – see Figure 27.

Figure 27 Q7 Preference for basis of comparison



The online survey was used to further test car buyer's understanding of comparison terminology by providing a list of vehicles (specifying manufacturer, model, engine size, fuel type and body shape) and asking respondents to place them into the same 'vehicle class' and 'model range' as a Ford Focus, 1.6 litre, petrol, family hatchback. The results are shown in Figure 28. (Note the 'correct' responses for 'vehicle class' are: A, possibly C, D; for 'model range': A, C).

The results show that the respondents had very little understanding of what constitutes a 'vehicle class', despite this being the most popular basis for comparison by far; fewer than 10% of the sample were able to answer this question correctly. The responses shown in Figure 28 suggest that manufacturer and engine size are the key factors being used by respondents to group vehicles into a class, fuel type and vehicle shape being less important. A different manufacturer seems to disqualify a vehicle from being the same class according to these results.

Figure 28 Q6a Same 'vehicle class' as Ford Focus 1.6 petrol family hatch

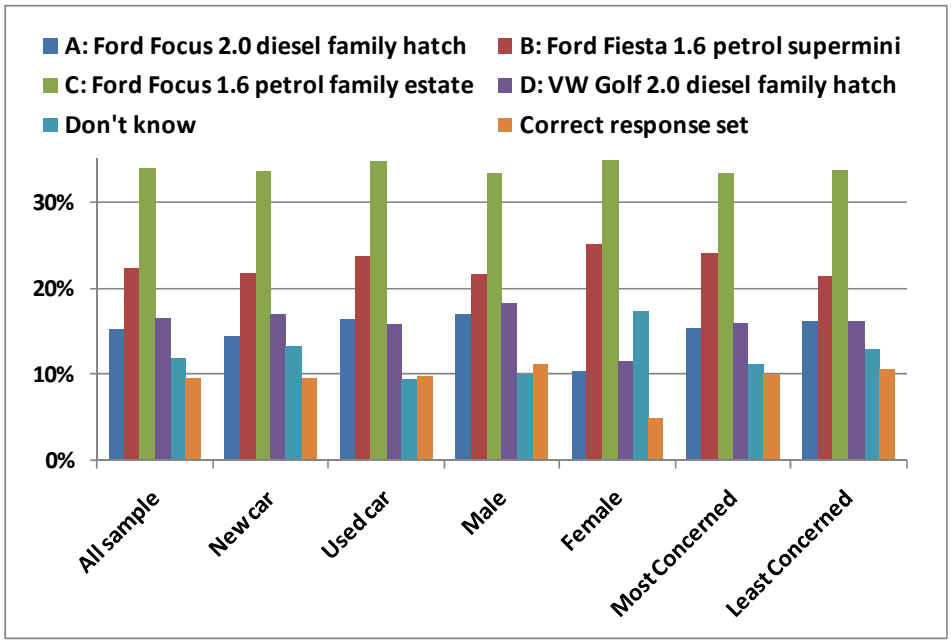
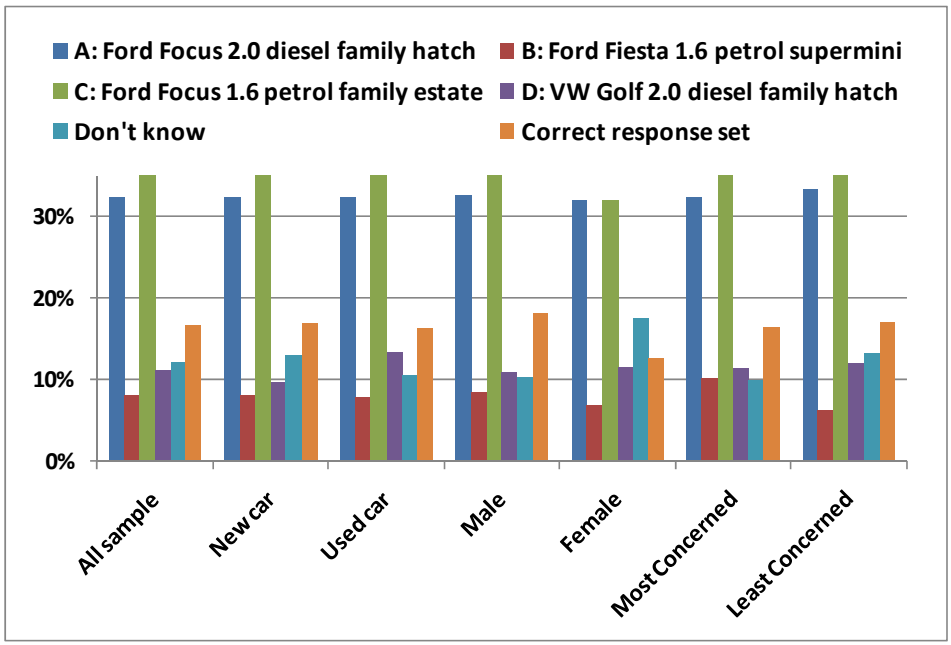


Figure 29 Q6b Same 'model range' as Ford Focus 1.6 petrol family hatch



For 'model range', the results shown in Figure 29 initially look more encouraging with over 30% of respondents selecting the other two Ford Focus models from the vehicle list provided. However, around 20% also selected other models in the list with the result that only 17% of the online sample selected the correct set of models; although a higher proportion than selected the correct set for the question regarding 'vehicle class'.

4.4.3 Timescale for comparisons

One last issue discussed in the context of the basis of comparison was the timescale over which fuel and tax costs are compared. Some of the alternative labels presented cost comparisons over a three year period in contrast to the more usual and current one year time frame. Of the two options, the

majority of focus group participants were in favour of an annual comparison, the main resistance to three year period being the long-term uncertainties in fuel price and VED rates.

I would like the three year comparison, because I get cars every three years, I just get my whatever, like I've just done in 2010, and then at the end of three years I will get another one basically – so for me it's actually quite handy [Male, Round 1, London]

It's not so much bad news – it's just I can't think three years ahead. You know, I'm here and now – who knows what's going to happen, you know I can't, it's not going to be the be all and end all that I buy this car because over three years it's going to save me this or cost me this [Female, Round 1, London]

And also we don't know what will happen to the fuel prices in three years time [Female, Round 1, London]

F: I don't like this! I don't want to know that I am going to be paying £7,000 over three years. I don't want to know that. I'd rather not think about that. You just do it without thinking about it. Q: Is it useful even though you don't want to know? F: No. It's not useful. It's a deterrent. Q: What would you do with that information? F: I'd rather just not see it – I'd rather not know that I was going to be forking out £7,000 0ver the next three years, it's easier to do it just doing it without thinking about it! [Laughing] [Conversation, Round 1, London]

4.4.4 Design options for presenting comparisons

The visual elements used to test model comparisons are shown in Appendices 2-3.

At several points during each focus group, alternative labels showing comparative information were presented to participants for discussion. These included comparisons of 'mpg', fuel cost, VED cost and annual fuel and tax costs combined. Across all these issues, a number of key observations can be made regarding the presentation of comparative information.

The first is the demand for clear explanation of the basis of comparison (which ever basis is used) and for all comparative scales (in whatever form) to include clearly marked appropriate numerical scales. Where appropriate, many in the focus groups also welcomed the addition of the actual model name alongside the 'most efficient' or 'best' as shown on the scale.

M: Yeah, there's the... it's the 43rd in the BMW 3 Series range – that's the first time we've seen saying what that bar graph is comparing it with... Q: So that's important? M: Well whether it's any better or not – the layout isn't as good as the speedometer one – but there is actually some writing underneath to tell you what, where or why it's... Q: So B4 is clearer on the basis of comparison? M: Yeah

F: B2 graph is definitely clearer than B4 graph Q: Why is it clearer? F: Because it puts the 170, it shows you on the graph with two figures either end, at the bottom [Conversation, Round 1, Birmingham]

M: I think B3 [dial] is better, but the one thing that is does do, it just says 'best', whereas that one [slider]... it gives you a figure, it says £92, so you can't see like, where 170 is... F: We didn't like the 'best' F: So, if that had 92 and 268 there, it should have the figures either end F2: Yes, I see what you mean Q: Oh Ok, so you would prefer to actually have the numbers F: Yeah [Conversation, Round 1, Birmingham]

F: It does tell you that it's just over half way to being one of the most efficient cars, and then there's also a little bit about the eco stop-start – where it stops when, you're at traffic lights and things like that... Q: ... and is it clear that that eco stop-start is the most efficient model? F: I think it's only clear if you happen to have a stop-start car, or read it – you may not know anything about them [Conversation, Round 2, Leeds]

One of the three main approaches used to visually present comparative information during the label testing was the so-called 'slider' design – two examples of which are shown in Figure 30 (applied to monthly fuel cost comparisons). Although the evidence is qualitative in nature, the focus groups expressed a significant level of support for this design style.

Q: Did you say bar graph? Yeah it's got that bar graph F: And when it says best BMW 3 Series, that's much more clear. But say if you were going to, if you were interested in emissions, or bothered by them, then you would know that the 3 Series would be the better one out of the two to go to [Conversation, Round 1, Birmingham]

Q: What do you think about the scale? Is it useful having it there, because it wasn't on the other ones M: Yeah, I mean it's just a visual representation isn't it. So, you know, it's all about picking stuff up quickly, and yeah you can see, on a general scale of economy, this car is just under half way as to what it could be if, I presume, you went for a greener car [Conversation, Round 1, London]

Figure 30 Examples of 'slider' style visual comparison labels (Round 1)

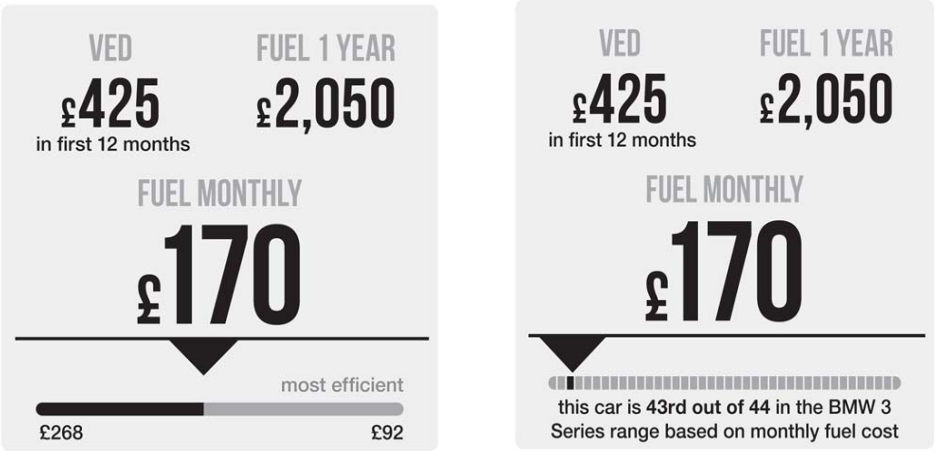
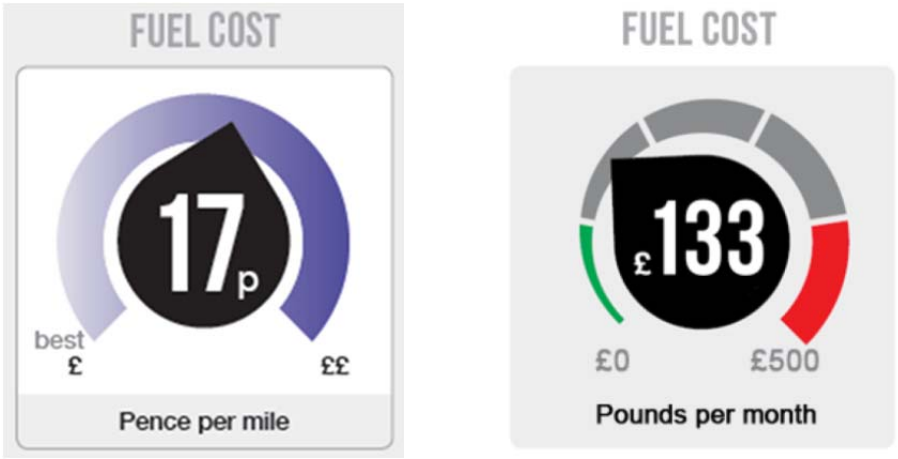


Figure 31 Examples of 'dial' style visual comparison labels (Rounds 1 & 2)



One notable observation made during the Round 1 focus groups was a very strong and negative reaction to the 'slider' showing information in ranked format (Figure 30, right) as opposed to the use of a linear scale. The reaction was quite emotional in most cases with participants expressing incredulity that there could be so many models within the BMW 3-Series range.

F: There can't be 44 different types of BMW 3 Series, can there? There can't be 44 different cars... Q: There are, apparently... F: 44? In one series? In a 3 Series?... M: Different shapes, power to weight ratios... F: I thought, I can't have read that right... F2: We didn't get that either [Conversation, Round 1, Birmingham]

F: Well, they are telling you something different in as much as with this one they are telling you that there are 44 cars in that series, which just seems unbelievable, doesn't it? And really, in a way, you don't need to know that – I don't want to know that I'm second to last, whereas that one shows it more sort of in the middle with a figure either end, on B4 [Female, Round 1, Birmingham]

I wouldn't have thought there were 44 different models in one series – that astounds me. How can you make 44 different types of one car [Male, Round 1, London]

In the context of fuel economy, the display of comparative information using a slider style scale was explored more fully in the web-based survey. Presented with the three visual elements shown in

Figure 32, respondents were asked to select the option that most clearly compared the fuel economy of a particular model with others in the same range (terms explained).

While the result of this question confirms one of the previous findings from the focus groups (the preference for the clarity of the 'white-on-black' 'mpg' design), it is also at odds with the negative reaction to the ranking design reported earlier, the online sample showing equal support for the ranking and linear scale options. (One possible reason for this discrepancy is the fewer number of models ranked on the online survey label as compared to the 44 models of the focus group label.)

Figure 32 Q8 Preference for MPG comparison design (Round 2)

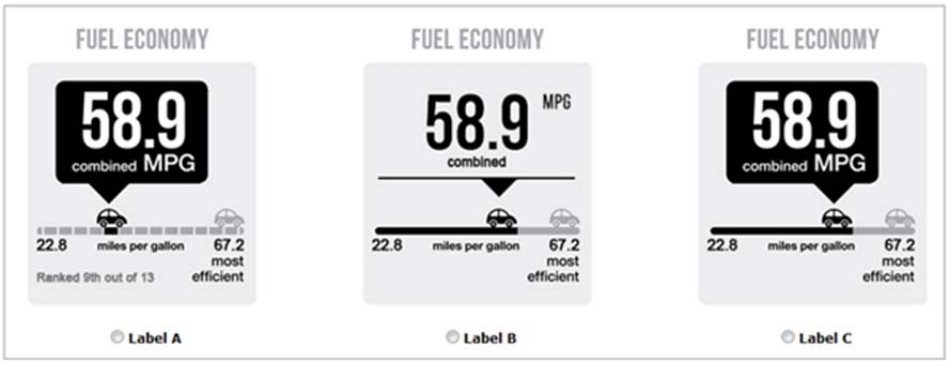
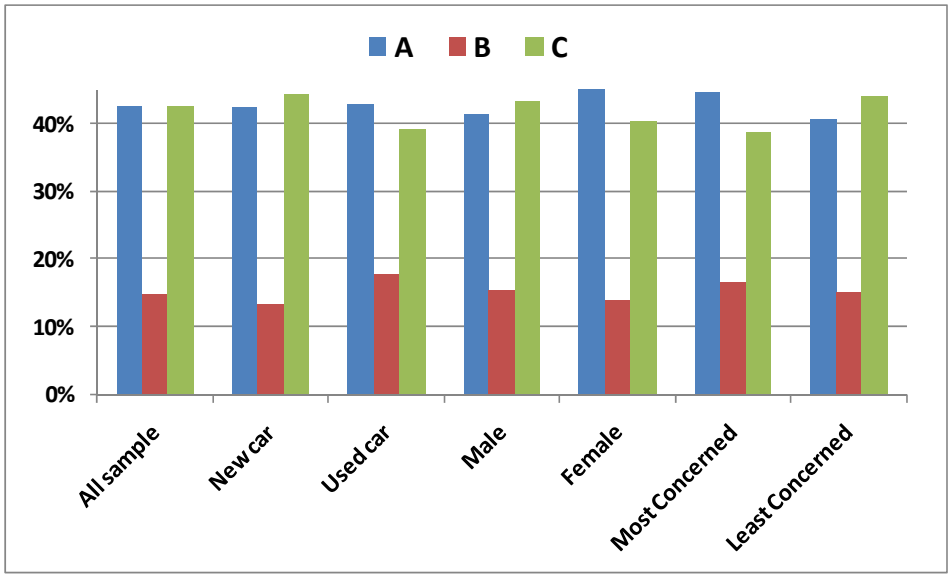


Figure 33 Q8 Preference for MPG comparison design



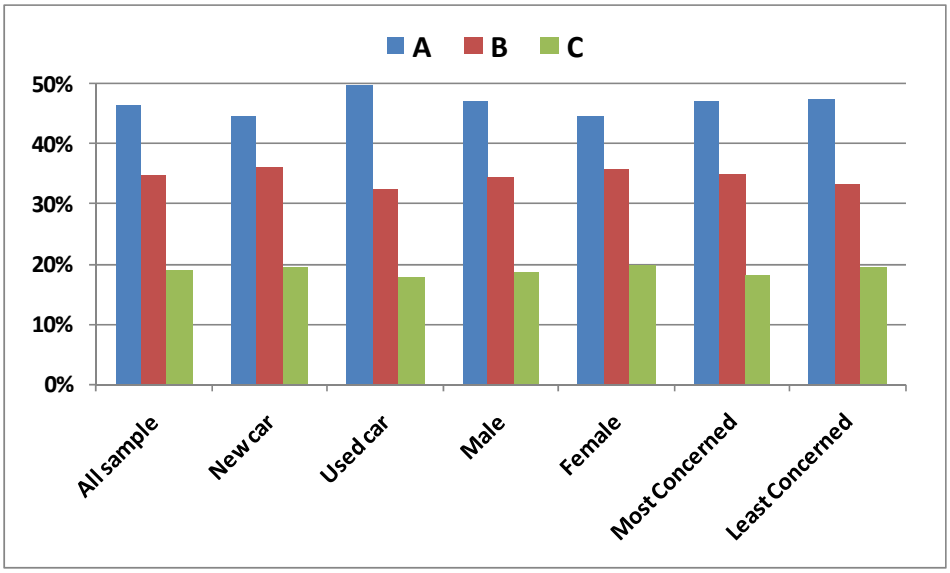
Second of the three main methods used to presenting comparative information was the so-called 'dial' design – two examples of which are shown in Figure 31 (applied to 'per mile' and 'per month' fuel cost comparisons). As was the case for the 'slider', the focus groups expressed a significant level of support for the 'dial' comparison design style.

> *Q: Why do you prefer B3? F: Because it stands out better doesn't it... Yeah it's a bit more clear information for us Q: Why is it clearer? F: I think this graph is a bit clearer... because of the use of the... F2: It's like a milometer... F: That's it [Conversation, Round 1, Birmingham]*
>
> *I prefer the speedo, but one thing that I think is missing is the figures, you know on these ones they have £92 and most efficient, so maybe having those figures down there as well [Male, Round 1, London]*
>
> *Rita and I prefer D1, again it's very clear and plain to see. We quite like the speedo thingy, although we discussed it and thought that we would prefer it if best and worst if had a little monetary value next against it – that would make it a bit better [Male, Round 1, London]*

In an attempt to better understand the relative popularity of the 'slider' and 'dial' comparison designs, the online survey presented the same information using three label options and asked respondents to select the option that most clearly compared the fuel costs of a particular model with others in the same range (terms explained) – see Figure 34.

Figure 34 Q11 Preference for fuel cost comparison design

Figure 35 Q11 Preference for fuel cost comparison design



The results show that, when used to compare fuel costs over a monthly timeframe, respondents have a preference for the 'dial' comparative design. However, two issues should be noted: first, the strong second preference expressed for the 'slider' design; and second, the fact that the result may be context dependent and may not be the case when comparing other metrics.

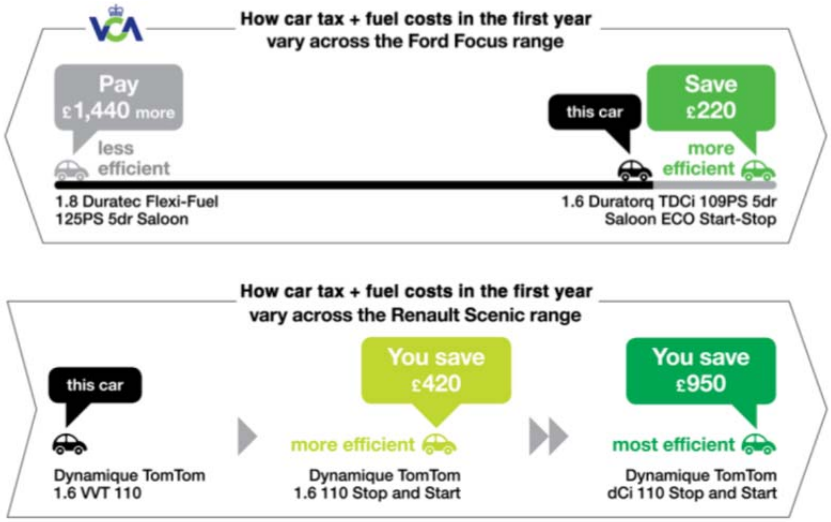
Third of the three main options tested to visually present comparative information was the so-called 'Buyer's Guide' – two examples of which are shown in Figure 36 (from Round 2). As shown in the top image, some of the labels tested included logos from well known and less well known organisations including WhatCar?, VCA and DfT. Although a mixed reaction overall, the focus groups expressed some support for at least one version of the 'Buyer's Guide' format.

> *Yeah... the moment I looked at it I wasn't confused or having to work things out as much as I have done on the other ones, so, it's very clear. I think the very fact that it says 'worst' and 'best', and with What Car? there, because that's going to have an indication of how they have things in their magazine, it's not, 'the worst' doesn't have the negative connotations as, 'you lose' – which is a lot worse I think. So, I thought it was really good, very easy to work out and quite explanatory [Female, Round 1, London]*
>
> *In a way it's quite good, because it's telling you about a different type of car, and it's telling you that that one is going to cost you £1,440 more, so it's actually... telling you that there's £1,440 difference... when I*

first looked at it I thought it was to do with the price of the car, but it's not, it's actually that the car tax and fuel [Male, Round 2, Edinburgh]

Its saying don't buy the car you're thinking about, buy the greener one! [Male, Round 2, Leeds]

Figure 36 Examples of 'Buyer's Guide' style visual comparison labels (Round 2)



Two main variants of the 'Buyer's Guide' were tested; one showing the 'best' and 'worst' in a model range (Figure 36, top image), the other 'better' and 'best' models (Figure 36, bottom image). Overall in the focus groups, opinions were divided as to which was the preferred option.

Q: ...is it better to see something that is a bit better, rather than just the best, on this definition? Is that a general..? F: It is on this scale, because you've got an option then haven't you F2: Yeah, yeah F: You've got the option of what you want to do, and which model you want to... it's giving you a bit more of an option on that, I believe [Conversation, Round 2, Leeds]

Q: Ok, but, why do you want to see both ends? Because you're not going to go and buy the worse efficient car ... why would you want to see it there? F: People have got to have the option – everyone has a budget. And they should be allowed to – they can't say what a person's going to buy and what they aren't going to buy – that person's is on, in some way, a budget, let them decide what they want to buy. They might not be able to afford that, but they can afford that [Conversation, Round 2, Leeds]

I was going to say basically what Linda said earlier, that, what's to the back of this – to the left hand side? There's nothing – if you're going to show what's better than this car, why don't you show, to be fair, what's worse than this car? [Male, Round 2, Leeds]

While there was broad support for one of the 'Buyer's Guide' options, there was also a significant level of criticism about the comparisons which focus solely on fuel and VED costs over one year. The main issue raised was the omission of other costs – such as purchase cost and/or depreciation rates – which were thought by some to be more significant than the fuel and tax costs presented. (This also links to the perceived 'trade-offs' of buying a more fuel efficient car – see Section 4.8.)

I'm just thinking, that it would also help me if I knew the cost of the cars, because that would be a major factor. You may be telling me that I'd only pat £1,480 less with an M3, but then how much is an M3? And how does that relate to me – would that even be a factor? [Female, Round 1, London]

F: It's like a sales pitch isn't it ... Q: More like a sales pitch? By buying that you can save that, and by buying that you can save that. But at the end of the day, costs are involved [Conversation, Round 2, Leeds]

Just one point – that should say in that last box, that should say 'you save on running costs'. The reason why we want running costs, are the fact that a diesel car will cost you more money than a petrol, initially, so you lose on the purchase price [Male, Round 1, London]

In order to get quantitative evidence regarding the popularity of the different 'Buyer's Guide' options, the online survey presented the same information using two labels and asked respondents to select the option that most clearly compared the fuel and tax costs of a particular model with others in the same range (terms explained) – see Figure 37. While a sizable proportion were in favour of the 'better/best' version of the 'Buyer's Guide' (around 40%), a larger proportion (60%) stated their preference for the 'best/worst' version.

Figure 37 Q12 Preference for fuel and tax cost comparison

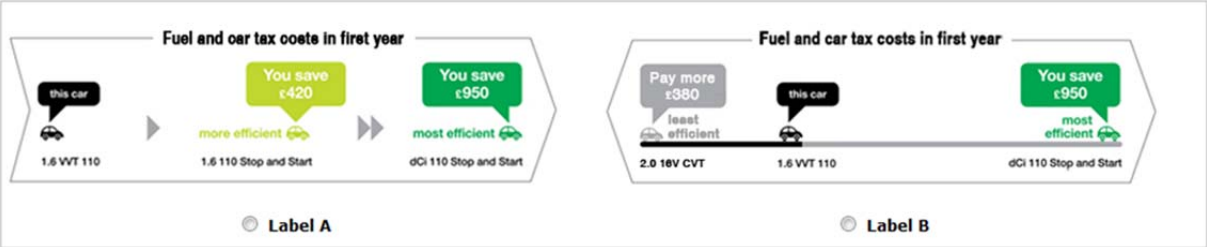
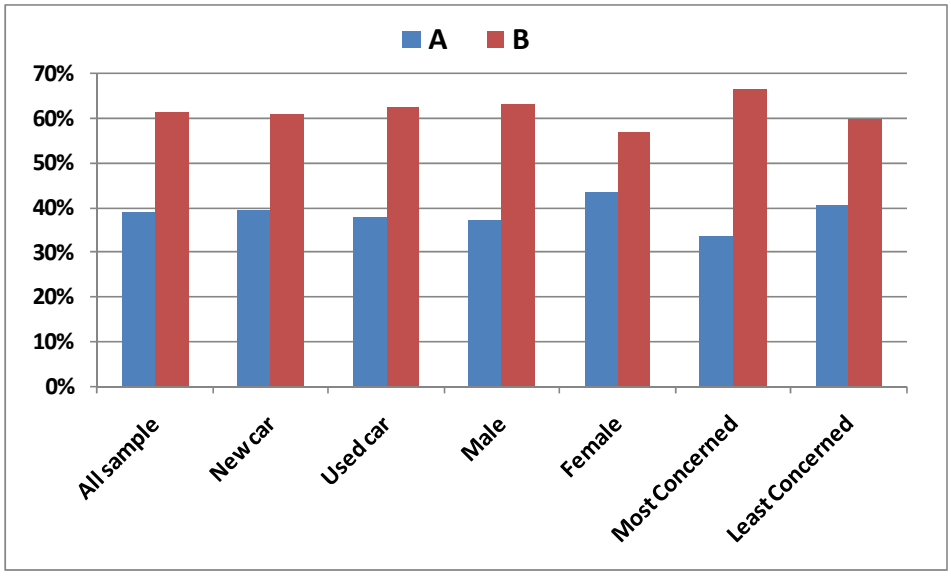


Figure 38 Q12 Preference for fuel and tax cost comparison



As part of the focus group discussion of the 'Buyer's Guide' labels, the issue of the information source was raised. As shown in Figure 36, several of the alternative labels tested included logos from well known and less well known brands including WhatCar?, VCA and DfT. While only a limited number of brands were discussed in order to test the principle of whether Government or other sources would be better received, the focus group comments suggest that citing well respected and independent organisations adds credibility and authority to the way the cost comparisons are perceived. This issue links with the 'trust' issue discussed in Section 4.1.3.

> *M: I think that, for something to look at, I think that do a comparison online or otherwise, What Car? give their credibility to this vehicle, by the various rigorous tests that they carry out on that car. It supports what this is all about. It is informative because people trust What Car? M2: Actually Which? would be better [Conversation, Round 1, Birmingham]*
>
> *It's quite clever they've put What Car? in, because we live in a world of comparisons now, and the fact that they've put the What Car? in, people would look at that and trust that... the What Car? buying guide – [one] might sort of take that away from the fact that, Ok, they've done the research and they've got the answers. I think it's quite clever that they've put that on there [Female, Round 1, Exeter]*
>
> *I think because you've got What Car? on there you immediately think, someone's looked at it already for me – I don't have to think about it. So therefore it's a good thing – if someone else has rated it already. Someone's done the leg work; it's got a rating of X – even though that might be... [Male, Round 1, Exeter]*

I think people know, Which? magazine or What Car? magazine, or most people know that they're independent. So, you can trust them more, because they're not influenced by anybody [Male, Round 2, Edinburgh]

Although WhatCar? was the main non-Government organisation proposed to the focus groups by the survey team, participants were quick to suggest other organisations they considered authoritative. These included Which?, the AA, the RAC. They also indicated that, should Government agencies make themselves better known, official Government figures were also to be welcomed. Underlying these opinions was the suspicion that manufacturers were in control of the data being presented.

Q: And apart from What Car? are there any other independent sources that you would trust? About cars... M: Which?... Q: Ok, What Car? or Which? Any third? M: RAC? Or The AA? Possibly [Conversation, Round 2, Cardiff]

Q: Can I just add one quick thing – so, we have said that What Car? lends some credibility, what about if it was some sort of Government agency's logo here, would that be credible? F: Yes M: The VOA or someone like that... M3: I don't think it is actually right to promote a third party which is a commercial organisation [Conversation, Round 1, Birmingham]

One other issue is also worthy of mention with regard to the use of independent information sources. Research shows that consumers tend to 'satisfice' when sourcing product information, only searching to a threshold level of 'adequacy' at which obtaining further information (in order to make an optimum choice) is considered too costly in terms of time and resources. [32] Where information sources are trusted, car buyers may therefore rely on this information to reduce the (perceived) need for further time-intensive research.

4.5 QR Code Reader

In the second half of the focus groups, new technologies were introduced to the participants for their consideration. These included a relatively recent IT technology, the QR Code reader, which was first demonstrated and then tried by the focus groups participants. As detailed in Section 3.1.2, two live tools were tested: a personalised fuel costs calculator, and a 'glossary' providing detailed information regarding a terms used for electric vehicles. In Round 2, a third model comparator tool was also presented in a 'mock-up' format rather than as a live test.

Although not a statistically large sample, many of the focus group participants indicated a general recognition of the QR Code and how they were intended to be used.

Q: So you don't know what they are called but you know what you do with them? What do you do with them? F: You point your iPhone or you smart phone whatever you've got to it, and it downloads the information onto your phone [Conversation, Round 1, Birmingham]

I see them all over the place – literally, on ads, in magazines, on bill boards... [Female, Round 1, London]

Q: Ok... you obviously recognise them... do you know what they do? F: Yeah, they take you straight through to a website [Conversation, Round 1, London]

4.5.2 Attitudes to QR Code reader

Across all six focus groups, the vast majority of participants were impressed by the ability of the QR Code reader to automatically link the printed label to live online information. Even those who had never seen a QR Code before voiced positive opinions about the technology.

Q: What are your impressions about the technology? Six of you had seen the QR code... F: Brilliant F2: I thought it was amazing [Conversation, Round 1, Birmingham]

[32] Prabha, Chandra, Lynn Silipigni Connaway, Lawrence Olszewski, and Lillie R. Jenkins. "What is enough? Satisficing information needs." Journal of Documentation, 63,1: 74-89, 2007.

I think it's accessibility – it's having the information available if you want to use it, depending on your technical knowledge, your need to know. It's as simple as that [Male, Round 1, Birmingham]

Great. I was really impressed – I've never really used one of these before, and when we did the calculator I thought that was brilliant [Male, Round 1, London]

A minority however did express a lack of interest or reservation about using such a device, with most negative comments highlighting the fact that the tools were only as good as the target website, or raising privacy concerns associate with stored data.

I've seen them but I don't use them, because for me, it's too technical. I'm just not interested [Female, Round 2, Cardiff]

... all the QR code does is take you back to an internet site ... You know, it's the website behind it – how you access the website, whether it's through a QR code or with your finger typing into the keyboard, I think is less important [Male, Round 2, Cardiff]

To be quite honest... I was just thinking, if you were involved in a traffic accident and you had killed somebody, for arguments sake, your iPhone is available for evidence in that inquiry – and you have recorded yourself as a boy racer – I mean... [Male, Round 1, Birmingham]

Of the majority who expressed support for including a QR Code on the label, many were quick to imagine how such a tool might be used (when researching models or in a showroom), and to highlight the advantages of having fast access to information under one's own control.

I suppose it's accessibility as well – the fact that you have got the information to hand when you are going out looking for vehicles, whereas normally when you're researching it you are at home on the computer [Male, Round 1, Birmingham]

M: I've seen these but I didn't realise that you could use them like this – I think it would be a really good feature. If you're in the showroom and you want to know a little bit more – rather than ask the dealer, you can just go, bang, and you've got the information to hand – so it's great F: Yeah, it puts you a little bit more in control doesn't it [Conversation, Round 1, London]

Yeah I do think it's good because you don't have to stand around in the showroom reading things, you can take it home. Once you've zapped it you can then store it on your phone [Female, Round 1, London]

4.5.3 Options for QR Code reader tools

Of the two QR Code reader tools tested, all focus groups[33] were clear that the 'fuel cost calculator' was by far the most useful, preferring it to the less interactive information glossary. The main reason for this view was the ability to *personalise* the calculation resulting in a more relevant, and more trusted, estimate of fuel costs.

Q: What did you think about the tool? Was it useful? F: I'm going to get the app as soon as I get home [Conversation, Round 1, Birmingham]

I thought that calculator – to be able to put in your miles, the sort of driver you are, the cost of fuel – and to calculate was a brilliant idea [Female, Round 1, Exeter]

Everybody's different, mileage is different, type of driving is different – everything is different so you can personalise it [Female, Round 1, Exeter]

M: I've seen these but I didn't realise that you could use them like this – I think it would be a really good feature. If you're in the showroom and you want to know a little bit more – rather than ask the dealer, you can just go, bang, and you've got the information to hand – so it's great F: Yeah, it puts you a little bit more in control doesn't it [Conversation, Round 1, London]

F: It's brilliant – I think it's brilliant [cost calculator]. Whereas the other one that we used is too much information, too much print and like, you know just standing in the showroom you have to read it all – it

[33] The QR Code was tested in five of the six focus groups. Given the evident high level of support for the tool, the time used to test the QR Code was reallocated in the sixth workshop to allow more time to test plug-in hybrid labels.

wouldn't interest me... Q: So you would prefer some calculator rather than flat information F: Yeah [Conversation, Round 1, London]

In addition to indicating support for the 'fuel cost calculator', several participants in the focus groups also offered suggestion as to how the tool could be improved, including the addition of a save function to enable access to the information at a later date.

Is there like, on that software that you can save your details, your mileage whatever, and then swap across – is that what you're saying you could do? ... Once you've saved it, put your stuff in then just move it across, on those cars [Male, Round 1, Exeter]

... it would be better if you had a single app on your phone and you go round to a dealership, and scan the code and it would add the information into your application so you could go round scan them all, and then you could compare in the app on your phone [Male, Round 2, Cardiff]

4.6 Electric cars

4.6.1 Issues specific to electric vehicles

During the second part of the 'new technology' session, electric vehicles (EVs) were introduced to the participants for discussion. First a short presentation was made to the groups to explain the basic capabilities of the latest commercially available EVs including the Nissan LEAF. Participants were also given a short time for a question-and-answer session so that all members of the group could become acquainted with the technology.

Both during the introductions, and when first presented with test labels designed for electric vehicles (two example of which are shown in Figure 39), many of the focus group participants (who had no direct experience for owning or driving EVs) voiced their initial concerns about some of the limitations of electric vehicle technology. One of these limitations concerned the maximum driving range on one charge.

... the fact that it goes 80 miles, you know the practicality of it would make me go, yeah, what is the point of this car? I can't even get to Bristol and back [Male, Round 2, Cardiff]

You can only drive 100 kilometres before your battery runs out – it's the first thing I would see [Female, Round 1, Exeter]

Or the distance is it? You can't just say, oh, we'll drive to Manchester this weekend, because the car... they don't go very far [Female, Round 2, Edinburgh]

Another common concern was the length of time to charge an EV and the uncertainty about the location of publicly available recharging points.

Yeah you charge it while you're asleep I suppose, but, it wouldn't be much good if you go away on a journey and you want to go out again, and you haven't charged it up [Male, Round 1, Exeter]

But, if you were buying an electric car, with a limited range, I'd want to feel confident that there are sufficient places that I could go and actually plug in [Male, Round 2, Edinburgh]

While not included on any of the test labels, a third issue that focus groups gave significant attention to was the high purchase price of vehicles and battery packs. This issue is linked to, and is an extreme example of, the perceived 'trade-offs' of buying a more environmentally friendly vehicle – discussed on more detail in Section 4.8.

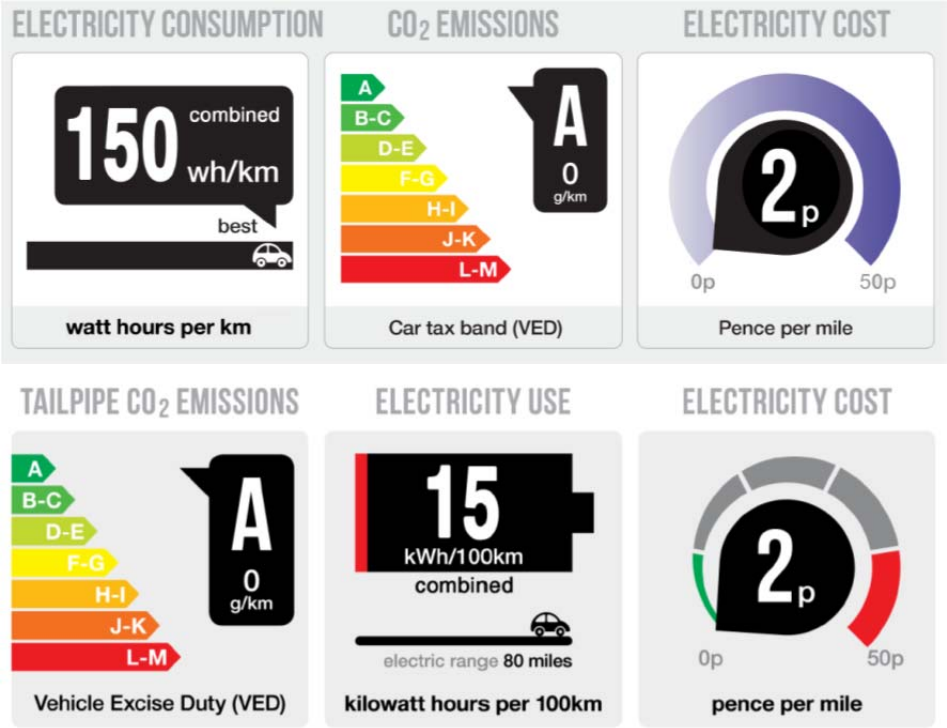
F: Oh you will have a massive outlay, on the price comparison I reckon that's a massive outlay to buy one of those. M: Or you could have a massive outlay to replace the battery [Conversation, Round 1, Exeter]

The cost of them – they're very expensive, so they're actually not economical at all, because you will pay so much for an electric car normally, that the saving that you're making doesn't equate to the cost of the car

and the running of it. Yeah, it will be cheaper to run, but you could buy a simpler diesel car, which is, over 5 years, actually cheaper to run than buying an electric car... [Male, Round 2, Edinburgh]

Well it's double the price and you can't even go more than 80 miles on it – who can afford to do that? [Male, Round 2, Leeds]

Figure 39 Examples of test labels for electric vehicles (Rounds 1+2)



4.6.2 Presenting electric vehicle information

One of the key objectives of the survey was to ascertain the most effective way to convey electricity consumption as opposed to fuel economy information. In contrast to the popularity 'mile-per-gallon' (as evidenced by this and other surveys), little prior knowledge was available regarding car buyers understanding of electric energy units including watt-hours (Wh) and kilowatt hours (kWh).

The evidence from the focus groups suggests a very low understanding of both 'Wh/km' and 'kWh/100km', two of the electricity consumption units trialled on the EV test labels.

Q: Ok, alright, and in terms of the units – we've got 10 watt hours per kilometre, 10wh... F: That means nothing to me F2: Nor me Q: ... Does a Wh per kilometre mean anything to anybody? F: Absolutely nothing [Conversation, Round 1, Exeter]

Q: Ok, does that mean anything to anybody? Wh/km? M: No, no F: Where's that? F2: Is that wattage? Kilometres M: Not really F: Wattage M: Yeah it's something to do with your electrical usage M2: What the 'h' then? [Conversation, Round 1, London]

Q: Do you understand what a kWh is? F: Kilowatt M: Kilowatts Q:Kilowatts? F: Isn't it kilowatt-hours Q: Kilowatt-hours? F: I wouldn't know what it is M: It's a measure of electricity [Conv., Round 2, Cardiff]

Several focus group participants also commented on the use of kilometres in this context, preferring distance to be expressed in miles. (This issue is linked with the general preference for fuel economy to be presented in imperial rather than metric units – see Section 4.1.2.)

Couldn't they do it in miles? Why did they do it in kilometre? [Female, Round 1, Birmingham]

There's also a mix up with kilometres and miles, then, you know, why don't you stick to one or the other? Everybody drives in miles, nobody drives in kilometres – well I don't drive in kilometres, I wouldn't know how far... [Female, Round 1, Birmingham]

Kilowatt hours per... they should have changed kilometres to miles, obviously, because we're in England [Male, Round 2, Leeds]

Given the preference for petrol and diesel fuel economy to be presented in 'mpg', some of the EV test labels were used to test focus group reaction to presenting electricity consumption in terms of its petrol 'mpg equivalent' (assuming 8.9 kWh/litre petrol). In general, this option was well received due to its comprehension by participants who were able to contextualise the figures and compare them with conventional vehicles.

The ones that say 'mpg equivalent' is more meaningful than the other ones [Male, Round 2, Edinburgh]

The point I'm trying to sneak in, is that we all measure engine power as horsepower, and no one actually knows how much one horse is anymore. But it's a relative thing – you can say that I've got a certain number of horsepower, the others are bigger, or smaller, and it's a case of what people recognise really. I think, theoretically, the new technology should move to the new measuring system. But like horsepower, it is probably better that you stick to something that you remember. Or it's an option anyway, so that's just confusing it now [Male, Round 2, Edinburgh]

I think what would be more informative, would be to keep that 168 miles per gallon, but somewhere on the side say how you got to that figure in the first place [Male, Round 2, Leeds]

However, several potential issues of using a 'mpg equivalent' figure were raised by participants. These were linked to the maximum EV driving range and (as is the case with conventional vehicles) the credibility of the test data.

That would attract me more, because I was thinking – wow, 168 miles per gallon. And then you read the small print – you're not going to be going 168 miles [Female, Round 2, Leeds]

Q: Miles per gallon equivalent – what does that mean to people? M: It explains it better than the kilowatts, but it's not going to be that all the time. If you put your lights on it will decrease [Conversation, Round 2, Leeds]

In order to quantify the relative popularity of the different options for presenting electricity consumption information, the online survey presented a list of six possible metrics and asked respondents to select the option(s) that they would prefer to appear on a future EV label. As shown in Figure 40, the most popular metric selected was 'mpg equivalent' (MPG-e: 41%) followed by 'miles-per-kilowatt hour' (Miles/kWh: 29%). All other options (including those suggested by respondents) were selected by fewer than 12% of the sample.

This survey question was posed in connection with a second graphical question that offered three options within a design element – see Figure 41. A similar response was found with 'mpg equivalent' (MPG-e) accounting for 63% of all responses, and 'miles-per- kilowatt hours' (Miles/kWh) in second place at 30%.

Test labels showing electricity and tax costs for electric vehicles were also presented to the focus groups for consideration. Apart from the issues of high capital cost (reported above), participants were generally impressed by the low running costs.

Q: Ok, so what are your reactions to these labels? F: Electric cars are a lot cheaper to run, than fuel cars [Conversation, Round 1, Exeter]

No car tax – that's a perk. That's a selling point [Female, Round 1, London]

F: I'm sold [laughing]... Because it's cheap... It's cheap cheap Q: And is this label making it clear quite how cheap they are? F: Very much so, yeah. It's the best for electricity costs – it's most efficient basically. Per month – pittance, per year – pittance. No tax – yay! [Conversation, Round 1, London]

Figure 40 Q13 Preference for electricity consumption units

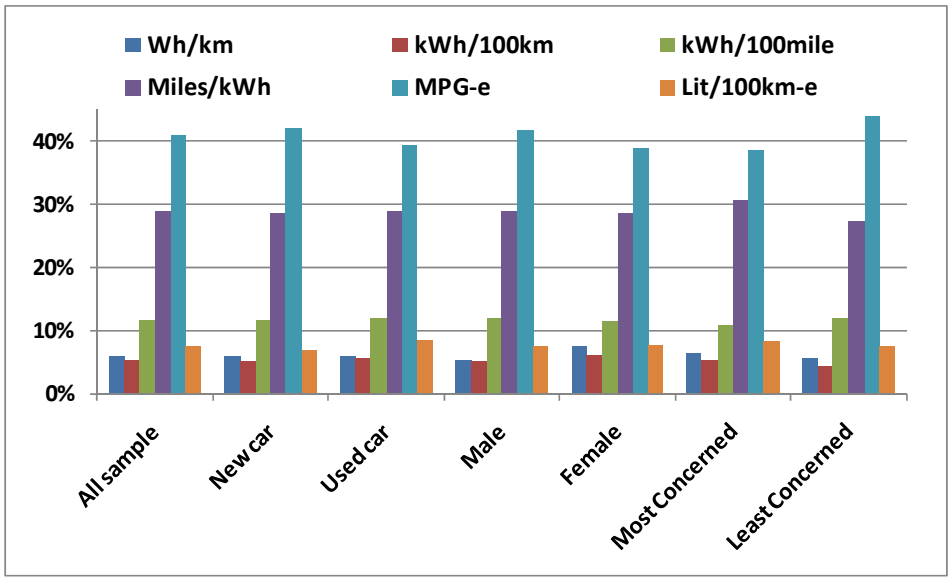


Figure 41 Q14 Preference for electricity consumption units

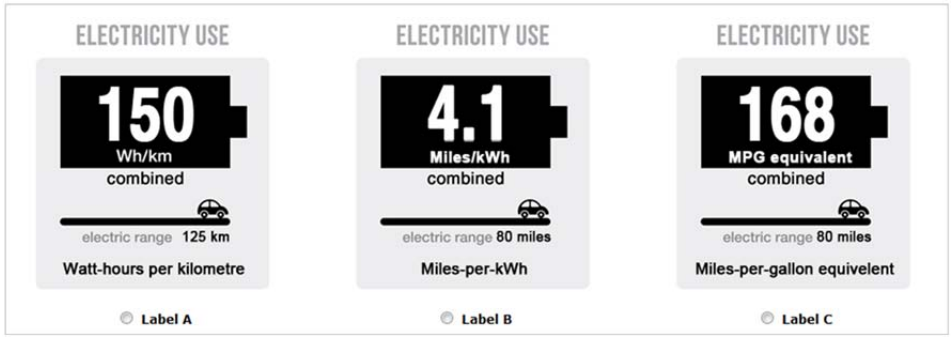
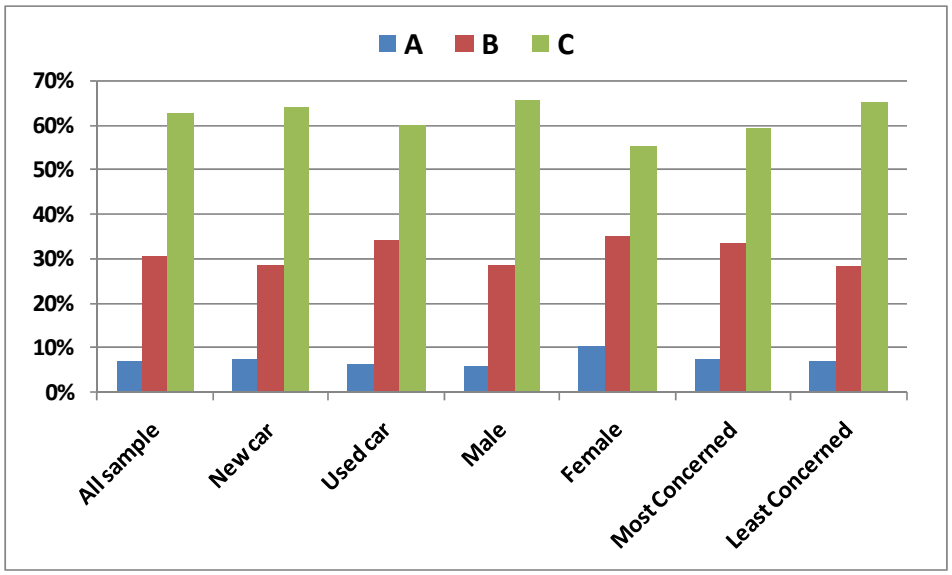


Figure 42 Q14 Preference for electricity consumption units



As was the case for conventional vehicles, several participants stated a preference for seeing VED tax costs over VED tax bands, many not at first linking the zero CO_2 emissions with zero-rated tax.

> *Well it's an A – but I don't know what the significance of well-to-well is, so I don't want to know all the emissions that need to be for that to be a red. All I want to know is what the letter is, and how much it's going to cost me [Male, Round 2, Cardiff]*
>
> *Well it says zero g/km, but that doesn't necessarily tell you there's no cost [Male, Round 2, Edinburgh]*
>
> *Yes. But we don't know whether zero emissions equals zero tax, or whether zero emissions equals £70 tax [Male, Round 2, Edinburgh]*

4.6.3 Additional information and comparison with ICEs

Given the novelty of EVs for most consumers, focus group conversations included a discussion as to whether car buyers would find it useful to have additional EV information included on the label. This information would only appear on labels for new vehicle types (including EVs and PHEVs).

In general, the group comments suggested a strong demand for additional EV information, the most popular suggestions including driving range (raised at the outset of the EV session), charging time and the locations of public charging points. Vehicle and battery costs were also mentioned.

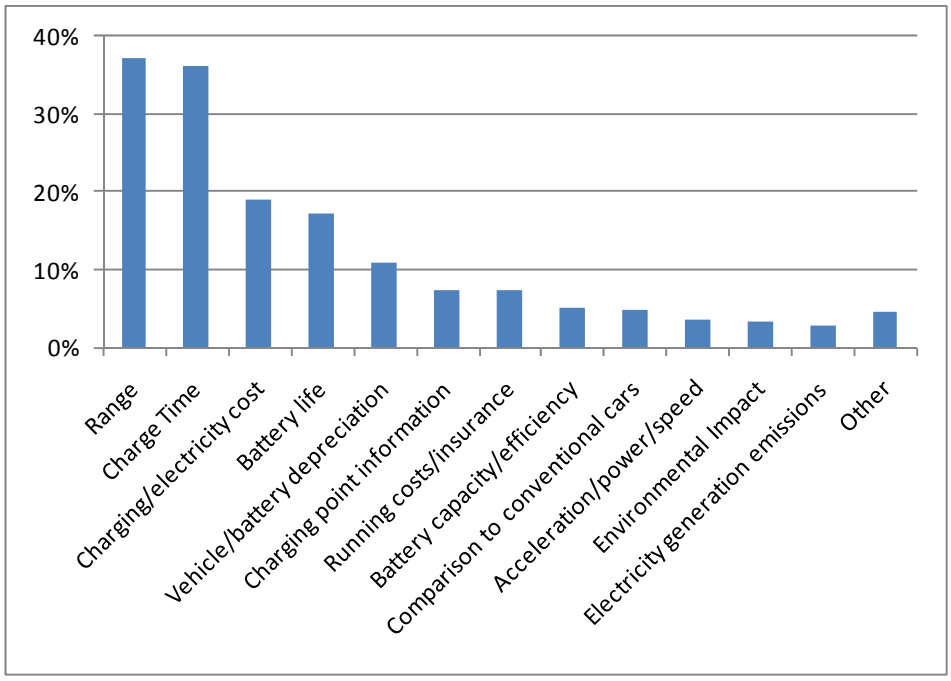
> *... if you want to buy a Nissan LEAF on cost, but as soon as you realised that it only went 80 miles before it had to be, have an 8 hour charge, you'd then start to think, I shall go for the Renault Scenic [laughing]. It's not enough information – it is misleading information [Male, Round 2, Edinburgh]*
>
> *Q: Ok, is there any other information about electric vehicles that you would like to know that isn't shown on this label? F: How much does it cost to buy one? F2: How long does it take to charge it up [Conversation, Round 1, Exeter]*
>
> *And the other thing I think would be useful is if you had, you've got a QR code here, but something with like – find a link, that gives you a map of where the locations are for charge points [Male, Round 2, Cardiff]*
>
> *The cost of the battery, overall running cost over 10 years, but battery and servicing and that sort of thing. I would want to know a bit more about that [Female, Round 1, Birmingham]*

To better quantify the demand for additional EV information, an optional open-response style question was included on the web-based survey; a question answered by 41% of the total sample. Broadly confirming the focus group findings, the most popular issues as rated by online respondents were driving range and the time for full charge – see Figure 43. Unlike the focus group participants, the online sample ranked charging locations as less important, preferring vehicle/battery costs and lifetimes in third to fifth place.

A final issue raised in the focus groups was whether there was a demand for the EV labels to present comparisons with all vehicle types (including petrol and diesel cars) or only with other EV models. On the whole opinion was divided with both cases being argued.

> *I don't think you are going to go out to look at an electric car, a petrol car and a diesel car. I think you've made the decision... you're going to buy a diesel or electric or whatever, before you step out of the door. So, I don't really see the point in having a comparison in the running costs [Male, Round 1, Birmingham]*
>
> *I think it's important to link the Nissan with other electrical cars, because if you put it with the petrol or diesel – it confuses everybody. I think if you're looking to buy an electric car it's better to make a comparison with the other electric cars [Male, Round 1, London]*
>
> *... the great advantage of electric – or what they are trying to sell you as the advantage of an electric over a petrol or diesel – ...look what you get with that, with your petrol and your tax and look what you get with the electric – and you can still see the advantages can't you [Male, Round 1, London]*
>
> *Well again, I think it's suggesting one thing – that it's going to be cheaper, and everything. It's not is it? [Female, Round 2, Leeds]*

Figure 43 Q14 Preference for electricity consumption units



One particularly pertinent comment offered a potential solution. If a 'per mile' fuel cost were to adopted on future labels for all vehicle types, this would become a *de facto* comparator as all energy and fuel data would be converted to technology independent cost information.

> *The only way to compare them really – when you've got two different fuel sources – is on pence per miles isn't it, because you can't compare miles per gallon with kilowatts, kilowatt hours per kilometre can you. There's no way to compare it [Male, Round 1, Exeter]*

4.7 Plug-in hybrids

4.7.1 Issues specific to PHEVs and REEVs

Plug-in hybrid electric vehicles (PHEVs) and range-extended electric vehicles (REEVs) present particular challenges to the presentation of information to car buyers. Not only do the electricity consumption units present a difficulty to consumers (as was shown for EVs in the preceding section), there is the additional problem of how to present fuel economy information when two fuels can be used simultaneously or independently to propel the vehicle.

As described in Section 2.1, the ECE R101 regulations specify what data is to appear on the type approval certificate (Appendix 4). For PHEVs and REEVs which can be externally charged, the regulations determine the method for measurement and recording of CO_2 emissions (in g/km), fuel economy (in litres/100km); and electricity consumption (in Wh/km) over the following test conditions and cycles:

- Combined[34] cycle; 'Condition A' conducted with fully charged electrical energy/power storage device;
- Combined cycle; 'Condition B' conducted with an electrical energy/power storage device in minimum state of charge.

[34] Combined cycle (representing urban/extra-urban driving) as defined by the NEDC test cycle. DieselNet. URL: http://www.dieselnet.com/standards/cycles/ece_eudc.php [Accessed April 2012]

- Combined cycle; so called 'weighted combined' which weights Conditions 'A' and 'B' according to the vehicle's electric-only range and the assumed average distance between battery recharges.[35]

At present, only the weighted combined figures appear on the Certificate of Conformity (CoC), but in principle, due to the requirements of Regulation No. 101, all the above data, including Condition 'A' and 'B' figures, are available for presenting on a future PHEV/REEV label.

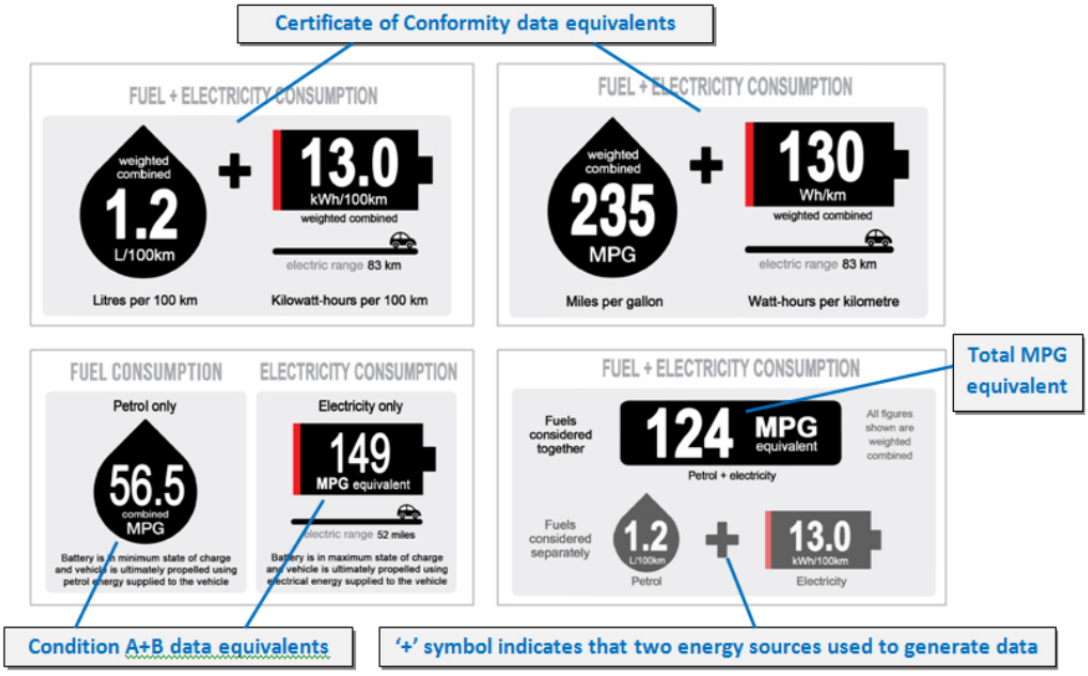
Given the large number of data permutations and possible forms that could be adopted by a future PHEV/ REEV label, a series of test labels was devised that used the CoC data as its starting point. However, in the light of the low level of understanding of both 'litre/100km' (fuel consumption) and 'Wh/km' (electricity consumption), the use of alternative units was explored to aid consumer understanding.

Figure 44 gives a schematic overview of the test labels presentation of fuel economy and electricity consumption information. The data is based on the Vauxhall Ampera/Chevrolet Volt REEV as quoted in the CoC and as required by ECE R101. In summary the four test labels shown in Figure 44 display the following data:

- Top left: 'weighted combined' data with 130 Wh/km converted to 13 kWh/100km;
- Top right: 'weighted combined' data with 1.2 lit/100km converted to 235 'mpg';
- Bottom left: Conditions 'A' data with 169 Wh/km converted to 56.5 'mpg-equivalent'; and Condition 'B' data with 5.0 lit/100km converted to 56.5 'mpg';
- Bottom right: 'weighted combined' data with 130 Wh/km converted to 13 kWh/100km and total energy consumption of approx 73.3 MJ/100km converted to 124 'mpg-equivalent';

The actual PHEV and REEV labels tested (in their entirety) can be viewed in Appendix 3.

Figure 44 PHEV/REEV labels elements test during survey



[35] The weighted CO2/fuel consumption/electricity consumption are calculated using X = (De•XA + Dav•XB)/(De + Dav), where: X = CO2/fuel consumption/electricity consumption (in g/km or l/100 km or Wh/km), XA = CO2/ fuel consumption/ electricity consumption over Condition A, XB = CO2/ fuel consumption/ electricity consumption over Condition B, De = vehicle's electric range, Dav = 25 km (assumed average distance between two battery recharges).

4.7.2 Presenting PHEV and REEV information

The headline finding from the testing of PHEV and REEV labels is that when only the CoC data is used (Figure 44, top two images), no participants were able to understand the information presented. The two reasons for this lack of comprehension were the use of metric units (already discussed in connection with electric vehicles), and the difficulty of comprehending two energy metrics simultaneously. The resulting experience was one of 'information overload'.

> *I haven't got a clue – it doesn't really mean anything to me. I don't know – I mean we were saying that we were understanding it a little in miles per gallon, in the other ones – but, that's about it [Female, Round 2, Edinburgh]*
>
> *F: That is it – it's too complicated, and I don't think you go and buy a car to do all that F2 [Figure 44, top right]: That F1 [Figure 44, top left] is just a nightmare, sorry [Conversation, Round 2, Leeds]*

The only positive comments from focus group participants related to the use of 'mpg equivalent', as this metric was more readily understood and was able to give some context to the data.

> *Q: There is an alternative unit for electricity, we can turn it into mpg equivalent. F: Yeah, because it's more standardised then and that's what people are used to isn't it M: Yeah, that would be good [Conversation, Round 2, Cardiff]*
>
> *Q: Just going on to F2, what I've done is turn one of the numbers into units that have gone down well so far – mpg. So is that a step in the right direction? F: Yes... M: Its better, but I still don't understand the 130?... M: Is it, I don't understand it. F: We need to be educated on this [Conversation, Round 2, Leeds]*

However, while 'mpg equivalent' figures are able to increase comprehension, presenting a mixture of imperial and metric units on the same label creates a new problem; namely only the imperial units are 'seen', the metric units being ignored. The effect is to misrepresent the energy information – instead of the label conveying '235 mpg *and* 130 Wh/km', the label is read as '235 mpg'. Consequently, participants treated this partial information with some incredulity commenting that it was unlikely (they thought) that you could drive such a PHEV for 235 miles on one gallon of fuel. (This links to the 'trust' issue discussed in Section 4.1.1.)

> *Well 235 mile per gallon – if I buy one of these, if I go and buy a Vauxhall Ampera today, with the type of driving I do I would not get 235 miles per gallon. I go to Bristol every day, Ok, so assume I go to Bristol every day, which is a round trip of roughly 80 miles, and I do a couple of business trips a week – so let's say I do roughly 500 miles per week – I'm not going to do that on 2 gallons of petrol [Male, Round 2, Cardiff]*

The concept of 'weighted combined' was raised with the Round 2 focus groups. Without explanation, and with only the label text for guidance, participants had no real understanding of what the term meant or implied. More positively, understanding did increase somewhat following explanation by a group facilitator.

> *And also, what I was querying – weighted combined – what's weighted combined? Does that mean how many passengers, or... luggage? [Female, Round 2, Leeds]*
>
> *[Referring to 80:20 electric: petrol split in weighted combined] I'm thinking if it's always an 80/20 – what that means is that you are actually using less petrol than you are electricity, so presumably you would have to keep on topping up the electricity to get the 124 miles per gallon [see Figure 44, bottom right]. Because if you don't you're going to get less than 124 – like 80 or something [Male, Round 2, Leeds]*

Another approach, and one already adopted in the US by the Environmental Protection Agency (EPA) for the US Vehicle Label,[36] is to present Condition A and B fuel/electricity consumption information in place of the 'weighted combined' figures. When tested in the focus groups, while there was a degree of support for this approach, many participants also wanted to see the 'weighted combined' figures.

[36] For more information, visit the EPA website. URL: http://www.epa.gov/carlabel/ [Accessed April 2012].

Q: Do you have any preference about whether you want – you just want to know how it works on average, or would you like to know the petrol and electric separately? F: Yeah, like this bit has got a bit for electric and a bit for petrol – I think it is clear to me when it split's it up [Conversation, Round 2, Edinburgh]

Well if there were miles per gallon on petrol, miles per gallon equivalent electricity and you knew how that was done. What I'm not sure about and don't know about, if you had those, would you then need a sort of combined one? [Male, Round 2, Cardiff]

I would probably want both, just because of the kind of driving I was doing. Because saying electric range is 40 miles... that would get me to work and back... that would be great. But then, if I went further, I would want to know what the combined mileage I would get out of it – so, if it gets me from A to B, to a charging point, then onto C. So I would want both [Female, Round 2, Edinburgh]

A final PHEV/REEV label tested was based on CoC data with the addition of a total measure of energy used (petrol and electricity combined) as shown in Figure 44 (bottom right). While the sample size was too small to draw firm conclusions, there was some evidence from participants' comments that this label offered the most usable combination of numerical information – an overall 'mpg equivalent' figure for the lay-person, with CoC published test data as required by ECE R101.

If you're buying a car you want to know miles per gallon – you're not bothered about kilowatts per kilometre or watt hours – I want to know how many miles I get out of my car, whether it's combined or single – I want one figure [Male, Round 2, Leeds]

F: [Looking at F5] That doesn't look as frightening, because to me, my car will do 124 miles per gallon. M: That's it – I'm happy with that [Conversation, Round 2, Leeds]

M: It doesn't matter what it is as long as you know what you're getting, in miles per gallon, again, combined – you know that you can go 124 miles on a gallon, from what you put in that car – that's all that matters. M2: Mpg, we're not talking, its gallons, and we know it's not gallons because it's electric – it's just a title... maybe you could change it to miles per unit, or whatever you want to call it. It's just a title, mpg, but everybody knows mpg. M: It's universal isn't it [Conversation, Round 2, Leeds]

In order to get more quantitative evidence regarding the most popular format and information that could be used for a future PHEV and REEV label, a question was included in the web-based survey. Given the established difficulty experienced by consumers in understanding the metric units required (by ECE R101) to express electricity consumption, the question was posed using only fuel economy data, the electricity use data being expressed in words – see Figure 45. The intention was to clarify the central issue posed by the question; namely to ask respondents which *data format* was most preferable for inclusion on a future PHEV/REEV label.

As shown in Figure 46, the most popular option selected was total 'weighted combined' energy use expressed in terms of 'mpg equivalent' (44%) followed by the separate 'Condition A' and 'Condition B' data (37%). The third option (closest to the CoC determined 'weighted combined' figures) was selected by fewer than 20% of the sample.

As part of the discussions about how best to convey fuel and electricity economy for plug-in hybrids and range-extended EVs, focus group participants were asked for their opinion on the use of the fuel and battery symbols that appear on the test labels shown in Figure 44. While for conventional vehicle labels, the online sample were equally favourable to a plain rectangle and 'oil drop' symbol format (see Figure 23), in the context of plug-in vehicles, there was some indication that the symbols were helpful to at least some car buyers.

Q: [Referring to the test PHEV and REEV labels] ...do these labels mean anything? F: That means petrol and that means electric, because of the symbols – that is it [Conversation, Round 2, Leeds]

Figure 45 Q16 Preference for plug-in hybrid label design

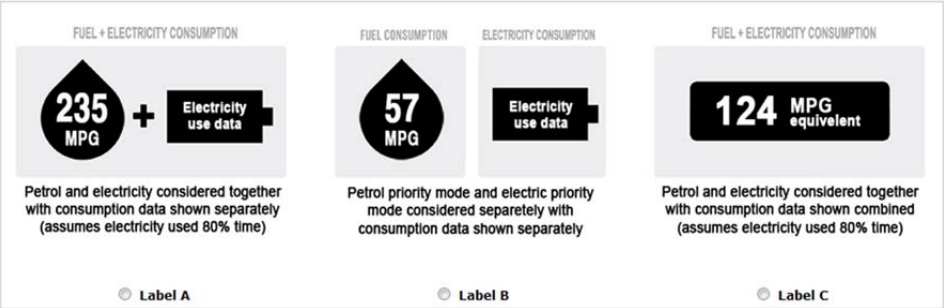
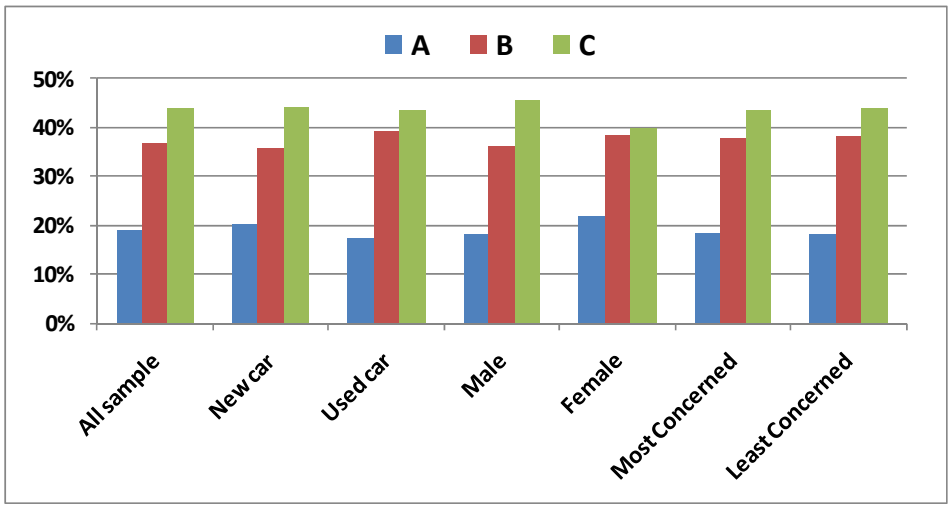


Figure 46 Q16 Preference for plug-in hybrid label design



As was the case for EVs, focus group participants were asked whether there additional information for PHEVs and REEVs should be included on the label. While only a few comments refer to this question, one suggestion was the addition of the electric range; particularly as this is model specific.

> *M: The big one is the 40 miles on electric range – we need to know that. Q: ... even though it can go further on petrol, you want to know what it can do on electric only? M: I think you need to know [Conversation, Round 2, Edinburgh]*

4.8 Use of words and colour

While many issues relating to label design and word choice have already been discussed, this section describes design issues (as raised by focus group participants) that have not been covered in previous sections.

While only one focus group participant commented on the actual title of the label, the comment noted that the current title is at odds with the main visual focus of the label which gives most prominence to CO_2 emissions.

> *I think it is emissions. But actually, I must admit, I have looked at these more and on this one, it is obvious that that bit is emissions, it's not so obvious with that because the first word that comes up is fuel economy [Female, Round 1, Birmingham]*

Of all the main designs tested in part and their entirety, the alternative label named 'dashboard' (see Appendices 2-3) was by far the most popular alternative labels according to the focus groups. The reasons given included its simplicity, modular design and the fact that the key numbers and text could be seen from a distance.

M2: A picture speaks a thousand words. If you're stood there and I'm back here, the first thing I look at, is what you're holding – I go straight to there... Q: When I walk into the showroom... M: I can see 58.9 rather than anything in your left hand [Conversation, Round 2, Leeds]

The use of colour also generated several comments. In addition to confirming that green is closely associated with 'good' and red 'bad', a few participants spoke favourably about the blue used in the 'dial' design (Round 1), and some unfavourably noted the use of grey which they found hard to read.

M: Why did they choose blue there instead of green? M: Actually, that's a good idea... F: Yeah. M: ...like go from green to red. M: I mean it all down to a green theme, so I'm confused as to why they chose blue [Conversation, Round 1, Birmingham]

Q: Is it showing you that the car is more expensive to run in a slightly clearer way than B2? F: Yes. Yeah because it's the first thing I noticed – it's got it with the dark blue. Q: How did it manage to make this amazing thing happen? F: Because it's gone to the dark, the dark blue. Q: The dark blue – so you've got a kind of visual clue there, that straight away tells you..? F: Yeah, so that is telling me, it's clearer, yeah, visually straight away by going to the darker colour, yep [Conversation, Round 1, Exeter]

Firstly I looked at it and thought, firstly I thought, what does 99 mean, on there. And I hate anything that's grey, because you're hiding something – why's it grey? If you want me to read it, make it black [Male, Round 2, Leeds]

4.9 Role of label in car selection

While the fact that the fuel economy label only plays a minor role when buying a car was discussed at the start of the focus groups during one of the warm up exercises, a few participants did voice their opinion that all the information displayed on the labels was, for them, irrelevant.

What is the point in it, because, what I don't get is, I'll be honest, I don't look at none of these figures, I look at the car and think, I want that car – and I will pay what I can afford. If I can afford it then I can afford it, if I can't then I can't. It don't look into all this rubbish [Female, Round 2, Birmingham]

Q: What is important to you? F: Honestly? None of it Q: None of it? F: No, because that's not why I bought my car – I bought my car because I wanted it [Conversation, Round 1, London]

Another minority view, but one important to note, is that several of the alternative labels tested led to 'information overload', which had the result of disengaging the participants involved from the conversations (to varying extents).

F: Well it just all confuses me, it would just put me off – I'd just end up walking out and not buying one. Q: Is the information just a put off? F: Yeah [Conversation, Round 1, Birmingham]

Q: You like A1? F: Yes, it's straight to the point and not too much information clouding the issue. That's just me, but it is, yes Q: Too much information on A4 F: Yes [Conversation, Round 2, Cardiff]

I just feel that it's too much information and I can't make my mind up going into the garage which car I was looking for – I'd have done research before I went in there, and that to me would have been too much information, basically [Female, Round 2, Cardiff]

As observed in previous studies, the focus group discussions generated much evidence regarding perceived 'trade-offs' in which improving fuel efficiency is thought necessarily to be accompanied by a loss in vehicle performance or an increase in costs. That fuel efficient cars cost more is the most common 'trade-off' reported.

F: Yeah, like if you went to the best one, which is this What Car? one, you would save £1,220, but it would probably cost you another £8,000 Q: So what do you feel about that figure that they have given you? F: I know that we have to be informed, but I think everybody knows that if you have got the money to buy the best car, you are going to get the best emissions, you are going to get the best fuel – you are going to get everything the best. Q: Do you actually think that it is necessarily going to cost more? F: Yeah [Conversation, Round 1, Birmingham]

F: We would all like to be able to drive those cars, and have those cars, but we can't all afford to purchase them Q: So the more efficient cars, or the cars with the lowest miles per gallon... F: Are out of our price range Q: ...are more expensive initially? F: Yes [Conversation, Round 1, Exeter]

If the price was better I would, yeah. They hike cars up based on the fact that it's eco friendly [Male, Round 2, Leeds]

The reverse 'trade-off' was also noted – that cars tended to get more expensive as they became more sporty and less fuel efficient.

M: Less efficient is probably more expensive. Q: You don't think it would necessarily be more expensive? M: No. If you got for like a Porsche 3-litre V8, whatever it is – that's not efficient at all [Conversation, Round 2, Leeds]

A second common perceived 'trade-off' is that newer cars are necessarily more fuel efficient and have lower emissions. This is linked with the high cost for new cars, and also the assumption that as technology improves over time, so does fuel economy and emissions control.

Yeah, what's it mean? Also, the fact that the B to C on the best BMW could relate to a brand new one, but if you are buying a second hand vehicle you wouldn't expect it to be in the lower exhaust emissions, sorry, the higher exhaust emissions, because the technology wasn't there... [Male, Round 1, Birmingham]

But you know, to avoid paying high taxes, and having cars that are more economical, you've got to initially pay out for a new vehicle, to get those issues with... so that your running costs are cheaper, your tax is cheaper. But initially you've got to purchase that car [Female, Round 1, Exeter]

5. Discussion of results

5.1 CO_2 emissions and fuel economy information

This survey finds that fuel economy expressed as 'miles-per-gallon' is of more importance to car buyers than CO_2 emissions and VED. 'Mpg' is a also a more 'front-of-mind' metric than CO_2; around 70% of the sample tested is able to provide a figure for their car's fuel economy in 'miles-per-gallon' as compared to only 20% for CO_2 emissions. This conclusion accords with the findings of previous studies which have shown that UK car buyers place great emphasis on fuel economy as a proxy for running costs, a key concern of motorists.[37]

It is for these reasons that the headline finding of this survey is that fuel economy (most commonly expressed by car buyers in terms of 'miles-per-gallon') is not given sufficient prominence on the current UK Fuel Economy Label. A corollary is that CO_2 emissions are given too much importance in terms of the space and positioning on the existing label.

While the majority of car buyers questioned broadly understood the term 'combined' in relation to fuel economy data presented on the UK label, one concern highlighted by the survey is consumers' lack of trust in the official figures, many having the opinion that the official figures were unlikely to represent 'real-world' fuel economy performance. However, more positively, this survey provides evidence that car buyers' have a sufficient level of trust in the official figures when used for comparison purposes, one of the key purposes and rationales for providing vehicle information.

The survey reveals a strong preference for fuel economy expressed in imperial as opposed to metric units. This is very much an issue for UK car buyers, and is unlikely to be applicable elsewhere in the EU where other car labels are in use. However, the central finding – that fuel economy is more important to consumers than CO_2 emissions – may well apply in other EU Member States if fuel economy expressed in local units.

When vehicle CO_2 emissions are considered by car buyers, they are most commonly linked with Vehicle Excise Duty, suggesting that, in the context of vehicle purchasing and information, CO_2 is more commonly linked with and perceived as a cost issue rather than as an environmental one. Given this association, the survey concludes that the visual links between CO_2 and VED on the existing label could be improved (as discussed in the next section).

In the light of these findings regarding model-specific CO_2 emissions and fuel economy information, this report makes two recommendations which would have the effect of reducing the space give to CO_2 information and increasing the prominence of fuel economy information. Not only would these changes accord with the findings of this and previous surveys, it would also make the title of the current label 'Fuel Economy Label' more relevant to the information contained.

Recommendation 1: Tailpipe CO_2 emissions information (expressed as 'g/km') should be given less space and importance than it is on the current UK Fuel Economy Label.

Recommendation 2: Fuel economy information (in terms of 'mpg') should be made more prominent (through better positioning and larger text-size) than it is on the current UK Fuel Economy Label.

[37] 2010 LowCVP Car Buyer Survey: Improved environmental information for consumers. Conducted by Ecolane, Sustain, and Robert Gordon University, for LowCVP, 2010.

5.2 Fuel and VED costs and comparative information

As noted above, where CO_2 emissions are considered by car buyers, they are most commonly perceived as a cost issue through the link with graduated Vehicle Excise Duty. VED is also more likely to be thought of in terms of cost than VED *band;* this preference seems to be prevalent even when the link between VED band and costs is appreciated. Of the sample tested, car buyers were over four times more able to volunteer a value for their car's annual VED cost than they were its VED band.

Despite buyers of new cars being well represented in the survey, few participants were able to confidently explain the difference between 'first year' and 'standard rates' of VED. This suggests that the relatively recent introduction of the two rates had yet to be appreciated by most motorists.

Given these findings, the survey concludes that the presentation of CO_2 emissions, VED band and VED cost on the existing label should be improved by providing more visual cues as to their link (through graduated VED). In addition, the 'first year' and 'standard rates' need to be more clearly shown than they are on the current new car label.

Focusing on fuel and VED costs, which are currently quoted on an annual basis, the survey aimed to establish whether other costing periods would be useful to car buyers. While the findings show that many car buyers would find 'per month' costs of interest (due to the tendency for households to budget on a monthly basis), the majority would prefer a 'per mile' estimate (due to the simplicity of calculating journey costs by multiplying fuel cost per mile by the journey distance to be covered).

In addition to the ease of fuel cost calculation, many focus group participants noted that the 'per mile' metric makes comparison across different vehicle fuels and technologies (such as electric vehicles) more transparent. Despite the fact that fuel and tax comparisons for different vehicle types can be made using an average annual mileage, the comments suggest that the comparison is made more concrete using a 'per mile' unit.

The 'informational power' of providing 'per mile' fuel cost information is demonstrated by evidence suggesting this metric may even increase drivers' motivation to switch travel mode. On several occasions during the survey, participants reported that if they knew what a particular car journey would cost in terms of fuel, they would be more likely to consider other travel options for that particular trip – possibly using non-car modes.

Given that VED is purchased on a 12-month or 6-monthly basis, the findings relating to 'per mile' information are relevant to the presentation of fuel costs. This report concludes therefore that the fuel cost information presented on the current label would be improved by the use of a 'per mile' and a 'per month' cost, in addition to the current annual estimate over 12,000 miles.

One of the objectives of the survey was to identify the consumer demand for comparative data and the most effective way that a comparison could be provided. While a significant proportion of the survey participants support the provision of comparative data on the label, one key finding is that, if not executed with care, comparisons can create confusion so reducing the effectiveness of the label as a whole.

Due to the availability of current data sets, the only practical option for providing comparative data is to compare cars in the same 'model range'. However, the results show that car buyers have very little understanding of what constitutes a 'model range'. Neither do they have an adequate understanding of 'vehicle class', the basis of comparison favoured by the majority of car buyers.

Regarding the presentation of comparative information, a number of key observations can be made. First is that labels that include comparisons must be clear as to the basis of comparison used, without relying on industry terms – such as 'model range' – as these terms are not understood by the average car buyer. Second, all comparative scales (in whatever form) should include clearly marked appropriate numerical scales. Third, where appropriate, actual model names should be included alongside the 'most efficient' or 'best' as shown on the scale.

At least three comparison formats were tested in the survey including: linear 'slider' design scale applied to 'mpg' and fuel costs; ranked 'slider' scale applied to 'mpg' and fuel costs; linear 'dial' design scale applied to 'mpg' and fuel costs; numerical 'you lose/save' style comparisons; and linear 'Buyers' Guide' scale applied to fuel costs (alone) and combined one-year fuel and VED costs – see Appendices 2-3 for label elements tested.

From this complex testing of formats, the survey draws the following observations. While fuel economy is the consumers preferred metric overall, comparing 'mpg' is inherently problematic due to the need to compare different fuel types, the nonlinear nature of the metric (which is based on the inverse of fuel use per unit distance),[38] and the strong, negative reaction of car buyers to viewing ranked information when a model range contains a large number of models. This report therefore recommends against the use of providing a comparison of fuel economy *per se* on the label.

In contrast to 'mpg', fuel costs do scale linearly with fuel use per unit distance, and are therefore more suited use as a comparator. Fuel cost is also technology neutral, and can be calculated for all conventional and electric vehicle types. This report therefore concludes that cost metrics be used for comparisons and, based on the popularity of the tested formats, the 'dial' style be used to show fuel cost in 'pence per mile' (using an absolute or relative scale), and total first-year fuel and VED cost be used within the 'Buyer's Guide' format using a scale ranging from the highest to lowest cost models in the range.

In the light of these findings regarding fuel and VED costs and comparative information, this report makes three recommendations which are designed to make clearer the link between CO_2 emissions and VED costs, improve the provision of fuel costs information through the introduction of 'per mile' and 'per month' fuel costs, and introduce (for the first time) comparative fuel and VED cost information across all models in the range.

Recommendation 3: The link between vehicle CO_2 emissions and VED cost should be made more explicit (through better visual cues) than it is on the current UK Fuel Economy Label.

Recommendation 4: In addition to annual fuel costs, the UK fuel economy label should include an estimate of fuel costs expressed in terms of 'pence per mile' and 'per month' (based on the model's combined fuel economy, an up-to-date average fuel price, and an assumed average mileage).

Recommendation 5: In addition to model specific information, the UK fuel economy label should include a comparison of total first-year fuel and VED tax costs with all models in the same model range. Care should be taken to include numerical values at the end of the scale and text indicating the model with lowest total costs, and technical wording should be avoided (e.g. 'model range').

[38] Larrick, R. and Soll, J (2008) The MPG Illusion. Policy Forum, Science Vol. 320, pp1593-1594, 20 June 2008

5.3 The fuel economy label in a digital context

Linked to the 'trust' issue regarding the official combined fuel economy (see above), many focus group comments suggest a level of dissatisfaction with the current label's fuel cost estimates which assume an annual mileage of 12,000 miles and a stated fuel price. As noted by participants, not only is the average mileage not relevant for a large number of drivers, given the inexorable rise in fuel prices, the estimated fuel costs printed on the label are quickly out of date.

One possible solution to this problem suggested in a previous LowCVP survey[39] is to 'hard-link' the fuel economy label to a website on which more up-to-date and personalised estimates can be calculated. Such a technology is QR Code, one of several industry 'hard-linking' standards, which enables a smart phone equipped with a QR Code application to direct its website browser to a target URL.[40] This technology is already used in many contexts including the latest US Vehicle Label.[41]

Although not a statistically large sample, the vast majority of focus group participants were impressed by the ability of the QR Code reader to link the printed label to a fuel cost calculator which allowed a degree of personalisation of input data (through the control of fuel price, driving style and annual mileage).[42] Even those who were using a QR Code for the first time voiced positive opinions about the technology. Indeed, many were quick to imagine how such a tool might be used, and to highlight the advantages of having immediate access to information under one's own control.

While it was never the intention of this survey to develop an actual QR Code reader tool, one of the objectives was to assess the level of demand for, and a potential application of, a QR Code located on the fuel economy label. In this context, and given the rapid adoption of similar technologies across most sectors, this report recommends that the next UK fuel economy labels should include a QR Code (or similar 'hard-linking' technology). Indeed, the authors are of the opinion that omitting to include such a technology would significantly limit the future options for consumer-focused information provision within the automotive sector.

Recommendation 6: In addition to printed information, the UK fuel economy label should include a 'hard-link' (e.g. QR Code) to link the printed label with online model information. The target URL should include some or all of the following: model specific information, a fuel cost calculator, and comparisons with other cars in the 'model range' or 'vehicle class' (depending on data availability).

5.4 Designing labels for new vehicle technologies

One of the key objectives of the survey was to consider the design of a label for new technologies such as the electric vehicles (EVs). In particular, the survey aimed to identify the most effective way to convey electricity consumption as opposed to fuel economy information.

The survey findings clearly show that car buyers have a very poor understanding of watt-hours (Wh) and kilowatt-hours (kWh). As a result, very few of the test participants adequately understood either 'Wh/km' or 'kWh/100km', two of the electricity consumption units trialled on the EV test labels.

In contrast, when electricity consumption figures are presented in terms of 'mpg equivalent' (assuming 8.9 kWh/litre petrol), this option is well received (and is the most popular option) due to

[39] 2010 LowCVP Car Buyer Survey: Improved environmental information for consumers. Conducted by Ecolane, Sustain, and Robert Gordon University, for LowCVP, 2010.
[40] For more information, visit: http://en.wikipedia.org/wiki/QR_Code.
[41] For more information, visit the EPA website. URL: http://www.epa.gov/carlabel/ [Accessed April 2012].
[42] One target URL tested is: http://www.nextgreencar.com/mobile-calculate/26041/VW-Polo-Diesel-Manual-5-speed.

its high level of comprehension by participants who are able to contextualise the figures and compare them with conventional vehicles. Of six possible metrics tested, the second popular metric is 'miles-per- kilowatt hours' (Miles/kWh), with all other options receiving little support.

When first presented with test labels designed for electric vehicles, many of the focus groups participants (who had no direct experience for owning or driving EVs) voiced their initial concerns about some of the limitations of EVs which included: short driving range on one charge, the length of time to recharge, and the uncertainty about the location of publicly available recharging points. Together with vehicle and battery costs, these were also the issues that car buyers most requested be included on a future EV label as additional information.

On a positive note, when test labels showing EV electricity and tax costs are presented to the test sample, the survey finds that car buyers are generally impressed by the low running costs. With the exception of the electricity consumption units, and the inclusion of additional information, this supports the use of a similar label format for both EVs and conventional vehicles. This would allow the direct comparison of 'per mile' and 'total first year fuel and VED costs' between vehicles with electric and conventional drive-trains.

Given these findings regarding the design of a label for electric vehicles, this report makes three recommendations which are intended to enable the comparison of EVs with all other vehicle types, maximise the comprehension of electricity consumption data, and provide an educational role regarding the capabilities of particular EV models.

Recommendation 7: The scope of the UK fuel economy label should be extended to include electric vehicles. The 'EV label' should: adhere to a similar format as for conventional vehicles; present electricity consumption as 'mpg equivalent' (assuming 8.9 kWh/litre petrol) shown alongside official energy data (in Wh/km or kWh/km), and include information specific to electric vehicles (including: driving range, recharge time, and the location of publically accessible charging points).

Plug-in hybrid electric vehicles (PHEVs) and range-extended electric vehicles (REEVs) also present challenges to the presentation of vehicle information for consumers.[43] Not only are the electricity consumption units not readily understood if expressed in Wh/km (as already described), there is the additional problem of how to present fuel economy information when two fuels can be used simultaneously or independently to propel the vehicle.

The main finding from the testing of PHEV and REEV labels is that when only 'weighted combined'[44] data is presented, few, if any car buyers, are able to understand either the terminology or the data. The two reasons for this lack of comprehension are the use of metric units, together with the difficulty of comprehending two energy sources simultaneously (symbolised in the test labels by the use of a '+' sign). The resulting experience is one of 'information overload'.

While providing an 'mpg equivalent' figure for the liquid fuel is able to increase comprehension, presenting a mixture of imperial and metric units (for electricity use) on the same label creates a new problem; namely only the imperial units are 'seen', the metric units being ignored. The effect is to misrepresent the energy information – instead of the label conveying '235 mpg *and* 130 Wh/km', the

[43] With the exception of the vehicle type description at the top of the label, PHEVs and REEVs are treated in a similar manner with respect to the provision of label based information.

[44] The weighted CO2/fuel consumption/electricity consumption are calculated using X = (De•XA + Dav•XB)/(De + Dav), where: X = CO2/fuel consumption/electricity consumption (in g/km or l/100 km or Wh/km), XA = CO2/ fuel consumption/ electricity consumption over Condition A, XB = CO2/ fuel consumption/ electricity consumption over Condition B, De = vehicle's electric range, Dav = 25 km (assumed average distance between two battery recharges).

label is read as '235 mpg'.[45] Consequently, this information may be not be trusted as car buyers may think it unlikely that such a car would actually cover 235 miles on one gallon of fuel.

Two alternative PHEV/REEV test labels were also tested: (1) showing a total measure of energy used (petrol and electricity combined) expressed in terms of 'mpg equivalent'; and (2) presenting Condition 'A' and 'B' energy consumption information in place of the 'weighted combined' figures (the approach adopted by the US Vehicle Label).[46] The survey provides quantitative evidence that the first (including only the total MPG-equivalent) is the most popular option, offering as it does the most comprehensible information, with the second alternative (Conditions A and B shown separately) being the next most popular option among web-survey sample.

With regard to these key issues for PHEVs and REEVs, this report concludes that an optimum label would be one that presents both the total 'mpg equivalent' figure for the lay-person and the 'weighted combined' published test data as required by ECE Regulation No. 101. (While Condition 'A' and 'B' energy consumption information would be of interest to many car buyers, the authors believe that a choice has to be made between metrics to avoid information overload.)

Recommendation 8: The scope of the UK fuel economy label should be extended to include plug-in hybrid- and range-extended electric vehicles. The 'PHEV/REEV label' should: adhere to a similar format as for conventional vehicles; present fuel/electricity consumption data as total 'mpg equivalent' (assuming 8.9 kWh/litre petrol) and as 'weighted combined' (fuel: litres/100km and electricity: Wh/km or kWh/km), and include information specific to electric vehicles (including: electric driving range, recharge time, and the location of publically accessible charging points).

5.5 The 'Dashboard Plus' fuel economy label

The main test alternative designs are shown in full in Appendices 2-3.

Focusing on overall design, there is little doubt that most car buyers recognise the current label's A-M coloured bands used to indicate the VED band, with most having seen the bands in other contexts such as on 'white goods'.

The high level of recognition of the bands suggests that they have become a symbol for 'efficiency'. It is therefore a key position of this report that any future development of the fuel economy label should retain the current system of coloured bands. However, regarding other aspects of design and format, the survey provides ample evidence that the current label could be improved to more effectively convey the information it contains to car buyers.

Of all the alternative designs tested in part and in their entirety, the uppermost part of the test label named Dashboard (shown in Figures 47 and 48) includes by far the most popular label elements according to the focus groups. The reasons given by participants include their simplicity, modularity and the fact that the key CO_2, 'mpg' and fuel cost per mile data and text can be seen from a distance.

Within the most popular Dashboard label (Round 2 version), the CO_2 panel (top left) is reduced as compared to the space it occupies on the current label. The VED band is clearly written using a large font size, and in the most popular version is 'white-on-black'. This increases the prominence of the band over the CO_2 emissions, while at the same time links the two within a single box; an arrow locating the level of emission within the well-recognised coloured A-M band format.

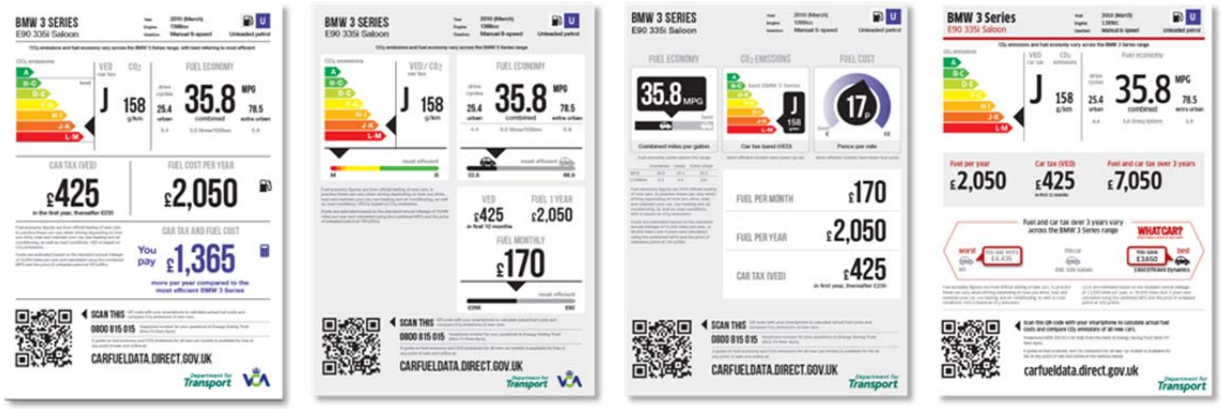
[45] Official NEDC figures applicable to Vauxhall Ampera REEV.
[46] For more information, visit the EPA website. URL: http://www.epa.gov/carlabel/ [Accessed April 2012].

In the next panel (top centre), fuel economy or electricity consumption is presented alongside the CO_2 information. The main fuel economy figure shown is 'combined mpg' with metric units also displayed. As with CO_2, the fuel economy data is written using a large font size, and in the most popular version is 'white-on-black' (metric units are presented in a smaller font in grey). The overall effect is that the combines 'mpg' figure can be seen at some distance from the label.

The third panel (top right) included in the Dashboard design is the 'dial' design element, which is used to present fuel cost information in terms of 'pence per mile', the scale being an absolute scale to match the absolute scale adopted by the CO_2 bands. This element is suitable for all technology types and there is evidence from the survey that this would be used by car buyers as a quick cost comparator, comparing one label with another.

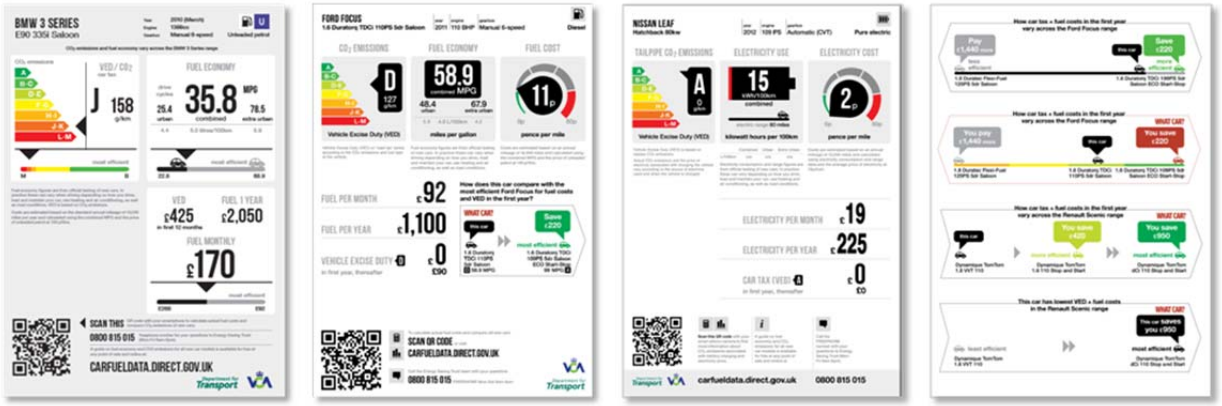
Within the central portion of the Dashboard design, fuel costs (in 'per month' and 'per year' units) and VED (first-year and standard rates) are displayed in a vertical format. While the vertical layout allows a block of space for additional information, the VED cost are somewhat disconnected from the CO_2 emissions information. Therefore, and given the finding that these issues should be visually linked, the horizontal arrangement of costs used on the Buyer's Guide design has the better potential to display CO_2 and VED information in close proximity.

Figure 47 Alternative label designs tested during Round 1 (selection)



Traditional **Slider** **Dashboard** **Buyer's Guide**

Figure 48 Alternative label designs tested during Round 2 (selection)



Slider **Dashboard ICE** **Dashboard EV+PHEV** **Buyer's Guide comparison boxes**

The comparison element of the Buyer's Guide label was also found by the survey to be an effective format in which to compare combine fuel and VED costs, the most popular version using the scale ranging from the highest to lowest first-year fuel and VED cost – Figure 48 (Buyer's Guide, top

image). In fact, this is a large version of the comparison bars found on the Slider label which received a significant level of support from focus group participants.

Considering all the evidence regarding labels tested, this report concludes that the most effective combination of alternative design elements would be a combination of the following:

- Uppermost third: Dashboard design elements (CO_2, 'mpg' and fuel per mile data);
- Central third: Buyer's Guide designs elements (VED, fuel cost, and model range comparison);
- Lower third: Sources of further information and tools (QR Code, website and phone).

For two reasons this optimum label is termed the **'Dashboard Plus'** label; first, most of its key design elements are taken from the original Dashboard design; and second, when a model range comparison is not possible or appropriate, the comparison area can be replaced with 'additional information'. Examples include cases where a new technology is employed (such as an EV, PHEV or REEV) or where there is only one model in a range.

As a purely *speculative exercise*, a series of four possible Dashboard Plus labels has been constructed based on the findings of the survey as described in this report. These are shown in Figures 49-52. It is important to note, however, that these speculative labels are only one interpretation of the survey's findings. The labels are not intended as a final design but are intended to be used as the basis for a final testing cycle (at the household level) which this report recommends be performed before a final design is selected.

While the authors are of the opinion that this report provides ample evidence that the speculative designs would be more effective in conveying vehicle information to car buyers, further work is required to address a number of remaining presentational and data issues.

For example, the 'least efficient' model in a range may not have the highest total fuel and VED costs as different fuel types can exist with a model range (such as petrol and bioethanol). Also more research is required to finalise the most effective metrics with which to display PHEV and REEV energy use information. Other issues include agreeing how to calculate recharge times for plug-in models as multiple charge rates can be used on many models.

In the light of these findings regarding the rationale of the 'Dashboard Plus' fuel economy label, this report makes two recommendations which are designed to more effectively convey vehicle model information to consumers, and outline what would be required for a final round of testing should the Dashboard Plus designs be taken forward towards implementation.

Recommendation 9: Based on the evidence presented, a future UK fuel economy label should incorporate the following design elements (collectively known as the 'Dashboard Plus' design): Uppermost section – Dashboard design elements (CO_2, 'mpg' and fuel per mile data); Central section – Buyer's Guide designs elements (VED, fuel cost, and model range comparison); Lower section – Sources of further information and tools (QR Code, website and phone).

Recommendation 10: Before implementation, a future UK fuel economy label based on the 'Dashboard Plus' design should undergo a final round of testing conducted at the household level to assess the potential impact of the new label on car buyer behaviour.

Finally, as part of the focus group discussions regarding the Buyer Guide comparison designs, the issue of the information source was raised. The majority of comments suggest that citing well respected organisations can add credibility to the way the cost comparisons are perceived. While participants agreed that *WhatCar?* and *Which?* were the two organisations most likely to be

considered authoritative, they also indicated that Government figures would be better accepted if the official issuing agencies (such as the Vehicle Certification Agency) were to make themselves better known. This report supports this latter option, and concludes that any marketing of a new label should also highlight the source and authority of the official data supplier.

Figure 49 Dashboard Plus ICE

Figure 50 Dashboard Plus EV

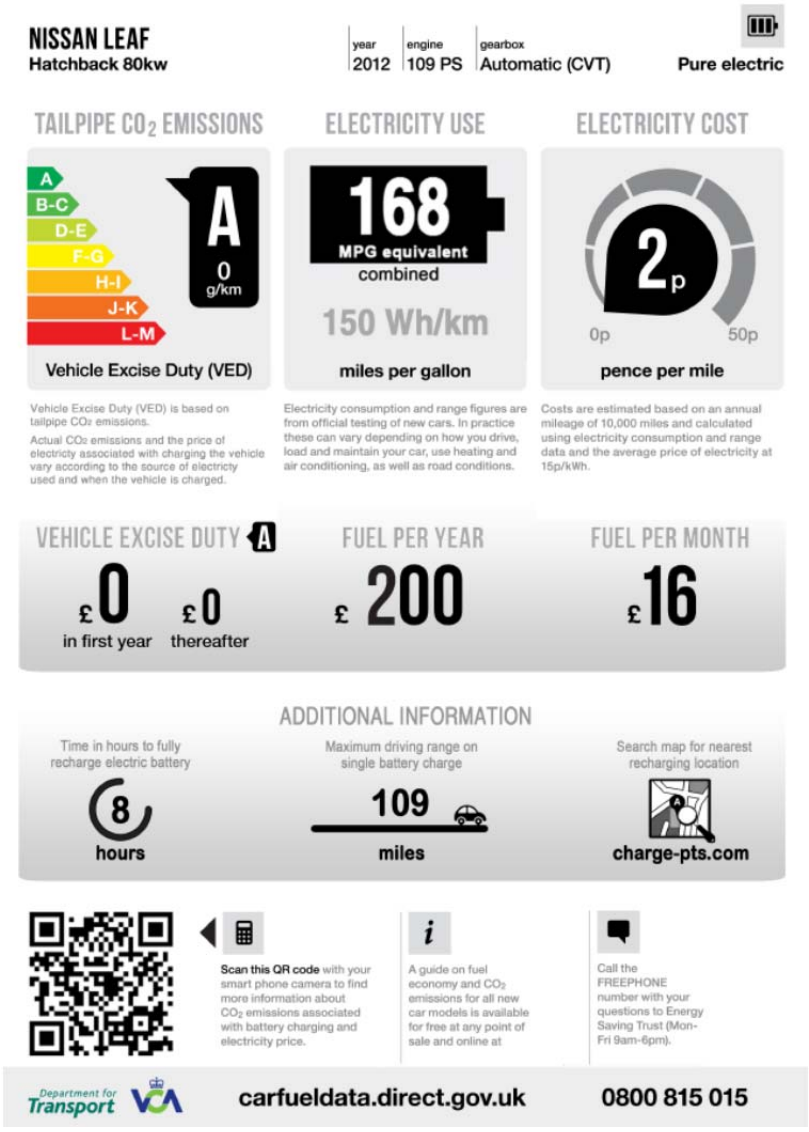


Figure 51 Dashboard Plus REEV #1

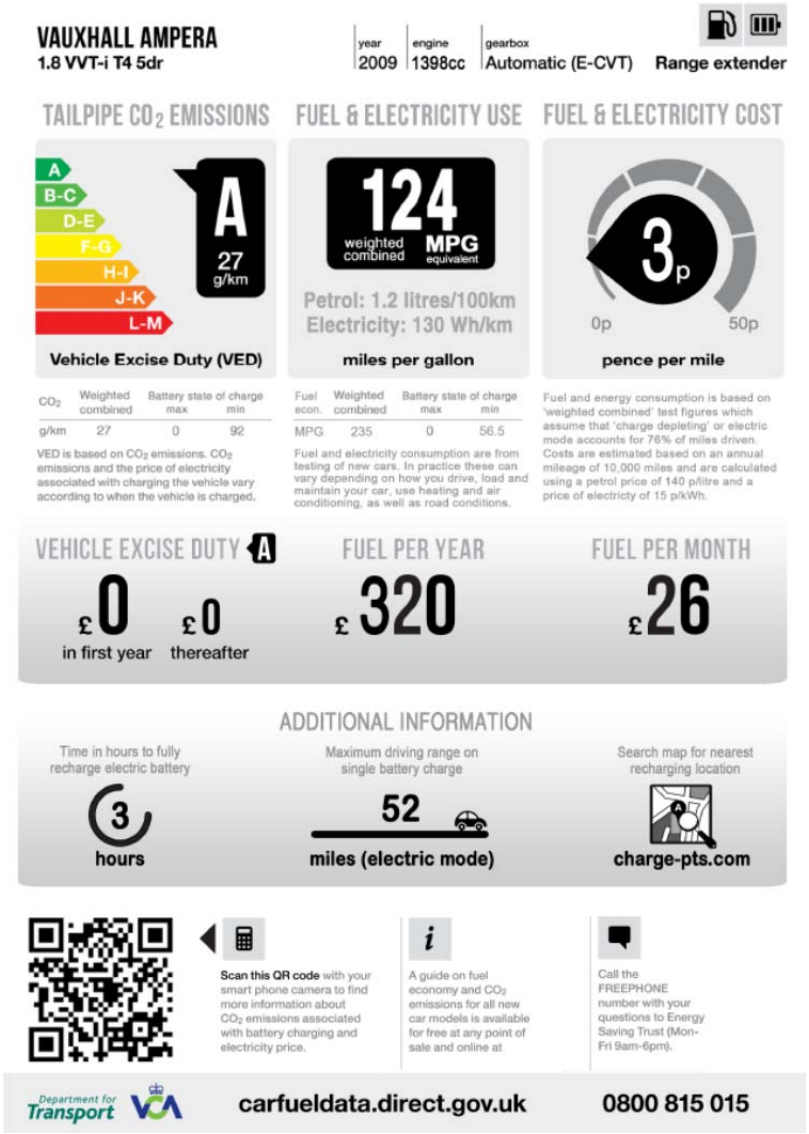
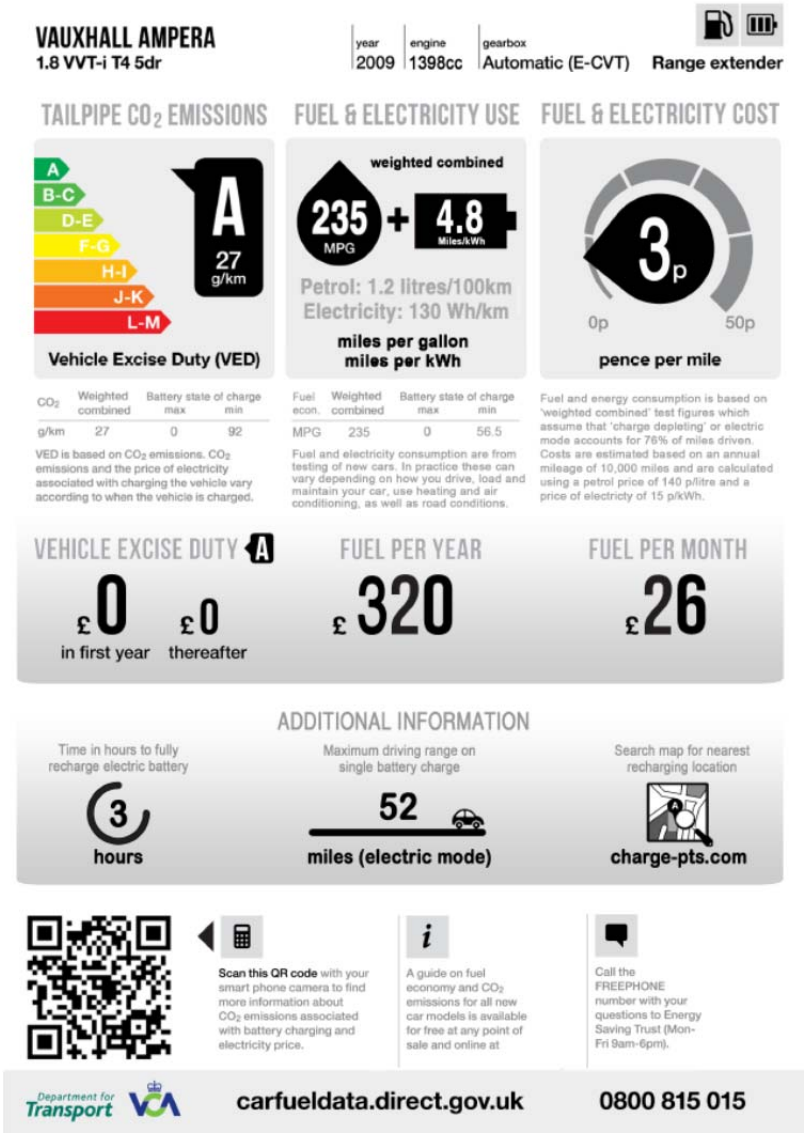


Figure 52 Dashboard Plus REEV #2



LowCVP Car Buyer Survey:

Testing alternative fuel economy labels

Research conducted by Ecolane Consultancy & Centre for Sustainable Energy on behalf of the Low Carbon Vehicle Partnership

Dr Ben Lane (Ecolane Consultancy)
Dr Nick Banks (Centre for Sustainable Energy)
Dr Jillian Anable (University of Aberdeen)

Appendix 1 – Focus group discussion guide

LowCVP Car Buyer Survey: Testing alternative fuel economy labels

Project commissioned by the Low Carbon Vehicle Partnership

Project managed by Dr Ben Lane, Ecolane Transport Consultancy

Report Details:

Project name	**LowCVP Car Buyer Survey: Testing alternative fuel economy labels**
Report Type	Final
Supplier	Ecolane Limited & Sustain Limited
Report Version	Appendix 1
Authors	Dr Ben Lane (Ecolane) & Dr Nick Banks (CSE)
Last Edited	16th July 2012
This report has been prepared by Ecolane and CSE for the Low Carbon Vehicle Partnership in accordance with the terms and conditions of appointment. Ecolane and CSE cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.	

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Appendix 1 – Focus group discussion guide (Round 1)

Welcome to participants and introduction to workshop			
Part	**Time**	**Title/Focus**	**Actions**
0.0	5 mins	**Welcome and Introduction**	Talk from front – overview, housekeeping, etc.

INTRO

OURSELVES – BEN & NICK

SURVEY COMMISSIONED BY....

VOICE RECORDER AND PHOTOS

HOUSEKEEPING...LOOS... EMERGENCY PROCEEDURE

ABOUT THE SESSION

FOCUS: INFORMATION REQUIRED TO BUY A CAR

QUESTIONS / POST-IT NOTES / DISCUSSIONS/ HAVE FUN / NO WRONG ANSWERS

2.5 HOURS – WITH A HALF-WAY TEA/COFFEE BREAK

AT THE END WE'LL GIVE YOU CASH AS A THANKYOU

GROUND RULES

RELAXED AND INFORMAL – BUT PLEASE DON'T TALK ALL AT ONCE

NUDGE IF WE NEED TO MOVE ON – PLEASE DON'T TAKE IT PERSONALLY!

PLEASE SET YOUR MOBILE PHONES TO 'OFF'

START BY WRITING YOUR NAME AND CAR PURCHASED ON THE CARD

ANY QUESTIONS?

FOR THE TRANSCRIBERS: PLEASE SAY YOUR NAME AND CAR – ROUND ROOM

Part 1 – Warm-up exercise and setting the context			
Part	**Time**	**Title/Focus**	**Actions**
1.1	10 mins	DIY car buying factors	Group led **brain-storm** to list the **key purchase factors** underlying the participants' decisions to buy their car.

IN THIS FIRST PART OF THE DISCUSSION THINK ABOUT THE FACTORS THAT WERE IMPORTANT TO YOU WHEN YOU RECENTLY PURCHASED YOUR CAR.

WHAT FACTORS WERE IMPORTANT IN CHOOSING THE PARTICULAR MAKE/ MODEL YOU PURCHASED?

Get participants to list the most important factors – write on post-it notes and display on white board.

Ask participants to give more details about the most important attributes listed on wall.

WORKING TOGETHER, HOW COULD WE GROUP THIS LIST OF CAR BUYING FACTORS?

WHICH OF THE FACTORS HAVE SOMETHING IN COMMON?

Encourage discussion of similarities/differences between the factors listed by the group.

Re-group post-it notes on wall to reflect discussion.

What factors were most important when you bought your car?

Summarise issue groups with particular attention to any issues that link with information provided on the test labels – e.g. mpg, co2, fuel costs, etc.

Part 1 – Warm-up exercise and setting the context			
Part	**Time**	**Title/Focus**	**Actions**
1.2	15 mins	DIY car information poster	Ask participants to individually **design a car label** in 5 mins – followed by shared discussion

Provide participants with an A3 sheet of white paper and coloured pens.

USING THE MATERIALS PROVIDED, AND WITHIN 5 MINUTES, DESIGN A POSTER THAT WOULD SHOW TO POTENTIAL BUYERS ANY USEFUL INFORMATION ABOUT A PARTICULAR MODEL.

THE POSTER (OR LABEL) WOULD BE DISPLAYED NEXT TO THE CAR WHICH WOULD BE LOCATED WITHIN A CAR SHOWROOM.

INCLUDE ANY NUMBERS/ TEXT/ IMAGES THAT YOU THINK ARE IMPORTANT.

Encourage creativity and use of any of the ideas previously discussed – but gently encourage the inclusion of numerical data.

Arrange posters on wall for viewing by whole group.

Summarise issues raised by designs and encourage participants to explain their thinking and discuss their reasons for including certain information.

Part 2 – Comparing MPG, CO2 & fuel cost information elements			
Part	**Time**	**Title/Focus**	**Actions**
2.1	15 mins	**MPG & CO2 information elements**	Show **MPG & CO2** information elements from four label designs – manage discussion as to pros and cons of each.

WE WOULD LIKE TO SHOW YOU FOUR CAR INFORMATION LABELS THAT FOCUS ON TWO ISSUES BUT PRESENT THE INFO IN DIFFERENT WAYS.

Hand out laminated versions of Visuals 2.1.
These show only MPG and CO2 information.

FIRST, WE'D LIKE TO KNOW YOUR OPINIONS AS TO WHAT INFORMATION YOU THINK THEY CONVEY?

WHAT INFORMATION IS COMMON AND WHAT DIFFERENT BETWEEN THE LABELS?

WHAT DO YOU THINK ABOUT THE LABELS THAT INCLUDE COMPARATIVE INFORMATION?

WHAT DO UNDERSTAND BY THE PHRASES 'BEST', 'BEST IN RANGE', 'MOST EFFICIENT'?

Probe for discussion of: CO2, MPG, CO2 versus MPG, urban/extra/urban, comparative information.

WHAT ARE YOUR OPINIONS ABOUT THE CLARITY OF EACH LABEL?

WHICH FORMAT(S) DO YOU FIND EASIEST TO USE?

Probe for discussion of: clarity, format, layout, attractiveness.

LASTLY, WHICH LABEL (IF ANY) DO YOU THINK WOULD BE MOST LIKELY TO CATCH YOUR ATTENTION AND INFLUENCE YOUR CHOICE OF CAR?

Part 2 – Comparing MPG, CO2 & fuel cost information elements			
Part	**Time**	**Title/Focus**	**Actions**
2.2	15 mins	**Annual (/year) fuel & tax cost information elements**	Show **annual fuel & tax cost** info elements from three label designs – manage discussion as to pros and cons of each.

NEXT WE'D LIKE TO SHOW YOU FOUR LABELS THAT FOCUS ON TWO ASPECTS OF RUNNING COSTS, BUT PRESENT THE INFORMATION IN DIFFERENT WAYS.

Hand out laminated versions of Visuals 2.2.
These show only fuel cost and car tax information.

AS BEFORE, FOR EACH LABEL, WHAT INFORMATION DO YOU THINK THEY CONVEY?

WHAT INFORMATION IS COMMON AND WHAT DIFFERENT BETWEEN THE LABELS?

WHAT DO YOU THINK ABOUT THE LABELS THAT INCLUDE COMPARATIVE INFO?

Probe for discussion of: fuel cost per year/per month, VED/car tax, and the three examples of comparative information. Pay particular attention to the issue of a linear cost scale versus model ranking.

WHAT ARE YOUR OPINIONS ABOUT THE CLARITY OF EACH LABEL?

WHICH FORMAT(S) DO YOU FIND EASIEST TO USE?

Probe for discussion of: clarity, format, layout, attractiveness.

WHICH LABEL (IF ANY) DO YOU THINK WOULD BE MOST LIKELY TO CATCH YOUR ATTENTION AND INFLUENCE YOUR CHOICE OF CAR?

IS FUEL COST/CAR TAX INFORMATION MORE OR LESS IMPORTANT TO YOU THAN MPG AND CO2 EMISSIONS?

Ask to make judgement on which is clearest, most preferable, most useful label which might be influential for car buyers when choosing a car

Part 2 – Comparing MPG, CO2 & fuel cost information elements			
Part	**Time**	**Title/Focus**	**Actions**
2.3	15 mins	**'Lose/save' fuel & tax cost information elements**	Show **1 and 3 year 'lose/save' fuel & tax cost** info elements from four label designs – manage discussion as to pros and cons of each.

THREE MORE LABELS THAT ALSO FOCUS ON TWO ASPECTS OF RUNNING COSTS.

Hand out laminated versions of Visuals 2.3 (excl. 3yr 'Buyers Guide' label). These again focus on fuel cost and car tax information.

COMPARED TO THE PREVIOUS SET, DO THESE PROVIDE ANY NEW INFORMATION?

IS THE COMPARATIVE INFO ANY MORE COMPELLING THAN PERVIOUS LABELS?

Probe for discussion of: fuel cost per year/per month, VED/car tax, and the examples of comparative information.

HERE IS ANOTHER VERSION – THIS TIME OVER A 3 YEAR TIMEFRAME.

Hand out laminated version of 3yr 'Buyers Guide' label.

WHAT ARE YOUR VIEWS OF 3 YEARS OVER AN ANNUAL FUEL COST COMPARISON?

WHAT ARE YOUR OPINIONS ABOUT THE CLARITY OF EACH LABEL?

WHICH FORMAT(S) DO YOU FIND EASIEST TO USE?

DOES HAVING A 'WHATCAR?' ENDORSEMENT CHANGE YOUR VIEW OF THE LABEL?

Probe for discussion of: clarity, format, layout, attractiveness.

WHICH LABEL (IF ANY) DO YOU THINK WOULD BE MOST LIKELY TO CATCH YOUR ATTENTION AND INFLUENCE YOUR CHOICE OF CAR?

Ask to make judgement on which is clearest, most preferable, most useful label which might be influential for car buyers when choosing a car.

Part 2 – Comparing MPG, CO2 & fuel cost information elements			
Part	**Time**	**Title/Focus**	**Actions**
2.4	10 mins	**Per mile cost and alternative ranking information**	Show **per mile fuel cost** and **alternative ranking** info elements from three label designs – manage discussion as to pros and cons of each.

BEFORE WE BREAK FOR TEA AND COFFEE, WE'D LIKE TO LOOK AT 2 FINAL WAYS OF PRESENTING FUEL COST.

Hand out laminated versions of Visuals 2.4 (two 'per mile' labels only).
These show only fuel cost and car tax information.

TWO OF THESE LABELS PROVIDE 'PER MILE' COST INFORMATION – INSTEAD OF PER MONTH DATA.

WHAT ARE YOUR VIEWS ON THE USEFULNESS OF 'PER MILE' FUEL COSTS?

IS IT MORE OR LESS USEFUL THAN 'PER YEAR' OR 'PER MONTH' FUEL COST?

Probe for discussion of: fuel cost per mile versus year/per month, other fuel cost metrics (e.g. cost to fill tank).

Ask to make judgement on which is clearest, most preferable, most useful label which might be influential for car buyers when choosing a car.

Break – Tea/coffee break – 5 mins

Part 3 – New technologies (QR Code and EVs)			
Part	**Time**	**Title/Focus**	**Actions**
3.1	20 mins	**Testing two QR Code tools**	Using iPod Touches with QR Code readers, participants test two **QR Code online tools** hard-linked from printed sheet of QR Code examples.

FOR THE NEXT TWO SESSIONS WE WANT TO LOOK AHEAD AT TWO NEW TECHNOLOGIES – ONE INFORMATION TECHNOLOGY AND ONE NEW VEHICLE TYPE.

Hand out laminated versions of Visuals 3.1. These show a set of QR Codes.

THE FIRST QUESTION TO ASK YOU ALL IS: DO YOU KNOW WHAT THESE PATTERNS ARE? HAVE YOU SEEN THEM OR USED THEM BEFORE?

Probe: general knowledge, experience/use, personal stories, urban myths.

OK, THESE ARE 'QR CODES' AND THEY ENABLE A PRINTED DOCUMENT TO LINK TO A WEBSITE USING A COMPUTER OR SMART PHONE FITTED WITH A CAMERA.

Demonstrate using the QR Code sheet and an iPod with a QR Code reader installed. Hand out iPod Touches for testing Visuals 3.1.

TRY USING THE IPODS TO LINK WITH THE QR CODES – THERE ARE TWO POSSIBLE DESTINATION TOOLS – MAKE SURE YOU TRY EACH TOOL AT LEAST ONCE.

Give group 5 minutes to use QR Code readers.

WHAT ARE YOUR FIRST IMPRESSIONS OF THIS TECHNOLOGY?

WHAT ARE YOUR VIEWS OF EACH TOOL – ADDITIONAL TEXT-BASED INFORMATION vs CALCULATE YOUR PERSONALISED FUEL COST?

Probe for discussion of: usefulness of information, ease-of-use of code/tools.

IN YOUR OPINION, COULD ACCESS MORE DETAILED INFORMATION OR A PERSONALISED CALCULATOR USING A QR CODE READER BE USEFUL TO YOU WHEN BUYING A CAR?

PROBE: In what ways? How would it be useful? Why would it be useful?

Ask to make judgement on whether more detailed information provided by online tools might be influential for car buyers when choosing a car.

IS IT USEFUL HAVING A TELEPHONE ADVICE LINE TO CALL FOR MORE INFORMATION – IN THIS CASE PROVIDE BY THE ENERGY SAVING TRUST?

Part 3 – New technologies (QR Code and EVs)			
Part	**Time**	**Title/Focus**	**Actions**
3.2	15 mins	**Comparable information for electric cars**	Show four label designs, two for **petrol car** and two for an **electric car** – manage discussion as to pros and cons of each.

WE'D NOW LIKE TO SHOW YOU TWO LABELS FOR AN ELECTRIC CAR – AND COMPARE THEM WITH SIMILAR LABELS FOR A CONVENTIONAL CAR.

Hand out laminated versions of Visuals 3.2 ('Dash-board' labels only).
These show information for an electric and a petrol car.

WHAT DO YOU NOTICE THAT DIFFERENT ABOUT SOME OF THE INFORMATION PRESENTED? WHAT FIGURES ARE TYPICAL OF ELECTRIC CARS?

Probe for discussion of: general EV knowledge, zero-emissions, zero car tax, electric vs. Petrol, units – Wh/km vs. MPG.

WHAT DO YOU UNDERSTAND BY THE WH/KM INFORMATION? WOULD IT HELP TO HAVE AN MPG EQUIVALENT FIGURE?

HOW DOES THE 'ELECTRICITY CONSUMPTION' COMPARE WITH 'FUEL ECONOMY'?

Hand out laminated versions of Visuals 3.2 ('Traditional' labels only).
These show information for an electric and a petrol car.

ARE THESE LABELS ANY CLEARER OR EASIER TO USE THAN THE OTHER TWO?

DO YOU HAVE ANY OPINION OF WHETHER AN ELECTRIC CAR SHOULD BE TREATED EXACTLY THE SAME WAY AS A CONVENTIONAL CAR WHEN IT COMES TO A LABEL?

WHAT INFORMATION MIGHT YOU WANT TO SEE FOR AN ELECTRIC CAR THAN YOU WOULDN'T NEED FOR A PETROL OR DIESEL MODEL?

Probe for discussion of: battery range information, recharge time.

Part 4 – Label format, design and impact			
Part	**Time**	**Title/Focus**	**Actions**
4.1	20 mins	**Key messages, label design and holistic impact**	Show **all car label formats** used in the preceding sessions of the workshop as **whole labels** – manage discussion as to pros and cons of each. At end, participants get to vote for **key information** elements and **best design** elements.

FOR THE LAST SESSION OF THE WORKSHOP, WE'D LIKE TO PRESENT ALL OF THE FULL LABEL DESIGNS WE HAVE CONSIDERED ONLY IN PART.

Display the large A1 laminated versions of labels Visuals 4.1 (excl. electric).

Summarise observations and opinions of group so far regarding all the issues raised by each label with particular attention to the strongest/ weakest design elements

HAVING CONSIDERED MANY ISSUES IN DETAIL, WHAT NOW ARE YOUR OPINIONS ABOUT THE INFORMATION CONVEYED BY EACH LABEL?

WHICH FORMAT(S) DO YOU FIND AND EASIEST TO USE AND UNDERSTAND?

Probe for discussion of: content, clarity, format, layout, attractiveness.

WHICH LABEL (IF ANY) DO YOU THINK WOULD BE MOST LIKELY TO CATCH YOUR ATTENTION AND INFLUENCE YOUR CHOICE OF CAR?

Ask to make judgement on which is clearest, most preferable, most useful label which might be influential for car buyers when choosing a car.

TO COMPLETE THE WORKSHOP, WE WOULD LIKE YOU TO VOTE (AS INDIVIDUALS) ON THE MOST/ LEAST USEFUL PARTS OF THE LABELS ON DISPLAY.

PLACE THE COLOURED STICKERS TO INDICATE WHICH DESIGN ELEMENTS YOU THINK ARE MOST/LEAST USEFUL – YOU EACH HAVE 10 VOTES:

- **3 GREEN 'USEFUL', 3 YELLOW 'OF INTEREST', 3 RED 'NOT USEFUL'**
- **YOUR OVERALL WINNER: 1 LARGE GREEN STICKER**

Hand out sticker sets – and ask group to vote and then return to their seats.

Complete session by assessing the voting and reflecting to group the results.

Check with the group that summary is a fair representation of their views.

Final close – 5 mins

WE'D LIKE TO INVITE YOU TO ADD ANYTHING THAT YOU'VE BEEN BURSTING TO SAY BUT HAVEN'T HAD THE OPPORTUNITY.

Check and discuss any remaining issues.

WE'VE REACHED THE END OF TODAY'S SESSION – AND WE'D LIKE TO THANK YOU AGAIN FOR YOUR TIME AND VALUABLE INPUT.

We'd also like to pay you in return for your time and effort in participating today.

As we mentioned at the start of the session, the results of the focus survey will be added to an online survey that is also running.

The findings will be fed back to the **Low Carbon Vehicle Partnership** who commissioned the study.

For more information – **Ecolane:** www.ecolane.co.uk **/ 0117 929 8855**.

Before we go, perhaps we could quickly go around the room and ask each of you to share your key take home message from our discussion.

Many thanks again and travel safely.

END

CAR BUYER SURVEY 2012 – MICRO-SURVEY E

Your name:

What UNITS would you prefer to be used to describe the fuel economy of an ELECTRIC VEHICLE ?

DESCRIPTION	**UNITS**	Using a '✓', indicate your preference and level of understanding		
		I prefer this/these units	I understand this/these units	Comments
Watt-hours per kilometre	**Wh/km**			
Watt-hours per mile	**Wh/mile**			
Kilowatt-hours per 100 kilometres	**kWh/100km**			
Kilowatt-hours per 100 miles	**kWh/100mile**			
Miles per kilowatt-hour	**Miles/kWh**			
Miles per gallon equivalent (petrol)	**MPG-e**			
Litres per 100 kilometres equivalent (petrol)	**Lit/100km-e**			
Other: _____				

LowCVP Car Buyer Survey:

Testing alternative fuel economy labels

Research conducted by Ecolane Consultancy & Centre for Sustainable Energy on behalf of the Low Carbon Vehicle Partnership

Dr Ben Lane (Ecolane Consultancy)
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Appendix 2 – Focus groups test labels (R1)

LowCVP Car Buyer Survey: Testing alternative fuel economy labels

Project commissioned by the Low Carbon Vehicle Partnership

Project managed by Dr Ben Lane, Ecolane Transport Consultancy

Report Details:

Project name	**LowCVP Car Buyer Survey: Testing alternative fuel economy labels**
Report Type	Final
Supplier	Ecolane Limited & Sustain Limited
Report Version	Appendix 2
Authors	Dr Ben Lane (Ecolane) & Dr Nick Banks (CSE)
Last Edited	16th July 2012
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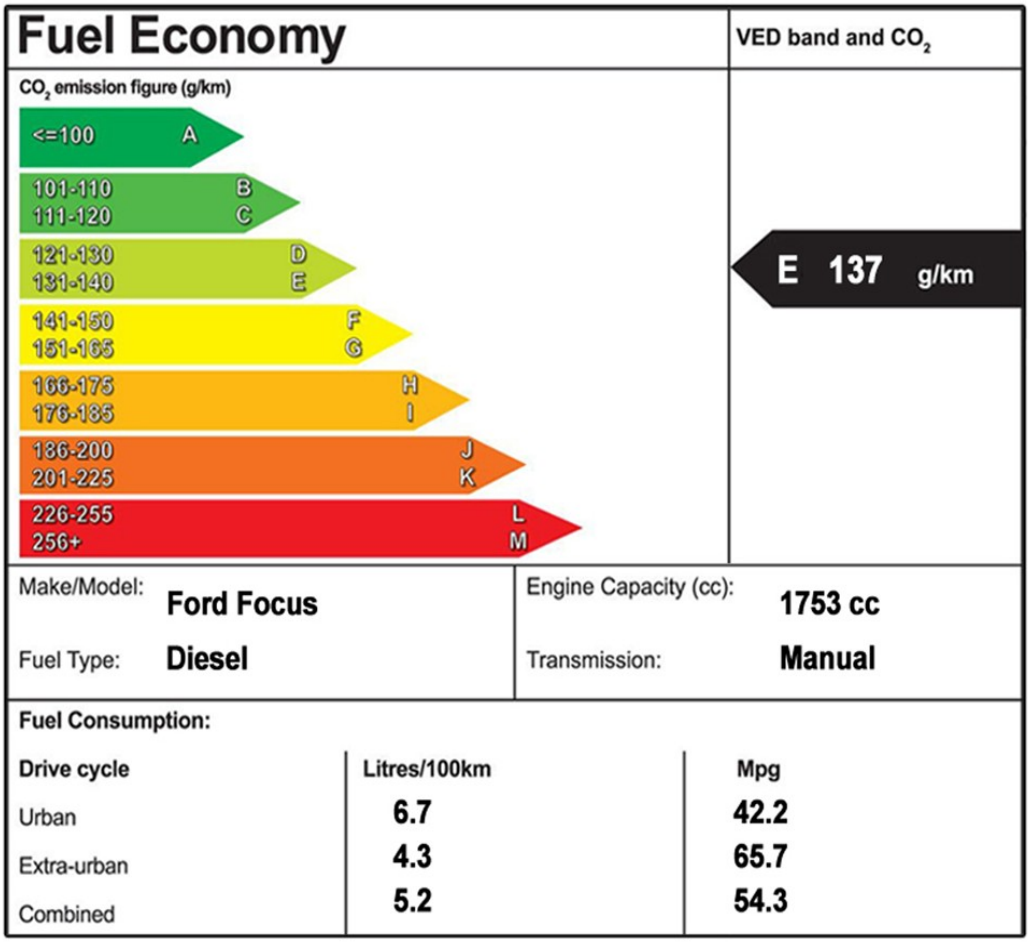
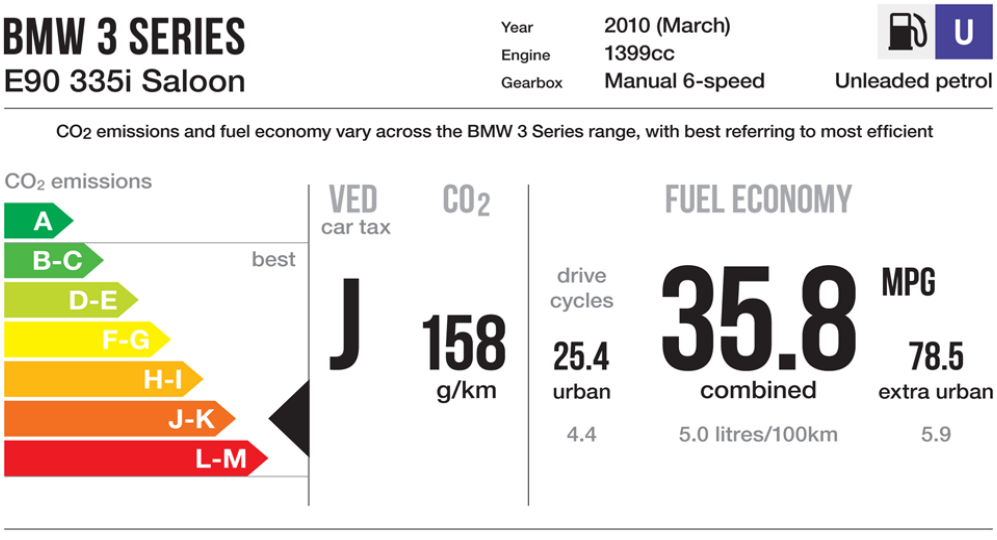
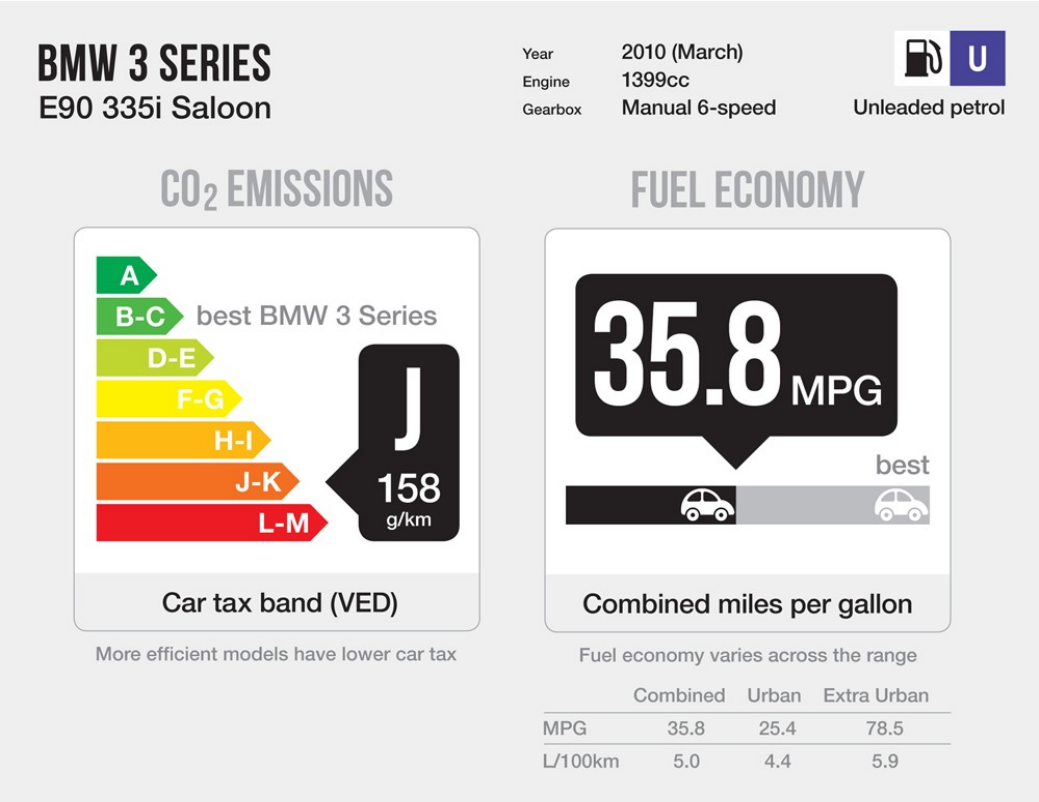
Appendix 2 – Focus groups alternative test labels (Round 1)



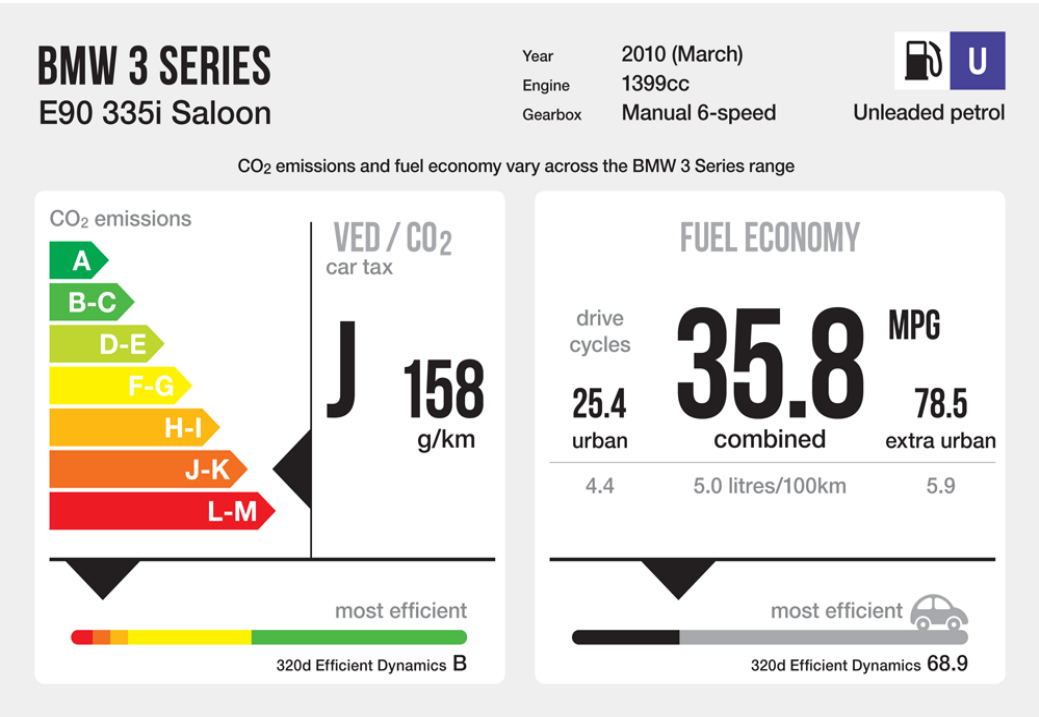
A1



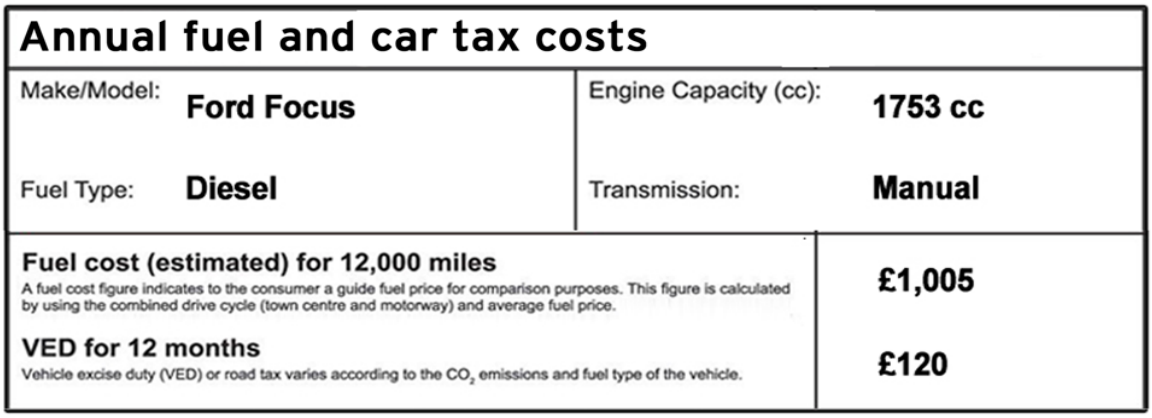
A2


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
CO2 EMISSIONS
A
B-C
best BMW 3 Series
D-E
F-G
H-I
J-K
L-M
J
158
g/km
Car tax band (VED)
More efficient models have lower car tax
FUEL ECONOMY
35.8 MPG
best
Combined miles per gallon
Fuel economy varies across the range
Combined Urban Extra Urban
MPG 35.8 25.4 78.5
L/100km 5.0 4.4 5.9

A3


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
CO2 emissions and fuel economy vary across the BMW 3 Series range
CO2 emissions
A
B-C
D-E
F-G
H-I
J-K
L-M
VED / CO2
car tax
J
158
g/km
most efficient
320d Efficient Dynamics B
FUEL ECONOMY
drive cycles
25.4
urban
35.8
MPG
combined
78.5
extra urban
4.4
5.0 litres/100km
5.9
most efficient
320d Efficient Dynamics 68.9

A4

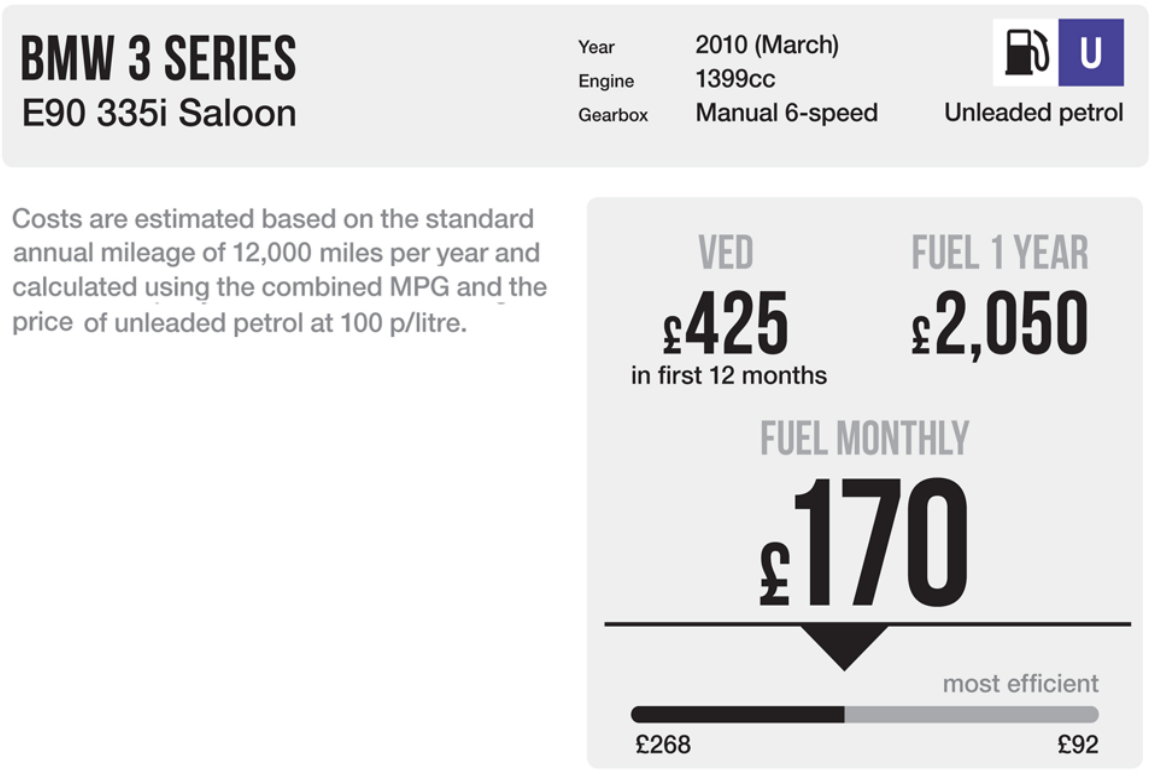


Annual fuel and car tax costs

Make/Model:	**Ford Focus**	Engine Capacity (cc):	**1753 cc**
Fuel Type:	**Diesel**	Transmission:	**Manual**

Fuel cost (estimated) for 12,000 miles A fuel cost figure indicates to the consumer a guide fuel price for comparison purposes. This figure is calculated by using the combined drive cycle (town centre and motorway) and average fuel price.	**£1,005**
VED for 12 months Vehicle excise duty (VED) or road tax varies according to the CO_2 emissions and fuel type of the vehicle.	**£120**

B1



BMW 3 SERIES
E90 335i Saloon

Year	2010 (March)
Engine	1399cc
Gearbox	Manual 6-speed

U
Unleaded petrol

Costs are estimated based on the standard annual mileage of 12,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 100 p/litre.

VED
£425
in first 12 months

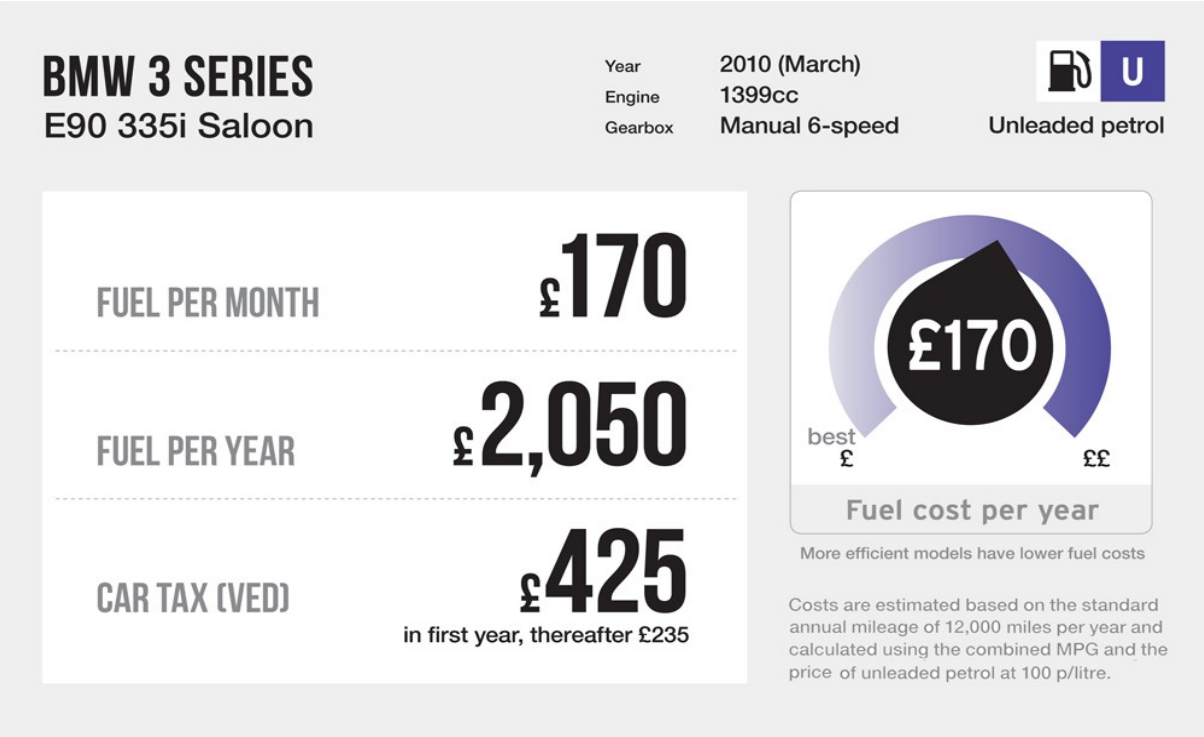
FUEL 1 YEAR
£2,050

FUEL MONTHLY
£170

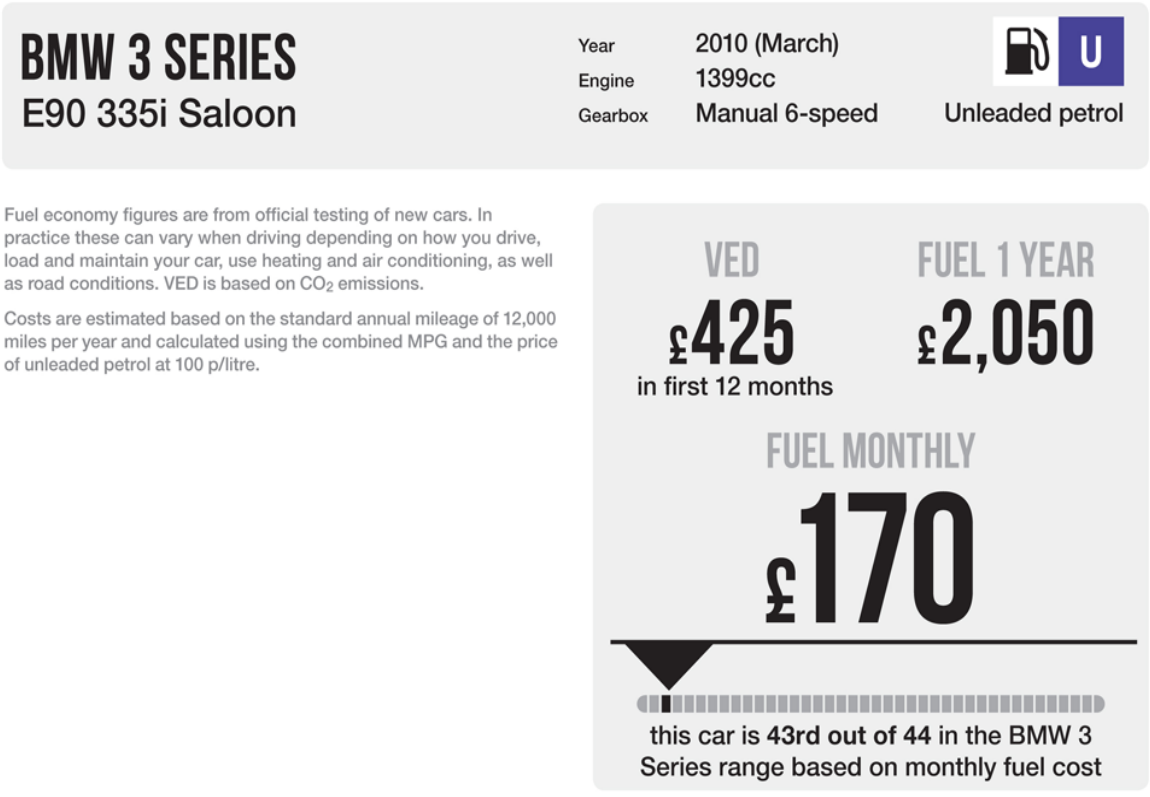
most efficient

£268 £92

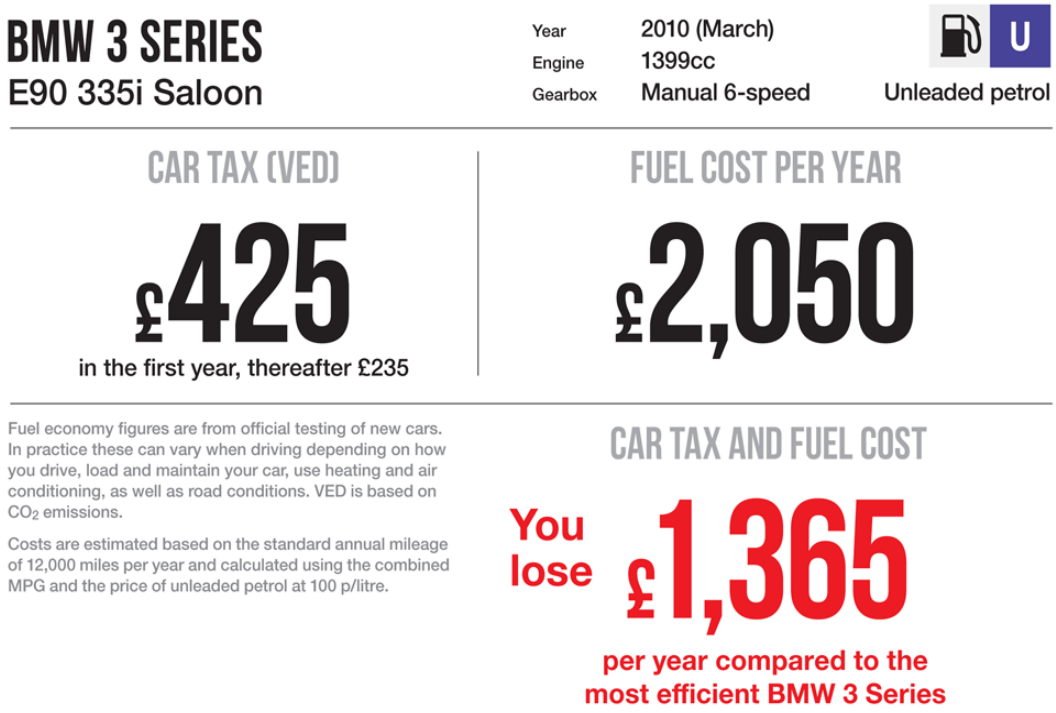
B2


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
FUEL PER MONTH £170
FUEL PER YEAR £2,050
CAR TAX (VED) £425
in first year, thereafter £235
£170
best £ ££
Fuel cost per year
More efficient models have lower fuel costs
Costs are estimated based on the standard annual mileage of 12,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 100 p/litre.

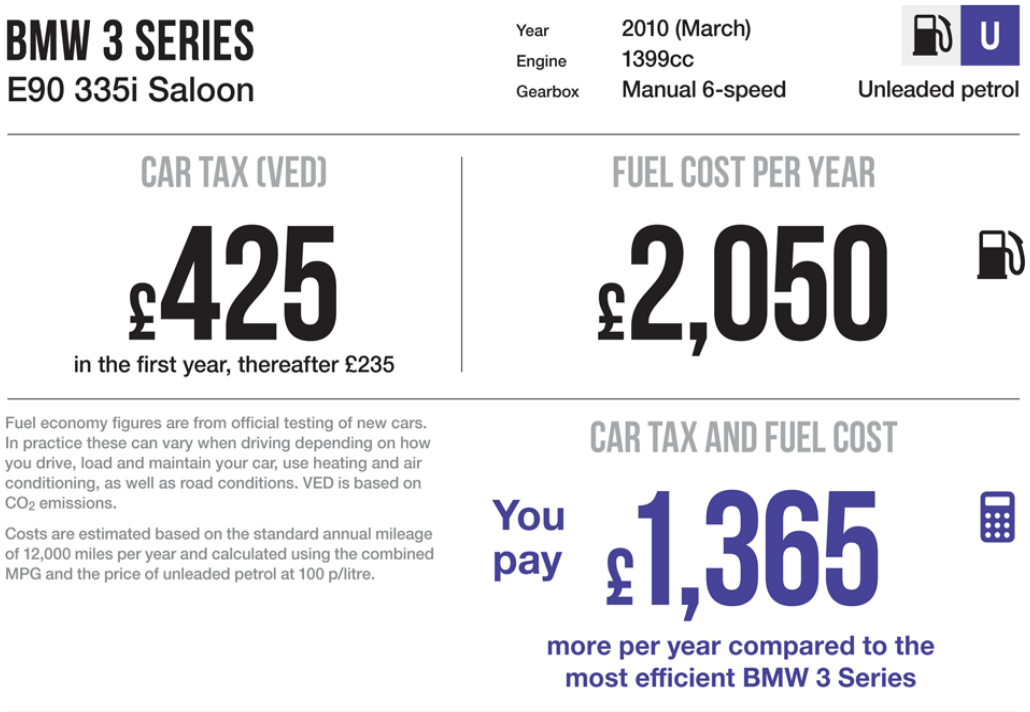
B3


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions. VED is based on CO_2 emissions.
Costs are estimated based on the standard annual mileage of 12,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 100 p/litre.
VED
£425
in first 12 months
FUEL 1 YEAR
£2,050
FUEL MONTHLY
£170
this car is 43rd out of 44 in the BMW 3 Series range based on monthly fuel cost

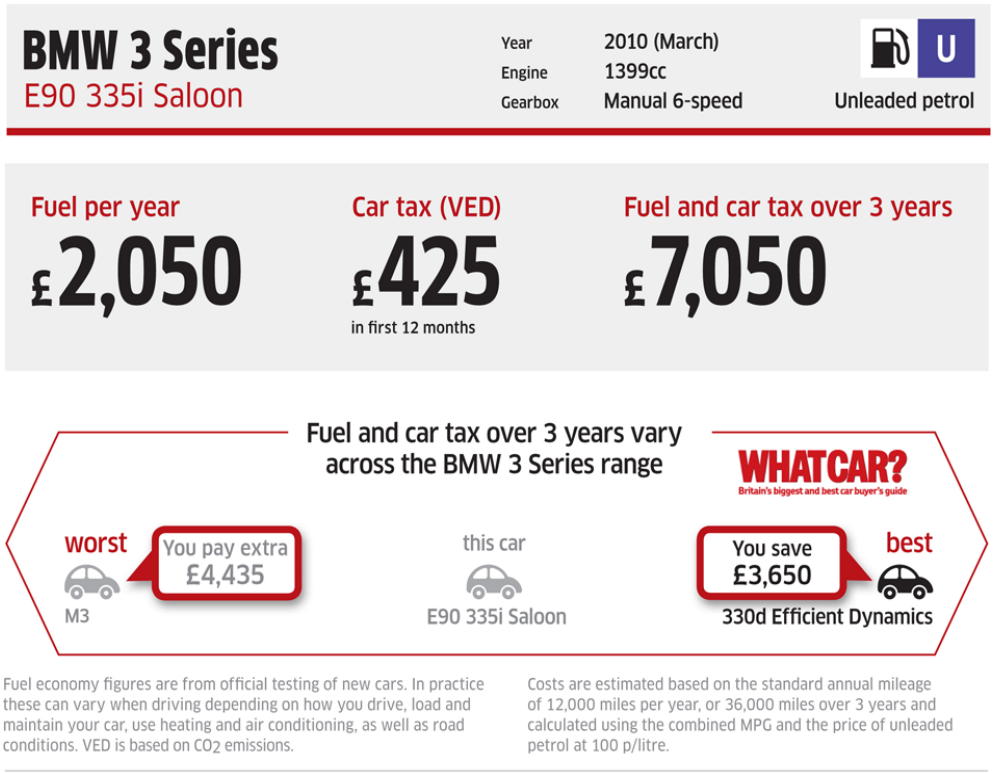
B4


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
CAR TAX (VED)
£425
in the first year, thereafter £235
FUEL COST PER YEAR
£2,050
Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions. VED is based on CO_2 emissions.
Costs are estimated based on the standard annual mileage of 12,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 100 p/litre.
CAR TAX AND FUEL COST
You lose £1,365
per year compared to the most efficient BMW 3 Series

B1


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
CAR TAX (VED)
£425
in the first year, thereafter £235
FUEL COST PER YEAR
£2,050
Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions. VED is based on CO_2 emissions.
Costs are estimated based on the standard annual mileage of 12,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 100 p/litre.
CAR TAX AND FUEL COST
You pay £1,365
more per year compared to the most efficient BMW 3 Series

B2



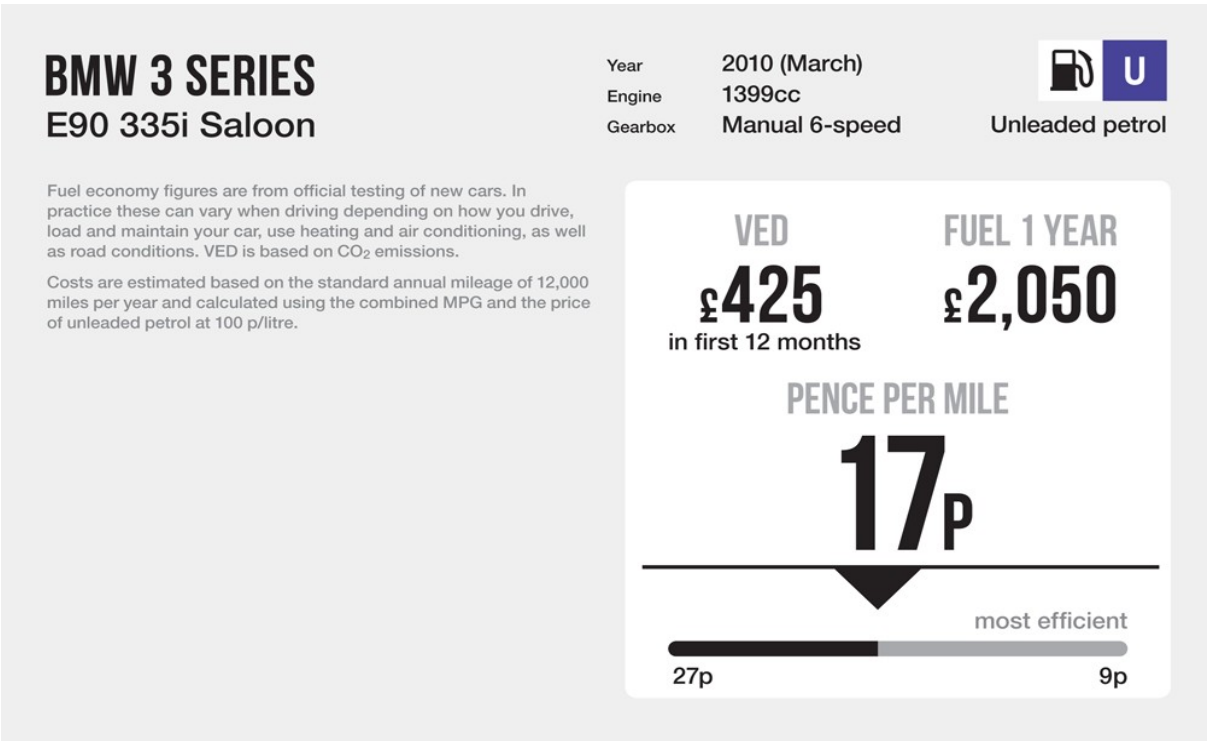
B3

Buyer's Car 3yr [test label B3] format with 3 year period replaced by 1 year period

B4


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
FUEL PER MILE
17p
FUEL PER YEAR
£2,050
CAR TAX (VED)
£425
in first year, thereafter £235
17p
best
£
££
Fuel cost per year
More efficient models have lower fuel costs
Costs are estimated based on the standard annual mileage of 12,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 100 p/litre.

C1


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions. VED is based on CO_2 emissions.
Costs are estimated based on the standard annual mileage of 12,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 100 p/litre.
VED
£425
in first 12 months
FUEL 1 YEAR
£2,050
PENCE PER MILE
17p
most efficient
27p
9p

C2

QR CODE READER TOOLS

Scan this QR code with your smartphone to calculate actual fuel costs and compare CO_2 emissions of all new cars.

Freephone 0800 815 015 for help from the team at Energy Saving Trust (Mon-Fri 9am-6pm).

A guide on fuel economy and CO_2 emissions for all new car models is available for fee at any point of sale and online at the address below.

carfueldata.direct.gov.uk

Department for Transport

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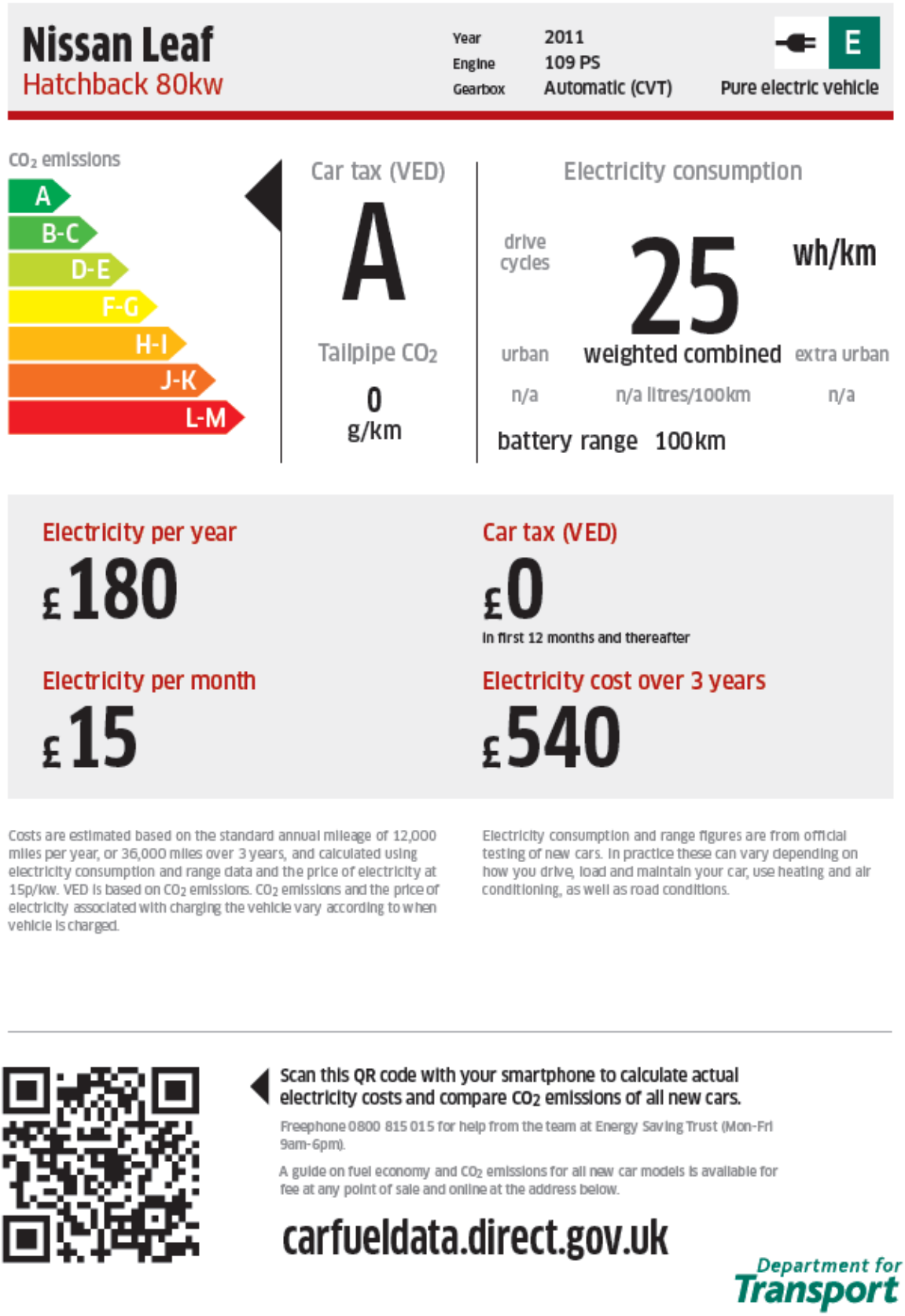
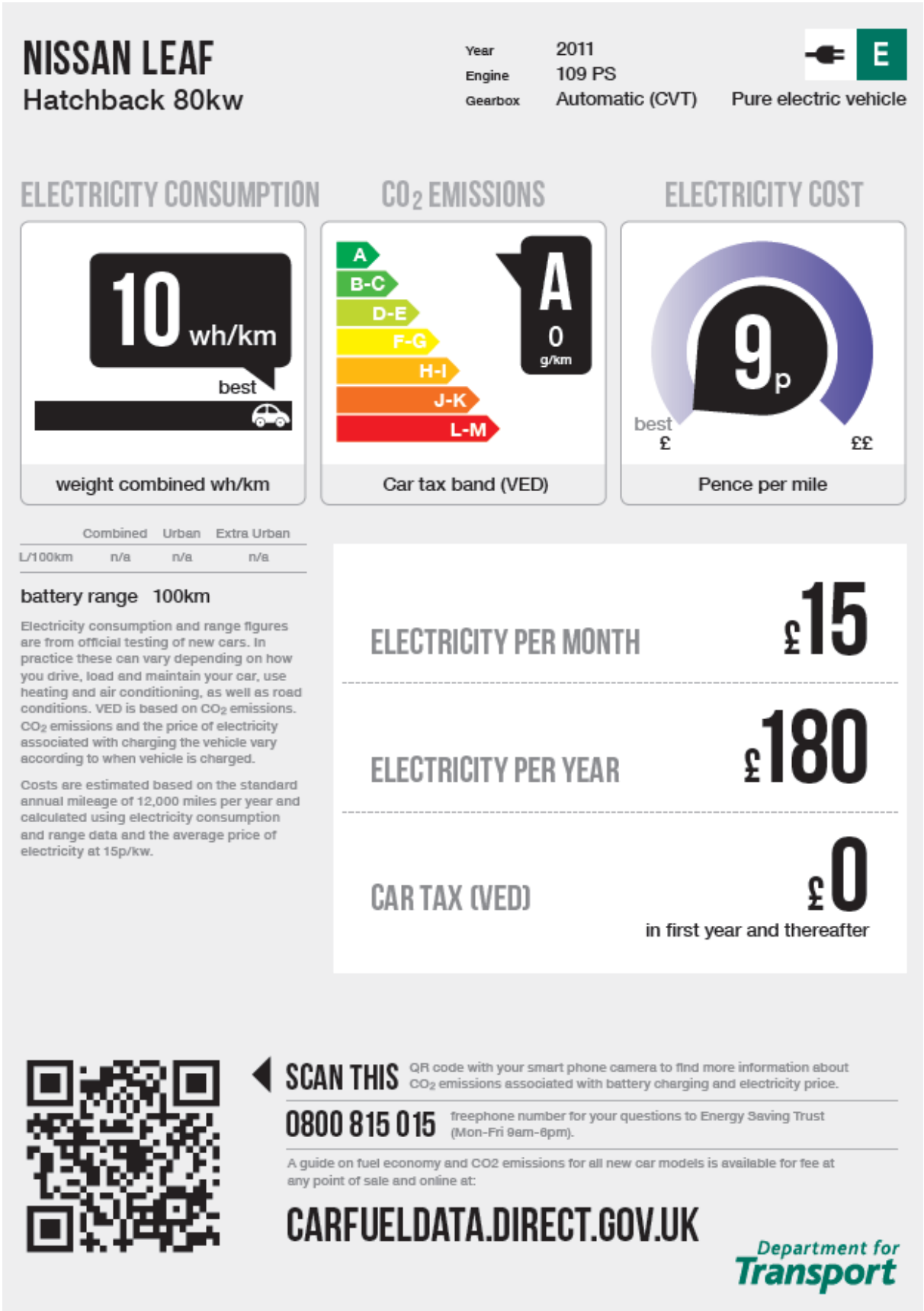
carfueldata.direct.gov.uk

Department for Transport

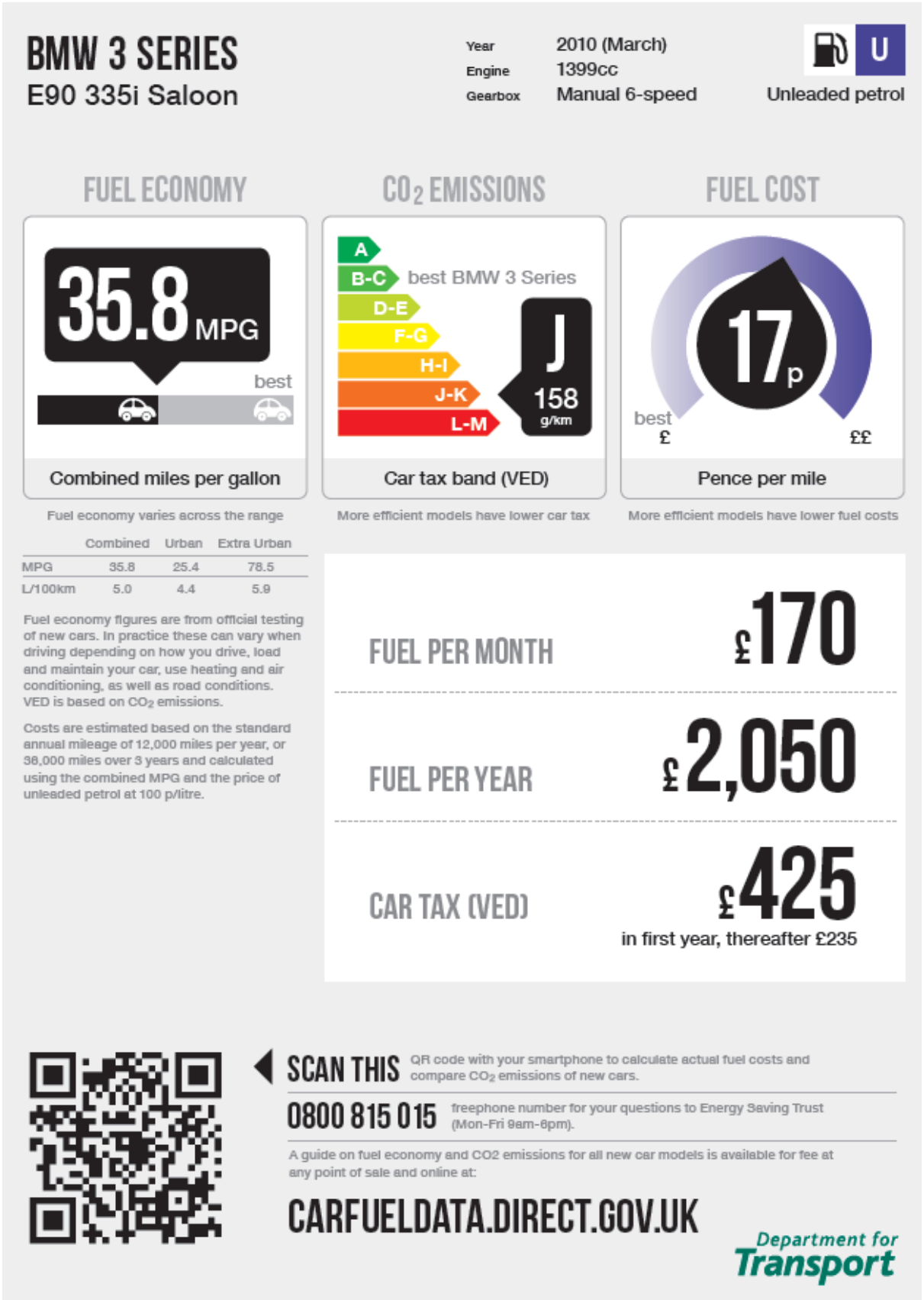
D2



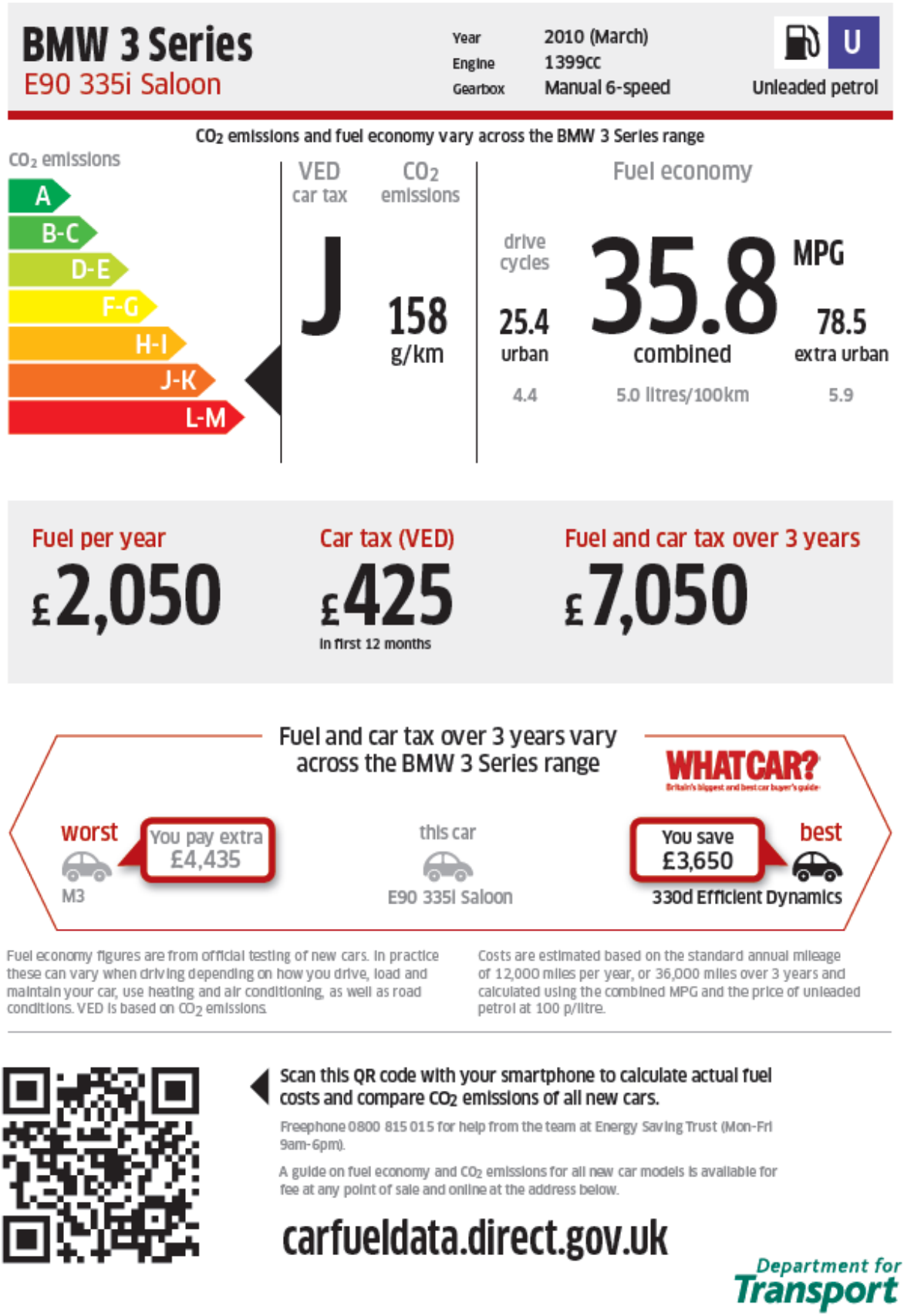
E1 – Traditional EV



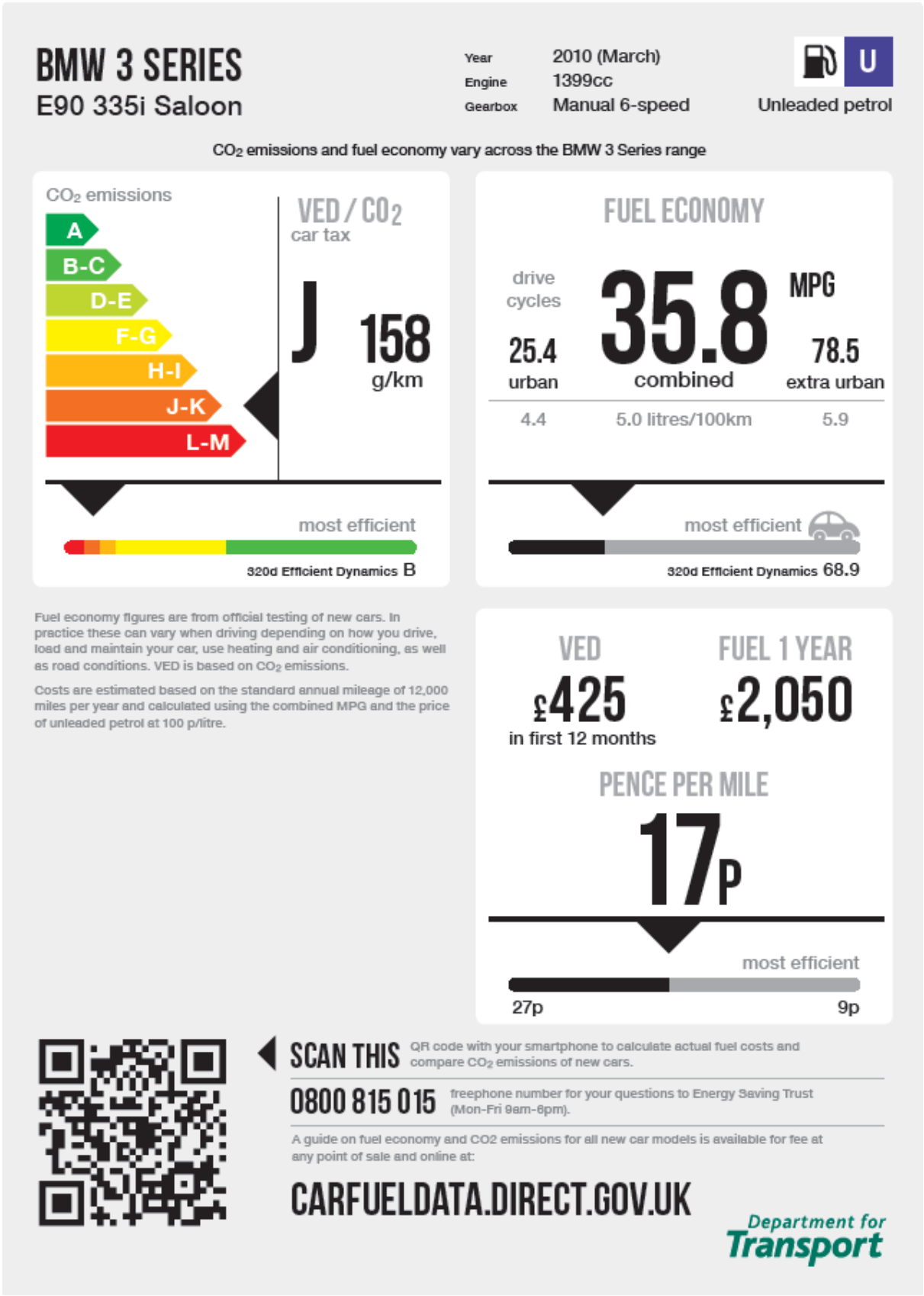
E2 – Dashboard EV



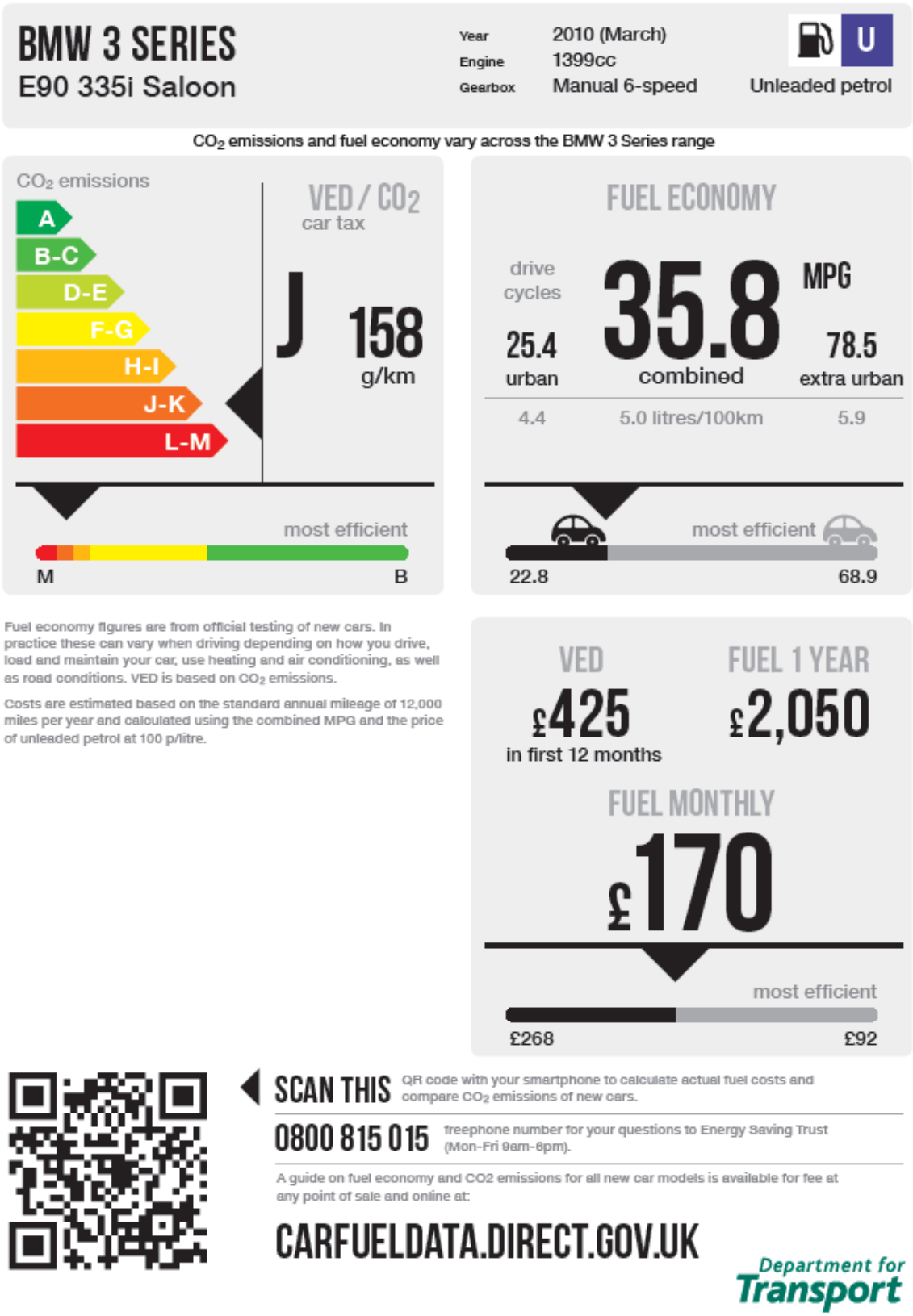
Dashboard ICE



Buyer's Guide ICE


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
CO2 emissions and fuel economy vary across the BMW 3 Series range
CO2 emissions
A
B-C
D-E
F-G
H-I
J-K
L-M
VED / CO2 car tax
J
158 g/km
most efficient
320d Efficient Dynamics B
FUEL ECONOMY
drive cycles
25.4 urban
35.8 MPG combined
78.5 extra urban
4.4
5.0 litres/100km
5.9
most efficient
320d Efficient Dynamics 68.9
Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions. VED is based on CO2 emissions.
Costs are estimated based on the standard annual mileage of 12,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 100 p/litre.
VED
£425
in first 12 months
FUEL 1 YEAR
£2,050
PENCE PER MILE
17p
most efficient
27p
9p
SCAN THIS QR code with your smartphone to calculate actual fuel costs and compare CO2 emissions of new cars.
0800 815 015 freephone number for your questions to Energy Saving Trust (Mon-Fri 9am-6pm).
A guide on fuel economy and CO2 emissions for all new car models is available for fee at any point of sale and online at:
CARFUELDATA.DIRECT.GOV.UK
Department for Transport

Slider 1 ICE


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
CO2 emissions and fuel economy vary across the BMW 3 Series range
CO2 emissions
A
B-C
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L-M
VED / CO2 car tax
J
158 g/km
most efficient
M
B
FUEL ECONOMY
drive cycles
25.4 urban
35.8 MPG combined
78.5 extra urban
4.4
5.0 litres/100km
5.9
most efficient
22.8
68.9
Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions. VED is based on CO2 emissions.
Costs are estimated based on the standard annual mileage of 12,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 100 p/litre.
VED
£425
in first 12 months
FUEL 1 YEAR
£2,050
FUEL MONTHLY
£170
most efficient
£268
£92
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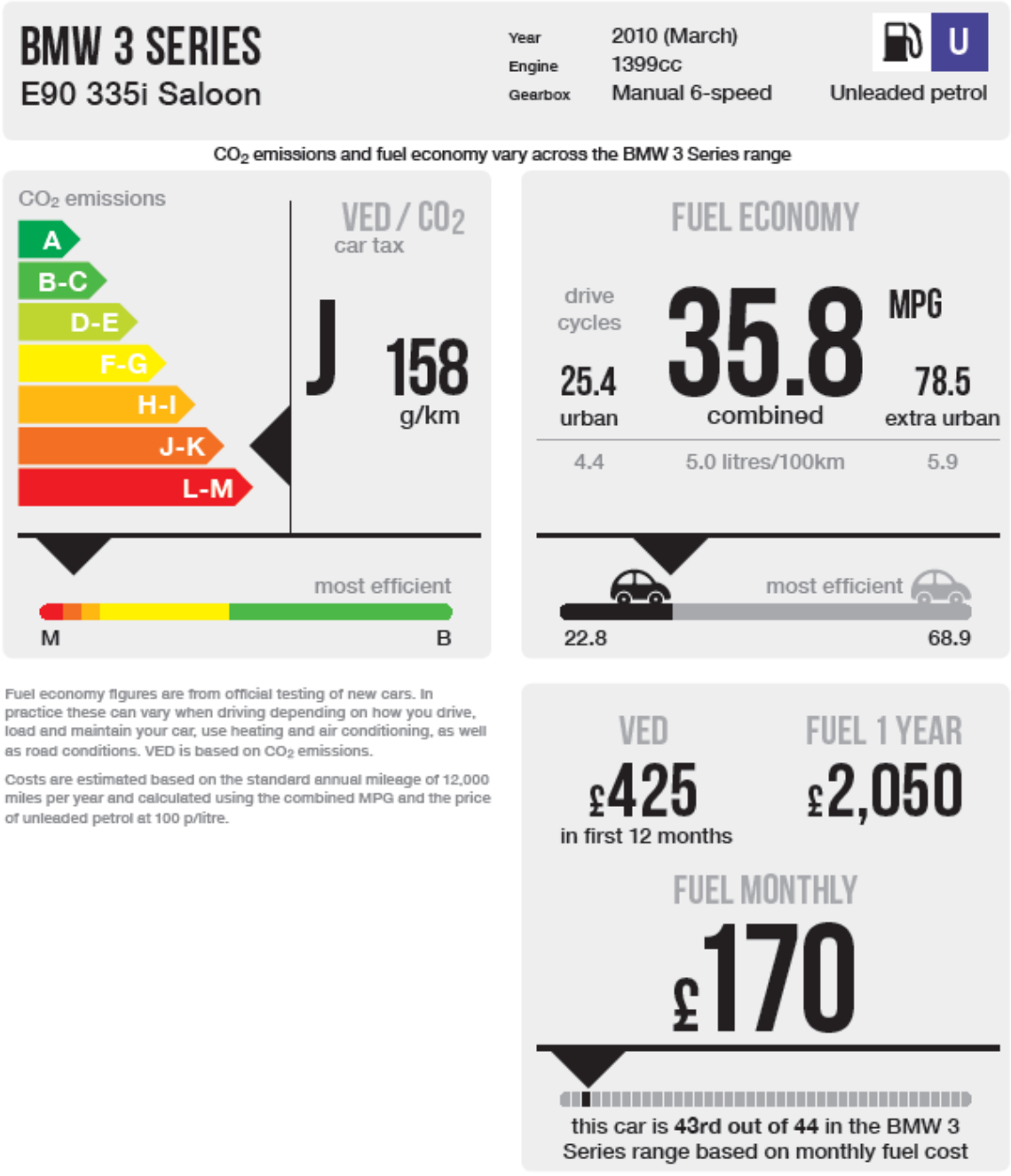
Department for Transport

Slider 2 ICE


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
CO2 emissions and fuel economy vary across the BMW 3 Series range
CO2 emissions
A
B-C
D-E
F-G
H-I
J-K
L-M
VED / CO2
car tax
J
158
g/km
most efficient
M
B
FUEL ECONOMY
drive cycles
35.8
MPG
25.4
urban
combined
78.5
extra urban
4.4
5.0 litres/100km
5.9
most efficient
22.8
68.9
Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions. VED is based on CO2 emissions.
Costs are estimated based on the standard annual mileage of 12,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 100 p/litre.
VED
£425
in first 12 months
FUEL 1 YEAR
£2,050
FUEL MONTHLY
£170
this car is 43rd out of 44 in the BMW 3 Series range based on monthly fuel cost
SCAN THIS QR code with your smartphone to calculate actual fuel costs and compare CO2 emissions of new cars.
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A guide on fuel economy and CO2 emissions for all new car models is available for fee at any point of sale and online at:
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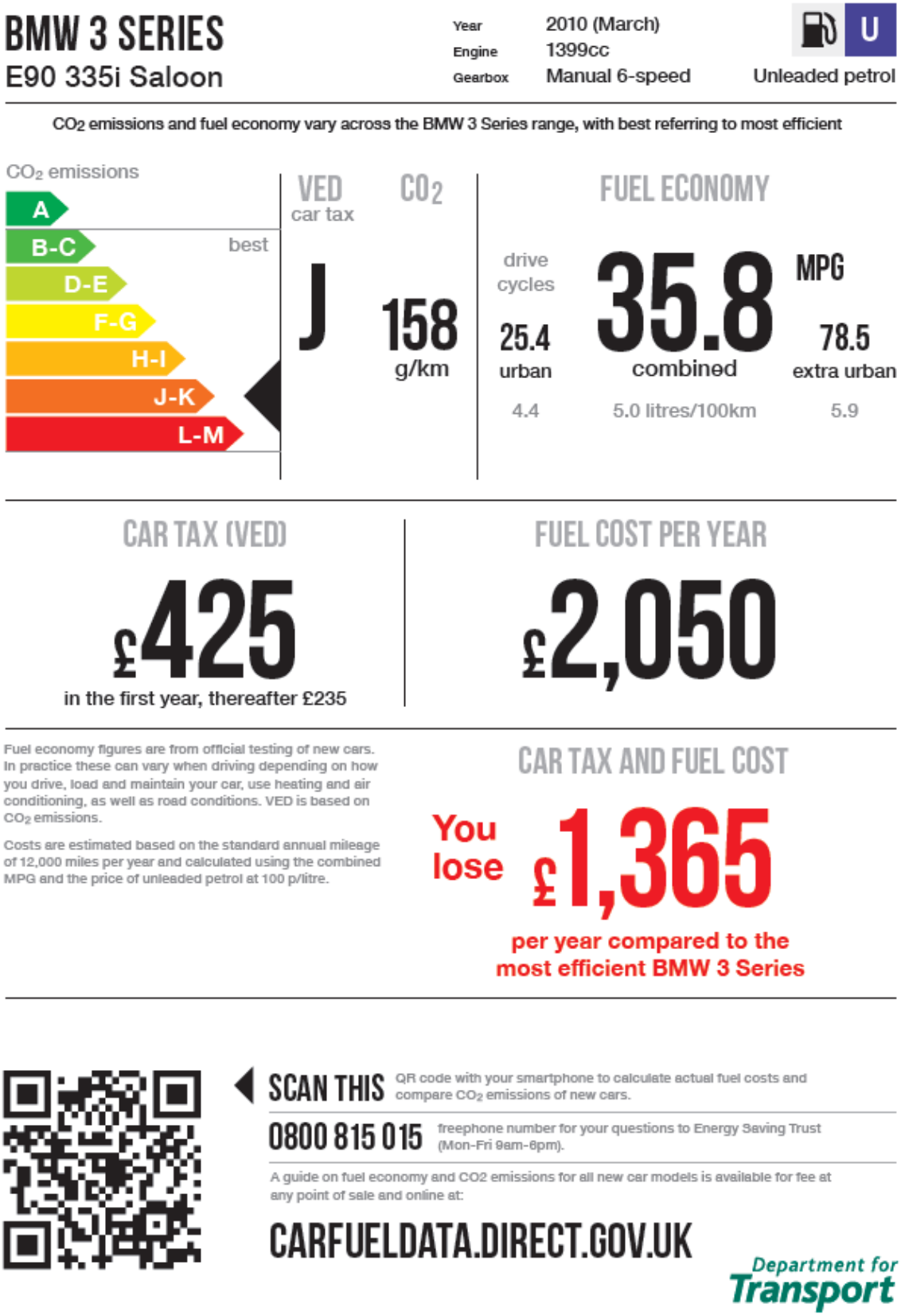
Department for Transport

Slider 3 ICE



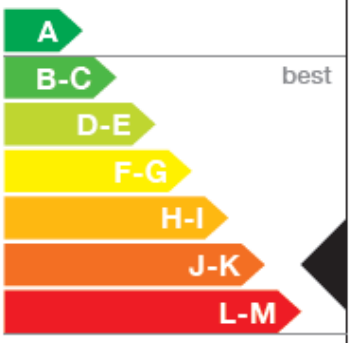
Traditional 1 ICE

BMW 3 SERIES
E90 335i Saloon

Year	2010 (March)
Engine	1399cc
Gearbox	Manual 6-speed

U
Unleaded petrol

CO_2 emissions and fuel economy vary across the BMW 3 Series range, with best referring to most efficient



VED car tax

J

CO_2

158 g/km

FUEL ECONOMY

drive cycles		
25.4 urban	35.8 combined	78.5 extra urban
4.4	5.0 litres/100km	5.9

MPG

CAR TAX (VED)

£425

in the first year, thereafter £235

FUEL COST PER YEAR

£2,050

Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions. VED is based on CO_2 emissions.

Costs are estimated based on the standard annual mileage of 12,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 100 p/litre.

CAR TAX AND FUEL COST

You pay £1,365

more per year compared to the most efficient BMW 3 Series

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0800 815 015 freephone number for your questions to Energy Saving Trust (Mon-Fri 9am-6pm).

A guide on fuel economy and CO2 emissions for all new car models is available for fee at any point of sale and online at:

CARFUELDATA.DIRECT.GOV.UK

Department for Transport

Traditional 2 ICE

LowCVP Car Buyer Survey:

Testing alternative fuel economy labels

Research conducted by Ecolane Consultancy & Centre for Sustainable Energy on behalf of the Low Carbon Vehicle Partnership

Dr Ben Lane (Ecolane Consultancy)
Dr Nick Banks (Centre for Sustainable Energy)
Dr Jillian Anable (University of Aberdeen)

Appendix 3 – Focus groups test labels (R2)

LowCVP Car Buyer Survey: Testing alternative fuel economy labels

Project commissioned by the Low Carbon Vehicle Partnership

Project managed by Dr Ben Lane, Ecolane Transport Consultancy

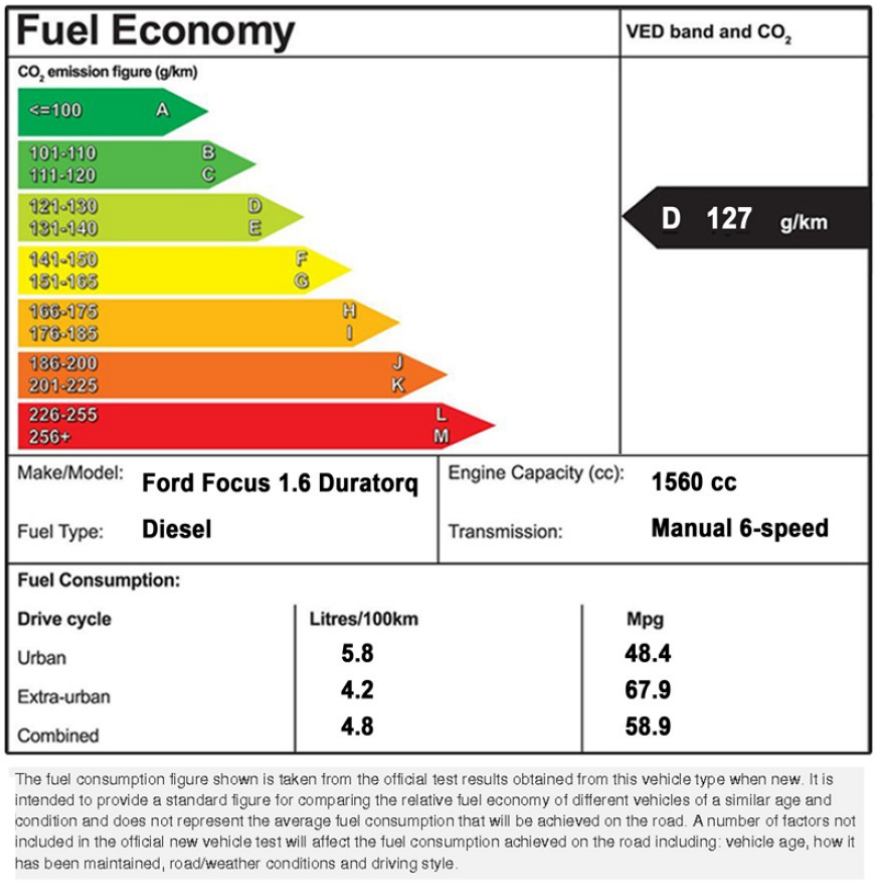
Report Details:

Project name	**LowCVP Car Buyer Survey: Testing alternative fuel economy labels**
Report Type	Final
Supplier	Ecolane Limited & Sustain Limited
Report Version	Appendix 3
Authors	Dr Ben Lane (Ecolane) & Dr Nick Banks (CSE)
Last Edited	16th July 2012
This report has been prepared by Ecolane and CSE for the Low Carbon Vehicle Partnership in accordance with the terms and conditions of appointment. Ecolane and CSE cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.	

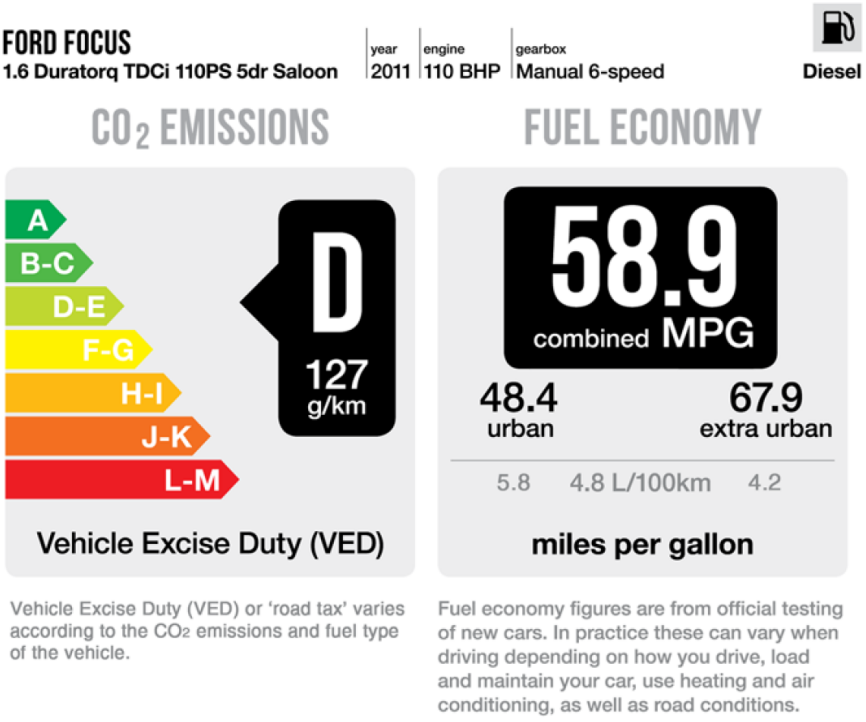
Contact Details:
Dr Ben Lane
Senior Consultant

Ecolane Limited
Unit 62, Spike Island
133 Cumberland Road
Bristol BS1 6UX, UK
Tel: +44 (0)117 929 8855
Skype: ecolane

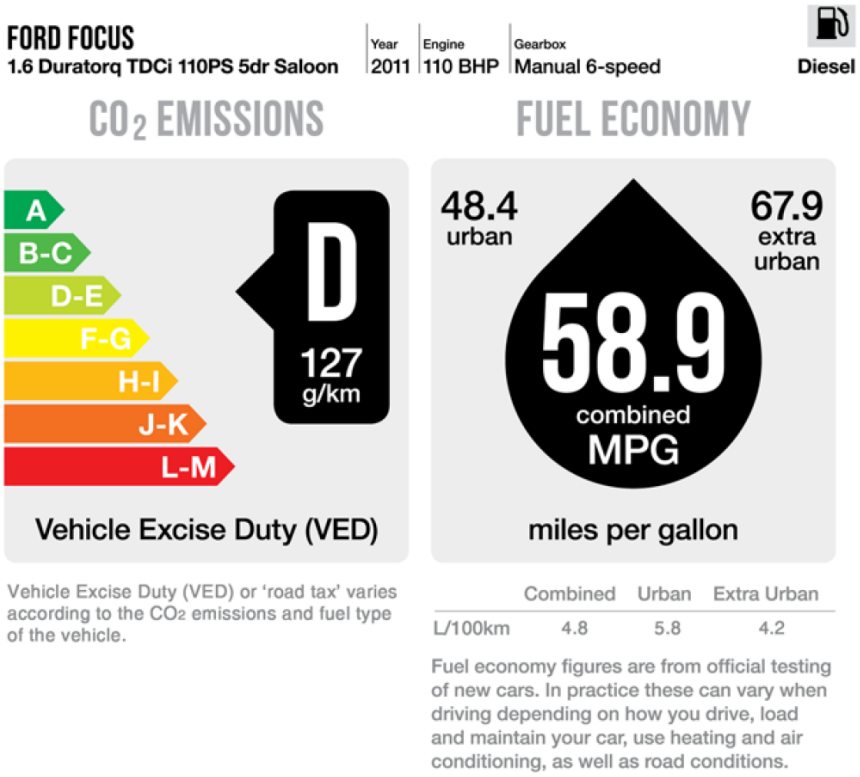
Appendix 3 – Focus groups alternative test labels (Round 2 final)



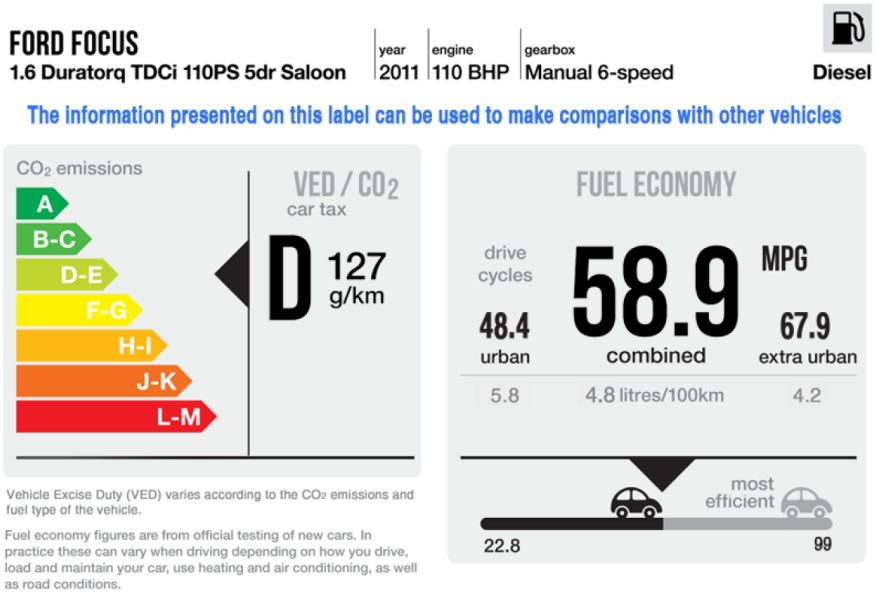
A1



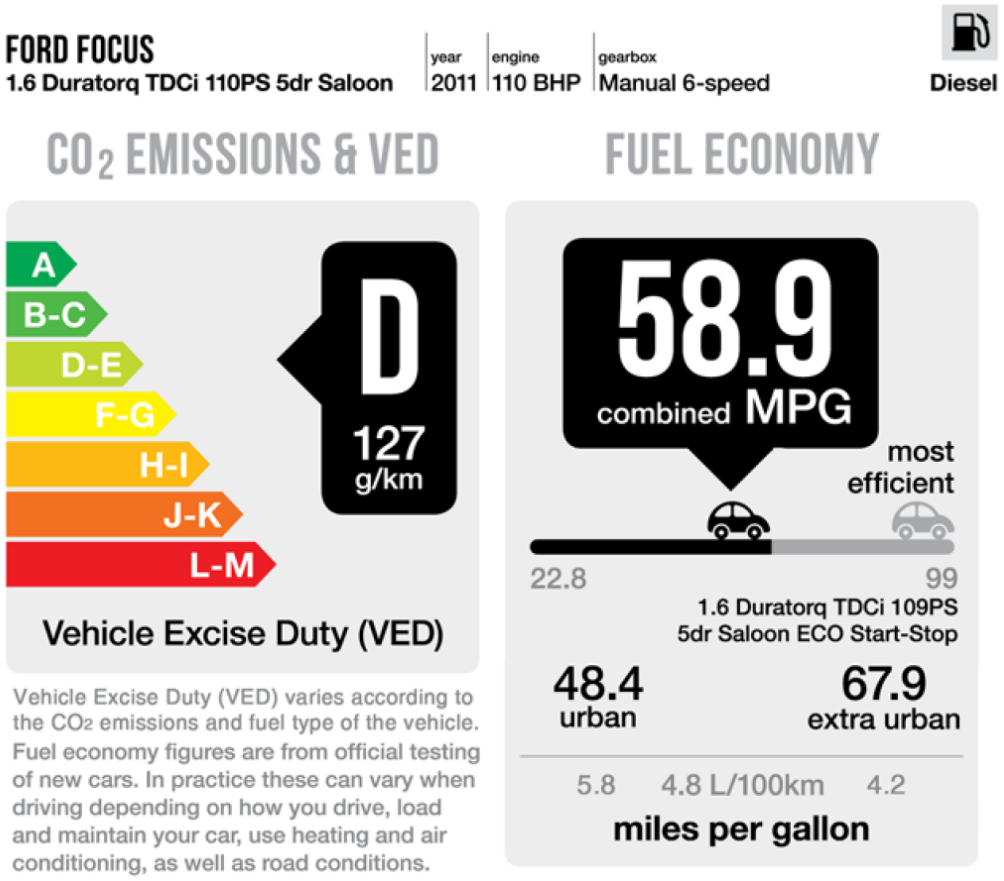
A2


FORD FOCUS
1.6 Duratorq TDCi 110PS 5dr Saloon
Year 2011
Engine 110 BHP
Gearbox Manual 6-speed
Diesel
CO2 EMISSIONS
FUEL ECONOMY
A
B-C
D-E
F-G
H-I
J-K
L-M
D
127 g/km
Vehicle Excise Duty (VED)
48.4 urban
67.9 extra urban
58.9 combined MPG
miles per gallon
Vehicle Excise Duty (VED) or 'road tax' varies according to the CO2 emissions and fuel type of the vehicle.
Combined Urban Extra Urban
L/100km 4.8 5.8 4.2
Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions.

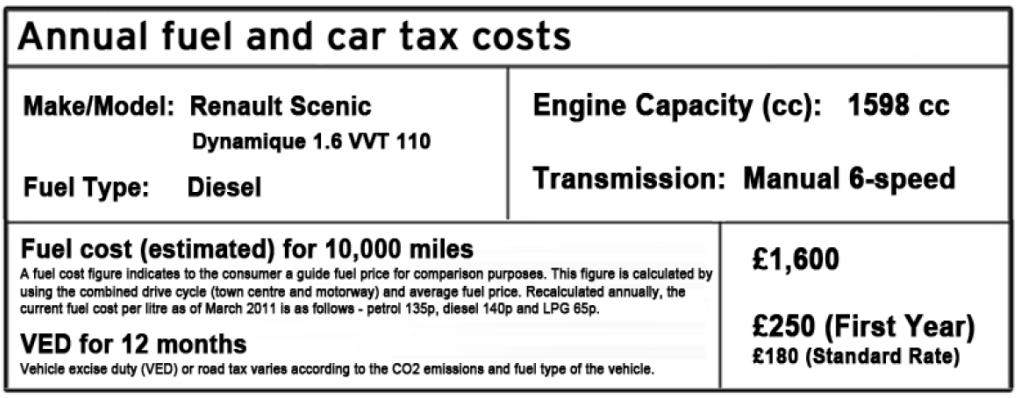
A3


FORD FOCUS
1.6 Duratorq TDCi 110PS 5dr Saloon
year 2011
engine 110 BHP
gearbox Manual 6-speed
Diesel
The information presented on this label can be used to make comparisons with other vehicles
CO2 emissions
A
B-C
D-E
F-G
H-I
J-K
L-M
VED / CO2
car tax
D 127 g/km
Vehicle Excise Duty (VED) varies according to the CO2 emissions and fuel type of the vehicle.
Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions.
FUEL ECONOMY
drive cycles
48.4 urban
58.9 MPG combined
67.9 extra urban
5.8
4.8 litres/100km
4.2
most efficient
22.8
99

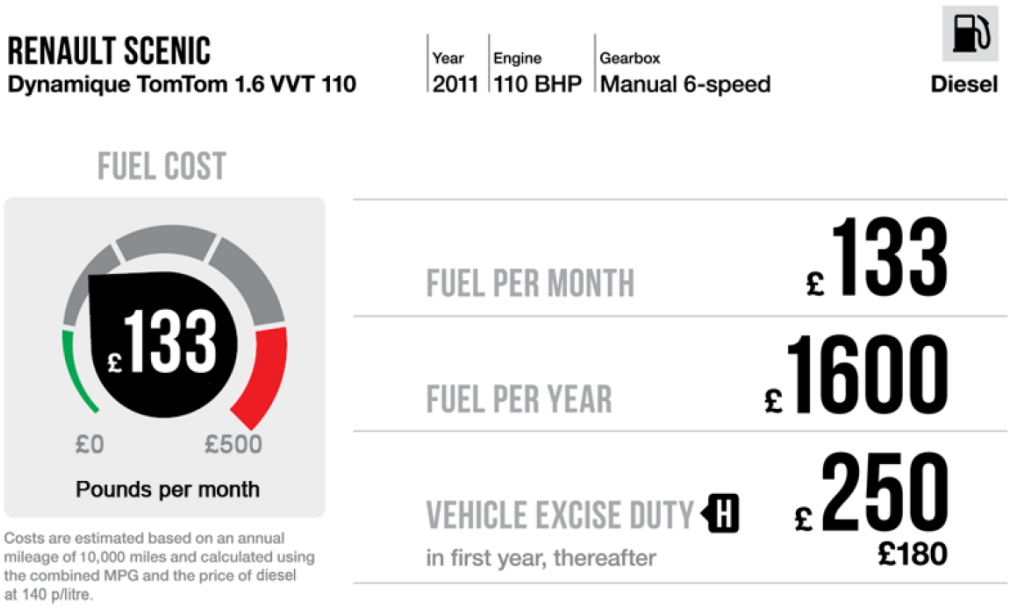
A4


FORD FOCUS
1.6 Duratorq TDCi 110PS 5dr Saloon
year 2011
engine 110 BHP
gearbox Manual 6-speed
Diesel
CO2 EMISSIONS & VED
FUEL ECONOMY
A
B-C
D-E
F-G
H-I
J-K
L-M
D
127 g/km
Vehicle Excise Duty (VED)
Vehicle Excise Duty (VED) varies according to the CO2 emissions and fuel type of the vehicle. Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions.
58.9
combined MPG
most efficient
22.8
99
1.6 Duratorq TDCi 109PS
5dr Saloon ECO Start-Stop
48.4
urban
67.9
extra urban
5.8
4.8 L/100km
4.2
miles per gallon

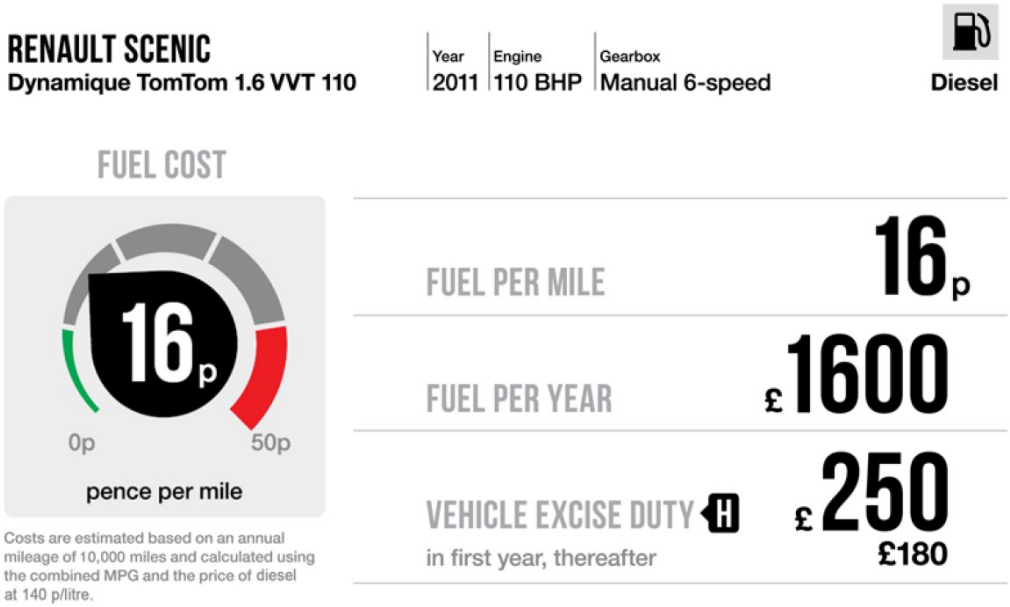
A5


Annual fuel and car tax costs
Make/Model: Renault Scenic
Dynamique 1.6 VVT 110
Fuel Type: Diesel
Engine Capacity (cc): 1598 cc
Transmission: Manual 6-speed
Fuel cost (estimated) for 10,000 miles
A fuel cost figure indicates to the consumer a guide fuel price for comparison purposes. This figure is calculated by using the combined drive cycle (town centre and motorway) and average fuel price. Recalculated annually, the current fuel cost per litre as of March 2011 is as follows - petrol 135p, diesel 140p and LPG 65p.
£1,600
VED for 12 months
Vehicle excise duty (VED) or road tax varies according to the CO2 emissions and fuel type of the vehicle.
£250 (First Year)
£180 (Standard Rate)

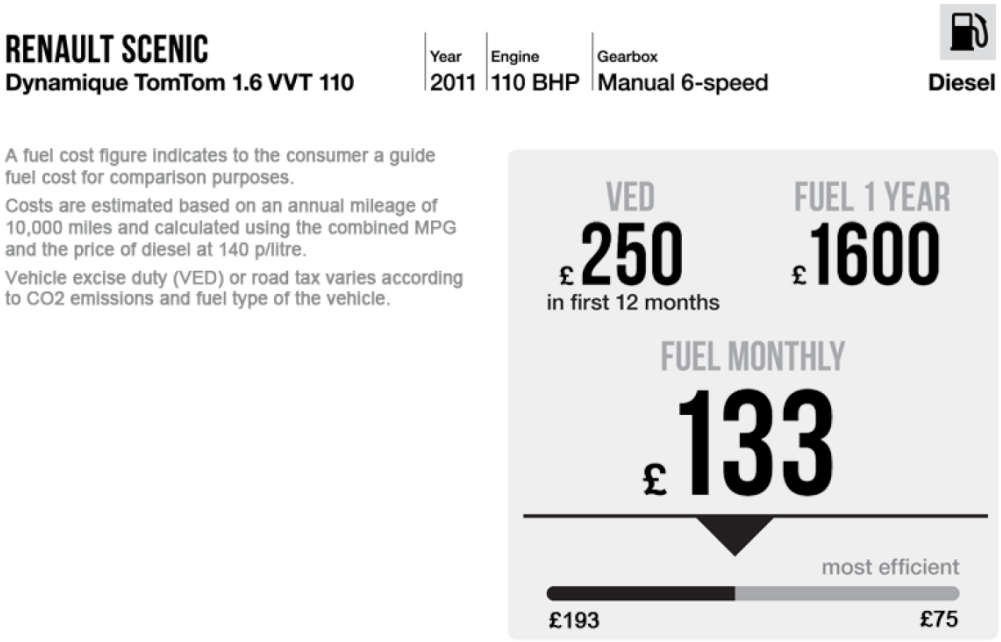
B1


RENAULT SCENIC
Dynamique TomTom 1.6 VVT 110
Year 2011
Engine 110 BHP
Gearbox Manual 6-speed
Diesel
FUEL COST
£133
£0
£500
Pounds per month
Costs are estimated based on an annual mileage of 10,000 miles and calculated using the combined MPG and the price of diesel at 140 p/litre.
FUEL PER MONTH £133
FUEL PER YEAR £1600
VEHICLE EXCISE DUTY H £250
in first year, thereafter £180

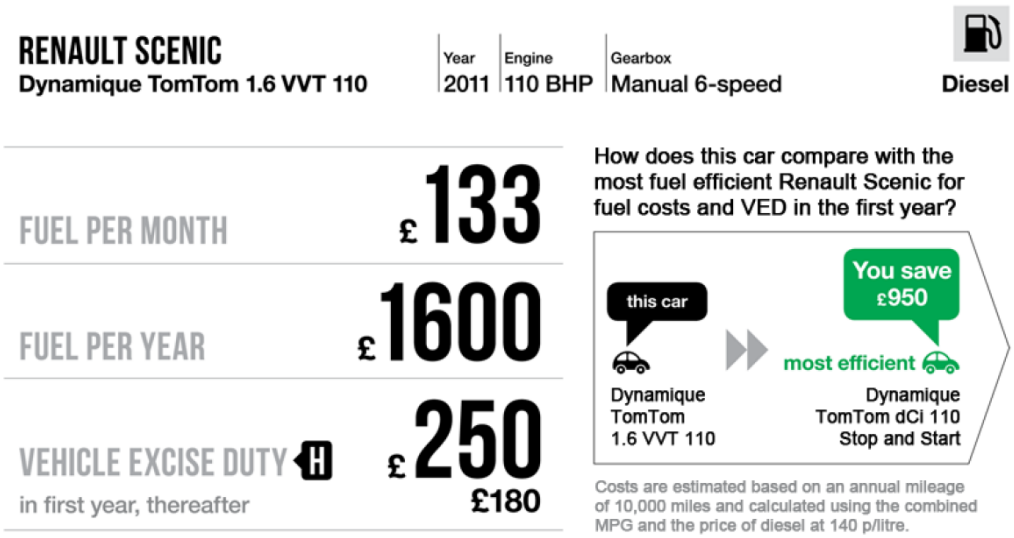
B2


RENAULT SCENIC
Dynamique TomTom 1.6 VVT 110
Year 2011
Engine 110 BHP
Gearbox Manual 6-speed
Diesel
FUEL COST
16p
0p
50p
pence per mile
Costs are estimated based on an annual mileage of 10,000 miles and calculated using the combined MPG and the price of diesel at 140 p/litre.
FUEL PER MILE 16p
FUEL PER YEAR £1600
VEHICLE EXCISE DUTY H £250
in first year, thereafter £180

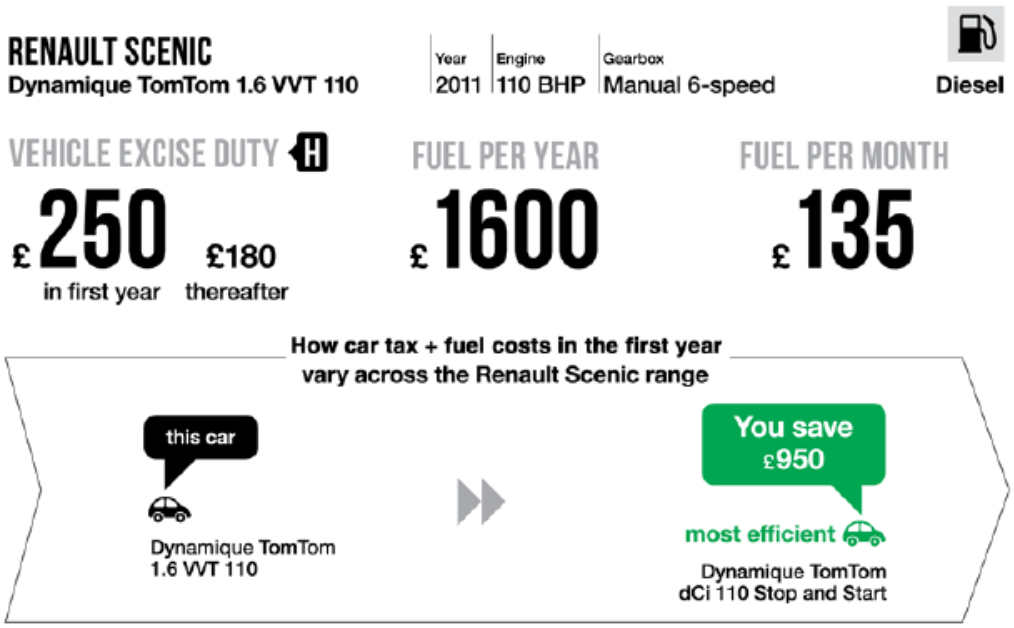
B3

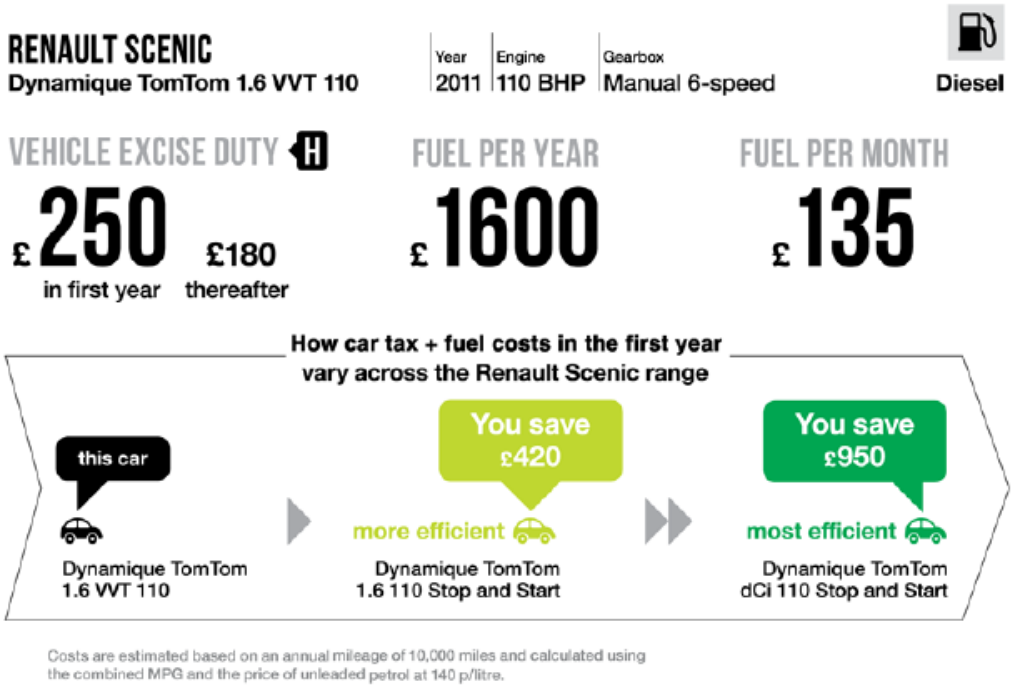

RENAULT SCENIC
Dynamique TomTom 1.6 VVT 110
Year 2011
Engine 110 BHP
Gearbox Manual 6-speed
Diesel
A fuel cost figure indicates to the consumer a guide fuel cost for comparison purposes.
Costs are estimated based on an annual mileage of 10,000 miles and calculated using the combined MPG and the price of diesel at 140 p/litre.
Vehicle excise duty (VED) or road tax varies according to CO2 emissions and fuel type of the vehicle.
VED
£250
in first 12 months
FUEL 1 YEAR
£1600
FUEL MONTHLY
£133
most efficient
£193
£75

B4

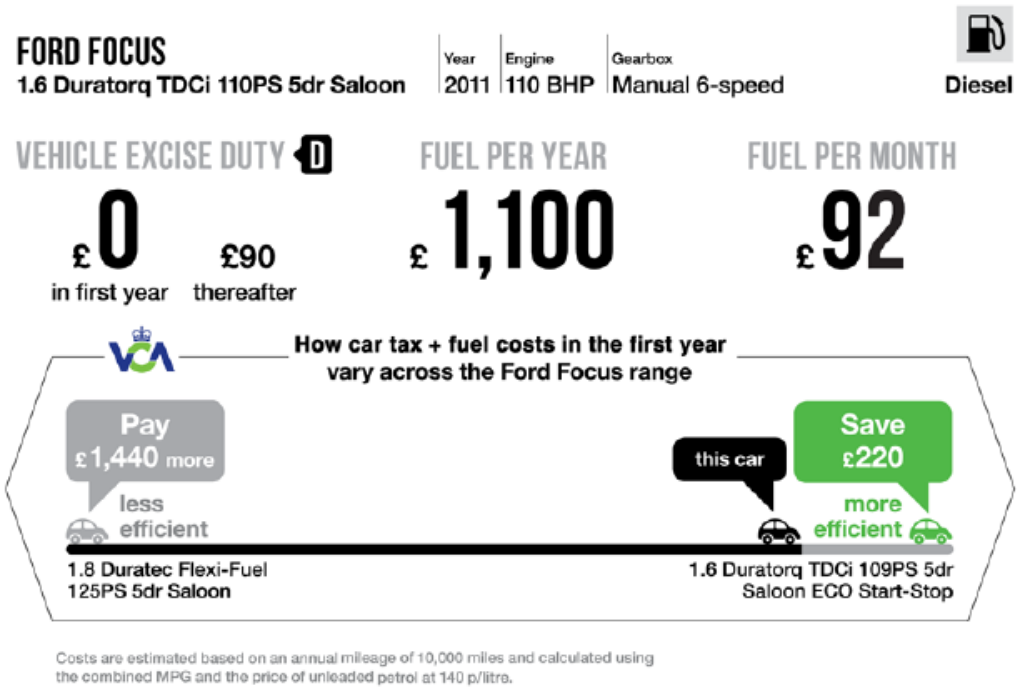

RENAULT SCENIC
Dynamique TomTom 1.6 VVT 110
Year 2011
Engine 110 BHP
Gearbox Manual 6-speed
Diesel
FUEL PER MONTH
£133
FUEL PER YEAR
£1600
VEHICLE EXCISE DUTY
in first year, thereafter
£250
£180
How does this car compare with the most fuel efficient Renault Scenic for fuel costs and VED in the first year?
this car
You save £950
most efficient
Dynamique TomTom 1.6 VVT 110
Dynamique TomTom dCi 110 Stop and Start
Costs are estimated based on an annual mileage of 10,000 miles and calculated using the combined MPG and the price of diesel at 140 p/litre.

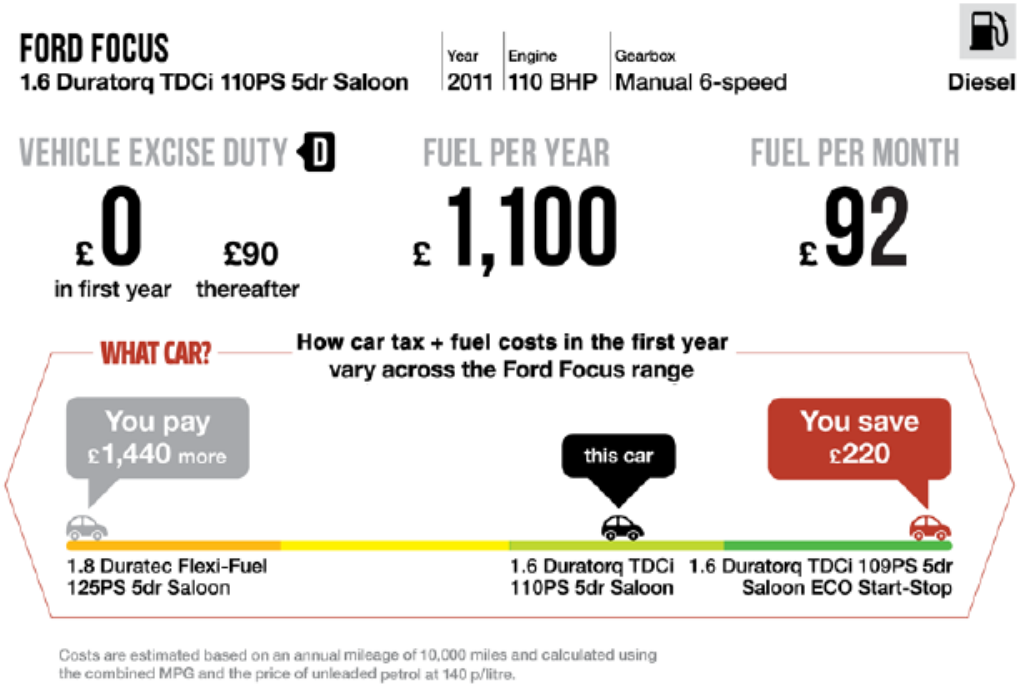
B5


RENAULT SCENIC
Dynamique TomTom 1.6 VVT 110
Year 2011
Engine 110 BHP
Gearbox Manual 6-speed
Diesel
VEHICLE EXCISE DUTY
£250 in first year
£180 thereafter
FUEL PER YEAR
£1600
FUEL PER MONTH
£135
How car tax + fuel costs in the first year vary across the Renault Scenic range
this car
Dynamique TomTom 1.6 VVT 110
You save £950
most efficient
Dynamique TomTom dCi 110 Stop and Start
Costs are estimated based on an annual mileage of 10,000 miles and calculated using the combined MPG and the price of unleaded petrol at 140 p/litre.

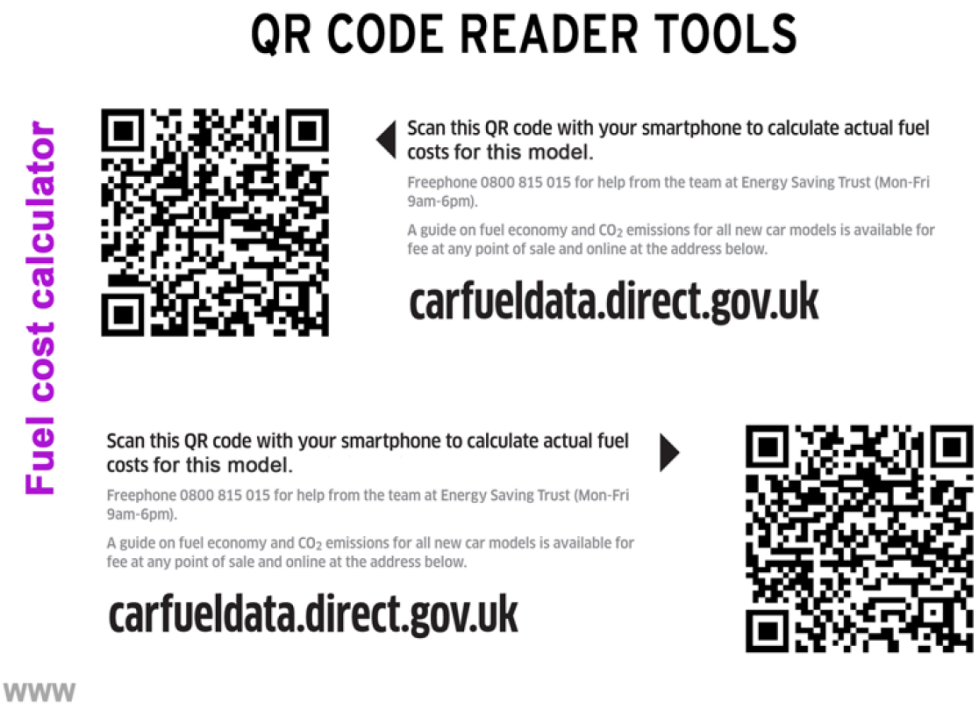

RENAULT SCENIC
Dynamique TomTom 1.6 VVT 110
Year 2011
Engine 110 BHP
Gearbox Manual 6-speed
Diesel
VEHICLE EXCISE DUTY
£250 in first year
£180 thereafter
FUEL PER YEAR
£1600
FUEL PER MONTH
£135
How car tax + fuel costs in the first year vary across the Renault Scenic range
this car
Dynamique TomTom 1.6 VVT 110
You save £420
more efficient
Dynamique TomTom 1.6 110 Stop and Start
You save £950
most efficient
Dynamique TomTom dCi 110 Stop and Start
Costs are estimated based on an annual mileage of 10,000 miles and calculated using the combined MPG and the price of unleaded petrol at 140 p/litre.

C1 & C2

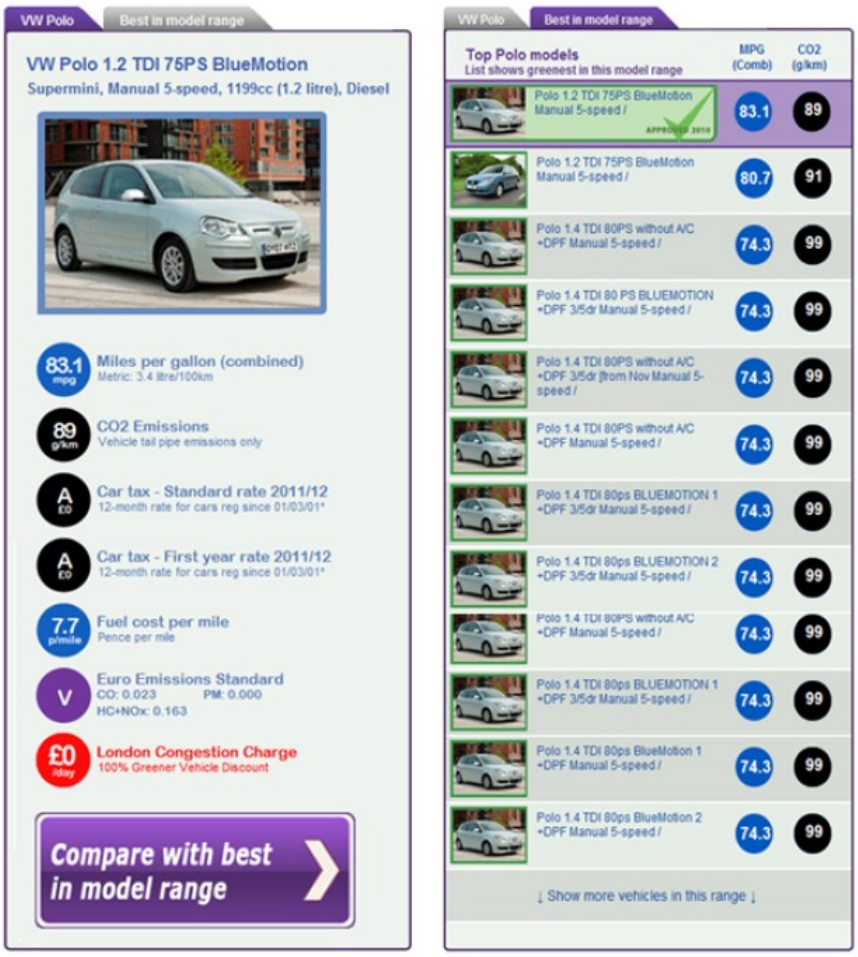

FORD FOCUS
1.6 Duratorq TDCi 110PS 5dr Saloon
Year 2011
Engine 110 BHP
Gearbox Manual 6-speed
Diesel
VEHICLE EXCISE DUTY
£0
in first year
£90
thereafter
FUEL PER YEAR
£1,100
FUEL PER MONTH
£92
How car tax + fuel costs in the first year vary across the Ford Focus range
Pay £1,440 more
less efficient
this car
Save £220
more efficient
1.8 Duratec Flexi-Fuel 125PS 5dr Saloon
1.6 Duratorq TDCi 109PS 5dr Saloon ECO Start-Stop
Costs are estimated based on an annual mileage of 10,000 miles and calculated using the combined MPG and the price of unleaded petrol at 140 p/litre.


FORD FOCUS
1.6 Duratorq TDCi 110PS 5dr Saloon
Year 2011
Engine 110 BHP
Gearbox Manual 6-speed
Diesel
VEHICLE EXCISE DUTY
£0
in first year
£90
thereafter
FUEL PER YEAR
£1,100
FUEL PER MONTH
£92
WHAT CAR?
How car tax + fuel costs in the first year vary across the Ford Focus range
You pay £1,440 more
this car
You save £220
1.8 Duratec Flexi-Fuel 125PS 5dr Saloon
1.6 Duratorq TDCi 110PS 5dr Saloon
1.6 Duratorq TDCi 109PS 5dr Saloon ECO Start-Stop
Costs are estimated based on an annual mileage of 10,000 miles and calculated using the combined MPG and the price of unleaded petrol at 140 p/litre.

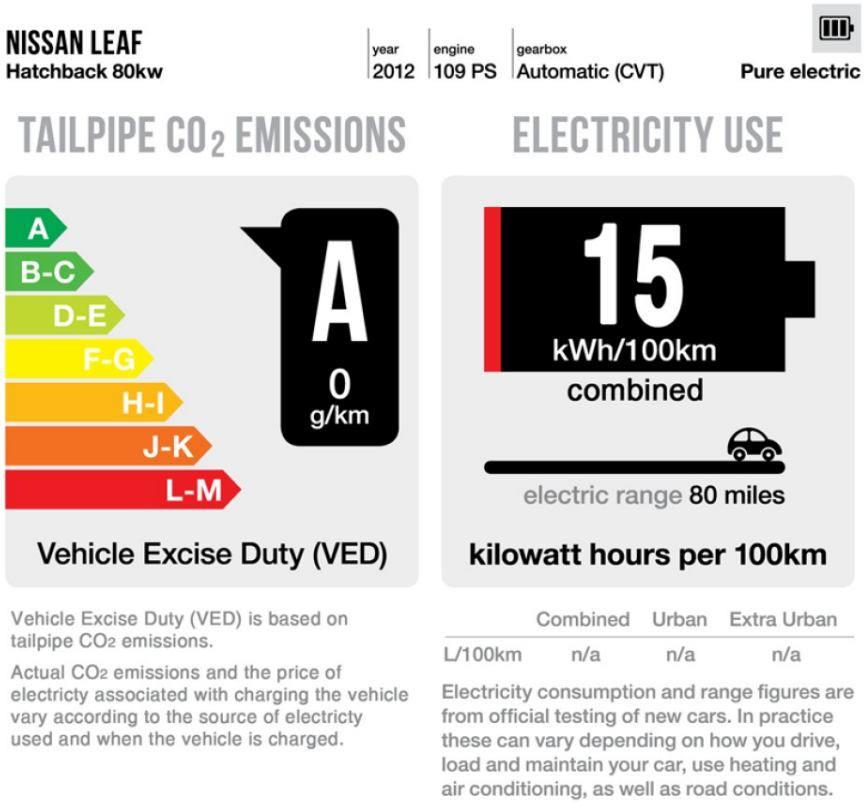
C3 & C4



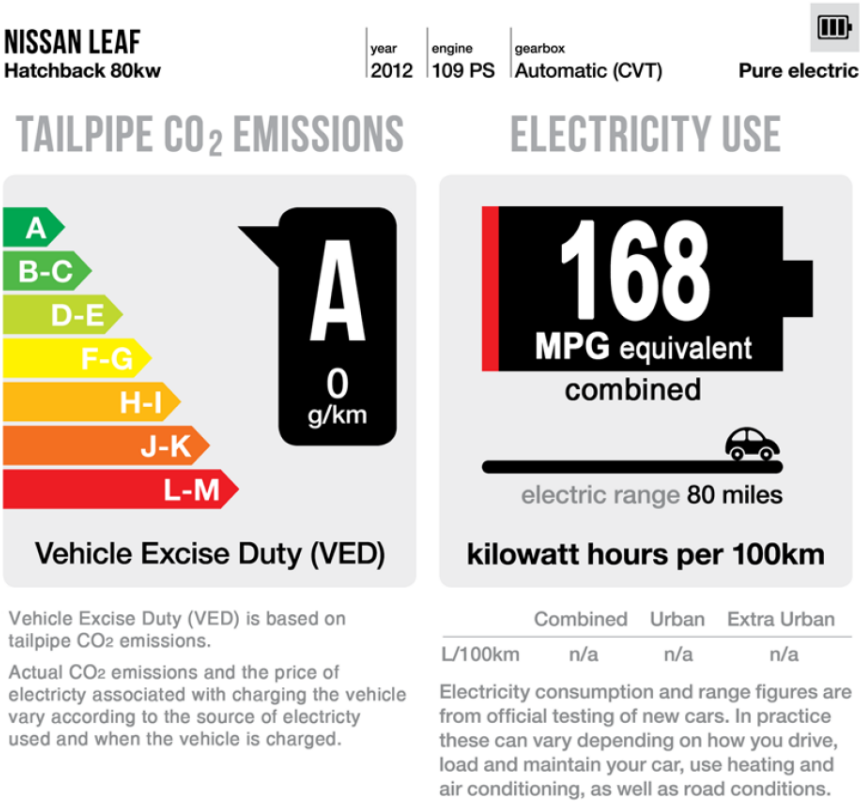
D1



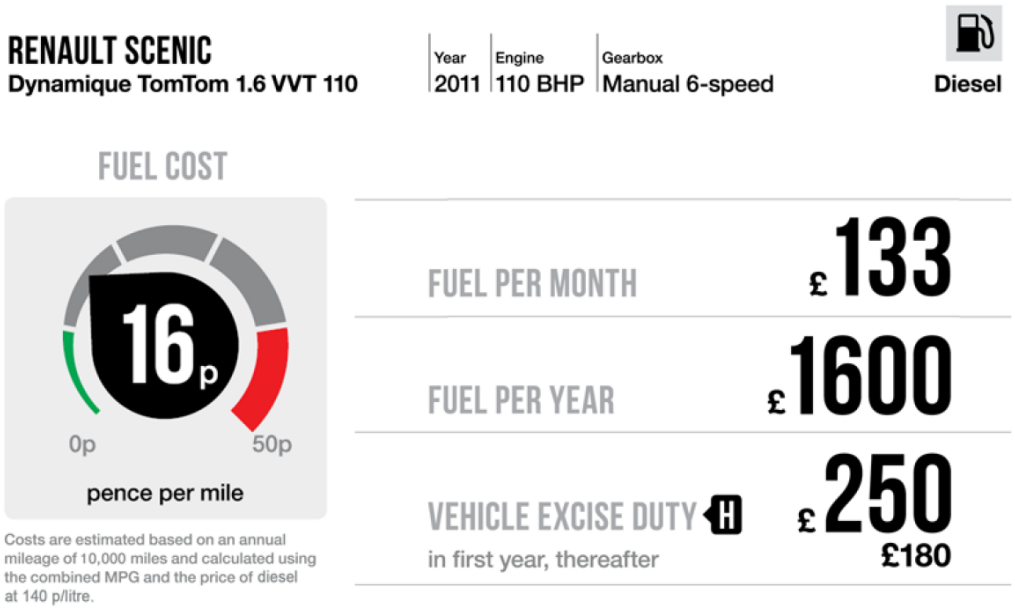
D2 – Best in range mock-up


NISSAN LEAF
Hatchback 80kw
year 2012
engine 109 PS
gearbox Automatic (CVT)
Pure electric
TAILPIPE CO2 EMISSIONS
ELECTRICITY USE
A
B-C
D-E
F-G
H-I
J-K
L-M
A
0 g/km
15
kWh/100km
combined
electric range 80 miles
Vehicle Excise Duty (VED)
kilowatt hours per 100km
Vehicle Excise Duty (VED) is based on tailpipe CO2 emissions.
Actual CO2 emissions and the price of electricty associated with charging the vehicle vary according to the source of electricty used and when the vehicle is charged.
Combined Urban Extra Urban
L/100km n/a n/a n/a
Electricity consumption and range figures are from official testing of new cars. In practice these can vary depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions.

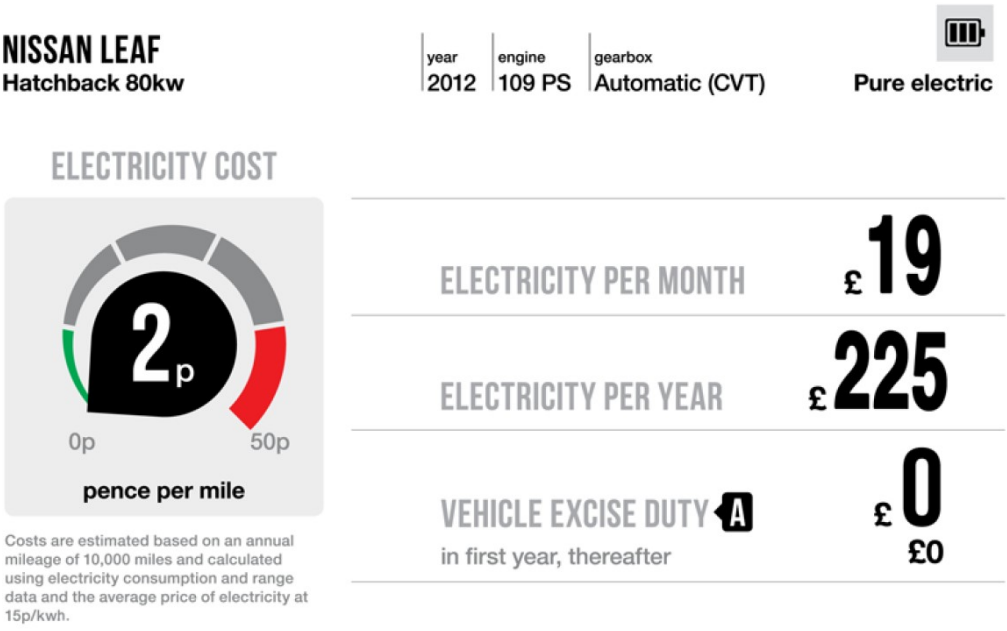
E1


NISSAN LEAF
Hatchback 80kw
year 2012
engine 109 PS
gearbox Automatic (CVT)
Pure electric
TAILPIPE CO2 EMISSIONS
ELECTRICITY USE
A
B-C
D-E
F-G
H-I
J-K
L-M
A
0 g/km
168
MPG equivalent
combined
electric range 80 miles
Vehicle Excise Duty (VED)
kilowatt hours per 100km
Vehicle Excise Duty (VED) is based on tailpipe CO2 emissions.
Actual CO2 emissions and the price of electricty associated with charging the vehicle vary according to the source of electricty used and when the vehicle is charged.
Combined Urban Extra Urban
L/100km n/a n/a n/a
Electricity consumption and range figures are from official testing of new cars. In practice these can vary depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions.

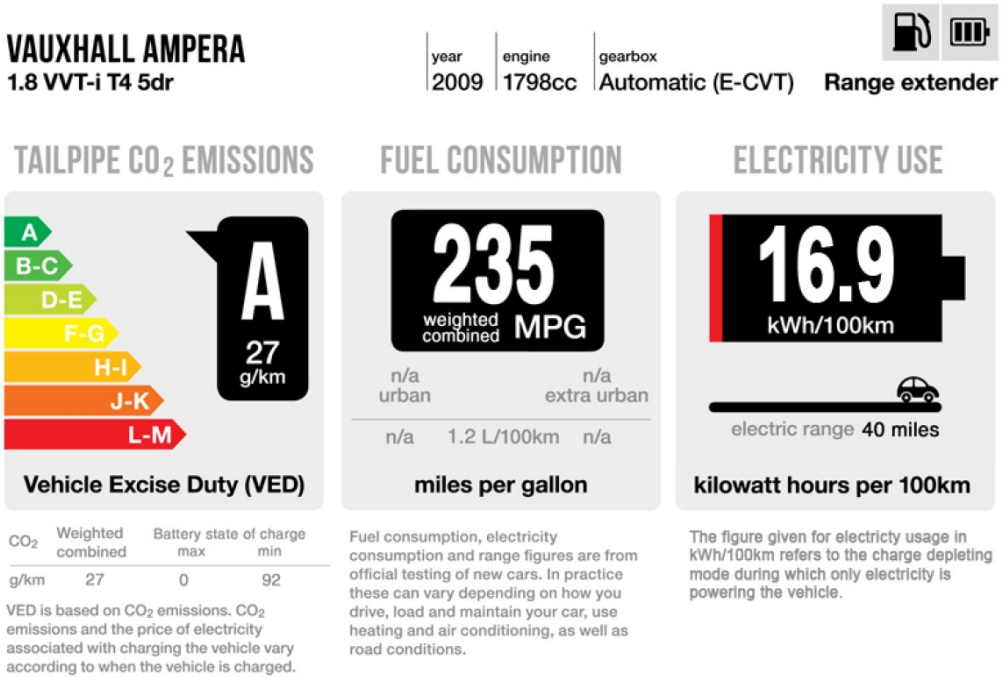
E2


RENAULT SCENIC
Dynamique TomTom 1.6 VVT 110
Year 2011
Engine 110 BHP
Gearbox Manual 6-speed
Diesel
FUEL COST
16p
0p
50p
pence per mile
Costs are estimated based on an annual mileage of 10,000 miles and calculated using the combined MPG and the price of diesel at 140 p/litre.
FUEL PER MONTH £133
FUEL PER YEAR £1600
VEHICLE EXCISE DUTY H
in first year, thereafter
£250
£180

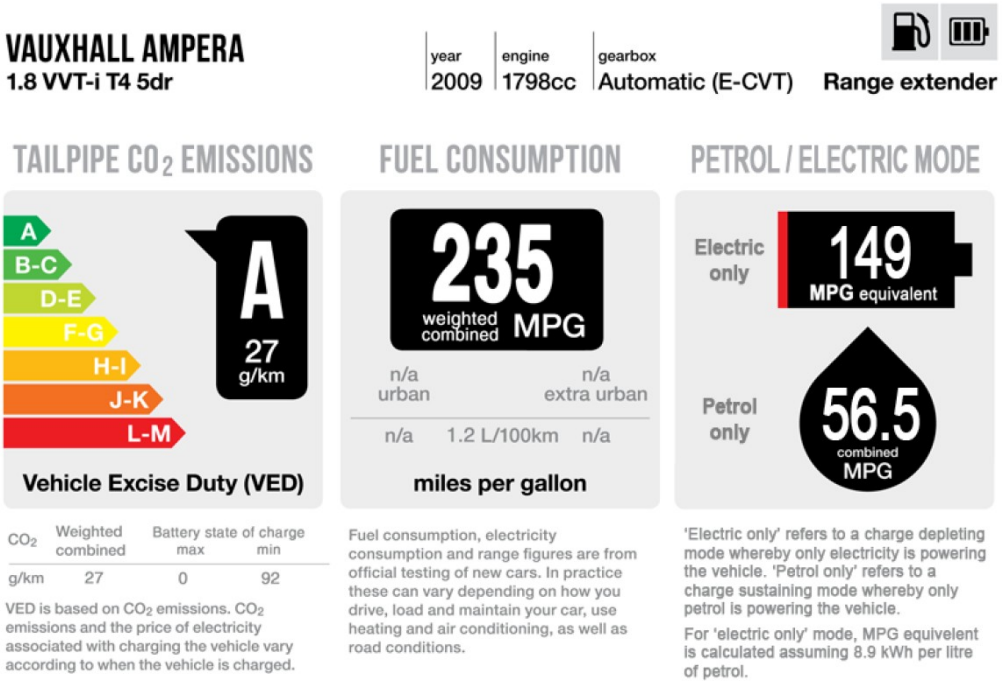
E3


NISSAN LEAF
Hatchback 80kw
year 2012
engine 109 PS
gearbox Automatic (CVT)
Pure electric
ELECTRICITY COST
2p
0p
50p
pence per mile
Costs are estimated based on an annual mileage of 10,000 miles and calculated using electricity consumption and range data and the average price of electricity at 15p/kwh.
ELECTRICITY PER MONTH £19
ELECTRICITY PER YEAR £225
VEHICLE EXCISE DUTY A
in first year, thereafter
£0
£0

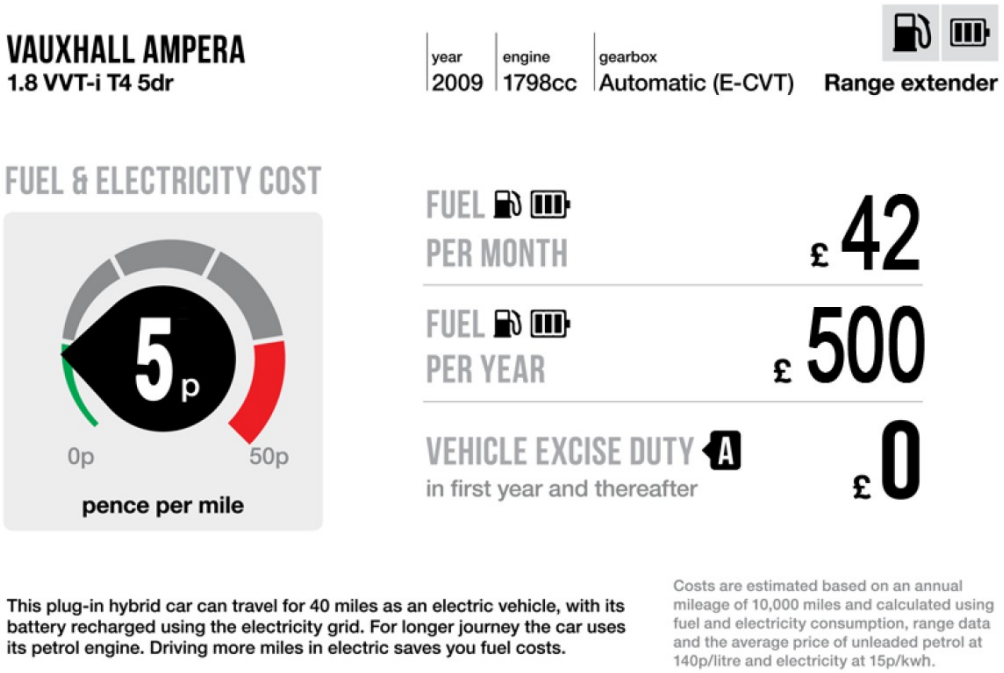
E4



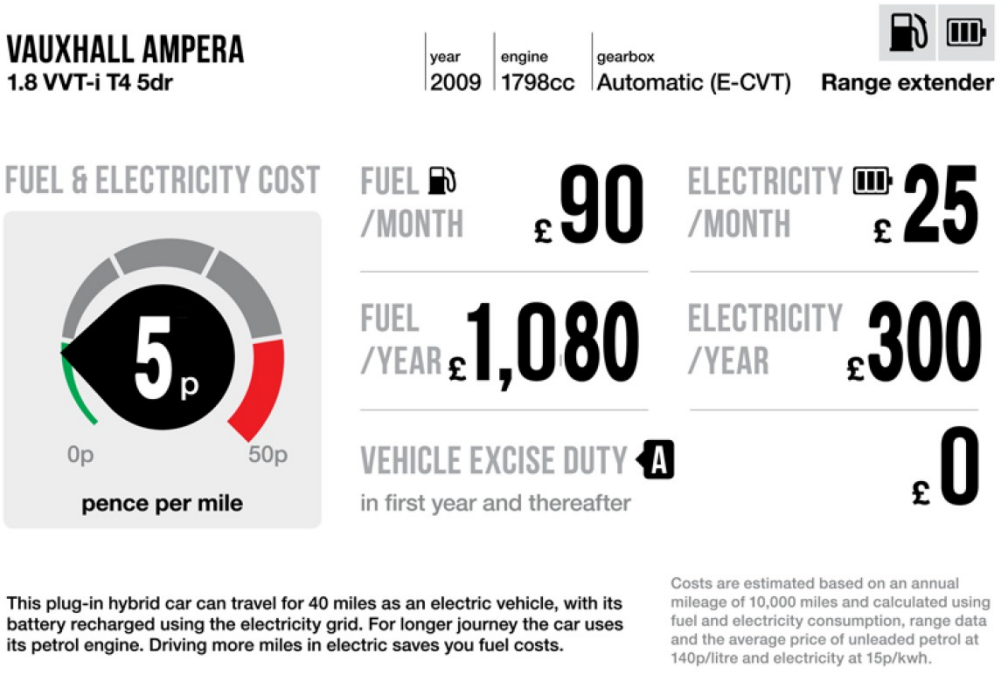
F1 – CARDIFF & EDINBURGH



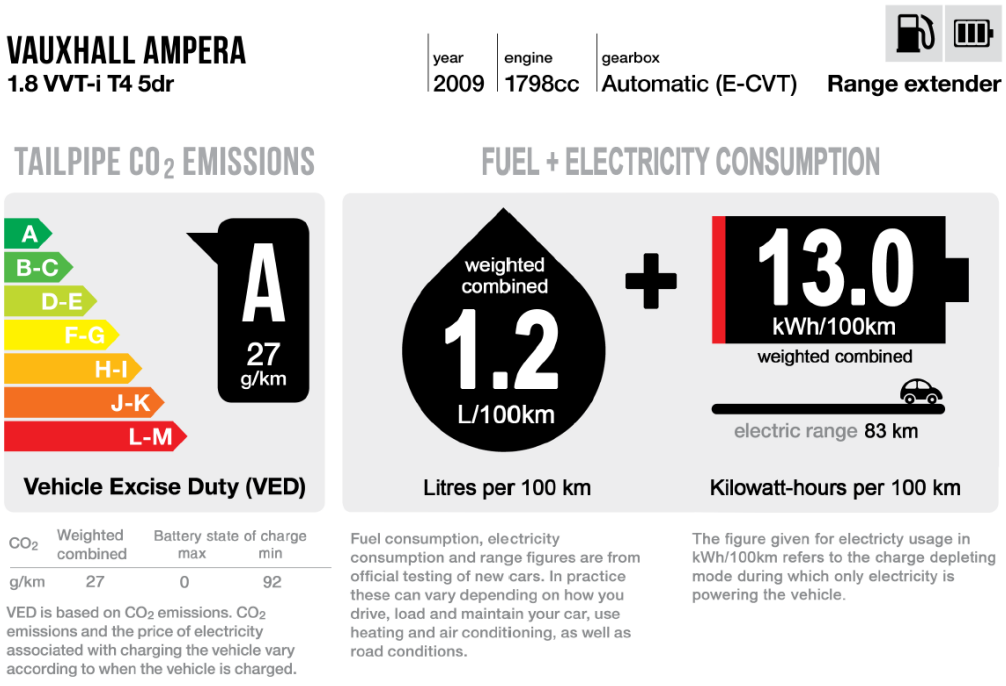
F2 – CARDIFF & EDINBURGH


VAUXHALL AMPERA
1.8 VVT-i T4 5dr
year 2009
engine 1798cc
gearbox Automatic (E-CVT)
Range extender
FUEL & ELECTRICITY COST
5p
0p
50p
pence per mile
FUEL PER MONTH £42
FUEL PER YEAR £500
VEHICLE EXCISE DUTY A
in first year and thereafter £0
This plug-in hybrid car can travel for 40 miles as an electric vehicle, with its battery recharged using the electricity grid. For longer journey the car uses its petrol engine. Driving more miles in electric saves you fuel costs.
Costs are estimated based on an annual mileage of 10,000 miles and calculated using fuel and electricity consumption, range data and the average price of unleaded petrol at 140p/litre and electricity at 15p/kwh.

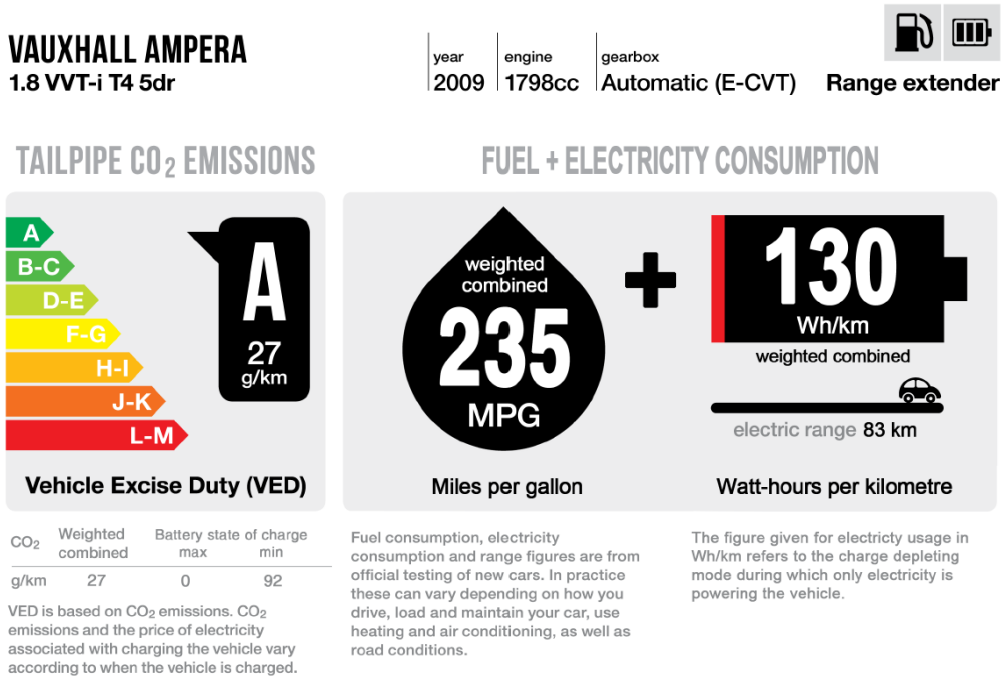
F3 - ALL


VAUXHALL AMPERA
1.8 VVT-i T4 5dr
year 2009
engine 1798cc
gearbox Automatic (E-CVT)
Range extender
FUEL & ELECTRICITY COST
5p
0p
50p
pence per mile
FUEL /MONTH £90
ELECTRICITY /MONTH £25
FUEL /YEAR £1,080
ELECTRICITY /YEAR £300
VEHICLE EXCISE DUTY A
in first year and thereafter £0
This plug-in hybrid car can travel for 40 miles as an electric vehicle, with its battery recharged using the electricity grid. For longer journey the car uses its petrol engine. Driving more miles in electric saves you fuel costs.
Costs are estimated based on an annual mileage of 10,000 miles and calculated using fuel and electricity consumption, range data and the average price of unleaded petrol at 140p/litre and electricity at 15p/kwh.

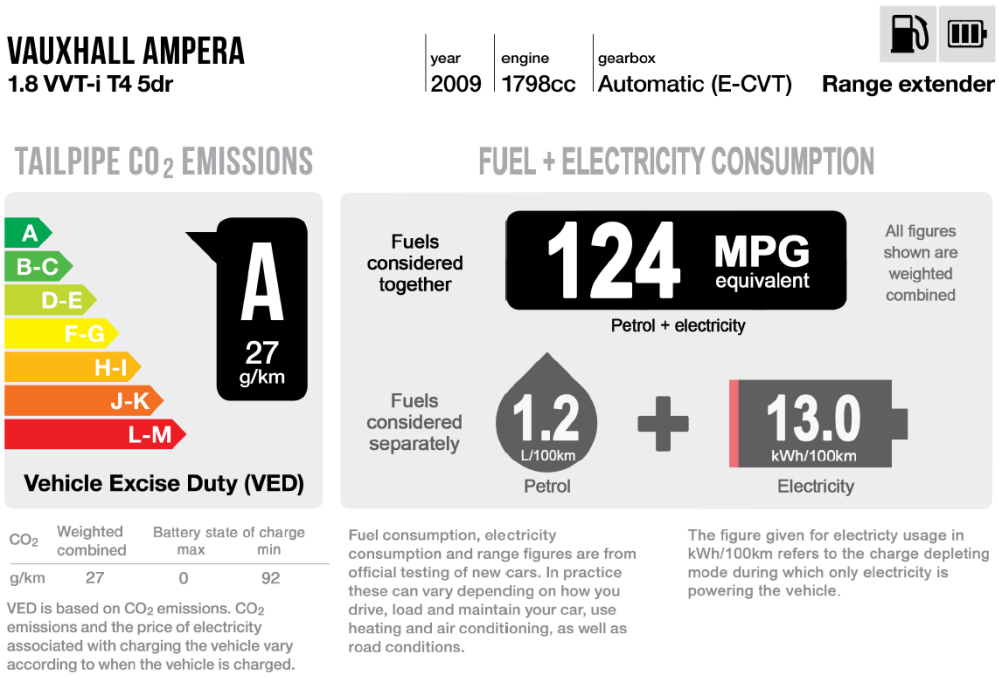
F4 - ALL



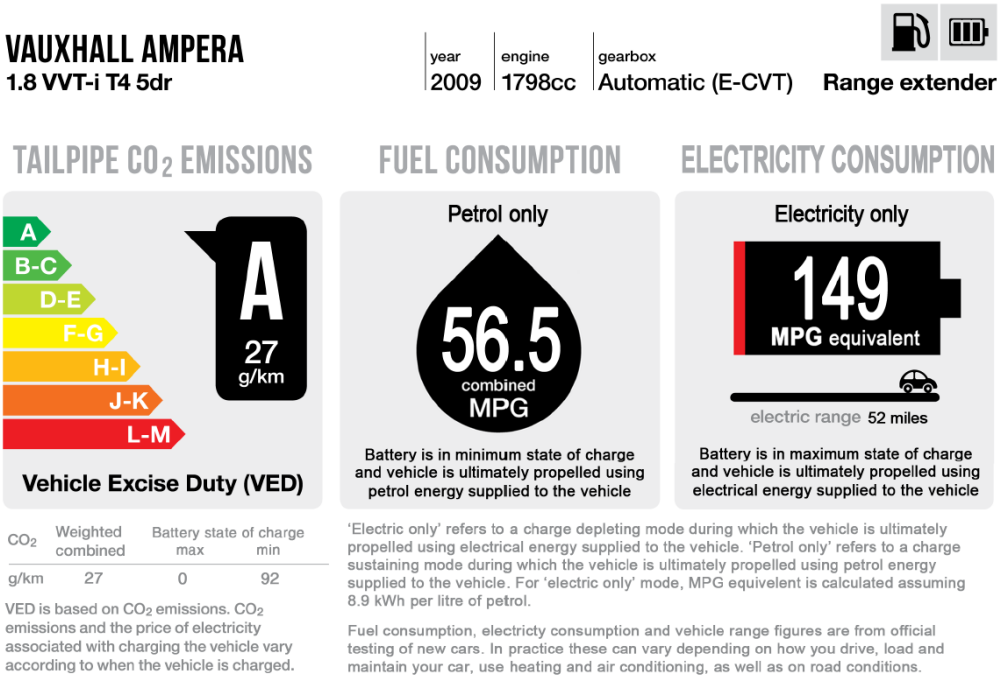
F1 - LEEDS



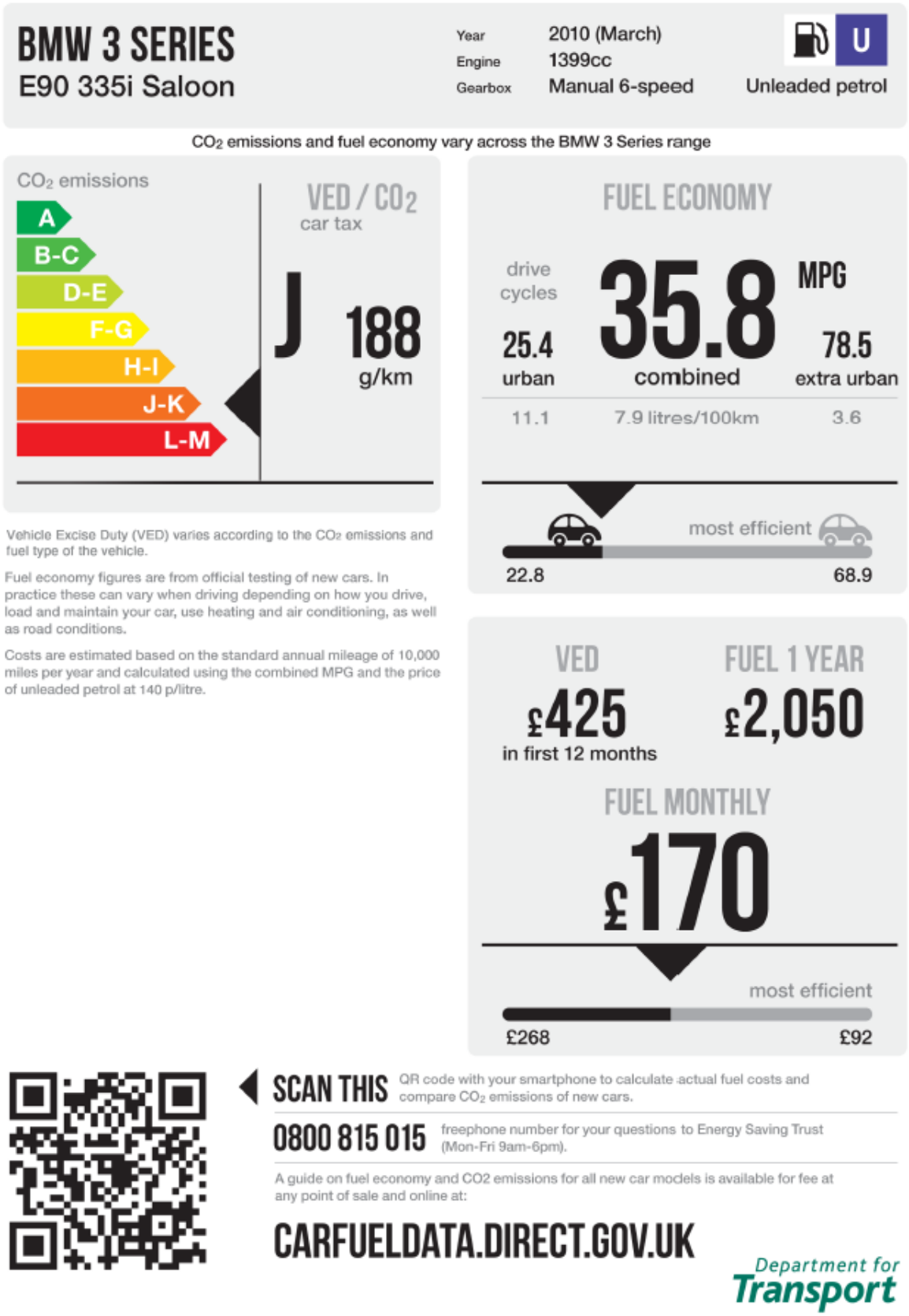
F2 - LEEDS



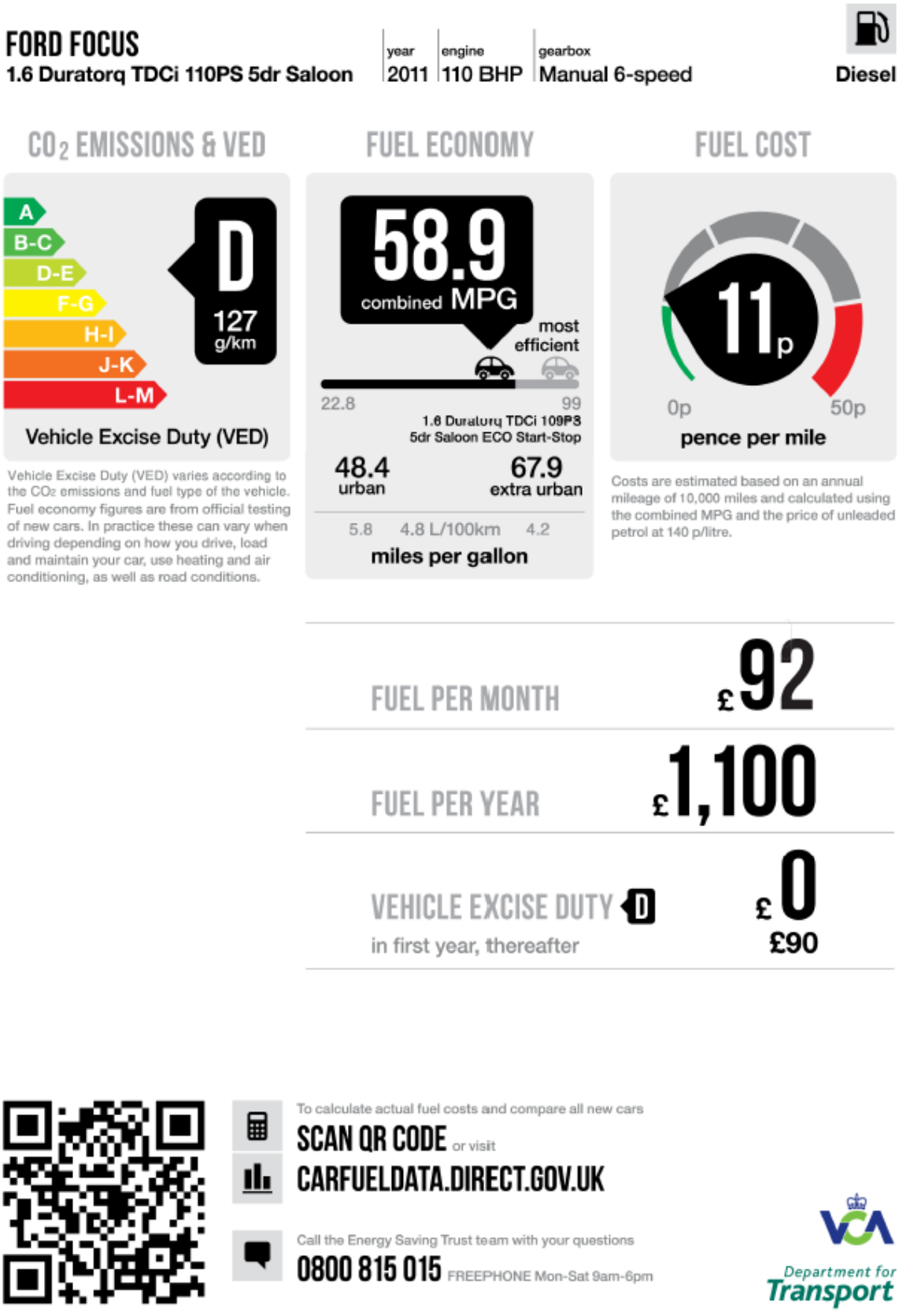
F5 - LEEDS



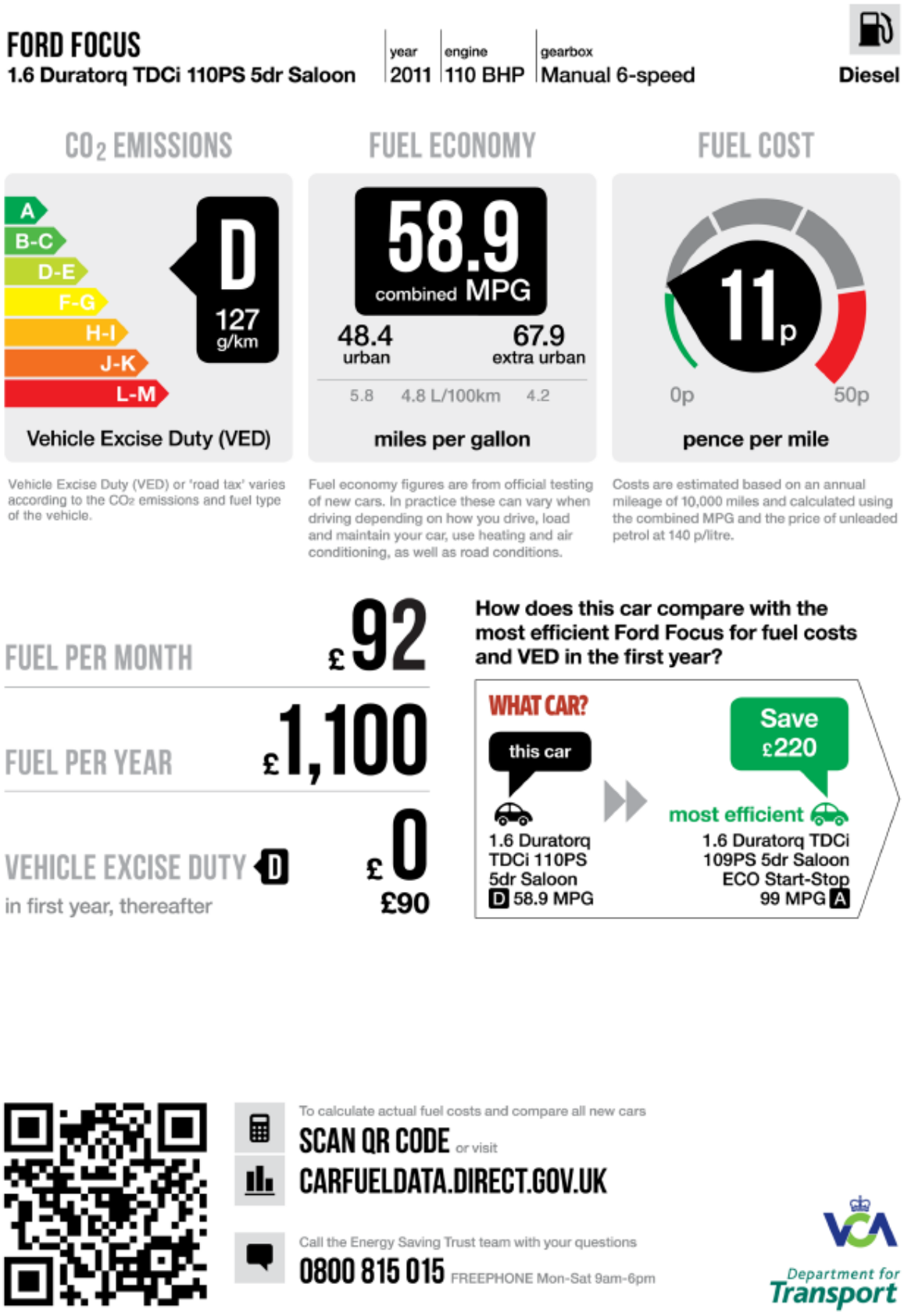
F6 - LEEDS


BMW 3 SERIES
E90 335i Saloon
Year 2010 (March)
Engine 1399cc
Gearbox Manual 6-speed
U
Unleaded petrol
CO2 emissions and fuel economy vary across the BMW 3 Series range
CO2 emissions
A
B-C
D-E
F-G
H-I
J-K
L-M
VED / CO2
car tax
J
188
g/km
Vehicle Excise Duty (VED) varies according to the CO2 emissions and fuel type of the vehicle.
Fuel economy figures are from official testing of new cars. In practice these can vary when driving depending on how you drive, load and maintain your car, use heating and air conditioning, as well as road conditions.
Costs are estimated based on the standard annual mileage of 10,000 miles per year and calculated using the combined MPG and the price of unleaded petrol at 140 p/litre.
FUEL ECONOMY
drive cycles
25.4
urban
35.8
MPG
combined
78.5
extra urban
11.1
7.9 litres/100km
3.6
most efficient
22.8
68.9
VED
£425
in first 12 months
FUEL 1 YEAR
£2,050
FUEL MONTHLY
£170
most efficient
£268
£92
SCAN THIS
QR code with your smartphone to calculate actual fuel costs and compare CO2 emissions of new cars.
0800 815 015
freephone number for your questions to Energy Saving Trust (Mon-Fri 9am-6pm).
A guide on fuel economy and CO2 emissions for all new car models is available for fee at any point of sale and online at:
CARFUELDATA.DIRECT.GOV.UK
Department for Transport

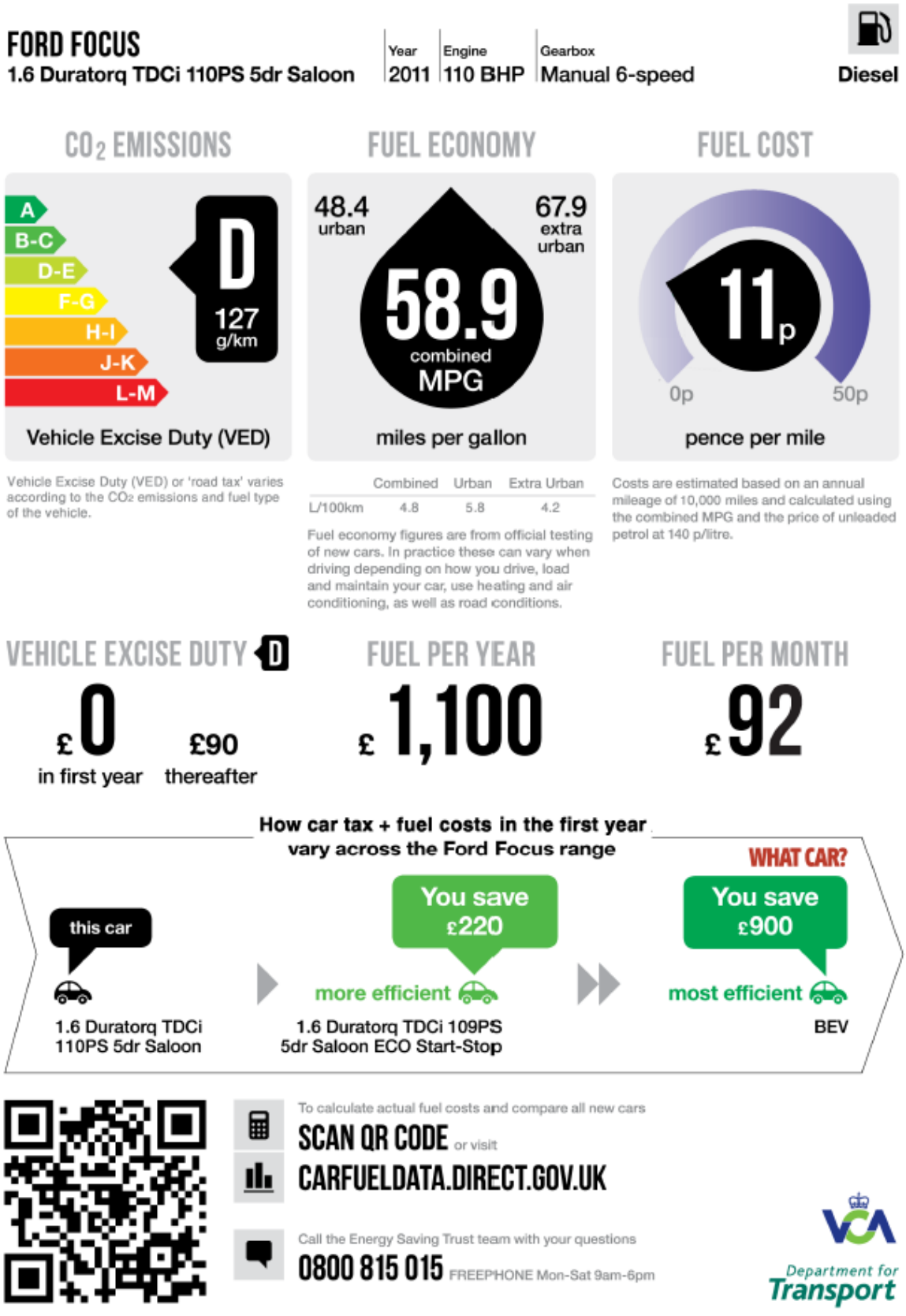
Slider ICE



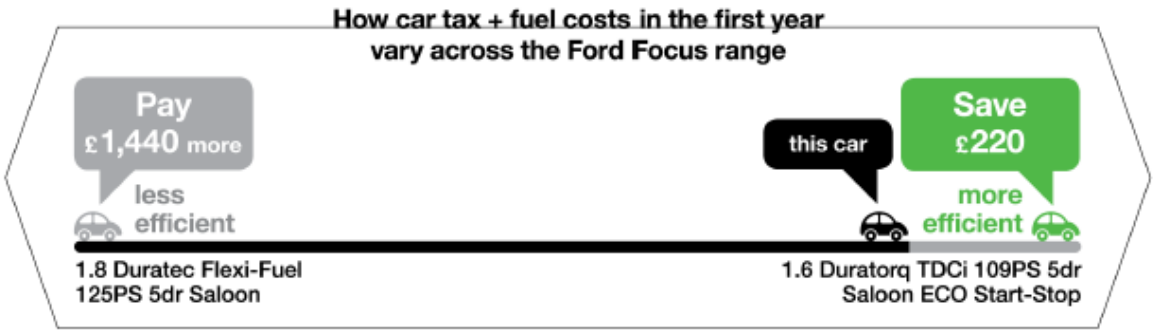
Dashboard ICE

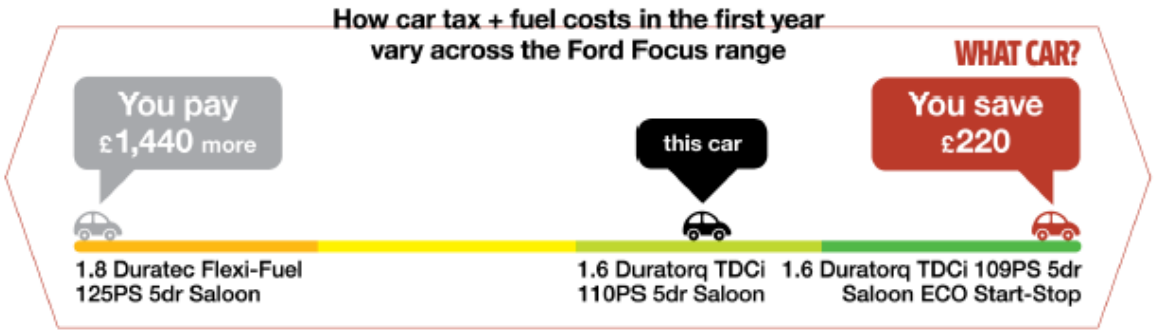


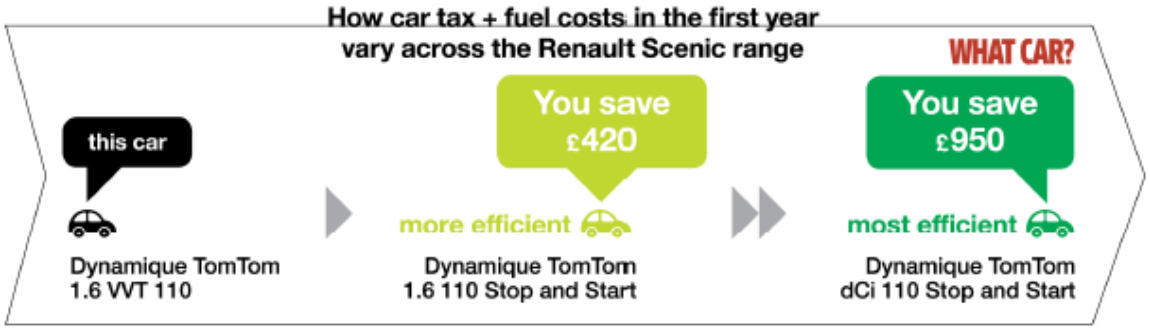
Dashboard + Buyer's Guide ICE

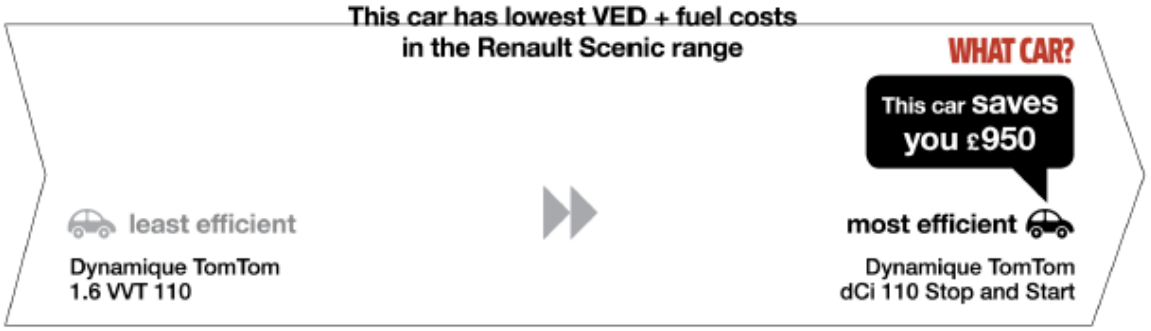


Dashboard + Buyer's Guide ICE

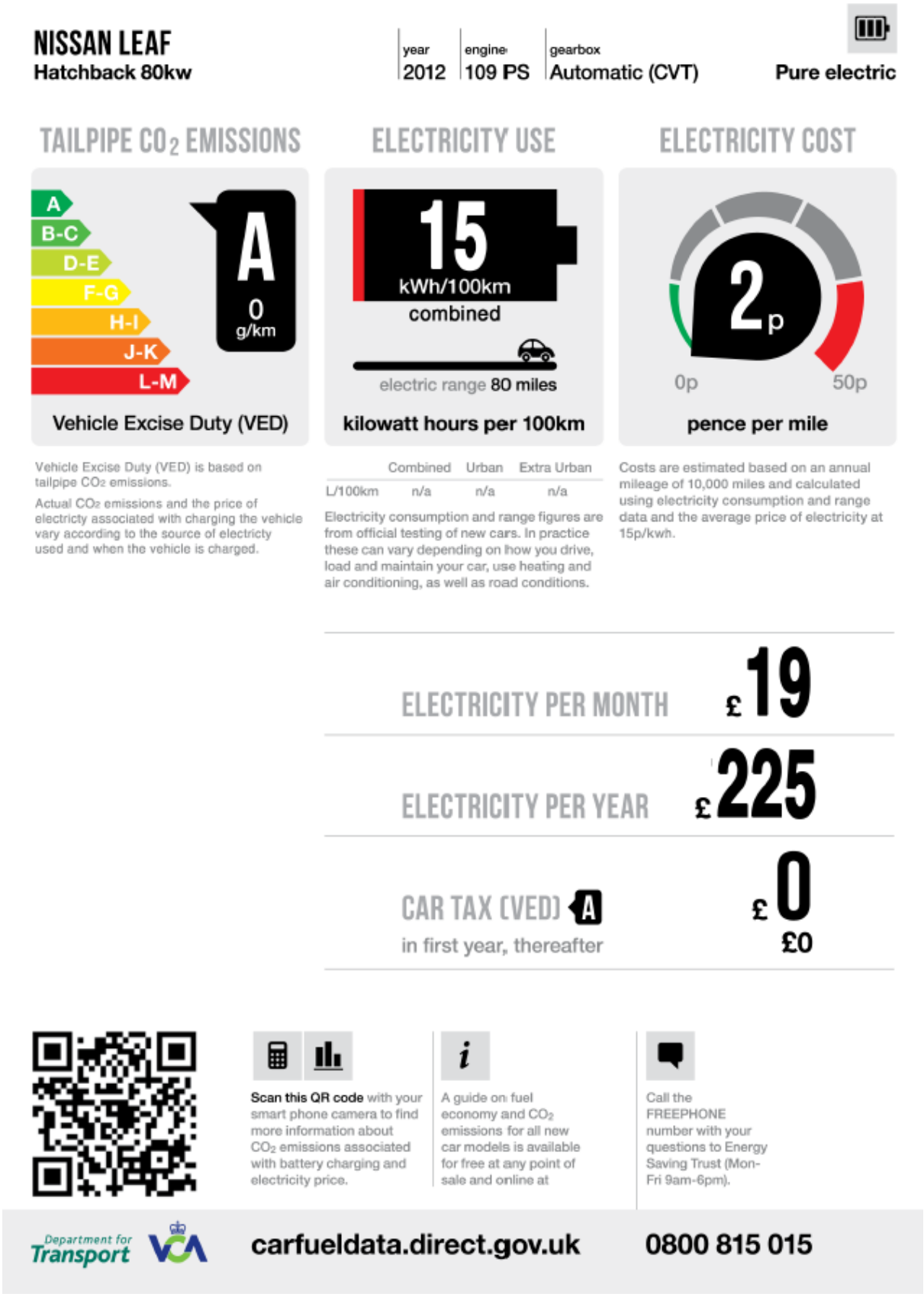




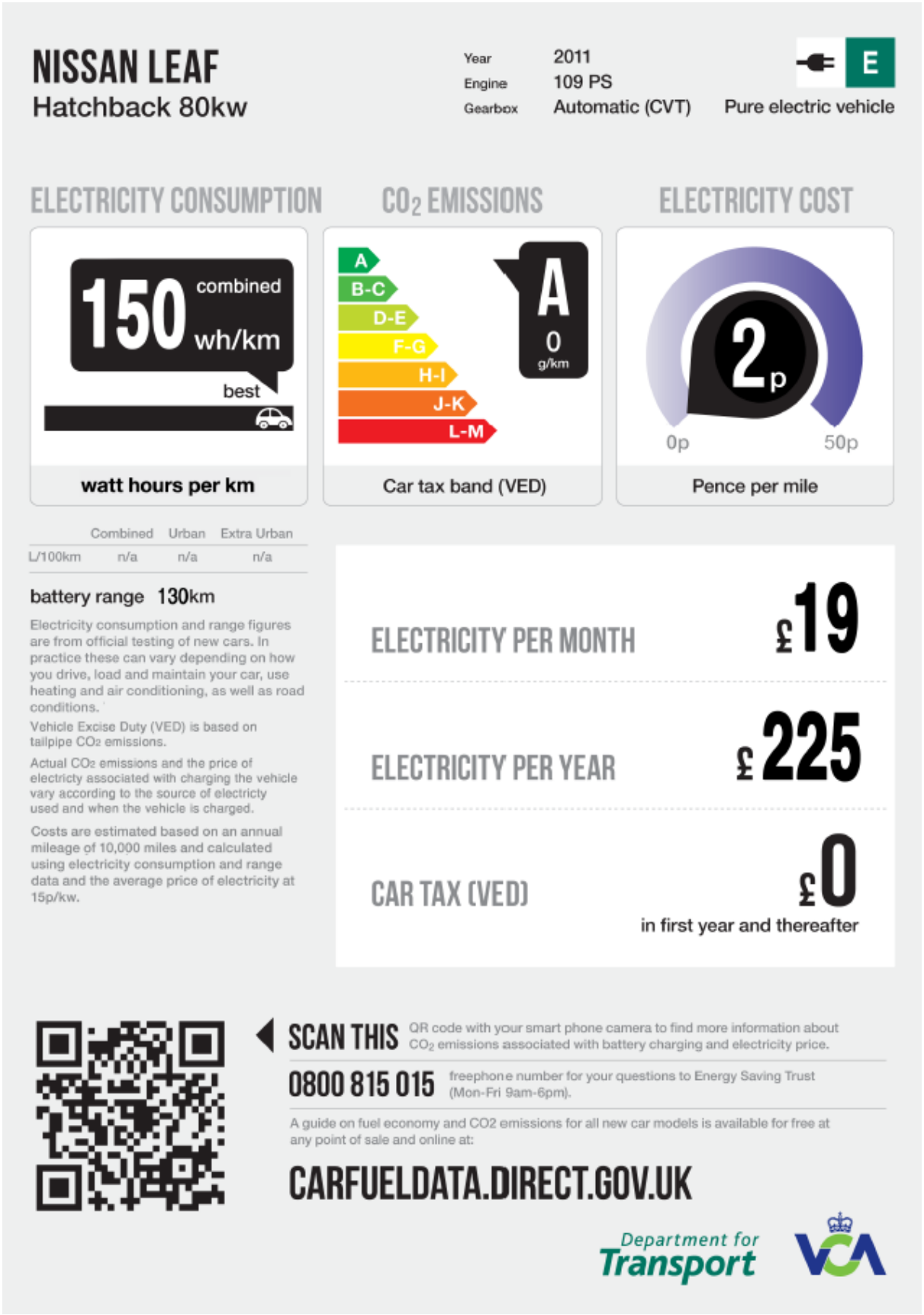




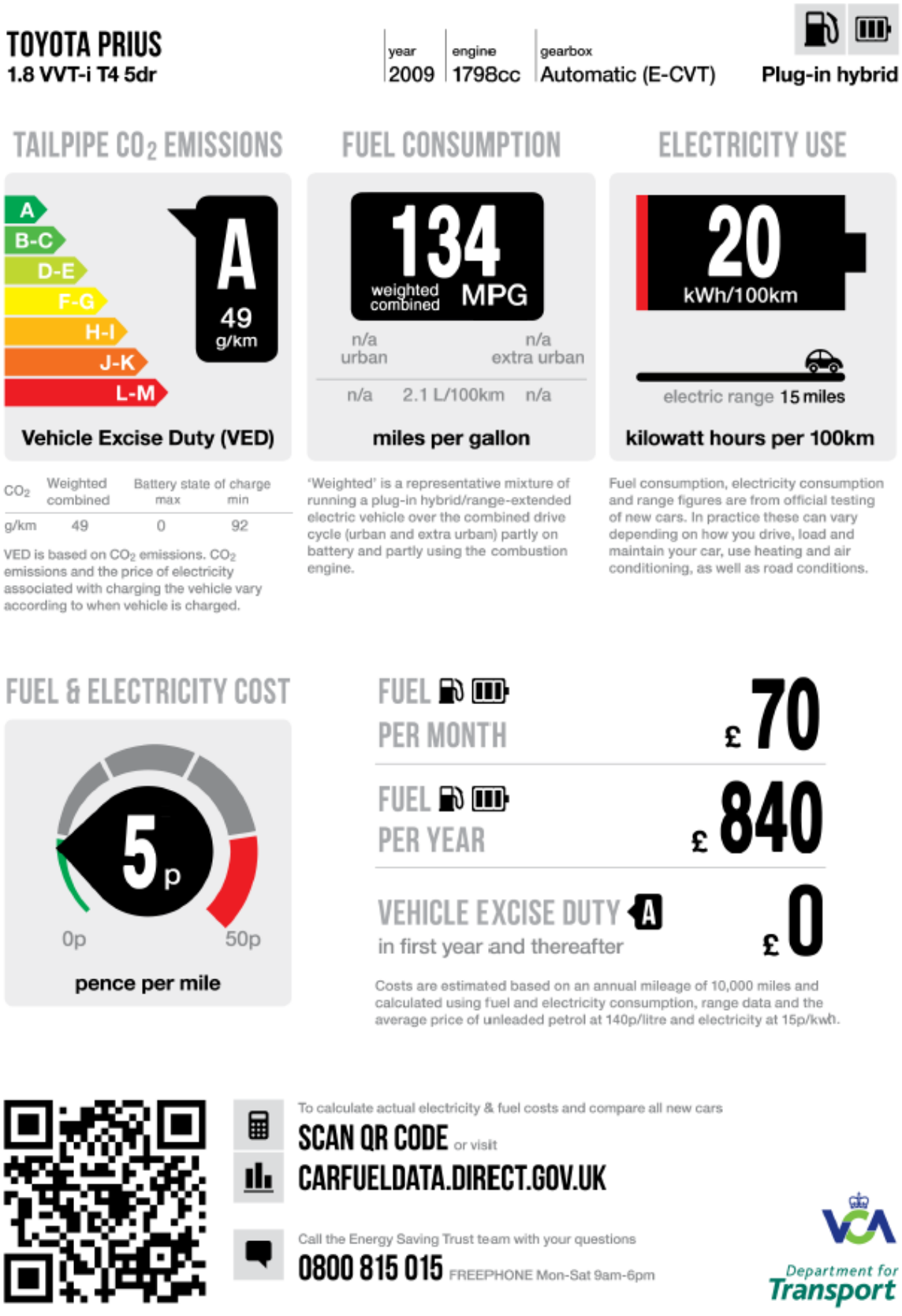
Buyer's Guide elements ICE



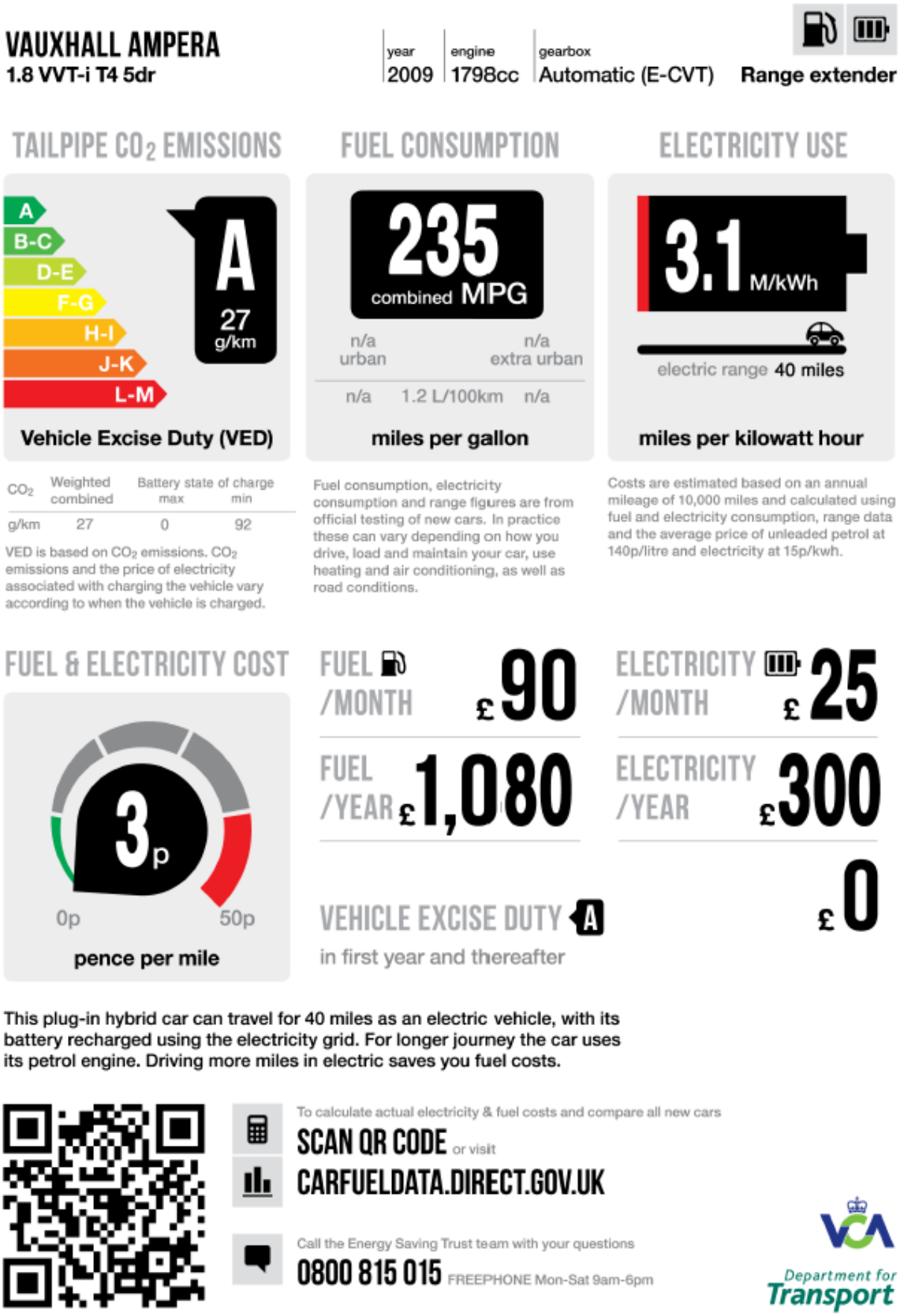
Dashboard EV (Round 2 style)



Dashboard EV (Round 1 style)



Dashboard PHEV



Dashboard REEV

LowCVP Car Buyer Survey:

Testing alternative fuel economy labels

Research conducted by Ecolane Consultancy & Centre for Sustainable Energy on behalf of the Low Carbon Vehicle Partnership

Dr Ben Lane (Ecolane Consultancy)
Dr Nick Banks (Centre for Sustainable Energy)
Dr Jillian Anable (University of Aberdeen)

Appendix 4 – Online questionnaire (R2)

LowCVP Car Buyer Survey: Testing alternative fuel economy labels

Project commissioned by the Low Carbon Vehicle Partnership

Project managed by Dr Ben Lane, Ecolane Transport Consultancy

Report Details:

Project name	**LowCVP Car Buyer Survey: Testing alternative fuel economy labels**
Report Type	Final
Supplier	Ecolane Limited & Sustain Limited
Report Version	Appendix 4
Authors	Dr Ben Lane (Ecolane) & Dr Nick Banks (CSE)
Last Edited	16th July 2012
This report has been prepared by Ecolane and CSE for the Low Carbon Vehicle Partnership in accordance with the terms and conditions of appointment. Ecolane and CSE cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.	

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Senior Consultant

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Bristol BS1 6UX, UK
Tel: +44 (0)117 929 8855
Skype: ecolane

Appendix 4 – Online survey questionnaire

Welcome to the Car Buyer Survey 2012

The aim of this survey is to identify what information is most useful to consumers when buying a new or used car.

The survey is independent and is **not a marketing survey**. The findings will be used to inform UK Government and EU policy.

The survey takes about **15 minutes**.

Please note that all information requested will only be used for the purposes of the survey and will not be passed on to any third parties.

Accept Survey Terms & Conditions

Please indicate whether you are the holder of a current UK driving licence

- ○ I am the holder of a current UK driving licence
- ○ I do not hold a current UK driving licence

Indicate whether you have recently bought a new/nearly-new car OR a used car in the last 24 months.

If more than one applies then choose one option for the purposes of this survey.

- ○ I have purchased a new/nearly-new car (up to 2 years old) within the last 24 months.
- ○ I have purchased a used car (over 2 years old) within the last 24 months.
- ○ I have not purchased a new/nearly new or used car within the last 24 months.

Registration

About you >>

About you

Please provide your details by answering all of the questions below

Gender ○ Male ○ Female

Age ○ <17 (years) ○ 17-24 ○ 25-34 ○ 35-44 ○ 45-54 ○ 55-64 ○ 65-74 ○ 75+ (years)

Household annual income ○ <£10k ○ £10k-£14k ○ £15k-£19k ○ £20k-£24k ○ £25k-£29k ○ £30k-£39k

○ £40k-£49k ○ £50k-£59k ○ £60k-£74k ○ £75k+ ○ Prefer not to disclose

Employment status ○ Full Time ○ Part Time ○ Student ○ Retired ○ None ○ Other

Job title [ ] (Leave blank if not applicable - Enter last position if retired)

Annual mileage ○ <6k (miles) ○ 6-10k ○ 11-15k ○ 16-20k ○ 21-25k ○ 26-30k ○ >30k (miles) (Include all vehicle use)

Registration

Your current car >>

About the car you recently purchased

Please provide a description of the car you recently purchased

Make & model (e.g. VW Golf)

Licence plate (e.g. XY08 ABC – we ONLY use this to check your car's performance details)

Age when purchased ○ <1 year ○ 1-2 years ○ 3-4 years ○ 5-6 years ○ 7-8 years ○ >8 years ○ Don't know

Fuel / engine type ○ Petrol ○ Diesel ○ Hybrid ○ LPG ○ Natural gas ○ Electric ○ Other ○ Don't know

Purchase value ○ <£6k ○ £6k-£10k ○ £11k-£15k ○ £16k-£20k ○ £21k-£25k ○ £26k-£30k ○ >£30k ○ Don't know

Primary use ○ Personal ○ Business ○ Personal & business ○ Other ○ Don't know

Registration

Go to survey >>

1a. For the car you purchased, enter the OFFICIAL figures in the boxes provided.

Complete as many as you can – AT LEAST ONE response required

Engine size >		litres
CO2 emissions >		g/km
Road tax band >		A to M
Annual road tax >		£ per year

Question 1a of 17

Next page >>

1b. For each of the figures you provided, rate your level of confidence in knowing these values.

For each figure you entered, select ONE level of confidence

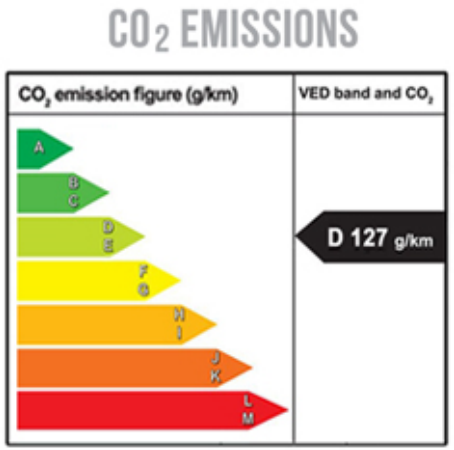
1.5 litres	Very confident	Fairly confident	Neutral	Not so confident	Not at all confident
150 g/km	Very confident	Fairly confident	Neutral	Not so confident	Not at all confident
D (road tax band)	Very confident	Fairly confident	Neutral	Not so confident	Not at all confident
120 £ (tax) per year	Very confident	Fairly confident	Neutral	Not so confident	Not at all confident

Question 1b of 17

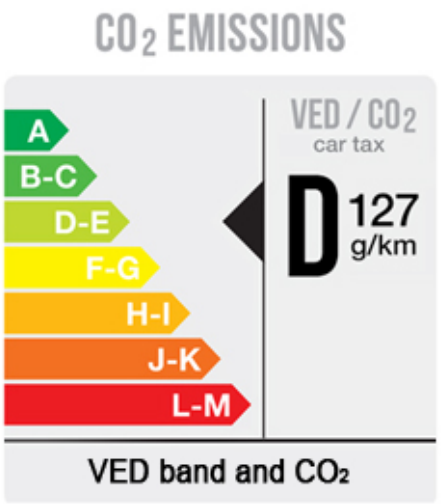
Next page >>

2. New car showrooms are required to display an information label for each model on sale showing the official CO2 emissions and Vehicle Excise Duty ('VED' or 'road tax') band. For a car with CO2 emissions of 127 g/km, which of the following labels do you think most clearly shows this information?

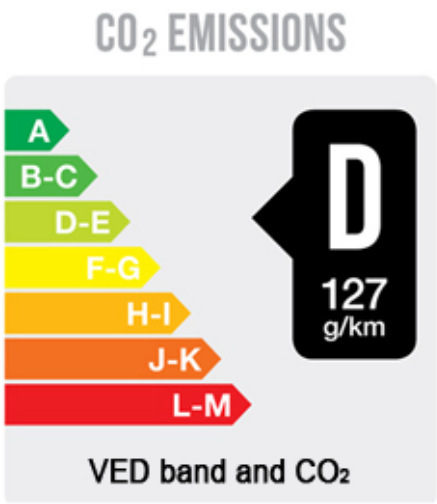
Select ONE option



Label A



Label B



Label C

Question 2 of 17

Next page >>

3a. For the car you purchased, enter the OFFICIAL figures in the boxes provided.

Complete as many as you can – AT LEAST ONE response required

Fuel economy > _____ miles-per-gallon

Fuel economy > _____ litres/100km

Question 3a of 17

Next page >>

3b. For each of the figures you provided, rate your level of confidence in knowing these values.

For each figure you entered, select ONE level of confidence

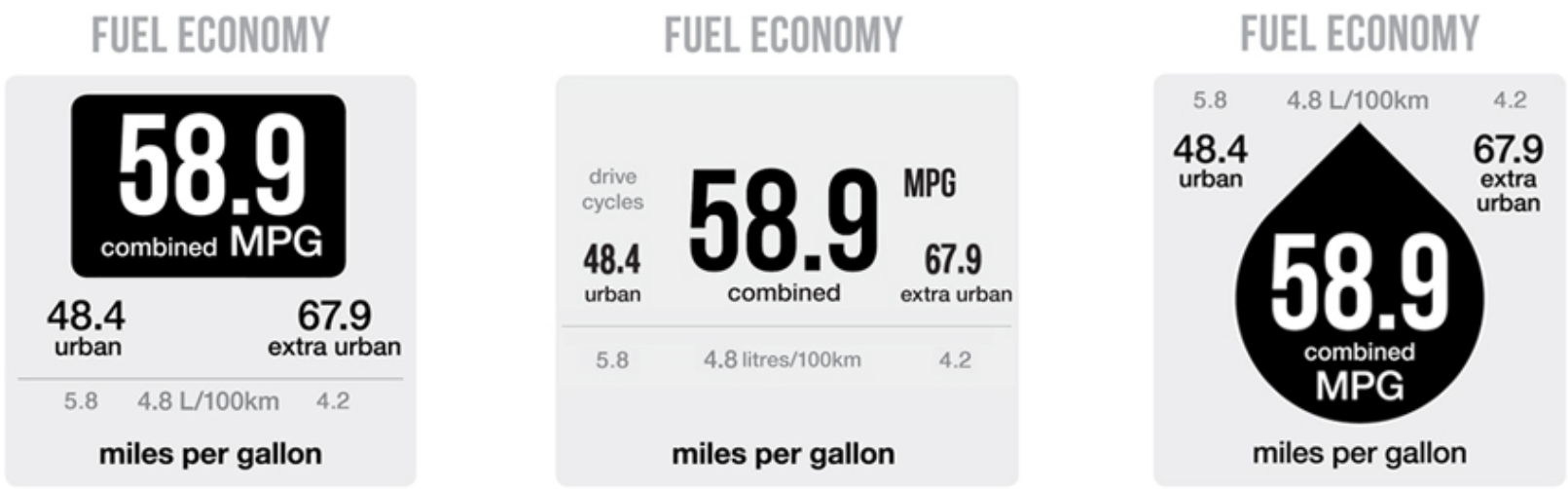
35 miles per gallon	○ Very confident	○ Fairly confident	○ Neutral	○ Not so confident	○ Not at all confident
14 litres/100km	○ Very confident	○ Fairly confident	○ Neutral	○ Not so confident	○ Not at all confident

Question 3b of 17

Next page >>

4. The car label also displays the official 'combined' fuel economy (in litres/100 km and miles-per-gallon or 'MPG'). For a car with a 'combined' fuel economy of 58.9 MPG, which of the following labels do you think most clearly shows this information?

Select ONE option



○ **Label A** ○ **Label B** ○ **Label C**

Question 4 of 17

Next page >>

5. Indicate the level to which you agree or disagree with the following statements about the official 'combined' figures for a car's fuel economy (in litres/100 km and miles-per-gallon or 'MPG').

Select ONE response for each statement

STATEMENT	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
For a particular car, the official 'combined' figure represents the fuel economy achieved by an average UK driver	○	○	○	○	○
For a particular car, the official 'combined' figure represents the fuel economy that I would achieve if I was driving	○	○	○	○	○
The official 'combined' fuel economy figures are a reliable way of comparing the fuel economies of different cars	○	○	○	○	○

If you have any comments about the official figures for fuel economy, enter them here (optional)

Question 5 of 17

Next page >>

6. Future car labels may compare the fuel economy of each car with other cars in the same 'vehicle class' or 'model range'. In the table below, which of the Cars A to D are in the same 'vehicle class' or 'model range' as Car X?

Tick all that apply

	X FORD FOCUS 1.6 LITRE PETROL FAMILY HATCHBACK	A FORD FOCUS 2.0 LITRE DIESEL FAMILY HATCHBACK	B FORD FIESTA 1.6 LITRE PETROL SUPERMINI	C FORD FOCUS 1.6 LITRE PETROL FAMILY ESTATE	D VOLKSWAGEN GOLF 2.0 LITRE DIESEL FAMILY HATCHBACK	DON'T KNOW
Same **'vehicle class'** as Car X	✓	☐	☐	☐	☐	☐
Same **'model range'** as Car X	✓	☐	☐	☐	☐	☐

Question 6 of 17

Next page >>

7. If future labels do compare the fuel economy of each car with other cars, which of the following comparisons would you find useful when choosing a car to buy?

Tick all that apply (leave blank if none)

Cars with a similar physical size and body shape (e.g. all small family hatchbacks) ☐

Cars from the same manufacturer and model range (e.g. only cars in the Ford Focus range) ☐

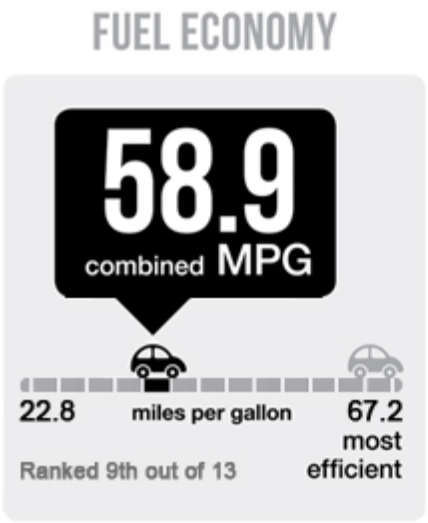
Other (please specify) _____

Question 7 of 17

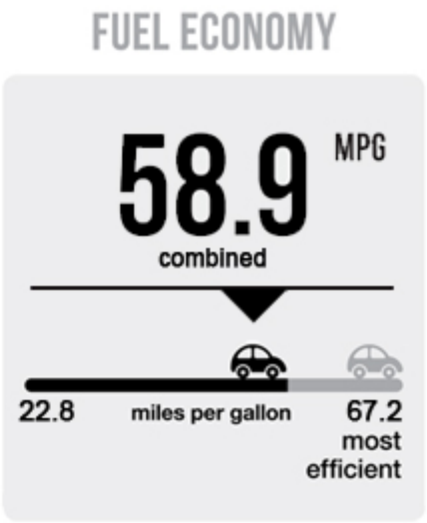
Next page >>

8. The following labels compare the fuel economy of a particular Ford Focus with other Ford Focus models. Which of the labels do you think most clearly compares the fuel economy of this car with the other models?

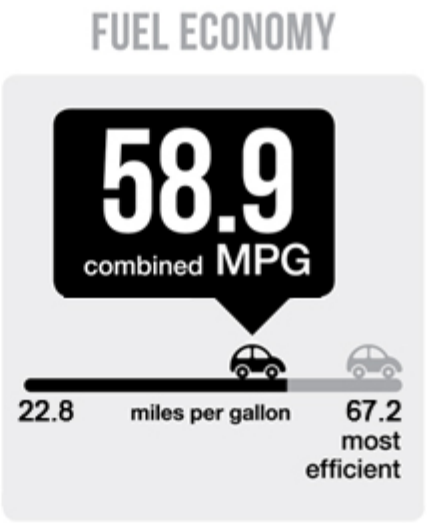
Select ONE option



○ **Label A**



○ **Label B**



○ **Label C**

Question 8 of 17

Next page >>

9a. For the car you purchased, enter the OFFICIAL figures in the boxes provided.

Complete as many as you can – AT LEAST ONE response required

Fuel cost > _____ £ per year

Fuel cost > _____ £ per month

Fuel cost > _____ pence per mile

Question 9a of 17

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9b. For each of the figures you provided, rate your level of confidence in knowing these values.

For each figure you entered, select ONE level of confidence

	Very confident	Fairly confident	Neutral	Not so confident	Not at all confident
1000 £ per year	○	○	○	○	○
100 £ per month	○	○	○	○	○
14 pence per mile	○	○	○	○	○

Question 9b of 17

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10. The current label shows a car's annual fuel cost. Future labels may also display fuel cost using other units. Which of the following units would you find useful when choosing a car to buy?

Tick all that apply (leave blank if none)

	PER YEAR	PER MONTH	PER WEEK	PER MILE	OTHER (PLEASE SPECIFY)
Fuel cost	✓	☐	☐	☐	

Question 10 of 17

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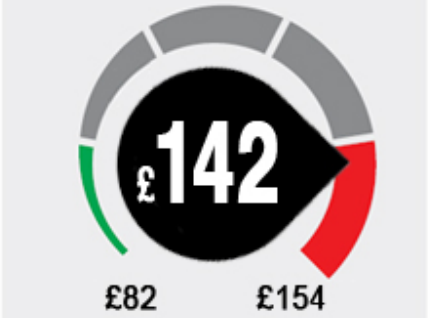
11. The following labels compare the monthly fuel cost of a particular Renault Scenic with other Renault Scenic models. Which of the labels do you think most clearly compares the fuel costs of this car with the other models?

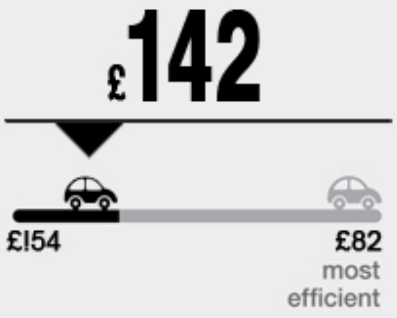
Select ONE option

FUEL COST



Label A

FUEL COST



Label B

FUEL COST

Label C

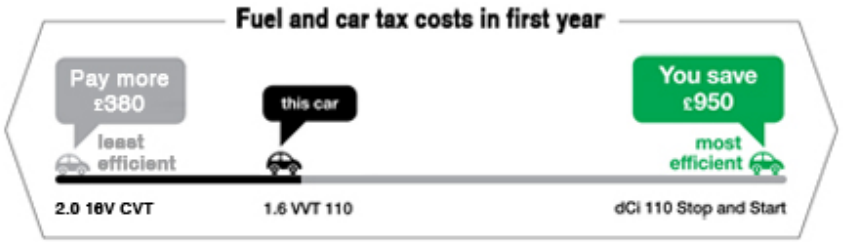
Question 11 of 17

Next page >>

12. The following labels compare the annual fuel and car tax costs of a particular Renault Scenic with other Scenics. Which of the labels do you think most clearly compares the fuel and car tax costs of this car with the other models?

Select ONE option

Label A



Label B

Question 12 of 17

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13. In the future, information labels will be provided for new vehicle types such as battery electric cars. Which of the following electricity consumption units would you prefer to see on a future electric car label?

Tick all that apply (leave blank if none)

UNIT	ABBREVIATION	TICK ALL THAT APPLY
Watt-hours per kilometre	**Wh/km**	☐
Kilowatt-hours per 100 kilometres	**kWh/100km**	☐
Kilowatt-hours per 100 miles	**kWh/100mile**	☐
Miles per kilowatt-hour	**Miles/kWh**	☐
Miles per gallon equivalent (petrol)	**MPG-e**	☐
Litres per 100 kilometres equivalent (petrol)	**Lit/100km-e**	☐

Other (please specify)

Question 13 of 17

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14. The following labels compare the electricity consumption of a particular electric car called the Nissan LEAF (pictured). Which of the following labels do you think most clearly displays this electricity use information?

Select ONE option

ELECTRICITY USE

150
Wh/km
combined

electric range **125 km**

Watt-hours per kilometre

Label A

ELECTRICITY USE

4.1
Miles/kWh
combined

electric range **80 miles**

Miles-per-kWh

Label B

ELECTRICITY USE

168
MPG equivalent
combined

electric range **80 miles**

Miles-per-gallon equivelent

Label C

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15. In addition to electricity consumption, what additional information do you think should be included on a future label for electric cars?

Enter additional information in the boxes provided (leave blank if none)

Additional information

Additional information

Additional information

Question 15 of 17

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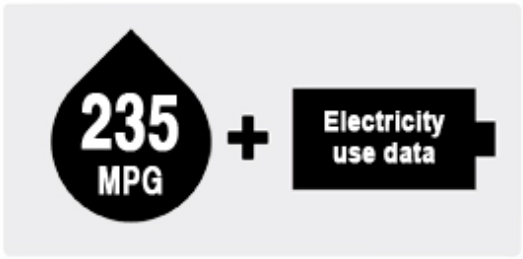
16. Another new type of car is the Plug-in Hybrid Electric Vehicle (PHEV), which can be refuelled using petrol and/or recharged using electricity. One such car is the Vauxhall Ampera (pictured). Which of the following information options would you prefer used on a future PHEV label?

Select ONE option

FUEL + ELECTRICITY CONSUMPTION



Petrol and electricity considered together with consumption data shown separately (assumes electricity used 80% time)

Label A

FUEL CONSUMPTION ELECTRICITY CONSUMPTION

Petrol priority mode and electric priority mode considered separetely with consumption data shown separately

Label B

FUEL + ELECTRICITY CONSUMPTION

Petrol and electricity considered together with consumption data shown combined (assumes electricity used 80% time)

Label C

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17. To complete the survey, indicate the level to which you agree or disagree with the following statements.

Select ONE response for each statement

STATEMENT	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
The effects of climate change are a real worry to me	○	○	○	○	○
All cars I would consider buying have roughly the same fuel economy	○	○	○	○	○
To reduce my fuel costs, I would consider buying a more efficient car	○	○	○	○	○
I should be able to use my car, even if it damages the environment	○	○	○	○	○
I am prepared to pay more for a fuel efficient car with lower fuel costs	○	○	○	○	○
The so-called 'environmental crisis' has been greatly exaggerated	○	○	○	○	○
Reducing my car's environmental impact would make me feel good	○	○	○	○	○
I would not buy a more efficient car for purely environmental reasons	○	○	○	○	○

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LowCVP Car Buyer Survey:

Testing alternative fuel economy labels

Research conducted by Ecolane Consultancy & Centre for Sustainable Energy on behalf of the Low Carbon Vehicle Partnership

Dr BX Lane (Ecolane Consultancy)
Dr NX Banks (Centre for Sustainable Energy)
Dr Jillian Anable (University of Aberdeen)

Appendix 5 – Focus group transcripts

LowCVP Car Buyer Survey: Testing alternative fuel economy labels

Project commissioned by the Low Carbon Vehicle Partnership

Project managed by Dr BX Lane, Ecolane Transport Consultancy

Report Details:

Project name	**LowCVP Car Buyer Survey: Testing alternative fuel economy labels**
Report Type	Final
Supplier	Ecolane Limited & Sustain Limited
Report Version	Appendix 5
Authors	Dr BX Lane (Ecolane) & Dr NX Banks (CSE)
Last Edited	16th July 2012
This report has been prepared by Ecolane and CSE for the Low Carbon Vehicle Partnership in accordance with the terms and conditions of appointment. Ecolane and CSE cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.	

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Appendix 5 – Focus group discussion transcripts

The quotes have been anonymised as agreed with participants.

The quotes highlighted in yellow are those that appear in the main report.

Quotes have been categorised and are arranged according to issue (shown in red).

Quotes\\1 General design issues\Clarity of dashboard design

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 3 references coded [0.95% Coverage]

Reference 1 - 0.33% Coverage

NXy Yeah that's fine – that's not anything to do with it. I think that [A3] is loads clearer – because that's something you walk past and notice and I can see the two main things to me

BL That's on A3. Yeah, oh so that's just visually – A3 is much clearer

NXy Visually – that's much clearer. And that's just telling you everything, where they start getting; it just gets a little bit confusing on the rest of it

Reference 2 - 0.38% Coverage

BL Ok, we're just going to finish this session – we'll have a quick vote between A3 and A4 – again you might not like either of them or you might love both of them. But out of the two, can you stick up your hand if you think A4 is clearer?

M I think A3 is clearer

BL Ok JX – no hands. Ok, if you think A3 is clearer – and we have 9 out of 10. Janice, maybe...

Jan Well... I'm even between both of them

BL Even between the two, Ok, so we've got 8 plus. Fantastic

Reference 3 - 0.24% Coverage

M D1 is a lot easier to read again

F Yeah

NB D1 – easier to read. Why do you think D1 is easier to read?

M Because you've got the numbers in a column, and you've got the speedometer dial as well

NB Ok, is that a general view, that we like the way that this one is arranged? D1?

M Yeah

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 2 references coded [0.47% Coverage]

Reference 1 - 0.20% Coverage

Rich But yeah, more information on the big one but, clearer on the small one

BL Ok, I mean, of the two, which wins for you? More information or clarity?

Deb A2

Rich Yeah, the smaller one [A2] wins

Reference 2 - 0.27% Coverage

M2 A picture speaks a thousand words. If you're stood there and I'm back here, the first thing I look at, is what you're holding – I go straight to there

BL When I walk into the showroom...

M I can see 58.9 rather than anything in your left hand

F Yeah

M Yeah

Quotes\\1 General design issues\Over complicated

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 5 references coded [2.13% Coverage]

Reference 1 - 0.54% Coverage

BL Ok, yeah AX?

And I thought the point that was trying to be put over should have been a very simple one, and this actually confuses it rather than simplifies it. I mean, it took me probably about, about the best part of a minute to work out this arrow – because there's such a... to work out that this arrow related to that, and that arrow was actually joined to that it would say that's the one their talking about and that gives me a clue as to what they are trying to say

BL Just for JX, this is A1

Reference 2 - 0.37% Coverage

BL What do you think about A2?

And Well it's the same principle – they're not very good

BL Not very good, not very clear visually?

And They don't say what they're trying to say. If somebody was trying to say what this is trying to say in words then I think you could probably say it in one sentence, so it should be said in one picture – easy

Reference 3 - 0.34% Coverage

NB So for you there's just too much information going on, packed into a...

M Yes, and there doesn't need to be. I mean what it's trying to say is – the greener it is, the cheaper it is to tax – and that's all you have to say, and then just back it up if you want to follow up what the reasons for that are

NB Ok

Reference 4 - 0.41% Coverage

NB There's too much going on in the first one?

M Yep

F Yeah, it's not...

M2 People don't want to see too much, they want to see something in their face – jumping out. You would look at it and say, I don't want to read that – I don't know why, it just gives that impression

F Yeah

M2 It looks so complicated, it just – you can't explain it but you just don't want to read it

Reference 5 - 0.47% Coverage

M3 There's something about the presentation [B4] – I still don't actually understand it

M2 No I don't

NB There's something about the presentation of the comparison or the...

M The whole thing

M2 How does my brain agree with this? It's still kind of blanking it off basically, rather than actually trying to say...

NB Can you suggest how it might be improved?

M A picture

NB A picture?

M And some words to back up that picture

Quotes\\1 General design issues\Recognition of A-M colour bands

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 4 references coded [0.68% Coverage]

Reference 1 - 0.23% Coverage

M Well, a general sliding scale of anything that you sell now has to have, has to be accompanied, from a property's point of view, by an energy performance certificate. This is the same sort of thing, and clearly it's just something that...

Reference 2 - 0.16% Coverage

M Ok, well that sliding scale really, from the ecology point of view, so if your home is more efficient it would be way up in the green area, if it's less efficient...

Reference 3 - 0.23% Coverage

M I think everything is going colour-coded now, isn't it, even the food – they've got the traffic light. You know like in Sainsbury's and the Co-Op, they've got that kind of thing, so green means the most BXeficial or... this seems just the same

Reference 4 - 0.06% Coverage

M Green is go, red is stop. I mean it's a simple as that isn't it

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.43% Coverage]

Reference 1 - 0.37% Coverage

BL Quick show of hands if you have seen those coloured bars anywhere

M Yes

M2 Yeah

BL Quick show of hands if you have – just again for JX. I think we've got 8 out of 10. Ok, fine, where else have you seen them? Those of you that have seen them

F I've just bought a new fridge freezer, and washing machine – and they're all on them

M Fridge, yeah

M All electrical appliances

M Yeah

BL Yeah, so white goods and that sort of thing?

F Yeah

Reference 2 - 0.06% Coverage

BL Fair. Has anyone seen them near a car? [A-M coloured bands]

F No

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.49% Coverage]

Reference 1 - 0.49% Coverage

Ger This reminds me of actually when I went to buy a washing machine, and a ..... and you have basically got triple A – its more or less the same sort of thing like this really. I always look at the green marks – so it's going to be triple A, double A or A – so greener means more A's – the greener the bar the more it reflects more environmentally friendly. So, when I look on here, and it's got A there, it's also got 35.8, which I know is what you get to the gallon. And that's the first thing I notice on here

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.18% Coverage]

Reference 1 - 0.18% Coverage

M Well just to say, when you put that poster up there I was just thinking it would be absolutely great to have this kind of information, you know, like you get for electric appliances...

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.43% Coverage]

Reference 1 - 0.43% Coverage

Jacq I just thought – that, to me, would be stuck on a fridge...

BL What do you recognise Jacqui from A1?

Jacq This one? Not a thing, it doesn't do a thing for me

BL You're saying it would be stuck on a fridge?

Jacq That, to me, is what you see when you're doing your, yeah, on household appliances

F3 Yeah, you get the labels on fridges and things...

BL You're indicating that you recognise the colours

M Yeah

Quotes\\1 General design issues\Use of colour on comparison scales

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.28% Coverage]

Reference 1 - 0.28% Coverage

PX Why did they chose blue there instead of green?

BL Sorry PX?

PX Why didn't they choose green?

M Actually, that's a good idea...

F Yeah

M ...like go from green to red

F Green to red

PX I mean it all down to a green theme, so I'm confused as to why they chose blue

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.69% Coverage]

Reference 1 - 0.69% Coverage

NB We are definitely nudging on here. Can we now have a quick look at B3. A slightly different way of presenting the same information – who would like to speak to B3, what's B3 telling us?

F [1:04:35] It's telling me that it's more expensive than average to run. That's all I would say that it's showing me different

F2 It's clearer on the car tax

M Yep

NB Is it showing you that the car is more expensive to run in a slightly clearer way than B2?

F Yes. Yeah because it's the first thing I noticed – it's got it with the dark blue

NB How did it manage to make this amazing thing happen?

F Because it's gone to the dark, the dark blue

NB The dark blue – so you've got a kind of visual clue there, that straight away tells you...

F Yeah, so that is telling me, it's clearer, yeah, visually straight away by going to the darker colour, yep

Quotes\\1 General design issues\Use of grey

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 3 references coded [0.82% Coverage]

Reference 1 - 0.21% Coverage

M Firstly I looked at it and thought, firstly I thought, what does 99 mean, on there. And I hate anything that's grey, because you're hiding something – why's it grey? If you want me to read it, make it black

Reference 2 - 0.26% Coverage

BL Before we move on, and more to say – good or bad – about A4 [slider design compared with dashboad]?

F It's too bland, again, the pictures look – if it had the black background... it's just too grey isn't it

F2 They could have made it bolder to read

Reference 3 - 0.35% Coverage

M2 Can I suggest something to you guys? Again, looking at that from this distance – what I would say is, if you want to make a statement, don't do it in a whisper. Can you read that?

F That's what I was saying, it should be black text

M2 Talk or shout – but don't whisper

NB Ok. So, I'll take that point that you don't like the grey lettering.

Quotes\\1 General design issues\Wrong title on current fuel economy label

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.21% Coverage]

Reference 1 - 0.21% Coverage

F2 I think it is emissions. But actually, I must admit, I have looked at these more and on this one, it is obvious that that bit is emissions, its not so obvious with that because the first word that comes up is fuel economy

Quotes\\2 General non-design issues\Credibility of independent sources

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 5 references coded [1.04% Coverage]

Reference 1 - 0.18% Coverage

FX Ok, What Car? It gives it a bit of credibility, it gives it a bit of credibility, but I think, I mean, using... You know what are Car and what's, all the other car magazines going to say?

Reference 2 - 0.27% Coverage

M I think that, for something to look at, I think that do a comparison online or otherwise, What Car? give their credibility to this vehicle, by the various rigorous tests that they carry out on that car. It supports what this is all about. It is informative because people trust What Car?

Reference 3 - 0.05% Coverage

M Actually Which? would be better

F See I like Which?

Reference 4 - 0.32% Coverage

NB Can I just add one quick thing – so, we have said that What Car? lends some credibility, what about if it was some sort of Government agency's logo here, would that be credible?

F Yes

M The VOA or someone like that

M2 The VOA

M3 I don't think it is actually right to promote a third party which is a commercial organisation.

Reference 5 - 0.21% Coverage

BL Ok, I thought one of the labels had – oh yes, can you see it's as the bottom, the VCA label is at the bottom of one of those. So are you saying that that as a brand, you trust them? That's a good source is it?

F Yeah

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 3 references coded [1.10% Coverage]

Reference 1 - 0.72% Coverage

F It's quite clever they've put What Car? in, because we live in a world of comparisons now, and the fact that they've put the What Car? in, people would look at that and trust that, if they, if they, you know, they would look to the What Car? buying guide – I mean my Dad and my brother always used to sort of read books like that when they were looking at cars – so if you put that on there, they might sort of take that away from the fact that, Ok, they've done the research and they've got the answers. I think it's quite clever that they've put that on there

BL Can I just follow that up – who thinks that it adds to the label in some way, by having What Car?, or could be another comparison point of view – could you put your hands up if you think it adds to it?

M I think it adds to it

BL 3, 4, 5, 6, 7 – at least 7. Ok. And, would anyone like to add to why that's important?

M Independent

Reference 2 - 0.23% Coverage

M I think because you've got What Car? on there you immediately think, someone's looked at it already for me – I don't have to think about it. So therefore it's a good thing – if someone else has rated it already. Someone's done the leg work; it's got a rating of X – even though that might be...

Reference 3 - 0.14% Coverage

BL So if you knew that this bit was independent, whether it was Which? What Car? Auto Trader or whatever – would that be a good section to have?

M Yeah

F Yeah

BL Yeah, Ok

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 2 references coded [0.72% Coverage]

Reference 1 - 0.31% Coverage

BL Just coming back to this box, anything that you like about it?

DX I like the fact that What Car? has been included, because it is quite a reputable periodical that people go to – I like the fact that it says 'best' and 'worst'. I like the fact that it gives me figures, but those... I would just like a figure for

Reference 2 - 0.41% Coverage

BL Does it help that there's a What Car? logo there?

M Yes it does, yeah. Because it just, it just brings in a different sort of aspect to it, letting you know that they have had a look at the market and stuff like this...

BL If that logo was not there, would that be not as good

M Well, it would still be good, but I think that it's just the endorsement of What Car? – that's it, because you know what they are about

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 3 references coded [1.07% Coverage]

Reference 1 - 0.56% Coverage

M I'd rather go with What Car? I thought that was good

F Yeah

M Yes

F Yes

M Yeah, you remember them

NB Ok, so of those three sources, who votes for What Car? as the most reliable and trustworthy source? Ok, that's about half. Government? A few, a few votes for the government – and perhaps SX as well. And, I'm guessing that, manufacturers? Who votes for the manufacturers? Well that's nobody at all

M As long as the – it doesn't matter, as long as they are all... if they are consistently wrong then you're comparing the same thing – it doesn't matter

F Yeah

Reference 2 - 0.26% Coverage

NB Yeah, and from which source have you got the best chance of getting consistent figures? Either consistently wrong or consistently right

M I would say probably – my view would be What Car?

M2 I agree – it's independent

F Yes

M2 It's got to be independent

Reference 3 - 0.25% Coverage

BL And apart from What Car? are there any other independent sources that you would trust? About cars

M Which?

M Yes Which?

F Yes

BL Ok, What Car? or Which? Any third?

M RAC? Or The AA? Possibly

F Yeah

M Yeah

BL Yeah, Ok

M3 Not Top Gear

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 3 references coded [1.09% Coverage]

Reference 1 - 0.22% Coverage

M ... and VCA

M2 What's VCA?

M Well, I...

BL That's, we wanted to know whether you would notice it, but you have – does VCA mean anything?

F No

BL Ok, just for JX – it doesn't mean anything.

Reference 2 - 0.64% Coverage

BL Jane, what's that saying to you? I sit good to have a What Car? stamp?

F No

BL You know what it is, but no. Brian?

Brian I mean it's clearly intending to add some credibility and objectivity to it

M I think people know, Which? magazine or What Car? magazine, or most people know that they're independant. So, you can trust them more, because they're not influenced by anybody, so...

BL Quick show of hands if having a What Car? stamp on the label would increase your confidence in the label?

M Yeah, I would think so yeah

F Yeah

BL 1, 2, 3, 4, 5, 6 – so sort of half... Ok, 6.

Reference 3 - 0.23% Coverage

NB If it does help – if you could clearly identify that this was a government body that issued the label, would that increase its credibility in the same way that Which? or What Car? would?

M Yeah

M2 Yeah

F Yeah

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 6 references coded [2.25% Coverage]

Reference 1 - 0.28% Coverage

BL Actually, let's come to the source now – who would you trust, if it wasn't the government, say, who would you trust to tell you some information about other models

M I wouldn't trust it anyway [laughing]

M2 Which?

F Yeah, Which?

M Yeah

BL Everyone agreed?

M Yeah

Reference 2 - 0.20% Coverage

BL I was going to ask you. Just before we go for tea, C3 has got VCA, C4 has got What Car? Anyone know what VCA stands for?

M No

M2 No

F Vehicle check... something – association? Whatever

Reference 3 - 0.45% Coverage

BL It's the Vehicle Certification Agency, which actually provides all the official numbers. We're not surprised you don't know – we just wanted to check. So, would you trust the label more that had something from the government – like VCA or the Department for Transport, or would you trust it more if it has What Car? or Which? or Top Gear, or something like that?

M For me, What Car? or Which? because I've heard of them

F Yeah

M2 Yeah

Reference 4 - 0.28% Coverage

M If the government made a big thing about VCA, then you'd want to choose that wouldn't you, because it's unbiased and...

BL So if you knew what VCA... if there was a government stamp that you knew, would that be Ok? Would you trust that? Or would you prefer What Car?

M Yeah

Reference 5 - 0.50% Coverage

F No, I think the government would be trying to sell you what they wanted you to buy

M Exactly

M Don't have it totally independent people... Why not? Why can't they be totally independent? This is, I am a consumer, for the consumer – I'm not on the government's side, I'm down the middle. So it's a Which?, or a What?

BL So you prefer What Car? or Which? or someone like that?

M Any independent, same on comparison sites – it's not biased. It's a comparison site, it's independent. Go for it

Reference 6 - 0.54% Coverage

F Yes. You said who we would trust and who would we see here. I've acted on Top Gear. I'd like to see that. I know they tend to be a bit biased on things, but I think it would be an interesting thing to see them do a program on...

BL Ok, we will give them a bell and see if Jeremy will give us a show

NB It's important, because a lot of people – it's a very influential program

F Yeah, people will watch it

F2 But it's an entertaining program – it's not just... It tells you what you should buy. They sort of do all the tests...

Quotes\\2 General non-design issues\Information overload

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 2 references coded [0.26% Coverage]

Reference 1 - 0.12% Coverage

M Could I just put something very important into the equation, there is an old saying – too much analysis causes paralyses.

Reference 2 - 0.15% Coverage

F2 Well it just all confuses me, it would just put me off – I'd just end up walking out and not buying one

BL Is the information just a put off?

F Yeah

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.11% Coverage]

Reference 1 - 0.11% Coverage

Trevor It all confuses me, all these sort of things really. I look at the 35.8 miles to the gallon – that's the biggest thing that would...

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 4 references coded [0.76% Coverage]

Reference 1 - 0.15% Coverage

M There's a lot of information underneath [A4]

F Yeah

M Too much

BL Too much information? Ok, so for JX that's Hue and that's A4. Fantastic, Ok

Reference 2 - 0.17% Coverage

BL You like A1?

F Yes, it's straight to the point and not too much information clouding the issue. That's just me, but it is, yes

BL Too much information on A4

F Yes

Reference 3 - 0.23% Coverage

F I just feel that it's too much information and I can't make my mind up going into the garage which car I was looking for – I'd have done research before I went in there, and that to me would have been too much information, basically

Reference 4 - 0.22% Coverage

M2 For me, all the slides are too busy, less the one that gives you the key facts

BL There's too much information on the...

M2 Too much information on all the rest of them – that's the one that gives you the key facts

Quotes\\2 General non-design issues\Irrelavance of all label information

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.28% Coverage]

Reference 1 - 0.28% Coverage

F What is the point in it, because, what I don't get is, I'll be honest, I don't look at none of these figures, I look at the car and think, I want that car – and I will pay what I can afford. If I can afford it then I can afford it, if I can't then I can't. It don't look into all this rubbish.

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 3 references coded [0.39% Coverage]

Reference 1 - 0.20% Coverage

BL Trevor, any views on that comparative box or anything else in there?

Trevor No not really. No I don't tend to look at that – I just sort of, yeah when I'm looking for something I look at a vehicle that will do what I want it to do basically

Reference 2 - 0.09% Coverage

Russell To be perfectly... I think it's no use at all – because I don't know what they're comparing it with

Reference 3 - 0.10% Coverage

M2 My answer is I think that comparison is absolutely useless. Credit us with some intelligence and we will compare them ourselves

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.17% Coverage]

Reference 1 - 0.17% Coverage

BL What is important to you?

F Honestly? None of it

BL None of it?

F No, because that's not why I bought my car – I bought my car because I wanted it, not because it's...

Quotes\\2 General non-design issues\Usability of 10,000 miles per year

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.47% Coverage]

Reference 1 - 0.47% Coverage

F The only good thing is that you can compare it with another car, a completely different car, but really, who does exactly 12,000 a year? I can see the point in saying most people. So, to me...

NB Its a hypothetical number of miles

F The only time that would work is on two cars next to each other, and you could see that one was going to cost you 170 and the other was going to cost you 150. So you could see that the 150 would be a more economical car

M So it's doing the job isn't it

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 3 references coded [1.15% Coverage]

Reference 1 - 0.33% Coverage

Rob It's completely irrelevant – completely irrelevant to me. I don't drive 10,000 miles a year, I mean, I would rather know what the fuel cost is, how efficient it is and how many miles per gallon as we suggested on the last one. Because, outing it at 12,000 miles – if you can, if I can fuel my car for £2,050 a year I'll bite my hand off

Reference 2 - 0.21% Coverage

NB Yes, so because it's based on a standard assumed number of miles travelled per year you feel it's of no relevance?

Rob Not at all

NB Is that a general view?

F Yeah

M Yeah

NB Everybody agree with that?

Reference 3 - 0.62% Coverage

F I think that, although it's got, you know 12,000 here, you could work out in your head how much you're going to do, so I think it's better than...

M It depends how your mind works, because, I would take the average there and then I would work out how much it would cost for me

NB How do you mean take the average?

M Well here you've got a fuel cost per month, so if you know that's for 12,000 miles – if I was doing 24,000 miles here then that will give me an average cost, for example

NB Ok, so you would do a calculation...

M I would do a calculation in my head to work out how much it, to work out how it relates to me

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [1.72% Coverage]

Reference 1 - 0.97% Coverage

M3 It can over simplify it, because isn't it based on 10,000 miles? And I don't know what the kind of mpg is supposed to be but, it's perhaps misleading, because you might get that car, and you don't spend £133 per month, you spend £60 or you spend £200. So... it looks good, but when you start to think about it, you know, how reliable is it as an indicator, then...

NB So for you there's a question mark about how relevant this information is to you personally, because you may not drive 10,000 per year?

M3 Yeah, I think it's a good thing. But if you start to think about it you start to question whether for me, in my circumstance, that's got to be a reliable number. You know, it might be helpful in terms of comparison because if the same statistics that they use for a car were on a CD, it's a very easy way to compare one against another

NB So as a base of comparison it might be useful

M3 Yeah

Reference 2 - 0.75% Coverage

NB But, leaving that to one side, it may not, you may not feel that I can use this actual figure to apply to my own personal driving style

M3 Yeah. Yeah I think that's how I would feel

NB Ok, is that a general view?

M I thought that as well, that was my first one – it's based on 10,000 miles, so if you only do 5, you just half it

NB Just half it? So you would just...

M If you were doing it. I drive more than that so it is a good comparison for me, but, how reliable would it be for...

NB Ok, so you can do some mental arithmetic then – even though you don't drive 10,000 miles you could still use this figure...

M3 Yeah, do your own equation on it

NB ... and do some maths

M3 Yeah

Quotes\\2 General non-design issues\VED term not understood

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.07% Coverage]

Reference 1 - 0.07% Coverage

F I was saying – what does VED mean?

F2 That's car tax – I learnt that on the last one

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.15% Coverage]

Reference 1 - 0.15% Coverage

M Sorry, all I was going to say is, it's obviously the VED band, but who knows what a VED band is? Or they can work it out? Why don't they just say car tax band?

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.17% Coverage]

Reference 1 - 0.17% Coverage

BL What's the general thought about... do we as a group understand vehicle excise duty? It's got 127 g/km – do we know what that's going on about?

F I don't

Quotes\\3 CO2\CO2 as env issue

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.22% Coverage]

Reference 1 - 0.22% Coverage

Jan It's very much an environmental thing isn't it – the CO2 emissions

BL What would be more important to you, out of those two bits of information? [CO2 and mpg]

Jan What would be more important to have? Oh, CO2 emissions – so that would be important to me, so that we are..

Quotes\\3 CO2\CO2 viewed in terms of cost

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.36% Coverage]

Reference 1 - 0.36% Coverage

M I had a little Peugeot diesel for a short while, a few years ago, and when I went in to tax it, she charged me £30 for 12 months – I though god, she's dropped a gooly there...

F No

M And that's what it was, it was under 120, that's when I started learning, I'm thinking, my god, you know that's good. It was a B to C because it's under 120 – it was probably a C actually

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 2 references coded [0.96% Coverage]

Reference 1 - 0.25% Coverage

Kieron I think 'parking permit costs' and 'road tax' go with 'CO2' because the CO2 determines the price of them two attributes

BL Is that a UK thing or a London thing?

Kieron Well in London it is

BL Anyone want to agree with that?

F I agree with that

Reference 2 - 0.71% Coverage

M I think one thing that worries me a little bit is this – I know this is going to throw a spanner in the works here, but if you were to purchase a car with the tax band being quite high, but you only use the car once a week, and it's linked to CO2 emissions – then shouldn't you pay less road tax, if you're not using the vehicle as much. Because we've moved away from actually using the vehicle or having a big car, to CO2 emissions. So, if that is the case and you don't use the car often, then where does that correlate then? Where does that tie in? Yes? You can't answer that question can you?

M No, it's one of those things where it would be difficult to police wouldn't it. It's like stopping people using their mobile phone...

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 2 references coded [0.38% Coverage]

Reference 1 - 0.27% Coverage

BL Can anyone give their ideas about the link between CO2 and the actual tax you pay?

M Less emissions isn't it. The less you emissions the less your tax is

BL Yeah, did we all know that as a group?

F Yeah

M Yeah

BL Yeah?

F Yeah, the greener the car the cheaper it is

Reference 2 - 0.11% Coverage

M All about the cost yeah. I think in the current climate, I think most people would find themselves in that boat

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.45% Coverage]

Reference 1 - 0.45% Coverage

F I think the one thing that we said about the emissions was, you're focussed on whether it's a D or an E or and F or a G, but in terms of road tax is that a major difference? In terms of road tax, a mention of how much the road tax was was like...

BL So there is actually a point – first you would like to know the cost?

F2 Yeah, the D means nothing to us – we don't know how much car tax is...

F Is it 200 or 50..?

Quotes\\3 CO2\Low interest in CO2 & VED bands

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.13% Coverage]

Reference 1 - 0.13% Coverage

M Well, I don't know what A to Z is on the vehicle excise duty, but, does anybody else? I mean, there is a J there, what does that indicate?

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 4 references coded [0.60% Coverage]

Reference 1 - 0.13% Coverage

Andy It's like when you buy a washing machine you get a colour graph like that... and you don't bother to look at that either...

F Yeah

M Yeah [laughing]

Reference 2 - 0.04% Coverage

Andy ...CO2 emissions and fuel economy mean diddly squat

Reference 3 - 0.35% Coverage

BL So is there a consensus that mpg is more important but you are interested in CO2 as a secondary thing?

M Yeah

F I definitely would go, that one, that one and then that one, because that one and that one involves my pockets, and that one...

BL Ok, just for JX, A2 – right to left

F Sorry JX. I would do miles per hour [means miles per gallon], tax band, and then CO2

BL Charlie, you..?

Charl Yeah, Yeah I'm the same

Reference 4 - 0.08% Coverage

NB That's enough information for you in this context?

Trevor Yeah. CO2's I wouldn't understand really

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 3 references coded [0.35% Coverage]

Reference 1 - 0.13% Coverage

TX I have to say, I'm going to be totally honest – it's not that I don't care about the world and the CO2 – I don't properly understand it

Reference 2 - 0.12% Coverage

Simply for the same reason as TX – CO2 emissions and stuff like that really doesn't come into it when I think about buying a car

Reference 3 - 0.09% Coverage

M Yeah, rather than a band, because people look at that and say: 'J band, what does that mean?'

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 3 references coded [0.64% Coverage]

Reference 1 - 0.15% Coverage

M I think the government would all love us to be interested in green issues but I think in the end we are just more interested in how much it's going to cost us

Reference 2 - 0.23% Coverage

M I just like to see the category and the cost associated. Once you see that related to your car you know your car tax essentially. The scale just takes up space and I'd rather have more useful information in that space than the coloured chart

Reference 3 - 0.25% Coverage

M Yeah, the coloured chart for me is not necessarily that important. The category and the cost associated with that is more important, because it could have an effect on my buying choice as how much road tax costs. The fact that mine is only £20 per year...

Quotes\\3 CO2\Support for A-M coloured bands

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.21% Coverage]

Reference 1 - 0.21% Coverage

BL Russell, did you have a comment on that?

Russell What the...?

BL On the coloured bands?

Russell I just know what it means – you know that red is worse than green basically, you know, at the end of the day...

BL So it's clear? Yeah?

Russell It's clear

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.27% Coverage]

Reference 1 - 0.27% Coverage

Den Over here now, this 2 was clearer for me, and I didn't need the numbers in this grid, it was quite easy for me to decipher that green was good and red was bad – and that, as it was orange and close to the red, that CO2 emissions were quite high. I get that really clearly...

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.46% Coverage]

Reference 1 - 0.46% Coverage

Rich For us, this one was more informative, but this one's clearer

BL A1 is more informative but A2 is clearer?

Rich Yeah

BL That's interesting. How is A1 more informative for you?

Rich Well, it's got the...

Deb ... the emission thing...

Rich Yeah, down the middle

BL What like the bands?

Deb Yeah, that doesn't tell me how many are in each band, although I don't know if you'd even need to know how many are in each band – I don't know

Quotes\\4 MPG\Clarity of dashboard with prominent MPG

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 3 references coded [1.13% Coverage]

Reference 1 - 0.27% Coverage

BL Why is (A3)... more straight forward?

F It just says it as it is doesn't it. I mean it's... CO2. It's got a box for CO2 emissions, and it just tells you that it's J, which isn't very good, and then fuel economy. It just stands out a bit more than... there's too much information here

Reference 2 - 0.53% Coverage

M2 A1 is more confusing with the less initiated to the exhaust emission...

BL Oh, because it has the numbers in the coloured band?

M2 Yep, where as I personally think that A3 is a better... A picture tells a thousand words... The vehicle falls about half way through the category of the test undertaken. Clearly gives the average miles per gallon, the picture underneath it depicts the car about mid way. We don't have all the exhaust emission criteria, which, really, most of the public don't understand. Yeah, but they can understand the colour clearly

Reference 3 - 0.33% Coverage

BL Right, I would like you to park A1, the big one, and instead replace it with A2, so we have got A2 and A3 next to each other. A2 is the one with the black and white, that's A2. Which of those do you... just thinking of impact, strength, preference...

F I still like A3

F2 It just stands out doesn't it

F Because you've got these boxes

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.55% Coverage]

Reference 1 - 0.55% Coverage

BL Ok, if we come back together as a group, anyone like to kick off? What do you think about these two labels?

F Well we're being women – we prefer the smaller one. Because, being a woman, all you see is this – and you think wow – that's not bad

BL Ok, just for JX – they are just pointing to 58.9 on A2

F Yeah, and that's the miles per gallon standing out more. And it has actually got just as much information as the big one, which, you've got to – that looks too complicated to read

BL So for you, A2 is simpler and clearer

F Yeah

Quotes\\4 MPG\MPG importance

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 4 references coded [0.61% Coverage]

Reference 1 - 0.15% Coverage

Would it be right if NX and I took from this group that mpg and road tax are, amongst other things, but those two are fairly important?

Jan Big issues

BL Big issues Janet said

F Yeah

Reference 2 - 0.35% Coverage

BL So is there a consensus that mpg is more important but you are interested in CO2 as a secondary thing?

M Yeah

F I definitely would go, that one, that one and then that one, because that one and that one involves my pockets, and that one...

BL Ok, just for JX, A2 – right to left

F Sorry JX. I would do miles per hour [means miles per gallon], tax band, and then CO2

BL Charlie, you..?

Charl Yeah, Yeah I'm the same

References 3-4 - 0.11% Coverage

Trevor It all confuses me, all these sort of things really. I look at the 35.8 miles to the gallon – that's the biggest thing that would...

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.10% Coverage]

Reference 1 - 0.10% Coverage

GX Well that's one of the first things I look at, and ask, you know, how many miles per gallon...

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 2 references coded [0.66% Coverage]

Reference 1 - 0.50% Coverage

BL Just before you go back to NX – how do you think about fuel costs, if you say you do a high mileage? Is that business miles or a mixture?

M3 Business miles, to and from work – I think of it as mpg. Its mpg now, that's, I don't know what I'm doing one day to the next, so its got to be mpg

BL Is that because, if its business use, rather than private use, it's more about the fuel economy of the car – is that what you mean? Mpg is more important? That's how you're thinking..?

M3 That's what's in my mind

Reference 2 - 0.16% Coverage

M2 I mean just for me, I would go – it's the miles per gallon which is the key information – this is just additional stuff. What I really want to know is miles per gallon

Quotes\\4 MPG\MPG trust

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 7 references coded [1.74% Coverage]

Reference 1 - 0.27% Coverage

Andy ...CO2 emissions and fuel economy mean diddly squat – because I had two cars... I had before, I had a Mazda estate and I changed it to a newer one – the newer one was supposed to be more fuel efficient this that and the other – it used more fuel than the old one

BL So, you don't believe in the figures?

M Not a great deal no

Reference 2 - 0.16% Coverage

Russ What I will say about the figures is, I think the manufacturers now tune their vehicles to pass these tests, so at a certain point they will do that. But in every day driving, they're not as good.

Reference 3 - 0.31% Coverage

Charl I think the point, well for me, with these figures here basically it's not... it may well be that in the factory but as soon as you start... it's the way you drive as opposed to what's actually written down. So to me that means nothing, I know it looks good, but if I start putting my foot down too much around town, I'm not going to be doing that at all, in any way, shape or form

Reference 4 - 0.36% Coverage

F I mean, they're... they're saying that... they're doing an average aren't they, with the combined, where I don't think the majority of people do half urban and half motorway driving, I don't think. It would be better to have

a not combined and more realistic figure where probably 80% of your driving is urban and 20%, maybe, on faster roads. So I think that 35.8 – you'd look at it and think, well that's your average but it wouldn't be for a normal...

Reference 5 - 0.23% Coverage

F That sort of thing, yeah, something... well, an average? I don't believe that's an average. An average would be, you know, take 100 people that have a normal life, that drive to work and work out what their average is, and then do it... whereas combined, I think is a little bit... cheating

Reference 6 - 0.13% Coverage

BL Do you know what combined means?

F Well I take it that it's those two and their added together and... like the average of those two put together isn't it

Reference 7 - 0.29% Coverage

Russ Well it's got some comparative because everyone's dealing on the same thing – yes it's a comparative, but whether it bares any relation to... the only think is – I've come back to the point where, the older vehicle that would have worse figures than this, the new one has 6-speed box, supposed to be better – uses about 10 miles to the gallon more. That's a lot

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 4 references coded [1.32% Coverage]

Reference 1 - 0.35% Coverage

M Well looking at What Car?, when they test vehicles, what they get out from the average miles per gallon bears no resemblance to the advertisements that you see for that particular car. They are invariably considerably less in real life than what the manufacturer may claim

M2 They usually drive around a test track and we're driving to Tesco's

F Yeah

Reference 2 - 0.31% Coverage

M Well on here it says official testing, but it doesn't actually say who's done those official tests. You know, like are they independent? Done by government, or What Car? or something like that – that's great. If it's done by the manufacturer, they can do official test but it would be interesting to know... yeah...

Reference 3 - 0.45% Coverage

M2 Exactly. I know this number will not mean anything to me because, when I bought my car I did take note of what the miles per gallon was, but based on driving style, that number will greatly increase or decrease, and therefore there is no guarantee that it will be anywhere near that. So when I look at it, it's a kilometre from where it could be, but I wouldn't take it to mean that's the truth, because I know from experience that it isn't the way that it's done

Reference 4 - 0.22% Coverage

Steve Ok, well just to say, you know, the idea of having these comparison figures is useful – but if you can't trust the figures then they are worse than useless, because you know, you would have to look it up independently

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.40% Coverage]

Reference 1 - 0.40% Coverage

M You don't know what miles per gallon is being assumed, you know, is it 60, is it 30? And whatever it is, is it reliable? Because we've already seen that you've got urban, what was it, super-urban, extra-urban. So, you know, if you don't know that, and every car I've had, if you look at the statistics of what you're supposed to get – I must be driving wrong because I never get...

Quotes\\4 MPG\MPG urban extra-urban issue

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.73% Coverage]

Reference 1 - 0.42% Coverage

BL Do you find the urban/extra-urban numbers meaningful, useful, confusing – what do you think of them?

F [0:38:57] No, I think urban is fine – that's just town driving

M Extra-urban is a bit of an odd one...

M2 Yeah, it's ambiguous isn't it

M Yeah

F Yeah, what is extra-urban? I didn't even see that! I take it that's motorway

M3 Is that, surely motorway drivers... the extra urban? I don't know, is it motorway driving?

F1 What does extra-urban mean?

F2 Urban to urban – on the motorway?

F Motorway?

Reference 2 - 0.32% Coverage

Russ I don't think it will make... well, extra, without a doubt I don't really understand what extra-urban is, but, at the end of the day you've got to have a – for these figures to mean anything – you've got to have a set way of measuring it, and I suppose these are set ways, but where are they, and my argument is that manufacturers are tuning their cars to perform well on these specific tests

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.60% Coverage]

Reference 1 - 0.60% Coverage

BL Is there any way that it can be clearer?

M Yeah, a lot. For example, if not bigger, I don't mean it has to be that large, but just the way it's written, so, what's extra urban? Something I don't know. I've got an idea that, you know, I'm driving around an urban area of suburban London – that might, that's the kind of mileage I'm going to get, otherwise combined is 35. Combined? What motorway or... I don't know. I'm not a car man, so I just, I need things, like a lot of people, simply... So, Ok great, year 2011, 1399, great, gearbox manual, 6 speed, unleaded – great. 35.8, but I don't... that I have to think about...

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 3 references coded [2.41% Coverage]

Reference 1 - 1.06% Coverage

M2 I don't particularly like the average – it would be better if you just had, in a heavily dense public area, what is your miles per gallon, and if you do long distance driving and a lot of motorway use, what is that number. Not the average number, because the average number means nothing

BL Ok, is the information you want anywhere on there?

M2 Well, I want to know what extra-urban meant, because I don't think that's particularly clear. Because urban is obviously an urban area, but extra is like – it implies it's a heavily populated area, which would mean that your miles per gallon would actually be significantly down. So, I don't really understand what that means

BL Ok, is there any other comments, any view about the non-average figures, the urban and extra-urban. Anyone know what they mean? Or agree with JX?

M Actually yeah, that's a good point – I presumed that extra-urban was the opposite of urban, but yeah, I think your point is right you know, its strange

F Yeah, extra-urban just means more urban

M2 It's a strange combination of words to use in that scenario

Reference 2 - 0.45% Coverage

Rob Personally, I don't think it matters what you call it – if everybody defines it the same way, and the information is there for a comparison, the worse think you could do is have everyone defining it in a slightly different way so you are comparing [inaudible]. You could call it anything – you could call it motorway, whatever you want, but perhaps non-urban would be better, I don't know. At least your, at least you've got a common differentiator so you can compare

Reference 3 - 0.89% Coverage

M The average is least important to me – the actual urban number and the non-urban number is the one – when I buy a car I think, well where am I going to be travelling, so when I bought mine, I was making regular trips up to Manchester at the time, so long distance travelling was important and therefore the miles per gallon for motorway use was important. The average – very rarely do you find somebody that mixes it up that much, people tend to either do long distance travelling regularly or short distances. So...

BL So you know the trips you do?

M Yeah, you generally know what trips you do and therefore, I think the two numbers – the heavy user number and then the local travel number are the two numbers that are most important and that average number doesn't mean anything to me

Steve I agree with that

BL Yeah, who agrees with that? Steve?

F Because who's average at the end of the day? Nobody is

Quotes\\4 MPG\Preference for imperial over metric units

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 2 references coded [0.35% Coverage]

Reference 1 - 0.20% Coverage

M The big problem is that we are half in decimal, and we're half out. We are still using miles per gallon, I mean out there, people understand miles per gallon, but very few people know, litres per kilometre

Reference 2 - 0.16% Coverage

F2 I don't know how much a litre is, I only know, you know, I fill my car up and it costs whatever. I don't know, I never look at the litre. I wouldn't have a clue...

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [0.42% Coverage]

Reference 1 - 0.11% Coverage

BL What about underneath, in grey, it says 4.8 litres/100km? Is that?

Jean I didn't know what that meant

Reference 2 - 0.31% Coverage

M I agree unanimously between a few of us, that gallons was easier

F2 Its a term we use

[Laughing]

F2 Its a term that I use, even though I buy in litres, miles per gallon is the phrase I know

BL What does it mean to you?

F2 Um, I presume the higher the number the better it is

Quotes\\4 MPG\Preference for metric over imperial units

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 2 references coded [1.17% Coverage]

Reference 1 - 0.85% Coverage

One thing that gets really confusing is, we changed, we went from pence per gallon to pence per litre, but yet, when you look at all the figures, they're all based on per gallon. Why? When we work in litres now

NB Good question

F That I don't... People say, 'Oh how many gallons do you get per mile' – I haven't got a clue. Whereas if they ask per litre, maybe we could work it out now

NB Ok, so you're more comfortable with litres than with gallons?

F Yeah, yeah

M Yeah because that's what you use, that's what you buy it in don't you

F Well we pay per litre – we don't buy gallons no more. Gallons left the country, I don't know, 10, 15, 20 years ago, so why are you still talking about per gallon

NB So we have previous labels where the fuel economy is expressed as miles per gallon

F Yeah, it still isn't – even in this one – I think it's really confusing.

Reference 2 - 0.33% Coverage

F But we don't use gallons no more. We don't buy it by the gallon; we buy it by the litre so why can't we work on just the litre

NB So you would rather have it, one unit

F Yeah, I don't understand gallons

NB You don't understand gallons?

F I was too young to understand gallons when it was out, so I'm trying to understand it now

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.33% Coverage]

Reference 1 - 0.33% Coverage

Jean It just annoys me because, it says 58.9 miles per gallon – nobody knows what a gallon is. You buy your fuel in litres. I've no idea – I mean I know it's more than a litre, but for me it would be so much easier if it said, 30p a mile on the road, you know, 25p a mile. Then you would actually know what it meant

Quotes\\4 MPG\Understanding of efficiency

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.24% Coverage]

Reference 1 - 0.24% Coverage

BL What do you understand by efficiency?

F Not an awful lot really

BL Say again

F That I'm not going to have to fill it up after every time I've done the school run

BL Yeah, so does it link together with fuel economy

F Yeah

Quotes\\Comparison issues\Buyers Guide - neutral or against

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.57% Coverage]

Reference 1 - 0.57% Coverage

Andy They've got it the wrong way around...

BL Andy?

Andy You should have it the low end. You know, you should start with the 318, then you've got your M3 at the bottom don't you, you know it's a sliding scale – start on small engine and you end up on the big engine, and that's the costs

BL You think that it should be the other way around...

Andy That's backwards isn't it. Yeah. Plus, naturally, you know, you walk in the showroom – you'd love an M3, but in reality you can only afford a 4 door 2 litre, or whatever...

BL Ok, you're on this side rather than...

Andy Yeah, you go up the sliding scale, and you know, the further you go up the scale the more it's going to cost you – that's life.

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 5 references coded [2.88% Coverage]

Reference 1 - 1.04% Coverage

DX I was going to say that, I quite like this little scale here, however, I'm given the figure for the worst, I'm given the figure for the best, but there's no figure to tell me – alright, it's mid range, but there's no figure. I'm just taking their word for it that this car sits in the middle, so it would be nice if there was some sort of factual information to show exactly where it sits on the scale, or exactly how much money you will be paying

BL Is there any information anywhere else on the label?

DX I don't like this! I don't want to know that I am going to be paying £7,000 over three years. I don't want to know that. I'd rather not think about that. You just do it without thinking about it

BL Is it useful even though you don't want to know

F No, it's not

DX No. It's not useful. It's a deterrent

BL What would you do with that information?

DX I'd rather just not see it – I'd rather not know that I was going to be forking out £7,000 0ver the next three years, it's easier to do it just doing it without thinking about it! [Laughing]

Reference 2 - 0.45% Coverage

M Just one point – that should say in that last box, that should say 'you save on running costs'. The reason why we want running costs, are the fact that a diesel car will cost you more money than a petrol, initially, so you lose on the purchase price. What you'll save on the running costs – you don't save anything. So if they put 'you save on running costs', it makes more sense

BL So, actually a bit more clarification about what it's actually saying?

M Yes

Reference 3 - 0.39% Coverage

BL TX and Mike, what do you think the best and the worst, and the car in the middle, do you think they are all the same fuel? Do you think they are different fuels?

TX I think they're different cars

BL How do you think they are grouped?

TX I just see them as being different cars because that says it's an M3, this is an E90, and this is a 330d. So to me it just feels like three different cars

Reference 4 - 0.26% Coverage

DX I'm just thinking, that it would also help me if I knew the cost of the cars, because that would be a major factor. You may be telling me that I'd only pat £1,480 less with an M3, but then how much is an M3? And how does that relate to me – would that even be a factor?

Reference 5 - 0.74% Coverage

Jo This card is misleading, because the 330 diesel, I hadn't picked up on it because I thought that all these figures were based on unleaded petrol...

F Yeah

F2 I didn't know it was diesel either [laughing]

M No I didn't

Jo ... so I'm just completely mislead now. Unless it's an error, and they shouldn't have put the diesel on here?

BL That's not an error, but it's not clear

Jo No it's not clear, because when you first look at the card, you automatically think their basing all of these figures on petrol cars not diesels

BL So you took it to be a petrol comparison?

Jo Yeah, yeah

F Especially as it says, 'unleaded petrol' in the top right hand corner, I think I, like most people, took it for granted that we were just talking about petrol

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [0.81% Coverage]

Reference 1 - 0.22% Coverage

And It doesn't do any harm, in that it's showing you that there's a choice, as opposed to bottom of the range, top of the range, or whatever it is – there's bottom, middle, top – so it's certainly doing no harm

Reference 2 - 0.58% Coverage

BL [01:16:59] Ok, just coming back together as a group. Anyone like to start anywhere? Whether they are useful seeing the worst in the range, or not?

M I think, well we thought it was confusing

F I took ages to actually understand what it's talking about

BL Why? Any reason why... is it impossible to put your finger on why they're confusing?

F I just didn't get it

M You've got to look right into it I think, to understand

F Yeah, and there's like – pay more, but I don't know how you pay more. And then I don't know what the scale is

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 3 references coded [1.16% Coverage]

Reference 1 - 0.34% Coverage

Jacq It's like a sales pitch isn't it – if you have that you safe that, if you have that you save that

BL Hang on a minute – Jacqui?

Jacq I think it's more like a sales pitch

BL More like a sales pitch?

Jacq By buying that you can save that, and by buying that you can save that. But at the end of the day, costs are involved

Reference 2 - 0.57% Coverage

EX We were just saying, again, that it doesn't the final story, there could be like another, ten, which are less efficient

James Yeah

BL Yeah, do you want to see those? We will go there in a minute. Is that something that you are sort of intrigued to know?

EX Yeah, it's like you were saying – that makes this car look really bad, on there...

BL We are giving this car a really hard time aren't we...

EX And then here, there's a better one and an even better one than that. But, this car could still be better than ten other cars that you're just not...

Reference 3 - 0.25% Coverage

MX I was going to say basically what LX said earlier, that, what's to the back of this – to the left hand side? There's nothing – if you're going to show what's better than this car, why don't you show, to be fair, what's worse than this car?

Quotes\\Comparison issues\Buyers Guide - support

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 2 references coded [0.96% Coverage]

Reference 1 - 0.31% Coverage

BL Just coming back to this box, anything that you like about it?

DX I like the fact that What Car? has been included, because it is quite a reputable periodical that people go to – I like the fact that it says 'best' and 'worst'. I like the fact that it gives me figures, but those... I would just like a figure for

Reference 2 - 0.65% Coverage

Jo Yeah, it's really, I think, you know, the moment I looked at it I wasn't confused or having to work things out as much as I have done on the other ones, so, it's very clear. It think the very fact that it says 'worst' and 'best', and with What Car? there, because that's going to have an indication of how they have things in their magazine, it's not, 'the worst' doesn't have the negative connotations as, 'you lose' – which is a lot worse I think. So, I thought it was really good, very easy to work out, and quite explanatory – I do agree with DX there, you don't need to know, some people though want to know that, but yeah, apart from that I think it's really good

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [1.31% Coverage]

Reference 1 - 0.37% Coverage

F I suppose, looking at it, if you look at the first one and you're like, you save some money, you won't loose all the features of what you like – you're going to do a little bit of sacrifice on maybe one or two features, but then you're saving, rather than saving loads by giving up all the nice extra that you have. So it's showing you more options

Reference 2 - 0.94% Coverage

M In a way it's quite good, because it's telling you about a different type of car, and it's telling you that that one is going to cost you £1,440 more, so it's actually – somebody said earlier that the prices could be £4,000 different – it's telling you that there's £1,440 difference, so it is showing you something that you haven't... but I had to look at it quite closely

F But I thought that it was saying that it would cost £1,440 more, not for the car but for the fuel...

M But it's a different car – yeah, when I first looked at it I thought it was to do with the price of the car, but it's not, it's actually that the car tax and fuel. And it gives you something that the other one didn't, in the, you know, what's the more expensive option? But it's very sort of clouded and, if you looked at it for another 5 minutes you would probably find some other interpretation.

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 7 references coded [4.68% Coverage]

Reference 1 - 0.59% Coverage

NB [01:09:17] Ok, last label – B5. And this is again showing something to do with a new way of making a comparison. So, what do you think it's telling you? RX, what do you think it's telling you?

Rich In the same range of car

NB Same range

Rich Yeah, this car that you're going to buy is this and the most efficient in the range is that

NB Ok

M2 That's the most efficient car going

F Well to me... Just looking at that little box, this car is the one that is low efficient. That one...

M It's saying don't buy the car you're thinking about, buy the greener one!

Reference 2 - 0.65% Coverage

BL Ok, apart from the typo – so would you like to explain, just for the record, why it is extra useful information [on C2]?

Lin Because, it's showing you three examples, and it's also comparing to three different models of the Renault Scenic

BL Is that clearer in this one?

Lin Well it is, than the other ones were

BL Ok, can you put your finger on why it's clearer?

Lin Because to me, that looks like it's the basic model. That one is slightly more expensive and then that one will probably be the top of the range

BL Ok, so back to... there's an assumption that you will have to pay more for one that's more fuel efficient?

Lin Yeah

Reference 3 - 0.38% Coverage

BL Ok, just before – is it better to see something that is a bit better, rather than just the best, on this definition? Is that a general..? DX?

F It is on this scale, because you've got an option then haven't you

F2 Yeah, yeah

F You've got the option of what you want to do, and which model you want to... it's giving you a bit more of an option on that, I believe

Reference 4 - 0.41% Coverage

Lind [01:22:04] Right, where it says £1,440 more on both of them, because really, the graph on this one is still showing that this car is slightly more efficient, which is probably good – I might go to buy that car, but why...

BL Ok, back together as a group for JX here...

Lind Why am I paying £1,440 more, for a less efficient car – usually – is that the saving on fuel?

F2 Yeah

Lind Oh, I see

Reference 5 - 1.81% Coverage

BL Let's, forget C4 for now – let's just concentrate on C3, and let's just nail a couple of issues there. So we've got this, yeah, we're uncertain about what that 'pay' means, but I think LX you were sort of, you were working out weren't you, that – you were saying that probably it's the...

Lind Well, probably the fuel and the tax, but looking at it, you would think you were going to be paying outright, the cost of the car, and extra £1,440

BL So there's confusion between the price of the vehicle and... I mean overall, are you happy that we're now showing you some worse models? MX, does that make you happy? Are you happy to see the car that you are about to buy is much better than a worse one?

F Yeah

M Better than, definitely

BL Even thought it might not be the best?

M Better than what we had previously. You're getting there, it's not a huge step, but you're getting there

BL Ok, but, why do you want to see both ends? Because you're not going to go and buy the worse efficient car – you might, if you really wanted to. But why would you want to see it there. Jacqui?

Jacq People have got to have the option – everyone has a budget. And they should be allowed to – they can't say what a person's going to buy and what they aren't going to buy – that person's is on, in some way, a budget, let them decide what they want to buy. They might not be able to afford that, but they can afford that – so it... somebody might want to buy that top of the range, that more friendly eco efficient whatever miles per gallon at 16p plus, but it's being individual on the budget they've got – give them the option, you've got to try and, you know, are they going to turn somebody away who's got £2,000 and they've got a car in their forecourt for £2,000 – they're not going to do it

Reference 6 - 0.36% Coverage

BL And just to finish this bit off – Jacqui, I take your point, and you should be free to buy any car you want, but, rather than just showing you something that's more fuel efficient, overall, it seems like you as a group want to see the other...

M The more they show you

BL Sorry?

M The more things they can show you, the more choices you can make

Reference 7 - 0.49% Coverage

NB Sorry, going back to Rob's point – is this label less like a sales pitch than the previous label, where it only shows you which was the best car that you could get? Because it's showing you the full picture in a sense, does that feel less like a sales pitch?

F Yeah, you don't look at though you're selling that actually Ford Focus – you don't look to see what car it is, you just look to see what you're paying more and what you're saving – that this car is on the more efficient end

Quotes\\Comparison issues\Comparisons - against

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 3 references coded [1.27% Coverage]

Reference 1 - 0.53% Coverage

FX You know when you go into a car dealership, you've got things like this, on the screen or on a stand next to it now. Yeah, so putting that, about another car, could be confusing. I mean, that should only relate to the car that you are looking at.

F Yeah

BL So, FX, you are saying that you wouldn't want to see a comparison on the label?

FX Not at that point, but in brochure what they could do, it have all their range and say, you know, this is the most efficient. Because that there, 'best BMW 3 Series', what this one? No, it's another one

Reference 2 - 0.40% Coverage

F Yeah, it's like, you know on the adverts on the car, I meant on the TV, you get this fantastic looking car and you think, wow, and it going 'only 9,995', and you think, bloody hell – that's good. And then you look at the bottom, and it's not that car, it doesn't have that spec on it, it hasn't got this on it, it hasn't got that on it, it hasn't got... the price is the most basic basic you can get. So it's just...

Reference 3 - 0.35% Coverage

M (TX) Yes absolutely, and the issue about, 'you lose', is a very defeative sort of comment, just to pick up on that, but generally, while we want the information, I think too much information confuses the issue and is not a fair balance on the vehicle that you are actually looking at, which is what this young lady said there, that's the vehicle I am looking at

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.10% Coverage]

Reference 1 - 0.10% Coverage

M2 My answer is I think that comparison is absolutely useless. Credit us with some intelligence and we will compare them ourselves

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [1.09% Coverage]

Reference 1 - 0.49% Coverage

Kev I just don't see the relevance of it. You know it's £133 per month, so it doesn't matter if it's, on that scale – why's that bad and why's that good – I don't know, it's like, you decide for yourself. Where's the limit? You know, you're saying £500 and 0, so you're not... that makes no difference, it's like you know what £133 is – to you is that good or bad? It doesn't really matter what scale it really is. For me that doesn't mean anything, that circle

Reference 2 - 0.60% Coverage

M Who says it's most efficient? I know you say it is, but, to me maybe that's really bad, or it could be really good. I mean, there's nothing to say why it is like that

NB Would you like to see more information about the basis of this comparison?

M I don't see what difference it makes, personally. You don't care if it's good or if it's bad – you care... that's costing me £133, I think that's quite good. It doesn't matter if it's better or worse than other cars. You know what that is for yourself, so it doesn't matter on the sliding scale if it's good or bad

Quotes\\Comparison issues\Comparisons - confusion re basis of comparison

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 6 references coded [2.24% Coverage]

Reference 1 - 0.19% Coverage

BL So, is the car with the label the most efficient, the least efficient or something in between?

F It's not very efficient is it, because it's down by...

M Personally, I find that quite confusing to understand what it's meaning

Reference 2 - 0.27% Coverage

BL Ok, let's start with the bottom right – the black and white one

M Yeah, I find that quite – I would say that it's meaning that this car is about, on A4, on the efficiency, that it's in the worst third of the... but it's taking me some reading to work that out

Charl Yeah exactly, yeah, I was reading that the wrong way around

Reference 3 - 0.19% Coverage

Tim No, I was just looking at it and thinking, it doesn't, just because it's in that box, I didn't realise until you said, that it was fuel and efficiency – not very clear

BL So it sounds like – not very clear

Tim Hence the mistake

Reference 4 - 0.54% Coverage

Russell Well is that in comparison with other BMW models? If it is, BMW might be rubbish – so what's the good of them being the best of the rubbish? If it's comparing, you know, is that just comparing between BMW, or is it comparing between every vehicle that's on sale? So then if you've got 4WD's lumped in with superminis – it just doesn't mean anything

NB What do you think the label is saying is the basis of comparison?

Russell I think its most probably comparing it within, maybe, as a guess, within the BMW 3 Series range, that they've got

BL Let's just say for JX, that's A3 that you are referring to, primarily

Russell A3 yeah, and A4 – both are as bad...

Reference 5 - 0.67% Coverage

NB And just one last question – is that a useful comparison? Is that a fair and useful comparison for you to have, or would you like some other measure of comparing..?

M I presume this works on – its how many litres per 100 km isn't it, it that... the more I look at this the more information I'm gathering out of that. But that's what it's all BXchmarked on is it? I believe, is it?

NB That's one measure...

M One measure, yeah, that's the problem – there's not one clear cut when you look at it – I mean these have been on cars for 20 years, they've had to have been on there, but people have just walked past them for years. So it's since the road tax has hit hard, that you go back and look at it again

M2 My answer is I think that comparison is absolutely useless. Credit us with some intelligence and we will compare them ourselves

Reference 6 - 0.38% Coverage

Russell This comes back to, what are you comparing it to? Because you're telling us to look at it and say what is it worth, I would look at that and say, well it's not comparing anything to anything, so it's useless, so I just discount it.

It's like take me to America and I'm skinny, take me to flipping Taiwan and I'm flipping fat, you know, so what are you comparing it with?

NB Yeah, we've noted your, RX we've definitely noticed you issues with comparison

[Laughing]

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 5 references coded [2.91% Coverage]

Reference 1 - 0.60% Coverage

NB Can I just ask something about this – we had three different views about what this comparison should be based on. We had all the cars in the same range – however we look at that, all the cars based in the same class – that's what you were interested in, so different makes but in the same sort of size brackets or however we define class, and then we have also had all cars out there at all – which I think you and A were saying. Now the second label – this one here – does that clarify what the basis of comparison is to you?

M No

F No

M No

F No

Reference 2 - 0.68% Coverage

NB Because there is some text here that says, at one end it says 'most efficient', underneath it says there, '1.6 Duratorq... saloon...' – so that shows you something about what this comparison is based on. But it's obviously not coming through very clearly

M It's still in the middle of the road isn't it

NB Sorry?

M It's still in the middle of the road – so although it's telling you what the model is, it's not exactly a great example because your just saying...

M2 How many people read small print like that?

NB Right

M2 They want something that's in your face so they can understand right away; you don't look at all that

Reference 3 - 0.73% Coverage

M2 I was just going to say that, it is now clear that there are two things going on here, and one is that it is what it will cost you per month, and the other is, in that range, whatever that range is, this is where this car kind of sits – and again, unless you know what the range is, how can you make a judgement about whether that's good, bad, or indifferent

NB Ok, and this label isn't showing you what the range is?

M2 No. But actually when I looked at it initially, I thought it was just a visualisation of the price, but now I'm starting to think, well actually, it's a range of vehicles that it's trying to compete with, against, and saying this is actually one of the cheaper ones

Reference 4 - 0.36% Coverage

F2 Yeah that's what I was thinking, I didn't even realise it was quite on a scale, so the 0 and the 500 I completely missed because it's actually not clearly labelled as some sort of fuel comparison thing, so I wasn't looking for it in a kind of scale. I just thought it was like a dial on a car and that was just a visual image for you

Reference 5 - 0.54% Coverage

M And, at the beginning of this group I would have said this was great, but now I've still got that same question mark about sort of, is this trying to manipulate my opinion – rather than actually informing me. Just because I'm sure that some of the cars are actually somewhere in the middle, rather than super super green

NB Ok, so you still have a question mark about the basis of this scale?

M It's only because we've been talking about it and I've suddenly got that in my head now, and I am now suspicious

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 3 references coded [1.28% Coverage]

Reference 1 - 0.77% Coverage

Jacq No but why, it isn't clear. I mean, because they've got the bold thing there, and you're given all this 48.4, the 67 – they've got 58.9 standing there, I mean then they've got a little picture with a little line – it doesn't mean anything to me. I don't know what it means

BL Ok

M Ok, a complete stab in the dark – if it was saying that this Ford Focus did 58.9 miles per gallon, would this bar chart, this line, say that a car, for example like a Ferrari or something, would do 22.8 – that's complete... And then, 99 would be the most economically efficient car, whatever car that would be. They're now saying that this is sort of somewhere...

F Half way between

BL So it comes back to – what does this line represent – it's not clear

F No

M No

Reference 2 - 0.37% Coverage

M If you've got a car that costs £75 per month, on an annual basis, based on 10,000 miles per year – what is that car?

F Yeah

M If that's the same... and it's similar to the Renault Scenic – great. But if it's, like, a tiny little whatever, like a Toyota Aygo or something – it's a completely different thing. It would be nice to know what this £75 a month model is

Reference 3 - 0.14% Coverage

F What if it was within the same insurance group? Would that be..?

NB Would that be a useful comparison? Same insurance group?

F Maybe yeah

Quotes\\Comparison issues\Comparisions - support

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 4 references coded [1.28% Coverage]

Reference 1 - 0.35% Coverage

Nic But it does actually give you something to compare other models with, at a glance. So say if I was there looking at an Audi and I could see what their mpg is, at a glance, I've got something to compare with...

BL So it could be useful as a comparison, even if you accepted Russell's point that you didn't believe that the figures were that realistic...

F And they're all using the same

F2 If they're all using the same

M Yeah

Reference 2 - 0.13% Coverage

Back to RX – would you think it has some comparative...?

Russ Well it's got some comparative because everyone's dealing on the same thing – yes it's a comparative

Reference 3 - 0.45% Coverage

NXy If you walked into a showroom with loads of different cars, and each car had that in their window, and they were all different sized cars with different sized engines – it would be a quick thing to look at. I'm not saying you know what the comparison is, but it's a good thing to look at, to be able to say, oh, god, well that one's average, that one, god – that's really efficient and that one's not. Efficient to what? I agree – we're not being told, but it would give you an insight in a showroom to look at each car window and see that on it. That's a comparison

Reference 4 - 0.34% Coverage

BL Just coming back to the point about, however the figure was got – at least it was got in the same way. The way you would compare would be just by looking at them?

NXy Yeah, it's a comparison. Not saying it's comparing against a Volkswagen or something like that but, to me, it would show me, out of all of those cars in that showroom which ones were the most efficient with fuel, which ones are.... to glance at that

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.06% Coverage]

Reference 1 - 0.06% Coverage

BL So having a comparison is important?

Lisa It's good yeah

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 4 references coded [1.19% Coverage]

Reference 1 - 0.25% Coverage

BL Yeah? Anyone want to say a little bit more? Would it change your mind if you knew that there was a more efficient model – not the one that you were just about to buy – would it make any difference to you?

M Yeah

F Yes. It probably would.

Reference 2 - 0.29% Coverage

BL Are you interested in knowing that there are other models that might be more efficient?

M Yeah, but you need to be bolder, because you can't see that. I mean, even once you had pointed it out I had to look hard. If you have something like that, it needs to be, so people can see it

Reference 3 - 0.31% Coverage

NB So that's reassuring. And if the label was indicating that a particular car was at either extreme, either super efficient or very inefficient – how would you feel about the car then?

F Well if it was very efficient I wouldn't look at it again, but obviously if it was the other end, I'd have a re-think

Reference 4 - 0.35% Coverage

NB [01:05:05] So, in a way, this one is combining BX's labels with the cost labels, showing something new. Ok, so how do people like this one? B4

F We've got the same little line at the bottom telling you how much it is, but without the car, but looking at that I think, you know, it's at the more expensive end – I'll go for the more efficient one

Quotes\\Comparison issues\Design - support for dial

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.37% Coverage]

Reference 1 - 0.37% Coverage

F We like B3

NB Ok, why do you prefer B3?

F Because it stands out better doesn't it

F2 I just think it's a bit clearer

F Yeah it's a bit more clear information for us

NB Clear information, why is it clearer?

F I think this graph is a bit clearer

NB Because of the use of the graph?

F Yeah, because of the use of the...

F2 And it's like a milometer

F That's it

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 3 references coded [1.91% Coverage]

Reference 1 - 1.15% Coverage

Clive RX and I like B3, because you don't have to read any small print – it's telling you three definite things you need to know about – fuel per month, could be fuel per year – car tax, which I prefer to VED, because everyone knows what car tax is – and then equally, it's got a scale on the fuel economy and it's a circular diagram this time, but it four big bits of information, plainly, cleanly shown – you don't have to think about it. And when you're buying a car, maybe that's all you're interested in, because as you say, you're going for your personal choice really, but these good things make you feel good about your choice as well

NB Ok. So Clive has highlighted this scale here, this circular scale here. This is showing essentially the same information that we had on B2 – the monthly fuel cost – but in a different way. It show the kind of speedometer kind of thing. Are people happier with the speedo or with the kind of linear scale?

F Speedo

F2 Speedo

M I prefer the speedo, but one thing that I think is missing is the figures, you know on these ones they have £92 and most efficient, so maybe having those figures down there as well

NB Ok

F Yeah, I like the figures

Reference 2 - 0.25% Coverage

Clive RX and I prefer D1, again it's very clear and plain to see. We quite like the speedo thingy, although we discussed it and thought that we would prefer it if best and worst if had a little monetary value next against it – that would make it a bit better

Reference 3 - 0.50% Coverage

NB Alright, brilliant. And just the last point on this – we've got the speedo scale, and we've got the kind of linear scale. Which is preferable, which is clearer?

F I prefer the speedo

TX The speedo

DX Yes

F With little numbers

NB With little numbers at each end?

F Yeah

M Yeah

F2 Yeah, I would like the 9 and 27p there

TX Yeah I do like that 9 and 27, because it would make me think, oh right, you know, if I was to buy that car over there it's only 9p, mines 17 – I can just understand it

Quotes\\Comparison issues\Design - support for slider

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.41% Coverage]

Reference 1 - 0.41% Coverage

BL Did you say bar graph? Yeah it's got that bar graph

F And when it says best BMW 3 Series, that's much more clear. But say if you were going to, if you were interested in emissions, or bothered by them, then you would know that the 3 Series would be the better one out of the two to go to

BL Ok, so A2 doesn't have any... does is have any comparison on A2?

F It does.... but it is not as clear

F2 BMW, it just says best

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 2 references coded [0.51% Coverage]

Reference 1 - 0.36% Coverage

BL What do you think about the scale? Is it useful having it there, because it wasn't on the other ones.

Clive Yeah, I mean it's just a visual representation isn't it. So, you know, it's all about picking stuff up quickly, and yeah you can see, on a general scale of economy, this car is just under half way as to what it could be if, I presume, you went for a greener car

Reference 2 - 0.15% Coverage

M I preferred A4 for the same reasons. I liked the description, the words at the bottom that say 'most efficient', it helps you read it – it's more clear

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.14% Coverage]

Reference 1 - 0.14% Coverage

BL What do you think it's trying to tell you, having that sort of bar chart?

M It's the efficiency of the car – miles per gallon

BL Yeah

Quotes\\Comparison issues\Model range - confusion

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.62% Coverage]

Reference 1 - 0.25% Coverage

BL Just coming back to what RX was saying about the range – if it was, you said it was probably a 3 Series range, collectively, do we know what that means? A BMW 3 Series range, or a Ford Fiesta Range – do we know what the word range means? NXy, you're shaking your head...

NXy No, I'm afraid I don't

Reference 2 - 0.38% Coverage

BL Anyone like to speak against the word range? Best in range, worst in range. Is there some confusion about what...

M Well you could say that there's a range in manufacturers – they do their 3 Series range that is the 3 Series, but then they would say, you could say a range as in that category of cars, if you bring in other manufacturers – which range of theirs? So would that be compared to a Modeo, would it be compared to a Audi A4, or what? You know, who knows...

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 2 references coded [1.07% Coverage]

Reference 1 - 0.22% Coverage

M Well, BMW's 3 Series, they are different engine sizes, so if you've got a large engine then the fuel costs must be higher. But that's a 1.4 so it shouldn't, surely that can't rate a 43rd out of 44? Because you've got higher models

Reference 2 - 0.85% Coverage

BL Can I just open that issue about what model range means to you, if anything, does it mean anything to you? A model range

RX Maybe it might be some extras on the car?

BL Sorry, RX?

RX Extras, in the car

BL Extras. Yeah, could be extras

Kieron So a family of identical cars just with different add-ons

F Yeah

BX Well, yeah

F That's how I think of it

M And it's often around engine size isn't it

BL I'm getting the feeling that you're not too sure

BX No no no

BL Is that fair?

BX No

M No, a BMW 3 Series – you go to a showroom and say, 'I want to look at a BMW 3 Series'. They say, 'What engine size are you looking at'

TX Yeah, because you've got the 318, then you've got the M3. You've got all the ones in between it

M You've got 330, you've got the – it's, different engine sizes. You can have a 1400 or you can have a 3 litre

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [1.05% Coverage]

Reference 1 - 0.71% Coverage

M2 Yeah, well the trouble is that you need to know the model don't you, I guess, if you want to buy that type of car, the range, in terms of mpg is this, so you know this particular model is, and presumably, the range will include, not just Fords, but Volkswagens as well

BL Yeah, this particular label is for a ford Focus...

M2 Yeah

BL ... but if I said in the model range, you would interpret that as meaning other makes as well?

M2 Yeah, because if it wasn't then it wouldn't be valuable information for me at all

BL Ok, so really, you would find it more interesting to know all the different brands rather than just other Ford Focus'

M2 Yeah, yeah, yeah

Reference 2 - 0.34% Coverage

BL Well, um, we are more interested to know what you think... if a label said, in the model range, we're trying to understand how you would understand it

F I think it's generic. Ford, you know, if you were looking at a Ford Focus it would be that particular size of car across the, you know, not just Ford, other cars

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [2.46% Coverage]

Reference 1 - 2.46% Coverage

BL Ok, and just thinking a little bit more generally. So this particular – the main label is for a Ford Focus – what do you understand about other models in the range? What about that phrase – in the model range, or in the range? What would you include in that? Would a Renault Scenic be in the same model range?

James As..?

BL As the Ford Focus?

James In the range it means within that brand

M2 I would have thought so, off the top of my head – yeah

James It would be a ???, or a Mondeo

M3 Astra

F Astra, yeah

James Yeah, other cars that that manufacturer produces

BL So, for you James, in a model range it's going to be the same manufacturer?

James Ah, yeah, yeah

BL Are we all agreed on that?

Rob No

BL Sorry, Rob?

Rob The model range is, what other cars are similar to this model – not necessarily the manufactures... because the Mondeo isn't the same sort of model range as what I would consider a Focus to be – I would consider other cars, like an Audi A3 or something, to be in the same as a Ford Focus, because it's a similar shape, similar engine sizes

BL So, for you, it's about similar shape and similar engine sizes that defines other cars in the model range?

M Yeah, but not necessarily similar costs

BL Ok, so we've got at least two views, and third views?

Rich I would have said the model range would be, all Ford Focuses. Because you can get a 1.2, a Ghia, an XS, blah blah blah...

BL So that's closer to James'. Yes?

F I would have thought...

BL Which one are you going for? James, Rich or Rob?

F No, I would have thought it would have been the range of Ford Focus that you were talking about...

BL So, there is some uncertainty in this group – we've got at least two views, are there any third views about what model range means?

M I agree with Rob

Rob You know what, I don't even agree with what I've just said

[Laughing]

Rob I think it's – yeah, Ford Focus ST, Ford Focus.... whatever, all Ford Focus

M Yeah

M3 Yeah

F Ford's range...

M2 Yeah, not Ford as a whole, but Ford Focus...

BL Unfortunately when we go and buy a car we haven't got a focus group with us, so we might... I think it's important for NX and myself to take away that there is some confusion, but maybe thinking about it, it seems to work now that we are back as a group, thinking that it's all the Ford Focus'

M Yeah, thinking about it I would probably agree with RX as well

Quotes\\Comparison issues\Model range - understood

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.83% Coverage]

Reference 1 - 0.29% Coverage

BL Yeah Charlie, what do you think it [model range] means?

Charlie Yeah. It's the smaller version of the 5 Series. I know because a friend used to have a 3 Series – I know what it looks like, I know the range, you've got the 318, the 320, you got 335's and stuff like that

BL In your mind you've got an idea?

Charlie Yeah I know – I've visualised it yep

Reference 2 - 0.54% Coverage

BL Do any of you think that the 3 Series might include other manufacturer models? Stick up your hands. No – TX is shaking his head

M No

BL Do you think it only means BMW 3 Series?

M Yeah, I would think so

F Yes

BL General nodding. Ok

NB And what does a 3 Series range include? What kinds of cars would be included?

M It's the size of it

M Saloon

NB A saloon car?

M Yeah

NB So it's a number of different kinds of saloon cars

M They do a Touring and a...

M2 2, 4, 5 doors

M3 Yeah they do the 3 Series Coupe

NB Just a 3 Series – all of them?

M2 Yes

NB So that includes a lot of different types of car, within the range

M Yeah

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.09% Coverage]

Reference 1 - 0.09% Coverage

BL What does range mean to you?

M Engine size, engines

TX All the different ones

M Yeah

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.10% Coverage]

Reference 1 - 0.10% Coverage

BL The comparison hear is actually best in model range

M So it's the same manufacturer?

BL Yeah

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.13% Coverage]

Reference 1 - 0.13% Coverage

BL Ok, Kevin?

Kev It would be the Focus range for me – that's what I would interpret it as

F2 Yeah that what I thought...

Quotes\\Comparison issues\Model range vs vehicle class

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 2 references coded [0.34% Coverage]

Reference 1 - 0.21% Coverage

F Well, if you have decided on the type of car, and you want a 3 Series, then you would be more interested in a comparison of the same series wouldn't you, because that's what you have decided you wanted is 3 Series...

Reference 2 - 0.13% Coverage

F2 Yeah, because it just says compared to the most efficient – and it's comparing it to a different car and I won't want that different car

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 4 references coded [1.74% Coverage]

Reference 1 - 0.88% Coverage

M I think that extra information is useless to be honest

NB Ok, can you say why?

M Because you've got two – you are comparing two Fords. In most cases you would perhaps be comparing a Focus and a Golf for instance, something like that. That's the information and the comparison you want to see, not cars in the same range. Because you might be picking a particular car for its costs, so you want to compare the equivalent car from a different manufacturers range – and that would be a comparison, not the different... it's kind of a...

BL You want a different manufacturer?

F Compare apples with apples

BL Rather than the same... you want the same cost but different manufacturers?

M Yeah, so a Golf and a Focus, because that would be the choice you were making

F Similar cars from different manufacturers

M I wouldn't go into a shop and my only primary choice would be a Focus or a Focus

Reference 2 - 0.29% Coverage

M No no, I want to look at other manufacturers, when I chose my Golf, I compared it to other manufacturers' equivalent cars, *not*, I went into Ford Focus garage, a Ford garage, and I picked 5 Focus' and I said, I want a comparison of those

NB Yes, is that a general feeling?

M2 Yes, absolutely

Reference 3 - 0.34% Coverage

NB And what do you mean by equivalent?

F The same size and...

M Well you have cars with similar price, you know, a similar model of car. Like I said, a Focus and a Golf would be the equivalent. If you wanted, I don't know, a Fiat Punto and a Mini for instance, or whatever small car, but it's a small car, if it's mid range then it's mid range

Reference 4 - 0.23% Coverage

M2 Yeah you don't want to just compare Polos – you want to compare Fiesta to Corsa to the rest of it...

F Yeah, that's what we mean

BL Ok, so yeah, you want to go beyond model range?

F Yeah, it's what we were saying earlier as well...

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 3 references coded [2.43% Coverage]

Reference 1 - 0.71% Coverage

M2 Yeah, well the trouble is that you need to know the model don't you, I guess, if you want to buy that type of car, the range, in terms of mpg is this, so you know this particular model is, and presumably, the range will include, not just Fords, but Volkswagens as well

BL Yeah, this particular label is for a ford Focus...

M2 Yeah

BL ... but if I said in the model range, you would interpret that as meaning other makes as well?

M2 Yeah, because if it wasn't then it wouldn't be valuable information for me at all

BL Ok, so really, you would find it more interesting to know all the different brands rather than just other Ford Focus'

M2 Yeah, yeah, yeah

Reference 2 - 1.15% Coverage

BL So it comes back to what we were talking about before, about what comparisons would you like to see? Would you like similar cars of the same model, would you like all cars or would you like cars of similar size across different models?

F Similar cars, different models. Because when I was looking for my car, I looked at Renault's Volkswagen's, Vauxhall's... all the usual stuff, so I kept all the information written down then went to the next garage and wrote more down, and that's how I did it

BL But just to be clear – you'd like to look at different makes?

F Different makes – same type of car – same sort of price range, but different...

BL And how would you define a similar car in your mind?

F Umm, size, engine size... I just looked at like, Clios and Corsas and a Polo – that sort of... small [laughing] small cars

BL So physical size, and engine size?

F Yeah, engine size yes

Kev I think everybody knows what car range is – you either get a small, medium or large. So, I think most people are kind of clear, you either want your small Corsas, or...

Reference 3 - 0.57% Coverage

M I think what's important for me, is that I define the range, you know, because the problem with someone else defining it is I may not agree with it, whereas the people who come up with something which is technology based, but you could say, well actually, I want to compare this car with that car – they may actually be quite different – people's opinions can be in different ranges. But for me, you know, if you can tailor the range, and it will seem, using that technology, good

M2 I agree with that completely

F Yeah, me too

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 4 references coded [1.56% Coverage]

Reference 1 - 0.30% Coverage

M Cars that are realistically in the same bracket as the Renault Scenic – that's something that's completely, something that you would be looking at. So if you are looking at the Renault Scenic, you're not going to want something completely either end of the scale – you want relatively comparable cars

Reference 2 - 0.43% Coverage

M2 If you were looking at that Renault Scenic, and you know what sized engine is it – so you look at another car with the same sized engine. What size is the body? And you would match them up, is that doing as many miles to the gallon as that one there – is that going to be cost effective to buy that one, or this one?

M Have we gone back to that clash of car again, where I agree with you then you change your mind?

[Laughing]

Reference 3 - 0.53% Coverage

NB Would the range comparison be useful? Now we all managed to get to an agreement on what a range meant. Would a range comparison be more useful than the class comparison? Or the other way around?

M Going back to Ford – if I'm looking at a Ford Focus, I'm not going to want to compare it to a Ford Fiesta, or a Ford Mondeo because they're the cars are completely – three completely different cars

M2 Yeah, that's right

M3 It's size isn't it

M Yeah, it's size yeah

M2 You're looking for other cars with similarities

Reference 4 - 0.29% Coverage

BL In a way, we agree that it has to be the same size, but maybe some of you disagree about whether they should all be from the same manufacturer. Because you could have the same size, all Ford. So you could say, five or six manufacturers all producing the same sized...

M Yeah

M2 Yeah

Quotes\\Comparison issues\Model rankings - reaction

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 4 references coded [2.26% Coverage]

Reference 1 - 0.27% Coverage

F There can't be 44 different types of BMW 3 Series, can there? There can't be 44 different cars

NB There are, apparently

F 44? In one series? In a 3 Series?

M Different shapes, power to weight ratios

F I thought, I can't have read that right

F2 We didn't get that either

Reference 2 - 0.45% Coverage

F2 It would put me off, if it came nearly bottom, I would think, well hang on a minute, I'm going to look at the first, second, and the first ten

NB So, wouldn't you think about well, that's...

F2 That's bad

NB Looking at another kind of car within the same range, would you? That wouldn't be what it prompted you to do?

M To buy a more fuel efficient car, wouldn't it...

F If I thought it was second bottom, it would put me off

F2 I can see what you're saying

Reference 3 - 0.34% Coverage

F Well, they are telling you something different in as much as with this one they are telling you that there are 44 cars in that series, which just seems unbelievable, doesn't it? And really, in a way, you don't need to know that – I don't want to know that I'm second to last, whereas that one shows it more sort of in the middle with a figure either end, on B4

Reference 4 - 1.20% Coverage

NB Ok, lots of positives for the QR code – everyone seems to like that – that's also reflected over there. Fuel economy, fuel costs per year – people are reasonably interested in those things, but they are not a game changer. The ranking of the car in terms of the whole series – we had quite a long discussion about that – that seems to be really unpopular as well

F Yeah... rubbish

M Yeah

F Yeah, no good

NB Yeah, if we could just recap the reason why people felt that was not a good way of presenting that

F You just don't need to know do you really

F2 No, you don't want to know about cars that have come last in the survey

M You have already made your mind up

F Exactly

NB So you don't want to buy... so, is this not helpful then, if it's showing that it's second to last then you will be able to see that information

F Well, it's negative

NB Its because it's a kind of negative...

F Yeah. If you can't afford the best, you're not going to want to know that that's

M You don't want to be told that you are buying the worst car

F Yeah, exactly...

M You have already made your mind up, that's the one I want

F Yeah

F2 Yeah

M But at the time you're not to have it

NB Don't give me the bad news

F Yeah

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 4 references coded [1.80% Coverage]

Reference 1 - 0.34% Coverage

NB Right, Ok, and then last one – if you can now have a quick look at B4... Again, a lot of the same information but with one crucial difference – it's like spot the difference isn't it...

F It doesn't tell you if 44 is the dearest of the cheapest does it?

NB Sorry what was that?

F It doesn't tell you – it's 43rd out of 44 but it doesn't tell you, or being the cheapest of the most expensive. So I think that's pointless

Reference 2 - 0.17% Coverage

Russell The graph is good with the bars along the bottom, that's better the – it's the first time that the graph has actually told you what they are comparing it to. That's the first time we've actually had a comparison

Reference 3 - 0.56% Coverage

BL Russell, were you referring to the...

Russell The bar graph at the bottom there

BL Yeah, you were referring to the two lines underneath...

Russell Yeah, there's the... it's the 43rd in the BMW 3 Series range – that's the first time we've seen saying what that bar graph is comparing it with

NB Right. So that's important?

Russell Well whether it's any better or not – the layout isn't as good as the speedometer one – but there is actually some writing underneath to tell you what, where or why it's...

NB So B4 is clearer on the basis of comparison?

Russell Yeah

NB It's just telling you what the basis of comparison is, whereas that wasn't clear in the other labels

Russell Yeah

Reference 4 - 0.72% Coverage

NB So what is that scale telling us?

M It's either, one from the bottom or one from the top [laughing]

NB And is that a useful bit of information?

NXy No, I don't actually know whether it's top or bottom

M2 Top or bottom? Yeah

NB So it's more important to know what the fuel consumption is relative to the others rather than where this particular model sits in the range

NXy Yeah

BL NXy, can you just explain – you said you don't know whether it's the top or the bottom?

NXy Well, I know that your common sense tells you that it's at the lower end, but there's nothing to say that it's the lower end, so it's saying that it's 43 out of 44 – but 1 may be the most efficient, and 44 might be the most inefficient. So, and it's not telling you what scale they are using – what way around it is

NB Oh so you don't know what way around the scale is organised

NXy Yes, yep

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 6 references coded [3.33% Coverage]

Reference 1 - 0.94% Coverage

M I'm not too sure what the 43rd out of 44 means

F No idea, what the hell does that mean?

Sorry, GX is going to

GX, I just though basically, that – I don't know if I'm right – but this car is 43rd out of 44 in the BMW 3Series, based on monthly fuel cost. So that, for me, meant that it is 43rd out of 44, so it's not the top, it's 43rd, so that's quite high up in the range as far as cost is concerned

BL Is that good or bad?

GX Well it's bad actually – if I was getting the BMW 3rd Series, I would rather it be 1st out of the 44 in that range, for fuel, for monthly fuel costs, which would be, you know, cheaper etc. This tells me that it's quite high – it's 43rd out of 44. Do you get me?

NB Yes. Would that change your decision maybe?

GX Depends if you want the car or not, I mean I'm different, I would want fuel economy etc, but someone else might just say I love the car so that's that, who cares. Which I do with other things

NB Ok

Reference 2 - 0.11% Coverage

M Well it says to me that, there is 44 BMW 3 Series models, so you can go for the same car but a more economical model

Reference 3 - 0.45% Coverage

M Yeah, it can help you but, it's just the way it's written, that's why – I mean I had to think quite hard about that and other didn't know what it meant. So yeah, I think it can be useful, but, it just needs to be explained a little bit more simpler

M2 I think you have to be a bit more car savvy though,

M Yeah

M I wouldn't have thought there were 44 different models in one series – that astounds me. How can you make 44 different types of one car

M Yeah

Reference 4 - 0.61% Coverage

BX But, you know what I'm thinking – even so, where it's 43rd or 1st or 2nd or 3rd, you know that every month is going to cost you £170. So if it's acceptable to you, it's acceptable. If it's not, it's not. So, it's irrelevant whether it's 43rd or 1st, because you know if you can afford that £180 a month, or not

NB So it's not important to you to know where it stands in the ranking, of the other model in that series?

BX Not really, because if I can afford it...

NB You're just looking at the absolute cost of running the thing

BX Yeah, yeah

NB If you can afford it then, that's sufficient

BX Yeah, pretty much

Reference 5 - 0.54% Coverage

DX Um, I just wanted to say that this confused me, because it wasn't obviously clear to me and to others – this arrow was in relation to...

NB B2 is that?

DX B4

NB B4, beg your pardon

DX It wasn't clear whether the arrow was related to that figure there, or the statement below. There is absolutely no key on this scale, to tell me what the hell it's in relation to – there is no key either end so it's like...

BL So if there were numbers either end to show you what, to give you some context

DX Yeah, as to what it's measuring

Reference 6 - 0.68% Coverage

DX Well, as I say, it wasn't clear whether it was related to this statement, this arrow, or the figure above. That's still not clear to me. And then it's just on a random scale as far as I'm concerned, in my head, because I'm not sure what the hell I'm measuring

NB Ok, so is there a sort of confusion between the monthly fuel cost and the ranking of models underneath?

DX Because in my head, if it's 43rd out of 44, why is it only down here, why is it not up there at 43, and only one left for it to be 44

TX That's 1 up there...

DX But it doesn't say that. There is absolutely... it doesn't... there's no key. I don't know how it's been measured or what the hell it's measuring. At all

Quotes\\Comparison issues\Scales on charts - importance

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 2 references coded [0.57% Coverage]

Reference 1 - 0.16% Coverage

F B2 graph is definitely clearer than B4 graph

BL Why is it clearer?

F Because it puts the 170, it shows you on the graph with two figures either end, at the bottom

Reference 2 - 0.41% Coverage

M I think B3 [dial] is better, but the one thing that is does do, it just says 'best', whereas that one [slider] actually says... it gives you a figure, it says £92, so you can't see like, where 170 is

F We didn't like the 'best'

F So, if that had 92 and 268 there, it should have the figures either end

F2 Yes, I see what you mean

NB Oh Ok, so you would prefer to actually have the numbers

F Yeah

F2 Yeah, as well

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 2 references coded [0.88% Coverage]

Reference 1 - 0.08% Coverage

M Firstly I looked at it and thought, firstly I thought, what does 99 mean, on there.

Reference 2 - 0.80% Coverage

BL Ok, we all agree RX. Alright, Ok, just going back to what MX said earlier – are we doing the sort of numbers at the end of the line – MX wasn't that happy and said it wasn't that clear, KX said it was a bit grey and could be darker. But what about the meaning of the numbers, do we know what the numbers mean?

F Is it the miles per gallon?

BL Could be miles per gallon

M I'm not sure what this 22.8 is

M2 Or the 99 – what is that?

M What range is that? 22.8 – what is it? Miles per gallon? It's telling you, you get 58.9 combined, but what's this 22.8?

BL Well, it could be miles per gallon but it's not very clear?

F Looking at the scale, it looks as though it probably is – 58 is in the middle of 22 and 99, which is about...

M It looks like miles per gallon

Quotes\\Comparison issues\Scales on charts - naming best model

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.58% Coverage]

Reference 1 - 0.58% Coverage

Jo It's obviously about the efficiency, that's what it's telling us

BL Jo, yeah what do you mean by efficiency?

Jo Well, exactly, I don't understand it. The EfficientDynamics, but I really don't know...

BL Ok, looking at A4, just for JX, so you are pointing at that scale at the bottom yeah?

Jo Yeah, both sides, but it means nothing to me

BL You are aware of the scale but you don't know what it is?

Jo No, unless somebody explains it to me

F Yeah, I agree, J, which we don't know what it is for, this 'most efficient', 320d EfficientDynamics, you know it means absolutely nothing to me

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 2 references coded [1.25% Coverage]

Reference 1 - 0.88% Coverage

Lind It does tell you that it's just over half way to being one of the most efficient cars, and then there's also a little bit about the eco stop-start – where it stops when, you're at traffic lights and things like that...

BL Yeah, and is it clear that that eco stop-start is the most efficient model?

F I think it's only clear if you happen to have a stop-start car, or read it – you may not know anything about them

M That's a really big deal, but are they making a big enough deal about it? In the end that is a massive thing in terms of it being economic and efficient, and, I didn't even realise it said that, until you mentioned it

BL So, what was not clear then?

M The eco stop-start

F The eco stop-start

BL That was the model that was the best... so, in a sense, it's fairly obvious that it's not that clear. Is it of interest to know?

M Yeah

F Yeah

Reference 2 - 0.37% Coverage

M If you've got a car that costs £75 per month, on an annual basis, based on 10,000 miles per year – what is that car?

F Yeah

M If that's the same... and it's similar to the Renault Scenic – great. But if it's, like, a tiny little whatever, like a Toyota Aygo or something – it's a completely different thing. It would be nice to know what this £75 a month model is

Quotes\\Comparison issues\Three year vs one year cost comparisons

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [1.58% Coverage]

Reference 1 - 1.58% Coverage

Andy Most people are into the long term, you know, it's not a short term car is it – not a year thing is it. It's going to be at least three years, to get some wear out of it, because you want the reliability and we want all those things don't we. So that's a figure, but that's not...

BL So Andy, in your book, that would be helpful to see three year comparisons?

Andy Yeah, I mean, I don't analyse money that hard. When I chose a vehicle it had to do what it had to do, then, you know, that's the way it is, not... I'm not going to analyse what it's going to cost me because otherwise I'd walk. That's it

BL Ok, one speaking up for three years. Anyone agree, or disagree strongly, or maybe it doesn't matter

M The only thing I would say is that, the C3 one – you've got three year and one year mix on the same thing, which makes it look a bit more confusing

BL Yep, agreed. So it should either all stick to one year, or just three year – not mix

M Yeah

BL RX, any?

Rich I think one year is probably a better way of doing it...

M Me too

Rich ... because people, well three years is a long time to think about that sort of money, so if you are looking at a yearly thing, I think you would probably be better than that sort of money, because, I mean that there is four or five grand, this is one – and you're thinking, oh, yeah... I think it's psychological really

BL Why do you think three years feels too long?

Rich Well it's a lot of money to think about isn't it, for a lot of people. I think over a year you think...

F It might put them off

Rich Yeah, I think...

Nicola Neither would interest me

BL Neither, fine Ok. Janice, the three year?

Janice Yeah, I think if anybody was purchasing something like that, they might, after a year, think, this is too costly – I'm going to get rid of the car and buy something cheaper, that's more...

BL So does that mean, the yearly comparison is more useful?

Janice Yep, yeah

M Yeah

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 5 references coded [2.65% Coverage]

Reference 1 - 0.83% Coverage

BL Just very briefly, because tea and coffee are on their way, if you compare C3 and C4, the key difference is that C4 is over a three year timescale – so in the red box, in the What Car? box, rather than doing it on a one year comparison it's now over a three year comparison. And we are just interested in, two of you have already touched on this issue – is it useful to know cost over three years?

F No

F2 I think that's extremely misleading, because I'm the sort of person who kind of just glaze over the fact that it's three years and think, oh my god, I'm going to save myself £4,000, without realising that that's over the three years. I take it for granted that it will be...

BL So the number would catch your eye, but you wouldn't quite clock the three year thing

F2 Yeah

TX I don't even know what I'm doing next week let alone next year

Reference 2 - 0.11% Coverage

BL Does anyone, just looking at the flip side, does anyone like the three year comparison?

F No

F2 No

BX No

Reference 3 - 0.57% Coverage

M I would like the three year comparison, because I get cars every three years, I just get my whatever, like I've just done in 2010, and then at the end of three years I will get another one basically – so for me it's actually quite handy

BL Is that, just for interest, it that a company car?

M No, it's just – you know, I get one, and then just get another one at the end of three years. Usually pay monthly, which I'm quite happy to do for a new car, I've had too many experiences with old bangers

BL [laughing] You don't have to be shy, just because everyone else is disagreeing...

Reference 4 - 0.71% Coverage

NB Ok, and then, some more red dots here...

TX I think that's for three years

NB This is because of this three year thing?

F Yeah

F2 Yeah

F It's too big a figure to show you

NB Too big a figure... you don't like the bad news?

F No

TX It's not so much bad news – it's just I can't think three years ahead. You know, I'm here and now – who knows what's going to happen, you know I can't, it's not going to be the be all and end all that I buy this car because over three years it's going to save me this or cost me this. You've got to think about here and now

NB Ok, so you're more concerned with more short term

TX Yeah

F And also we don't know what will happen to the fuel prices in three years time

Reference 5 - 0.43% Coverage

NB But I know, GX, you found the three year figures quite helpful, because of the way that you buy cars?

GX Yep

Kieron Yeah that's what I was going to say. It doesn't apply to me, but people that buy a brand new car sometimes think, I'm going to sell it in three years because the warranty runs out. So, buy knowing how much you're going to be spending on your purchase for the next three years might be interesting to people, like yourself

Quotes\\Fuel & tax costs\Assumptions behind cost calculations

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.66% Coverage]

Reference 1 - 0.19% Coverage

F I think it's really good, but I don't understand how they base the one year, when, our petrol changes – the prices change so much through 12 months, and, it's working out what they work that out on, where I can't see how realistic that can be

Reference 2 - 0.47% Coverage

M You've got your cost issues – you've got super unleaded, normal unleaded – there's a huge difference in that. And you know, going back to that miles per gallon thing as well – if you run your vehicle on normal unleaded from Tescos, or you put super unleaded you get better miles per gallon, because of the way the engines work, because they work better. So again, there's too many variables

NB Ok, so it's coming back to this issue about whether these figures are based on something that really applies in the real world, because of differing fuel costs etc

Russell Yeah, obviously

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 3 references coded [1.13% Coverage]

Reference 1 - 0.41% Coverage

F And also, this fuel cost dial thing – how can they tell you it's £133 per month? That you're going to use on fuel?

F2 Because it says, estimated...

M3 That's the bit that's clearer on this, that's not clear really on that. We were really asking ourselves, like, £133 more month if you do what – then we read this tiny little bit at the bottom that said if you do 10,000 – I think that needs to clearer

Reference 2 - 0.26% Coverage

M They could probably, for peace of mind, they could probably break that 10,000 miles down, to, if you do however many miles in that month it's £133, as opposed to generalising it and saying in a whole year, because you might not drive the same every month

Reference 3 - 0.46% Coverage

F2 Well that was confusing for me, because, I mean, looking at it I think, well how do they know what I'm going to do? How many miles? The print on the bottom is not clear. If they had put something about, on average...

NB Ok, on average. And, well it is an average estimate...

F2 Yeah, but I had to look for it really

M Clearly, instead of having it at the bottom left you should have it next to the actual amounts – so £133 for an average of 10,000 miles

Quotes\\Fuel & tax costs\Fuel cost to fill up a tank

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.44% Coverage]

Reference 1 - 0.44% Coverage

M The scary thing it that, I mean a lot of people would just go into the garage and put say, £20 worth in, and you've got it in your mind, oh £20 – that's probably so many gallons, but when you do do the comparison back you think – god, it's only that. And of course, because it's gone up so much, based on your original thinking, you are thinking, I'm getting so and so to the gallon, but when you work it out you're not getting so many gallons to that £20 – obviously

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 2 references coded [0.65% Coverage]

Reference 1 - 0.21% Coverage

Kath I just go by the cost of filling the tank up basically

M Yeah

NB The cost of filling the tank up, so you don't think in terms of time periods?

F No

M No

NB Ok, is that a general feeling...

F Yeah

Reference 2 - 0.44% Coverage

M Personally, for the fuel economy, I'd rather have a scale of how far you could do on a full tank of petrol, on average. We all know it's an average price, but if I went to see two cars, it's the exact same information on both cars – then you can say that that one can do 250 on a full tank of petrol and if it's represented that way, it will give you an average idea of how far – because most people go by how much it costs to fill a full tank, these days

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.11% Coverage]

Reference 1 - 0.11% Coverage

BL Do you know what your car is [mpg]?

F2 Not got a clue – I just know how much it costs to fill it up

Quotes\\Fuel & tax costs\Fuel price - out of date

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.34% Coverage]

Reference 1 - 0.34% Coverage

M Because if it is all based on a comparison then it is pointless

F It is pointless

M So if you are going to do a cost, based on a pound a litre. What's the points when it's not a pound a litre?

NB Do other people feel that? That if the fuel cost is moving around all the time it kind of invalidates the comparison?

M EX says, a load of crap

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 4 references coded [1.48% Coverage]

Reference 1 - 0.14% Coverage

F Oh that's good, it tells you what... 12,000 miles – the price of what your fuel would be. I'd like to know... is that with fuel not changing in price in the next year [laughing]

Reference 2 - 0.25% Coverage

F I think it's really good, but I don't understand how they base the one year, when, our petrol changes – the prices change so much through 12 months, and, it's working out what they work that out on, where I can't see how realistic that can be

NB Ok

F But, I think it's a really good idea to have it on there

Reference 3 - 0.13% Coverage

M But then you can make a decision, you know, if it comes up with £2,000 at £1 per litre – you know it's going for £1.50, quick maths then that's £3,000 there isn't it

Reference 4 - 0.95% Coverage

F I think that would be very dangerous for someone to see, because it's not realistic is it. From what the price they put the fuel as – I mean I'm assuming they would put it at the right thing there, but I think that could financially get people in a mess if they're stupid enough to believe that and believe it, and then, not look any further. I think that could be classed as quite misleading. Because it's not really information is it – if it's not true information

M I take your point, that's not very up to date is it, really, you know, £1 a litre

M2 No, because if it cost £70 in a month, you would use 4 tank full's of fuel wouldn't you – it's £70/80 a tank isn't it

M You know, we're approaching 150 now, well that's a long way off that actual figure

NB So you're saying, unless this information is bang up to date...

F Yeah, it shouldn't be on there – it's misleading. And I think there are a lot of people that glance look at things – and that, if it's not up to date, then it's completely irrelevant having it on there

NB Ok, is that a general consensus?

F That would make me annoyed as a consumer, to be given false information – rather than be given no information

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.63% Coverage]

Reference 1 - 0.63% Coverage

M2 Well I just, if something is 11 pence per mile, when was it 11 pence per mile? Is that information already out of date? You know, there's so many... interesting to see where it is on the 0 to 50 pence bit, because that's more relative information – the actual cost of what it is...

M The issue, for this car would be out of date as soon as it's public, because the cost of petrol changes so much that no-body is going to be able to, everyone is going to have to re-work out the cost of this car

NB Is it helpful that it says in the text underneath what the assumption is...

M It does help, but it does point out the fact of how wrong it is

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.13% Coverage]

Reference 1 - 0.13% Coverage

NB Ok, any other views on monthly versus annual?

M It's going to be out of date as soon as you print it really isn't it

F Yeah

Quotes\\Fuel & tax costs\Pence per mile - against

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 6 references coded [1.48% Coverage]

Reference 1 - 0.37% Coverage

NB Ok, just focusing then on the pence per mile figure – is that a useful figure? Do people think in pence per mile?

NXy I think it's frightening

M No

F Not in pence per mile, no

NXy No, I think that's a bit crazy, to go that low down

NB Ok, NXy, you think it's crazy?

NXy Yeah, to go that low down – to think, oh god, 17p every mile. I don't want to know that

F No

M It's pretty magnified, broken down to that smaller fraction

M2 Yeah

Reference 2 - 0.08% Coverage

F Yeah, that's too – yeah, pence per mile is, I think you would put anyone off buying a car

M Yeah

Reference 3 - 0.15% Coverage

F Maybe, per 50 miles. But not per mile. Because we're...

F2 It might be good for the government to stop us driving

M It might be good for a rep, if he were paid so much per mile

Reference 4 - 0.30% Coverage

Janice I'd rather have it greater than per mile, personally. I mean who's going to worry about how much it's going to cost them per mile. You're going to do a lot more than a mile, you know, if you saying, you're driving to a parents – or in my case my daughter in Somerset – you know, what's it going to cost me to drive there and back? I'm not interested in the per mile

Reference 5 - 0.16% Coverage

BL Can I just ask Janice, if it was pence per 100 miles, that would be better?

Janice Yeah

BL Because it's still different from saying per month, or per year

Janice Yeah, that would be much better

Reference 6 - 0.42% Coverage

F I mean if that's to scare somebody to not use their car so much, 17 pence per mile is brilliant for that. But if this is to sell a car – no, obviously it's stupid, because obviously it would stop you wanting to use that car

NB And in terms of how a car is used – which is often, as you say, for short term journeys – is it useful to know pence per mile?

F Yep, little trips. That would make me think, it costs me 60p to take my son to school and back. And it would make me think, that is like, ridiculous – you can't, but...

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.94% Coverage]

Reference 1 - 0.94% Coverage

M I think when you see fuel per mile you might ask yourself.....????????

BL In what sense?

M Well, if there's one number that actually, I think you should think about the cost of using a car, is to see what the cost is per mile, and actually if you were to add the full cost per mile, then you would suddenly see it's 45p or something

NB When you say the full cost, what do you mean by that?

M Um, car tax, maintenance, depreciation – all that sort of stuff

NB So, do other people have any thoughts on that?

M2 Yeah, because when you look at that 16p, you don't want to have to look at fuel per mile, you think that's maybe what that is, but the whole running cost of the car is a lot lot more than that, so if you're trying to emphasise that point, you want to put in to understand, rather than just the fuel economy of it, because there's a lot more in it, you know...

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 3 references coded [1.08% Coverage]

Reference 1 - 0.48% Coverage

M2 I don't think it would mean much to people, per mile

F No

NB Why don't you think it would mean much?

M2 People don't really relate to, you know, you look at the miles per gallon, and you might look at the fuel per month, but the price per litre – per month sorry – doesn't mean anything to anybody. I know it doesn't mean anything to me, personally

F You've got to be able to do the maths as well haven't you?

M Yeah

F Not everyone will sit there and work it out

Reference 2 - 0.22% Coverage

M It's the weakness isn't it – this lady brought it up, what she said, go to school, or take the kids out – it might cost you 20p to take your kids to school, but when you go on a long run it might only be 10p

NB Yeah

Reference 3 - 0.38% Coverage

F The other thing that we've obviously got this car, this information – you're not telling me that after a couple of days you'll be thinking I'm using 16 pence per mile. Well realistically, you're not are you. You're sat in your car, you're not going to be sat there thinking, I'm using 16p per mile. You're not going to do it – it will go out of the window. Do you know what I mean?

Quotes\\Fuel & tax costs\Pence per mile - motivation to switch mode

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 2 references coded [0.50% Coverage]

Reference 1 - 0.19% Coverage

M I think it's [per mile costs] trying to tell the women that are picking the kids up, that's how much it is costing you to pick up, to do the school run

F That you need to walk

F2 Yeah [laughing]

Reference 2 - 0.30% Coverage

F2 So for example with you guys that have come on the train today, I bet that was – if it had been a week day – you would have been [inaudible]. But if it is a Saturday you might think well, is it cheaper to go in the car, or cheaper to go on the train. If it was per mile you would know – you could work it out roughly

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.67% Coverage]

Reference 1 - 0.25% Coverage

M What that will dissuade you from doing is nipping down to the supermarket twice in a day rather than once

F Yeah

NB Ok, so it would be effective in that sense?

M In that sense yeah – not for, maybe buying a car, but if it's for something else, you know, for government advertising, to dissuade you from...

Reference 2 - 0.42% Coverage

F I mean if that's to scare somebody to not use their car so much, 17 pence per mile is brilliant for that. But if this is to sell a car – no, obviously it's stupid, because obviously it would stop you wanting to use that car

NB And in terms of how a car is used – which is often, as you say, for short term journeys – is it useful to know pence per mile?

F Yep, little trips. That would make me think, it costs me 60p to take my son to school and back. And it would make me think, that is like, ridiculous – you can't, but...

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.40% Coverage]

Reference 1 - 0.40% Coverage

TX I like mile, because when my daughter says to me, mum can you take me somewhere, I can say yeas, it's 5 miles so... petrol money. It relates a little bit more, per mile. Because I know, if I'm going up to town it's 30 miles – so I can relate on, shall I get the train or how much is it going to cost me in petrol, and then how much is it going to cost to park – I think I can relate to it a little bit better, per mile

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 2 references coded [0.51% Coverage]

Reference 1 - 0.20% Coverage

BL Does it make you think about a typical journey?

M Well, I've said it as a joke, but yeah, if you look at it like that, you could say, do you know how much it would cost with your mates in the back?

Reference 2 - 0.30% Coverage

F2 If it was someone that wanted me to use my car less that probably would work

F Yeah

NB Sorry, which one were you referring to?

F2 The fact that it tells you the price per mile

NB That would incentivise you to use your car less?

F2 Yes, possibly

NB Because it's so shocking?

F2 Yes

Quotes\\Fuel & tax costs\Pence per mile - support

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 3 references coded [1.20% Coverage]

Reference 1 - 0.43% Coverage

NB So, we've got pence per mile here, is that a more useful way of thinking about the cost of running the car than a monthly cost or not?

F Yes

F2 No, I...

F You know the mileage, don't you

M It seems more real

M2 You could probably relate to is more couldn't you

F Really quickly

NB Right, so for you it would be more helpful to know the cost per mile

F I know it's like, 28/30 miles to work, so, I could work that out really quickly

Reference 2 - 0.30% Coverage

NB What about the annual cost of running the car? The annual fuel cost

F I prefer to know the per mile – I know what mileage I do

F2 Well I would actually, because I think, annually it just varies and so I would like to know when I popping down, out on a visit or on a shop, it's going to cost me roughly so much...

Reference 3 - 0.46% Coverage

NB Ok so, because the annual cost is based on some assumptions about the number of miles that a typical car will go in a year, does that kind of... do you well that doesn't really apply to me..?

F I doesn't

F2 No, because you do different... different people

F I'd like to know more or less how much a journey would cost when I'm going somewhere. I'm nipping into town – how much roughly is it going to cost me

NB So pence per mile would give you that information?

F Yes

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 3 references coded [1.39% Coverage]

References 1-2 - 0.89% Coverage

NB Ok, so then, you like the cost per mile. Do you prefer the cost per mile to cost per month, cost per year? Or not

DX Yeah, I like that

NB Yeah? Would you like to say why DX?

DX Because it's a small figure it confuses [laughing], well it does – it does things like fool you into thinking, oh it's not that much

TX I like mile, because when my daughter says to me, mum can you take me somewhere, I can say yeas, it's 5 miles so... petrol money. It relates a little bit more, per mile. Because I know, if I'm going up to town it's 30 miles – so I can relate on, shall I get the train or how much is it going to cost me in petrol, and then how much is it going to cost to park – I think I can relate to it a little bit better, per mile

NB Ok, is that a general view? Or, can we do a poll – who prefers cost per mile to cost per month?

F I do

NB And so for the record, that is about 6 or 7 out of 10.

Reference 3 - 0.50% Coverage

F If you look at, if you pull up a journey on Google Maps, it will give you your destination from A to B, and it will tell you how many miles you're covering – so you can then work it out, and like TX said, you can then decide whether you should use public transport or whether you drive to your destination. Which one works out more..?

NB Ok, that's an interesting idea, that you can then compare whether it's cheaper to go by public transport or use your car. If you've got the pence per mile comparison

F Yep

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 2 references coded [1.68% Coverage]

Reference 1 - 1.04% Coverage

How do people feel about that measure?

M Well I take trips to Manchester on a regular basis, then the pence per mile can help me work out how much my trip would cost, and then, it just gives you a better idea of where you're actually spending your money, essentially for me, because it's in trips, rather than doing, because I was a contractor it could be anywhere, so the cost of the trip is more important to me

NB So it enables you to calculate accurately, I see if you're a contractor you need to factor that into your business

M Yeah

NB It enables you to do the calculation. So this isn't – to answer Rob's problem, which the previous labels – it's not making assumptions about how far you drive in a month or in a year...

M No it just allows me to do a trip cost

NB It allows you to make an absolute calculation?

M It also helps you to make the decision to whether to get the train or drive up. It literally helps you to work out how much, what the difference in cost is. So, if it's cheaper to go by car, then I'd go by car and claim the mileage back

Reference 2 - 0.64% Coverage

M2 But again, it's the average isn't it, you know

M Yeah but the good think about, because the margin is so small per mile, the swing of the cost difference – you're talking a couple of pence either way, and therefore it's perhaps a little bit more accurate than as a big value with some of the other cars we have previously seen. Big values stretch, you know, miles per gallon is from 50 to 60 miles per gallon – 11 pence per mile is quite a small variable and therefore it's not going to be 5 pence per mile, and it's not going to be 15 pence per mile. Maybe a penny either way – it's more of a reliable figure then, to the variable figure, for me anyway

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [0.82% Coverage]

Reference 1 - 0.46% Coverage

Jean It just annoys me because, it says 58.9 miles per gallon – nobody knows what a gallon is. You buy your fuel in litres. I've no idea – I mean I know it's more than a litre, but for me it would be so much easier if it said, 30p a mile on the road, you know, 25p a mile. Then you would actually know what it meant

BL You like it in terms of pence per mile?

Jean Yeah, then you would know what the actual running costs were, yeah

Reference 2 - 0.36% Coverage

NB Yeah, Ok, thank you. I know Jane and Claire, this is the information that you said you would like to see...

Jane Yeah, the thing is, you would be able to calculate, for yourself, you know how many miles you do to work and back each day, so it would be easier for me to calculate how much I would be spending... I think it's easier

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 4 references coded [0.89% Coverage]

Reference 1 - 0.21% Coverage

F2 I'd quite like it if I'm going on a long journey and I do Google Maps – that now tells you approximately what your journey is going to cost, I quite like that. I don't know if I would like it on every journey

Reference 2 - 0.19% Coverage

NB Ok, any other thoughts on pence per mile?

F I quite like it

NB You quite like it?

F As soon as I saw it about the journey to school, because it's just over a mile, there and back...

Reference 3 - 0.26% Coverage

M That would be good, because if it's a standard thing for every car then you could easily compare what you will get, in terms of value for money. And the journey, if that was the standard for every car that you saw, which maybe not per journey, but per mile

Reference 4 - 0.23% Coverage

NB Ah Ok, so then you can apply it to your own circumstances

F I don't drive many miles, I don't go very many miles, so I tend to think it's more, you know, journeys that are a mile or two, rather than £130 a month, or whatever
Quotes\\Fuel & tax costs\Pounds per month - support

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.36% Coverage]

Reference 1 - 0.36% Coverage

F3 No, I prefer per month

NB You prefer a monthly cost?

F3 Yeah

F Yeah I think I do as well actually

NB Is that how you sort of budget for the household finances? Is that how you think about your outgoings? A monthly basis?

F I don't think about my outgoings to be fair, there're outgoings – they've got to go out haven't they. But I would prefer the monthly I think

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 3 references coded [1.41% Coverage]

Reference 1 - 0.22% Coverage

NB But just in terms of looking at the monthly fuel costs, is that a more or less useful figure than the estimate of the annual fuel cost

M I think I get paid monthly so yeah, that's how everybody budgets their money I would have thought

F It gives you a guide line

Reference 2 - 0.85% Coverage

F If you had in your mind how much you've got per month to pay for fuel and you walked past that thinking, £170, I can't afford that every month. So I think it's quite good in as much as it's telling you possibly, within, you know, £40 either way, that that is going to be the average cost of your fuel. And if you can't afford to pay that in fuel every month, you wouldn't consider it

BL Is that how you – have you got an idea about your monthly fuel cost?

F Yeah, yeah

BL Do you think on a monthly basis as far as fuel costs go? Or weekly? Or yearly? Is monthly the way...?

F Um, yeah I think you've got to satisfy per month how much you've got to pay on fuel, and you know, if you say roughly you've got £80 to £100 per month on fuel, you would walk past that because you would think, well even if you were tight on it, you know, £170 is still, you know, twice as much as I would want to pay each month on fuel. But everybody's circumstance is different, but personally, I would think, well I can't afford £170 on fuel, regardless if I get 25/30 or 50 miles...

Reference 3 - 0.34% Coverage

NB And for you is it easy to think in monthly terms, or weekly terms, or an annual comparison?

F I think, yeah, I think we all kind of think monthly now. We're paid monthly, we've got our monthly, you know, we've got our lump sum each month. Whereas weekly, we've come away from weekly haven't we

NB Ok, can we do a quick show of hands – who thinks in weekly terms? RX. Monthly terms? That's virtually everybody else.

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.55% Coverage]

Reference 1 - 0.55% Coverage

NB We've got a monthly fuel cost estimate. Now is that a useful way of thinking about the fuel costs. Do people think that that is, or not?

M I think it is useful, yeah, I mean you think, if you think in monthly salary, you think in monthly outlay, you think in direct debit – whatever. It brings out a kind of focus for you, or for me anyway.

M2 This also gives you, well it's roughly the cycle that you fill up your tank too – once a month, or twice a month, or once every two months, or whatever – you can compare it

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 2 references coded [0.61% Coverage]

Reference 1 - 0.43% Coverage

NB Ok. So, I'll take that point that you don't like the grey lettering. So this is showing something different to this one. So, B2 is showing something different to B1, which is this estimate of the monthly cost of fuel. Is that helpful, is that a helpful figure?

F Yes

NB Is that the way people think about...

M I deal in months, when I'm thinking about petrol, how much is it going to be in a month – I like that...

Reference 2 - 0.18% Coverage

F What's the point of getting it down to the nitty-gritty – you've talked about the cost per month. Let's not be breaking it down and saying right, it's going to cost you 16p per mile

Quotes\\Fuel & tax costs\VED - First year and standard rates

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.69% Coverage]

Reference 1 - 0.45% Coverage

Trev That's the tax you have to pay on the first, first payment, and when you buy a new car you have to pay that extra on top for, perhaps buying a big cc car. But I don't think you pay that on a smaller, economical car would you? I could be wrong, I don't...

F Vehicle Excise Duty – road tax

NB Ok, so, it's telling us something about the tax that you have to pay...

M Your tax the first year is twice the amount every year afterwards isn't it. That right?

NB I'm not going to answer that. Is that your perception?

M That's a general rule I think

Reference 2 - 0.24% Coverage

F I wouldn't as, if I was drawing this, writing this – I wouldn't put the car tax as 425, I would put it as 235. It's only the first year and they normally give you that free anyway. Because I would see that – if I read that, I would say that the car tax was 425 every year

BL Right so it's not clear...

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.46% Coverage]

Reference 1 - 0.46% Coverage

TX Can I ask, why is the car tax more expensive in year one and then it's going to go down?

NB BX will answer that question

BL At the moment, there are two levels of car tax – one is called the first year rate and the other is called standard rate. So, if you buy a car brand spanking new, the rate is higher, then it goes down to the standard rate...

TX Is that across the board?

BL Across the board, yeah

TX So my tax is going to be lower this year

BL Yeah

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.43% Coverage]

Reference 1 - 0.43% Coverage

F You've changed the vehicle excise duty so now it says £250 in the first year, after that, but actually it hasn't got the after the first 12 months with it. It's not like those two... I don't like that...

NB Yes, that's different. So you'd still like to see...

F I'd still like the after the first year, to know how much it is

NB After the first year, you'd like to have that information?

F Yes

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.71% Coverage]

Reference 1 - 0.71% Coverage

M With your road tax, it's saying it £250 first year, then every year after that it goes down to £180. What does that mean? So now I've got two road tax

M2 Is it?

NB Do you think it is?

M Is annual road tax, 180?

M2 180, standard rate

M Standard rate – what does standard rate mean?

F Unless it goes up [laughing]

NB It is confusing, is this one any better at getting across the information?

M I don't understand why, after the first year it goes down. Why would it do that? If it's the same car nothing's going to change is it?

F2 Why should you have to pay more?

NB Would it be helpful to have an explanation for it?

M To tell me what it is – tell me why it's going up

NB Ok

Quotes\\Fuel & tax costs\VED - preference for costs over band

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.19% Coverage]

Reference 1 - 0.19% Coverage

F The reason I like it, and I probably sound really dense, is I didn't know that VED was anything to do with car tax – and that one tells me that's car tax – what band it is. Where the other one, I wouldn't know what VED and J meant...

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.16% Coverage]

Reference 1 - 0.16% Coverage

M Coming back to what I said earlier on about the J code, it didn't mean anything to a lot of people, but once you put money around it, then people can relate to that

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.30% Coverage]

Reference 1 - 0.30% Coverage

M You need to put the road fund licence – the VED pricing in there. There's no point in me telling you it's a D

BL So you want to see...

M I want to see a price there

BL So you want to see the cost, the money, rather than...

F Not the category, I want to see how much it's going to cost

M Exactly

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.43% Coverage]

Reference 1 - 0.43% Coverage

M One thing, is, that even though the road tax is associated with the emissions, I think it should probably display how much road tax it, you know

F Yeah, it tells you D band

BL What, so where it says D, you actually want to see how much it is?

F Yeah

M How much road tax, like, it's £30 road tax because it's a low emission vehicle, and those sort of things, they're the key things...

BL You want that?

F Yeah

Quotes\\Fuel & tax costs\Weekly vs monthly vs annual fuel cost awareness

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 4 references coded [1.67% Coverage]

Reference 1 - 0.62% Coverage

NB Is that a reasonable... are people comfortable with that idea? A yearly cost? An estimate of a yearly cost of running a car?

F Yeah, because you know that it is estimates on the 12,000 miles per year – you know if you only do 6,000 miles a year, just to half that cost. But it also on the A2, it also gives you your monthly cost of fuel, per month – which is good because most people will know what they spend a month as opposed to a year, on fuel

NB Ok, so is that a view that other people have – that you have a better sense of what you spend in a month on fuel than in a year, or...?

M Yeah

F Yes

TX I'd like a weekly price

Reference 2 - 0.35% Coverage

TX I think it could be monthly or weekly, not annual. I mean I would love for my car just to take £170 per month – that would be great. But I think monthly and weekly would be better than annually and monthly

NB Is that because weekly – that's how you think about your finances, your household finances is it?

TX Weekly and monthly more than annually, yeah

Reference 3 - 0.19% Coverage

M I think it's better to have a shorter period rather than the annual, because as you say, you can relate it to your filling up every two weeks, or whatever. It's easier to relate the figures isn't it

Reference 4 - 0.51% Coverage

NB And I just wanted to ask as well, is it a fair comparison, the yearly figure for example, is based on 12,000 miles. Do people have a sense of how many miles in a year?

M Yep

F Yeah

F2 Oh yes

NB So people – can we have a vote – who knows how many miles they drive in a year, roughly? Ok, for the record – for JX, that is 9 out of 10, Ok, and presumably, you have also an idea of how many miles you drive in a month. Do you have a better idea of how many miles you drive in a month?

F No

F2 No, not a month

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.78% Coverage]

Reference 1 - 0.78% Coverage

NB Does anyone have a sense of how much they spend on fuel in a month? Or in a year? Or in a week?

M Yes

F I have a rough idea

NB A rough idea?

F Yeah

NB Monthly or annually?

F Monthly, because I know that it's roughly monthly that I fill the car, and I know that it's roughly monthly, whatever I fill the tank up, it's gone up from say, £65 up to 80 – in the last few months. So my monthly filling up the car – you know, that's how I know...

NB I see, so that coincides with what you were saying Kath, that you think in terms of how much it costs to fill the car

Kath Yeah

NB And if you're filling roughly on a monthly basis, then the two things come together in your mind

F If I had to fill up more than on a monthly basis then I know that I've driven further than I did last month

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [0.88% Coverage]

Reference 1 - 0.73% Coverage

NB Ok, can I just nail the monthly versus annual thing, because this is an annual, showing the annual cost of running the car, this is showing the monthly cost. Hands up for who prefers an annual estimation of the cars running costs – versus the monthly. So hands up for annual – that's just Kevin. [Laughing]. Who prefers monthly? Ok, that's everybody else

BL Can I just come in there, is that monthly as well as annual?

M No, just...

F No

M No

BL Are you happy to ditch the annual?

Jane Yeah

F2 I like both

M I like both, I prefer both

NB So Jane, KX and other KX would like both

Kev Yeah

M And then, the annual one's more – I would like them both

Reference 2 - 0.15% Coverage

F Change the per year to per month and I'll be happy

F2 Why don't you put them all? Per mile, per month and per year – then everybody's happy

Quotes\\Fuel & tax costs\You pay or lose - emotional response

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 4 references coded [1.54% Coverage]

Reference 1 - 0.47% Coverage

BL Ok, we will kick off, because I just heard Margret make a comment about the 'loose'. So we are looking at C1 and C2, where C1 is 'you pay', C2 is 'you lose'. What does that tell you?

F I just think it is a negative comment, and I can't, I can't see the point of advertising that

M It's supposed to be a negative comment

BL So, you feel, I sense there is an emotional reaction to that..?

F2 Well, I just, as DX said, you lose 1,365 – I don't think I would even read anymore

Reference 2 - 0.33% Coverage

F But you are going into pay something, when you go into buy a car you are going into pay, so...

F2 Well you paying 1,365 more, is still the same as...

F I know, I know, it's just a different way of presenting it, but if I read that, straight away, I'm not going into lose anything, I'm going in to pay something, so that to me is worded better

Reference 3 - 0.12% Coverage

BL You're saying that blue 'you pay' is a little bit more sober?

F Well I think it, well it makes you understand it more

Reference 4 - 0.63% Coverage

NB Ok, I think my job is fairly easy here – obviously the whole framing of the 'you lose' as opposed to 'you pay' is very very unpopular with people

F Yes

F2 Yeah

NB Can we just re-cap why that was? What was the sense...

F It's negative

F2 If you lose anything, you don't really want to be seeing that do you

F It very negative

NB So, buying a car is a kind of positive experience?

F Yes

F2 Yeah

NB Something that you look forward to – and then to be confronted with this information is...

F You expect to pay. But you don't expect to lose

F2 Yeah

F3 Because you're already losing money by driving off the forecourt aren't you

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 4 references coded [2.87% Coverage]

Reference 1 - 1.35% Coverage

BL [1:09:37] Good, Ok, we've got C coming round. Ok, we are going to just focus on C1 and C2 to start. And really just after your immediate reaction really...

NXy [1:10:12] Red to me straight away, means sale price

BL NXy? That's what it means to you?

NXy Red means sale price. I haven't read anything yet. All I can say is red, means...

BL What do you think, what's it about here? What is it saying to you?

SX Red is bad

BL SX?

SX Red is bad

BL Red is bad?

M Yeah

Nicola It's very negative that one

BL Very negative, yeah

M The blue is like a, it's not a stand out at all, as simple as that, so that hits you a lot harsher if you see what I mean in that sort of sense

BL Ok

F See, red I see it, is what you save. I see it completely the opposite then

BL Any other comments over here about red versus blue?

M Red stands out more

M2 Yeah red makes you aware that it's

M3 The red stands out more, it just sort of alerts – it draws you to it you know

BL What's the, just focusing on the red one, what information is it conveying to you?

Nicola It's negative

BL It's negative, negative in a good way or negative in a bad way?

Nicola In a bad way

BL Can you say a bit more about that?

Nicola You're losing money, it's almost like saying – don't buy this, to me

M Yeah

BL Is it a warning that might be useful to you, or is it just a warning?

M Well you look at it and you think, oh, forget that. You'd go the other way wouldn't you

F Red for danger

BL It's just a turn off?

M Yeah, it's a turn right off

F It's appalling isn't it

M You lose

M2Yeah, I don't think you would look twice at that

Reference 2 - 0.18% Coverage

BL You wouldn't look twice at it, Ok. What about, let's move to the blue one – is the blue one useful in any way? Or what's it trying to say?

NXy I like the fact that it's got a calculator on it

F It's saying the same...

Reference 3 - 1.08% Coverage

F The red one was saying, you *lose*, and the blue one is saying, you *pay...*

Trevor Yeah, you lose that, but that one is saying you pay

F ...So what is that telling us? It means the same doesn't it – if you are losing it, it means the same

BL Which one would you like to be told?

F Well that scares you, as I've already pointed out, the red one – you lose, we don't want to be told we're losing anything. So, buy saying you pay, we're still losing, but you're not as afraid of it. So, maybe...

BL Ok, what about the words underneath, are you clear about what you're paying for?

F I don't know, I don't know what it's telling me. Per year, *more* per year. One's saying per year compared and the other one is saying more per year compared. So, what does that mean?

BL You've either got, you pay 1,365 more, or you lose. I think we've established we don't like the lose

F2 No we don't like the lose

F It's the same as the chart isn't it, the last one, all it is, is it's putting it in writing which I think is even more confusing than it is by having a chart, it's not necessary

F2 Yeah, it is the same. It's highlighting it, but it means the same

BL What you don't like the comparison in writing?

F No

BL Ok

F Either way, you lose it or you pay it – it's negative, so, there's no win with that

F2 Yes, they're both negative

Reference 4 - 0.26% Coverage

BL So you don't like losing or paying?

M No

F No, because it's the same thing

Russell You don't want to be reminded that when you go to the showroom

BL So you don't mind if it just says, fuel cost per year, in a sort of sober way, you're Ok. You don't like being told....

F No, you lost or you're paying more

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 10 references coded [4.73% Coverage]

Reference 1 - 0.87% Coverage

TX I don't like the way it's saying 'you lose'...

BL Oh, expand on that

TX Because I don't think that's a good selling point to somebody, if you want to go and buy something, and you're told you are going to lose something already – you understand you've got to pay, because of course, when you buy a car you've got something to pay. But I don't want to be told that I'm going to lose

BL Yeah, do you know – I appreciate that point – do you know what... does it explain it clearly what you are going to lose

TX Yeah, well that I'm going to lose car tax and fuel costs, that's what I'm going to lose. But I also don't understand when it says 'per year compared to the most efficient BMW 3 Series' – to me that's also telling me that this car is crap, that some of our other 3 Series are much better than this one

BL And basically, it sounds like you don't like that

TX No [laughing]

Reference 2 - 0.39% Coverage

DX Yeah you pay more, that's clearer in my head than 'I lose', and it being in red, and just looking like danger, and just steer clear and I would walk straight past and not take any notice of it. Whereas...

BL So that would be a turn off basically

DX Yeah, and this clearly tells me that I am paying more, which would then prompt me to think, Ok, let me look at something that would cost less

Reference 3 - 0.09% Coverage

M Yeah I mean, it does look quite negative with the red, even though it's nice to know that

Reference 4 - 0.15% Coverage

M I think a good idea would be to have, 'you pay', but have it in red, like this one, because red catches your eye

NB Yeah, it sends a warning signal

Reference 5 - 0.37% Coverage

BX Um, I prefer C1, as you say, red signals, 'you lose' – it's a bad thing, it's a negative thing. But I must admit, at first I didn't notice that it said 'more per year compared to the most efficient BMW 3 Series', I'd have thought that this figure here is the price you pay per year for your total fuel

BL Ok, so there is the possibility of misunderstanding it

BX Almost, yeah

Reference 6 - 0.10% Coverage

Mike No, I think I just agree with what everyone else has said – I think red is not good really, on anything

Reference 7 - 0.92% Coverage

M I agree with BX about the small writing there – it was only when I actually read it I realised it's paying 'more than'. I think, we think, I think the red one – although it's not palatable – it's actually making you think that you are actually losing the money, therefore shall I re-think my thoughts and maybe go for a smaller one. So that one is going to maybe make you question your decision, and possibly look at the option of buying a cheaper, a lower one, and maybe save the money rather than lose it. Although the message on both is exactly the same, but if, it depends who is commissioning this work – if they want people to re-evaluate why they are buying their car – that one will make you think, whereas that one you just accept, I think

NB That's a different view to DX – you thought the other way around didn't you

M But red is danger, whatever, isn't it. That's probably why they've done it in red. But I think that makes you think

Reference 8 - 0.75% Coverage

F Well for me, first of all the messages are very misleading because, as most of us understood that, that's what it will cost me per year – only then I had to put my glasses on and read it [laughing]. And the second thing is that I think that this is actually a selling point for the other car, and not the car that I am kind of interested in. Because it tell me that actually, the other one is better, so, forget about this – I'm going there. You know, for me it is a little bit silly because if I go, and I am interested in this car, why are they pushing me towards the other car?

F2 It's still BMW. They're still going to get money

F Yeah I know, yeah, but they still, if I came here and I am interested in it, they should have me as a customer, not actually send me some...

Reference 9 - 0.64% Coverage

TX It's the, you lose, in red – it's negative

BL It feels like an emotional response

M It's a wrong use of language

F And the colour

M The use of colour

BL Oh, do you want to expand on that?

M Just by saying, 'you lose', if it said 'you pay' instead of 'you lose' and it was still red, I think that would...

BL If you saw that label in the showroom, what would you do?

F Carry on walking by

TX Yeah it's negativity, it's just, makes you think you are going to lose money, you know, we all know we have to pay for things but we don't like the term that we're going to lose it

F I want to know if I'm going to pay more, not lose money

Reference 10 - 0.46% Coverage

M Because you are losing – Ok you pay more, it's the same message, but, that's what I'm saying – who wants this information? If it's trying to get us to rethink our purpose for buying a car and go greener – that one will make you rethink, it might not make you change your mind but you'll stop for a second and think, you're losing money, which makes you think, Oh, do I want to lose that much? Or shall I buy one where I lose a little bit less, therefore I will buy a different car

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 4 references coded [1.66% Coverage]

Reference 1 - 0.81% Coverage

JX I think, I want to emphasise that fact that, if the car that costs more, it's actually belittling the car itself. So if you are looking at two cars, I think that, you get a lot of people coming who pick that car because they like that particular car – and by seeing that, they are going to just discount the more expansive car straight away, because they, because of the fact people are going to be swayed by that, rather than the particular model of car...

BL So you are saying that they would be swayed?

JX I think so yeah. I think if you saw two cars, and it said this one will save you £950 – you are going to be swayed by somebody who says you're going to save £150

BL So in a way, the labels work from the person trying to sway you?

JX It will work – it just depends on what sort of consumer you are really...

Reference 2 - 0.21% Coverage

F It does depend on whether you've made your mind up on what car you're going to buy before you go into the garage, you know, if you know what you're going to buy then it doesn't really make a difference, you know

Reference 3 - 0.27% Coverage

BL Ok, it seems like, speaking in its favour, JX is at least saying that it might have some use if you are not sure which model you are going to buy

JX Yeah exactly – I can definitely see that that would effect...

F It might have some kind of leverage on the decision

Reference 4 - 0.38% Coverage

M I don't like it, I don't know about you, but, I found this information slightly confusing – it's telling me I would save £950, but I have to look at it quite hard to work out why it's telling me that, and my reaction is that I don't trust this at all

NB This is label C1 for JX's BXefit

M Well, and C2, both of them. My reaction is, I feel this is giving me information I can't trust

Quotes\\Plug-in electric cars (EVs)\Costs - high purchase & battery price

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 4 references coded [0.81% Coverage]

Reference 1 - 0.18% Coverage

F How much are they to purchase the car?

NB No idea

M They are about £30,000

F I was going to say, they are aren't they...

F2 Are they really? [laughing]

F But then it's worth it

Reference 2 - 0.23% Coverage

M Well when you're doing your reading I would think it's quite essential really, because obviously you got to offset the buying costs of the car and weigh up whether or not it's worth paying the extra for an electric car, to what you get back

Reference 3 - 0.26% Coverage

M It think I read something as well, that the batteries don't last that long

F Well they don't, its saying, um, oh yes, they are very expensive to buy – I heard that on the radio the other day.

M The batteries only last six years

F And they ate phenomenally expensive

Reference 4 - 0.14% Coverage

M Yeah but then you've got to then go to the What Car? to say would I go for an electric because of cost of ownership, depreciation, blah blah blah

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.59% Coverage]

Reference 1 - 0.32% Coverage

F I think that when you've got no – I might be being naive here – but when you've got no worries of finance and things like that, maybe you would stretch to care a bit more about the environment and things like that. But while you haven't, I think you have to go with what you can afford and I think, in my head, although it's cheaper to run obviously which would tell me that there's probably massive to buy

Reference 2 - 0.26% Coverage

F Oh you will have a massive outlay, on the price comparison I reckon that's a massive outlay to buy one of those

M Or you could have a massive outlay to replace the battery

Russell Yeah, well that's the other thing... the cost of the batteries are hideous

M That comes back to your whole vehicle costs doesn't it

F Yes

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.60% Coverage]

Reference 1 - 0.60% Coverage

M Like a tram, so it picks up the..?

[Inaudible]

M I'm not a fan of electric cars

NB Ok, can you say why?

M Well...

M2 The price...

M The cost of them – they're very very expensive, so they're actually not economical at all, because you will pay so much for an electric car normally, that the saving that you're making doesn't equate to the cost of the car and the running of it. Yeah, it will be cheaper to run, but you could buy a simpler diesel car, which is, over 5 years, actually cheaper to run than buying an electric car, which is, well, £20,000

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 2 references coded [0.59% Coverage]

Reference 1 - 0.48% Coverage

M If the petrol and the electric car were the same price to buy – this would be cheaper, I assume. But, because they're not...

NB ... cheaper to run...

M ... yeah, cheaper to run sorry, so, yeah, the electricity bills go up but the petrol is considerably coming down, and you're not paying tax either – you're not paying road tax, but, because like you said, that car is going to be so much more money – I bet if someone stopped and did the maths...

F You'd actually be sick...

Reference 2 - 0.10% Coverage

M2 Well it's double the price and you can't even go more than 80 miles on it – who can afford to do that?

Quotes\\Plug-in electric cars (EVs)\Costs - low tax and fuel costs of EVs

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.19% Coverage]

Reference 1 - 0.19% Coverage

NB How does it compare to the BMW? This side of the label, so you can make a direct comparison

F The money that you're saving

M Oh, it just unbelievable isn't it

F It's unreal

F2 Yeah

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.09% Coverage]

Reference 1 - 0.09% Coverage

NB Ok, so what are your reactions to these labels?

F Electric cars are a lot cheaper to run, than fuel cars

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 4 references coded [0.91% Coverage]

Reference 1 - 0.05% Coverage

No car tax – that's a perk. That's a selling point.

Reference 2 - 0.47% Coverage

F And are the charge points free?

M They are at the moment...

F Yeah

M Well I think so because we've got them in London. Sorry, I work in central London and you often see cars plugged around Covent Garden – and there's no meter or anything, so you just plug your car in and...

F Yeah. Nothing

F2 Or they're in the car parks in Tesco and Asda car parks and places like that

M I think the idea at the moment is that they are encouraging people to buy them, because it's free...

Reference 3 - 0.03% Coverage

Yeah, and you don't pay tax

Reference 4 - 0.36% Coverage

DX I'm sold [laughing]

NB Your sold – and why are you sold DX?

DX Because it's cheap

NB Because it's cheap?

DX It's cheap cheap

NB And is this label making it clear quite how cheap they are?

DX Very much so, yeah. It's the best for electricity costs – it's most efficient basically. Per month – pittance, per year – pittance. No tax – yay!

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.24% Coverage]

Reference 1 - 0.24% Coverage

F You'd think there was a catch if you saw that – I would

NB You'd think there was a catch because, the figures are too...

F Yeah, too like, cheap

NB It's too cheap? Is it surprisingly cheap?

F Yeah

M Yeah

M2 Yeah

Quotes\\Plug-in electric cars (EVs)\Costs - preference for VED tax over VED band

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 3 references coded [1.11% Coverage]

Reference 1 - 0.63% Coverage

M All these cards have got the same – right it's an electric car, it's good, it's A. What is the significance of putting B to C on the rest of them, because it's just pretty irrelevant – we know it's an electric car and therefore it's eco-friendly. But to take up so much space on this card with the actual tree of colours, I just think is completely irrelevant. It's green, it's A – we don't need to know this, what, 6 other categories below it

NB Ok, So for you it's not useful to be able to see where this car stands in relation to others

F Everybody knows the alphabet don't they

M Everybody knows the alphabet and that really is irrelevant

Reference 2 - 0.25% Coverage

M2 Does it give you the cost of tax?

F Yeah that's really useful

M Yeah, exactly – rather than the colours, the cost – which has got to be zero I guess

NB Yes, no vehicle excise duty on an electric vehicle

M So that's what she thinks it should tell us

Reference 3 - 0.23% Coverage

M Well it's an A – but I don't know what the significance of well-to-well is, so I don't want to know all the emissions that need to be for that to be a red. All I want to know is what the letter is, and how much it's going to cost me

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.78% Coverage]

Reference 1 - 0.78% Coverage

F I presuming it's cheap one – but you don't know from that scale it's nothing

NB You don't know if it's nothing?

F No

NB Is it not clear that it's nothing

M Well it says zero g/km, but that doesn't necessarily tell you there's no cost

F G... what's it, g/km – it's not about price, I don't know what that means. I just means that it's probably the cheapest vehicle excise duty that you can pay, whatever that is – I don't know

BL From 0 CO2 do you know what the tax is?

M Yes. But we don't know whether zero emissions equals zero tax, or whether zero emissions equals £70 tax

BL That leads back – again we were talking about that earlier, about wanting to see the money rather than, just emissions

M Yeah

F Yeah

Quotes\\Plug-in electric cars (EVs)\Demand for additional information

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 2 references coded [0.94% Coverage]

Reference 1 - 0.61% Coverage

NB I think that's it unless – just one last question, is there any other information that is not on the electric car label that you would like to see there, is there anything else specifically about electric vehicles that you would be interested in?

F Well, I was just going to say, particularly, I think, because it is such a change, I would want more information about what you were saying...

F2 The cost of the battery, overall running cost over 10 years, but battery and servicing and that sort of thing. I would want to know a bit more about that

NB The battery costs, and how to maintain the battery as part of the running cost

Reference 2 - 0.33% Coverage

F Couldn't they also – I mean they might not be able to do this – this smart phone thing at the bottom, could that not tell you where the battery, you know where you can go and plug your battery in as well

M Recharge points

F's Yeah

M's Yeah

F Where you could go... because you know where the petrol stations are

F2 Yeah good point

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 3 references coded [0.91% Coverage]

Reference 1 - 0.17% Coverage

NB Ok, is there any other information about electric vehicles that you would like to know that isn't shown on this label?

F How much does it cost to buy one?

Janice How long does it take to charge it up

M Yeah

Reference 2 - 0.44% Coverage

F2 And then, what would your electricity bill be

NB What your electricity bill would be

M What is it per charge?

NB Well, it's got an indication of that

F Yeah, but then, you could have a comparison of a yearly normal household electric consumption, followed by one...

NB What the additional cost would be having an electric vehicle

F Yeah, because you look at that and think – that's going to save me loads of money, but then if you get a £1000, you know, every three months on your electric bill then it's not a good saving is it

NB Ok

Reference 3 - 0.30% Coverage

F I think it's, I probably think the majority of us don't know the basics of an electric car – so without knowing the basics – that part is irrelevant. I think we need more education on electric cars as a whole, to be able to compare them with fuel cars

BL Does that mean, as a minimum you would need this additional information to tell you about, range?

F Yeah, exactly

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 2 references coded [0.37% Coverage]

Reference 1 - 0.16% Coverage

NB Ok, so you would like some additional information about this – how long it takes to charge the battery

F2 Of course

F Yeah, how many charge points there are

Reference 2 - 0.21% Coverage

Kieron I think there needs to be some type of measurement conversion as well. If you look at the top left, how are comparing Wh/km to miles per gallon? What is the equivalent? So you need some kind of conversion tool there

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 2 references coded [1.20% Coverage]

Reference 1 - 0.34% Coverage

M What you could do to make it a fair comparison, is every car's got a residual value, because the manufacturers all set the residual value so that's the cost of the leasing – why don't you do residual value, why don't you do a cost per mile with a residual value included? And then you find something that is probably more expensive than a petrol car

Reference 2 - 0.86% Coverage

BL Ok, residual value is one idea. Can we quickly go around the room?

F It doesn't say how long it takes to charge

M How long it is to charge

BL How long to charge, yeah, Ok

M And the other thing I think would be useful is if you had, you've got a QR code here, but something with like – find a link, that gives you a map of where the locations are for charge points. So that if you look at this, you need to get the information and see if it's actually a viable choice for you, rather than have to take this, go home, look at it on the internet

F ...and then realise that you have to drive to Bristol to charge it up...

BL So it's depreciation rate, vehicle range, recharge time and charge point location... any additions to that? Does that capture...?

M I'd still like to come back to the battery costs

BL The..?

M The cost of the battery replacement

BL Ok, yeah

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [0.86% Coverage]

Reference 1 - 0.38% Coverage

NB Ok, that's fantastic, we can take that away. I just wanted to come in as well, and ask you on what additional information you'd like to see on these labels, if any? About electric vehicles, is there other stuff that you would like to see on an electric vehicle?

F Purchase price?

NB Purchase price? Yeah

M How far you can drive before recharging

Reference 2 - 0.48% Coverage

NB Anything else that you would like to know about electric vehicles that you think should be shown on the label?

F When the batteries need to be replaced

NB Battery life?

M Where are the charging stations?

NB Where are the charging stations

M2 How long it takes to charge as well

NB How long it takes to charge

M3 Sorry, not only where they are, I mean how many are there, I mean is there only like three in the country or, 3,000

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.22% Coverage]

Reference 1 - 0.22% Coverage

NB So would that kind of information be useful on a label?

M What sorry?

NB Some information about where the charging points are, or information about how long it takes to recharge the...

M How long it takes

Quotes\\Plug-in electric cars (EVs)\Label comparisions with conventional cars

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 4 references coded [2.30% Coverage]

Reference 1 - 0.41% Coverage

NB What we've got now is a direct comparison between the electric and the BMW, in terms of the pence, the running cost per mile, so you don't have to go through...

M Is that just purely running cost? It isn't taking into account the purchase...

NB Purely the cost of the elec... the fuel cost. Yeah. So, is that useful to have a pence per mile to make a comparison?

F Yeah

F2 Yes it is, because it's like for like isn't it

Reference 2 - 0.94% Coverage

NB Just to make sure that we have nailed this one, do you have an opinion of whether an electric car should be treated in exactly the same way as a conventional car when you are making the comparison?

F Yeah

F2 You actually can't make a comparison

NB Could it be compared with other cars or should it be compared with only other electric cars?

M I don't think... anybody who is going to buy an electric car is going to buy an electric car. I don't think the comparison really matters in fairness

NB So it would be more useful for them to compare an electric car with other electric cars?

F Other electric cars yes

F2 Yeah

M I don't think you are going to go out to look at an electric car, a petrol car and a diesel car. I think you've made the decision... you're going to buy a diesel or electric or whatever, before you step out of the door. So, I don't really see the point in having a comparison in the running costs

M2 I agree

NB Is that a consensus?

F Yeah

Reference 3 - 0.34% Coverage

BL Just to summarise then, because you know what petrol and diesel cars are, the comparison makes sense. But because electric vehicles are so different, and as PX said, you know if you are going to buy one, but because it's so different you need other information, because, there is some education going on

F Yes you do

F2 Of course you do

F Yes

Reference 4 - 0.61% Coverage

F3 And I think they should just be based on... like run-arounds really, because they don't do much, you know. Like just a little run-around car, not to go like, across the country. It won't get very far

M You can go to London in one journey on one charge

BL So actually, something like, what information would you need to know?

F They would have to say it on the back of the...

M If you are going on a journey, where's your nearest Travel Lodge

F Well then it's not a good company car

NB So the comparison should be with other 'run-around cars', as you out it?

F Yeah

NB To make a useful comparison

F Exactly

F2 Yeah

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 4 references coded [2.06% Coverage]

Reference 1 - 0.20% Coverage

Russell The only way to compare them really – when you've got two different fuel sources – is on pence per miles isn't it, because you can't compare miles per gallon with kilowatts, kilowatt hours per kilometre can you. There's no way to compare it

Reference 2 - 0.41% Coverage

NB [2:05:16] Just want to drag – sorry, it's interesting points – but I just want to drag you back to, one more thing about these labels, which is the basis of comparison. So here we've got the Nissan LEAF, if you turn it over, back to the, what we call the dashboard label, and you've got an estimate of 10 wh/km, and that's shown as being the best

M How can it be the best? There aren't that many electric cars on the market...

M2 Of course it is – it's the best and the worst isn't it

M The best of what?

Reference 3 - 0.31% Coverage

M2 The best of those two. I tell you what, my thing, if you look at that, and you see 9p to 17p – it doesn't seem a massive saving in pence per mile, actually. For the inconvenience of limited range and everything else for an electric car as compared to a petrol one that we know what we're dealing with

NB Ok, so insufficient savings per mile to justify all the uncertainties. Yeah?

Reference 4 - 1.14% Coverage

NB Ok, and, very last question on this. Back to the best and the comparison here, what would be a more useful comparison – a comparison of the LEAF with other electric vehicles, or a comparison of the LEAF with other, with all cars?

M You've got to sort of put your cars into town cars haven't you, you know, there's a Mini or a Fiat 500, and an electric car...

NB Ok, so in the same class of cars

M Yeah, in that kind of grouping isn't it – you know, cost or whatever. You can't put it against a 3 Series BMW because that's not the electric car market is it. That is your sales rep, family car...

M2 Yeah you're not going to compare that to a Fiat 500 are you..

M Yeah, that kind of thing – small town car...

NB So you would rather have a comparison with other cars, all be it in the same class?

M Yeah

F Yes, absolutely

M Similar sized

NB Rather than only with other electric cars?

F And what they'll be used for as well

M Yeah, and what it... yeah

M2 Just to balance that, you know, that sort of thing

NB Ok and why would that be a better comparison for you?

M Because you're looking at the usage of that vehicle aren't you – if you're going to buy a Fiat 500, you're not going to go on family holidays in it are you? You're going to go to the shops, you're going to run around town – do your small commuting with it. Same with your electric car – you're not going to go on family holidays...

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 3 references coded [1.72% Coverage]

Reference 1 - 1.19% Coverage

M I think it's important to link the Nissan with other electrical cars, because if you put it with the petrol or diesel – it confuses everybody. I think if you're looking to buy an electric car it's better to make a comparison with the other electric cars

F Definitely

NB Is that a general view or...

M No, I disagree

BX No, I wouldn't say so

M I think that you want to... the great advantage of electric – or what they are trying to sell you as the advantage of an electric over a petrol or diesel – so here's the equivalent of, you know, sort of like a 1000cc or something, and look what you get with that, with your petrol and your tax and look what you get with the electric – and you can still see the advantages can't you. Because there aren't that many electrics – there will be

NB BX, sorry?

BX Yeah same, you're able to compare your usual petrol with the new electric, and see the BXefits and savings, and whatever

NB So you would like a label that allows you to see the BXefits of the electric versus other vehicles

BX Well no I mean, because I can see from the costs involved, it is obviously cheaper to buy electric, so it is important that you compare electric with a petrol car, to make a comparison

Reference 2 - 0.34% Coverage

Kieron I think that the comparison should be in the same category, like, this is a saloon and this is a hatchback. So I would prefer it to be, if it's going to compare electric and petrol, it's going to compare electric and petrol saloons only, not saloons and hatchbacks

NB Ok, so you would like to compare within a class?

Kieron Within a class, yeah

Reference 3 - 0.18% Coverage

M Well, as Kieron was just saying, at least if you're going to do saloons then do saloons, and not compare a saloon and a hatchback. And, same engine size, for example – sort of the same range

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.58% Coverage]

Reference 1 - 0.58% Coverage

M2 I think unfortunately, if you put a – I'd like to see a vehicle in the same class, but not necessarily an electric vehicle. But if you do that, the electric vehicle is going to come way below what you'd expect – it's going to cost obviously more to run a non-electric vehicle, but perhaps the BXefits move far away that negative... because at the end of the day, if I'm driving to Manchester, I have to stop and charge the car half way – well not even half way, I'd have to recharge it twice – get there, and you're talking, my journey was 3 hours anyway, and if you do a rapid charge of whatever

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.42% Coverage]

Reference 1 - 0.42% Coverage

NB [02:01:25] Ok, just coming back together again then. So, what do you think about this comparison?

M It obviously is, if you want to buy a Nissan LEAF on cost, but as soon as you realised that it only went 80 miles before it had to be, have an 8 hour charge, you'd then start to think, I shall go for the Renault Scenic [laughing]. It's not enough information – it is misleading information.

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.11% Coverage]

Reference 1 - 0.11% Coverage

F Well again, I think it's suggesting one thing – that it's going to be cheaper, and everything. It's not is it?

Quotes\\Plug-in electric cars (EVs)\\Technology - charging issues and limitations

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 3 references coded [0.48% Coverage]

Reference 1 - 0.09% Coverage

NB What's your perception of how long it takes to charge an electric vehicle?

F I have no perception – I don't know

Reference 2 - 0.20% Coverage

F 8 hours to charge, so you would have to – I presume charge them at home

M Yeah you charge it while you're asleep I suppose, but, it wouldn't be much good if you go away on a journey and you want to go out again, and you haven't charged it up

Reference 3 - 0.19% Coverage

F Like you say though – the whole panic thing of like, always being able to find a petrol station but you know, you'd be watching that, you know, the battery. The battery would go on red and you'd be beside yourself wouldn't you – well I would

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.75% Coverage]

Reference 1 - 0.75% Coverage

F It's like that episode of Top Gear where they just drive around trying to find plug sockets, and you can't find one

M If you lived in central London, you'd find one probably, but if you went to Chipping Sodbury tomorrow and there's no power point there, you're...

F What you would do, if you were driving through areas of Wales I doubt there's anywhere where you can charge

M Rural areas, well you'd be stuffed wouldn't you

F Yes, exactly

M And how long does it take when you get there?

F2 Imagine driving to ...., or somewhere like that and not finding anywhere

NB Ok

F You're pressed to find service stations

M I have problem finding a petrol station let alone an electric point that will charge your electric car

F Yeah, and 80 miles is nothing

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.31% Coverage]

Reference 1 - 0.31% Coverage

M3 Sure, but I mean at the moment, you know, you wouldn't consider, when you were buying as car, the accessibility of fuel supply. But, if you were buying an electric car, with a limited range, I'd want to feel confident that there are sufficient places that I could go and actually plug in

Quotes\\Plug-in electric cars (EVs)\\Technology - driving range limitations

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 2 references coded [0.44% Coverage]

Reference 1 - 0.23% Coverage

NB Starting with the one with the coloured scale to the left. We've got some new information here, different to the diesel cars. What's that telling you?

M It only goes 100km

F Yeah that's the problem

F2 And then it goes hummmm

M Yeah

Reference 2 - 0.21% Coverage

F I was going to say, [inaudible] if you're on the motorway and your electrics gone, then, there's... do you know what I mean? They're not really...

M [2.09.26] That's something they've desperately got to sort out

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.08% Coverage]

Reference 1 - 0.08% Coverage

F You can only drive 100 kilometres before your battery runs out – it's the first thing I would see

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.45% Coverage]

Reference 1 - 0.45% Coverage

F2 There's so many factors to take into consideration, I mean, as far as battery range it say 100km, um, I've just asked this gentleman beside me and he said that's 60 miles, so that's not very far before you have to stop and... you know, I mean, living in the city, we're always racing against time – if you're going out on a long journey, how long then does it take to charge up the battery? Because you're going to have to stop, and 60 miles isn't very far is it

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 2 references coded [0.37% Coverage]

Reference 1 - 0.28% Coverage

M2 Yeah, I mean I'm not sure – you know, I'd have a different view on that, I think, everybody can do something for that, but actually the fact that it goes 80 miles, you know the practicality of it would make me go, yeah, what is the point of this car? I can't even get to Bristol and back

Reference 2 - 0.09% Coverage

M It's alright for around town, but I wouldn't want to try and go from here to Manchester in it

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [0.30% Coverage]

Reference 1 - 0.14% Coverage

F Or the distance is it? You can't just say, oh, we'll drive to Manchester this weekend, because the car... they don't go very far

Reference 2 - 0.16% Coverage

M Is that right? So you can only drive 80 miles. Surely not, I mean I thought it was more than that

M2 Well that's when it's new as well [laughing]

Quotes\\Plug-in electric cars (EVs)\Technology - lack of noise

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 2 references coded [0.53% Coverage]

Reference 1 - 0.13% Coverage

F They don't make a noise do they... electric cars. This is my problem

F2 No they don't

F I just think they are a bit dangerous

Reference 2 - 0.41% Coverage

M By the way, those electric cars, they are actually giving them a noise now

F They should do

F2 Oh they should do

M They are giving then a noise because...

F Good

F2 Because children could walk out in front of them

M Yeah so people can actually hear them coming, because they don't make it. So they are creating a noise for them

F I would do

M2 It's on a cassette and they've got to put the cassette in

Quotes\\Plug-in electric cars (EVs)\Units - low understanding of Wh and kWh

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.74% Coverage]

Reference 1 - 0.74% Coverage

F What does that mean?

NB Wh

M Wh? I don't know

NB Any guesses?

M Weighted Combined?

F Don't know

F Wh? Don't know what you're talking about

F2 Does that mean how many people are in the car

F No, don't know

F Things like, kilowatts per hour that you get isn't it, and things like that

F2 At home you get kilowatts

F Watt per hour

F Well you get kilowatts per hour on your...

M Kilowatts per hour

F It's the equivalent of that

M Yes

F It is in kilometres

F No, because it's electric – kilowatts is electric

NB That's right, kilowatt hours... these are watt hours, Wh stands for watt hours

F Ohh

NB And a kilowatt hour is a thousand watt hours

F Watts per hour

F2 Right

M I'm confused now

F Oh, I've lost it now

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.45% Coverage]

Reference 1 - 0.36% Coverage

NB Ok, alright, and in terms of the units – you mentioned the comparison between the two units there – we've got 10 watt hours per kilometre, 10wh...

F That means nothing to me

F2 Nor me

NB ... Does a wh per kilometre mean anything to anybody?

F Absolutely nothing

F2 No

M No

M That means you've got 10 bar heaters on for an hour to go a kilometre

F Really, oh

F2 I work for the electricity board and it doesn't mean anything to me

Reference 2 - 0.08% Coverage

F It's just pointless isn't it – it is

M It doesn't mean much does it

F2 It doesn't mean a lot, no

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.69% Coverage]

Reference 1 - 0.69% Coverage

NB Ok, does that mean anything to anybody? Wh/km?

BX No, no

F Where's that?

F2 Is that wattage? Kilometres

BX Not really

F Wattage

M Yeah it's something to do with your electrical usage

M What the 'h' then?

BX Yeah but how far? How fast?

[Laughing]

NB Alright, I think it's fair to say nobody understands what Wh is...

F No

NB ...although we've got a general idea that it's...

F Watts something

F2 Wattage

BX Yeah

NB For the record, its watt-hours, watt-hours

F Oh

NB Like a kilowatt-hour

F No one knew watt-hours, so we're not going to know kilowatt-hours

M So you've got 10 watt-hours...

NB 10 watt-hours

M That's 10 hours then? 10 watts an hour

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 4 references coded [0.90% Coverage]

Reference 1 - 0.22% Coverage

NB Can I just ask you about the units that they've used here? If you look at this one – on the box on the left hand side, it's described as 150 wh/km. Does that mean anything?

M What's that?

M2 No

F No

F2 I don't know

Reference 2 - 0.19% Coverage

NB Do you understand what a kWh is?

F Kilowatt

M Kilowatts

NB Kilowatts?

F Isn't it kilowatt-hours

NB Kilowatt-hours?

F I wouldn't know what it is

M It's a measure of electricity

Reference 3 - 0.27% Coverage

NB Do you have a sense of how much energy a kilowatt hour is? Does anyone have any sense of what a kilowatt hour is?

F No

M I know that's the unit they would charge you on your domestic electricity bill, but I don't know whether this uses more than a few bars on an electric fire

Reference 4 - 0.22% Coverage

NB Right, but is there – I'm just trying to get a sense of whether people get a feel for what a kilowatt hour is? It doesn't seem as though...

F No idea

M Not really

NB Ok...

F I don't know – I haven't got a clue

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 3 references coded [0.75% Coverage]

Reference 1 - 0.28% Coverage

NB [01:47:24] Ok, if we could just come back together. What are our first thoughts about the information on these labels?

F We didn't really know what it meant

M Haven't got a clue. The 15 – I haven't got a clue what that means

NB 15 – haven't a clue – Ok

Reference 2 - 0.36% Coverage

NB We'll come back to the cost of running these vehicles in a moment. In terms of this unit here, on this label, 15 kWh/100km – does that...

M Doesn't mean anything

M2 Means nothing

NB Doesn't mean anything?

M I mean, I'm assuming the red line is, you know, would suggest that it's not using a lot

F I've got no idea what...

Reference 3 - 0.11% Coverage

NB Ok, does anyone have a sense of how much a kilowatt hour costs?

F No

M No

M2 Is it roughly 13p?

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 3 references coded [0.90% Coverage]

Reference 1 - 0.42% Coverage

NB Ok, so just coming back as a group. We will just take a look at E1 first. Any thoughts on this label?

F Confusing!

NB Confusing – why is it confusing?

F 15 kilowatts 100... it means nothing to me

F2 It doesn't to me either, that's what we were saying

M You don't deal in kilowatts do you?

M2 It alright if you use solar power

M Maybe in 10 years time it will be the norm

F Yeah, it's confusing

Reference 2 - 0.18% Coverage

M Kilowatt hours says to me, maybe, how many hours you need to run a certain amount of lights? But, you have to think about it first – you can't just look at it an know what it means

Reference 3 - 0.30% Coverage

NB Right, for JX's BXefit that's about half. Who knows what it means? MX knows what it means. Just MX

M Basically, the only reason my hand's up, right, I'm buying a solar power for the house, and that's the only reason why my hands up in the air. So I do know about kilowatt hours...

Quotes\\Plug-in electric cars (EVs)\Units - Mile units preferred to km

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.64% Coverage]

Reference 1 - 0.64% Coverage

NB So it's just a quantity of electricity, what's that... 25 of these watt hours, just imagine a quantity of electricity called a watt hour. 25 watt hours per kilometre

F But I don't understand the kilometre bit, that's what I'm saying

M Hands up who thinks they are back at school

[Laughing]

F Couldn't they do it in miles? Why did they do it in kilometre?

NB It could be done in miles, would you prefer to see it in miles?

F Yes

F2 Yeah I think so

F Yeah I don't like kilometres

F Yeah I don't, well there's 1.6 kilometres

F2 Yeah I know that, but I...

F I know there are but I don't understand really

F2 I'd prefer it in miles

F Yeah

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.30% Coverage]

Reference 1 - 0.20% Coverage

Russell The only way to compare them really – when you've got two different fuel sources – is on pence per miles isn't it, because you can't compare miles per gallon with kilowatts, kilowatt hours per kilometre can you. There's no way to compare it

Reference 2 - 0.10% Coverage

NB [2:00:44] Battery range in 100 kilometres, would it be more helpful to have it in miles?

M Miles – yeah. Yeah, definitely

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 2 references coded [0.36% Coverage]

Reference 1 - 0.05% Coverage

F It looks like as well, the kilometres – I prefer miles

Reference 2 - 0.31% Coverage

M Cost per mile – because surely that is the thing that's... across the board for any car – how much per mile does it cost you to run it? Whether it's electric, petrol, diesel or whatever, it doesn't matter – it's how much per mile. So that is the constant isn't it

F I'd like, mile, month and year – I'd like all three

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.32% Coverage]

Reference 1 - 0.32% Coverage

F2 There's also a mix up with kilometres and miles, then, you know, why don't you stick to one or the other? Everybody drives in miles, nobody drives in kilometres – well I don't drive in kilometres, I wouldn't know how far...

NB Ok, so for you it would be better to have a consistent, miles, throughout the whole thing?

F Yeah

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 2 references coded [0.28% Coverage]

Reference 1 - 0.12% Coverage

Rich Kilowatt hours per... they should have changed kilometres to miles, obviously, because we're in England. But...

Reference 2 - 0.16% Coverage

Carol The 83 kms is more useful, but why not put that in miles? Together with the other one. I can't see the point... either put them both in kms or both in miles

Quotes\\Plug-in electric cars (EVs)\Units - problems with MPG equivalent

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.19% Coverage]

Reference 1 - 0.19% Coverage

F You're obviously not working for Nissan. But you made an interesting point Russell, about the means of comparison between these two because, watt hours per kilometres does not readily translate to mpg, but...

Russell Cost does...

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.25% Coverage]

Reference 1 - 0.25% Coverage

NB Second one – E1. We've got an attempt to get around this issue with the kilowatt hours...

F That would attract me more, because I was thinking – wow, 168 miles per gallon. And then you read the small print – you're not going to be going 168 miles

Quotes\\Plug-in electric cars (EVs)\Units - support for MPG equivalent

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.42% Coverage]

Reference 1 - 0.42% Coverage

NB Now, there is a way of converting watt hours into... Would it be useful to show what an electric vehicle would consume if it was consuming petrol?

M If you did a comparison?

F Yeah, Yeah

NB That way of doing a conversion, to show the comparison

F That would be useful, more useful, yeah

NB Would that be useful information as well?

F Instead of...

M I would think so

NB Instead of what it is at the moment?

F Yeah

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [0.68% Coverage]

Reference 1 - 0.10% Coverage

M2 The ones that say 'mpg equivalent' is more meaningful than the other ones

M Definitely, yeah.

Reference 2 - 0.58% Coverage

M2 The point I'm trying to sneak in, is that we all measure engine power as horsepower, and no one actually knows how much one horse is anymore. But it's a relative thing – you can say that I've got a certain number of horsepower, the others are bigger, or smaller, and it's a case of what people recognise really. I think, theoretically, the new technology should move to the new measuring system. But like horsepower, it is probably better that you stick to something that you remember. Or it's an option anyway, so that's just confusing it now

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 2 references coded [1.00% Coverage]

Reference 1 - 0.51% Coverage

NB Miles per gallon equivalent – what does that mean to people?

M It explains it better than the kilowatts, but it's not going to be that all the time. If you put your lights on it will decrease

M2 It's equivalent to... it's just equivalent to petrol isn't it?

M No, fuel – it's a comparison. It's a comparison to fuel. It doesn't say that, but that's what I believe it means

NB And is that a useful comparison? Would you be using that figure to compare this vehicle to other vehicles?

M Yeah

Reference 2 - 0.49% Coverage

M2 I think what would be more informative, would be to keep that 168 miles per gallon, but somewhere on the side say how you got to that figure in the first place. Therefore, you're not spending X, Y and Z on fuel, but you're spending X, Y and Z in electricity, and therefore, that's how we get to this figure

BL So, maybe having both units – so having the 15 kWh, but having the mpg to help understand...

M2 Yeah, to help understand how you actually got to the 168 miles to the gallon

Quotes\\Plug-in hybrids (PHEVs)\Design - oil drop, battery symbols & simplicity

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.76% Coverage]

Reference 1 - 0.76% Coverage

M The one thing I will say is get rid of the battery – get rid of the battery, I really do like this electric range, marker, but ditch the battery, all I want to work out is the personal cost to me. All I want to know is the overnight charge and how much it's going to cost me personally, and if I charge it out, what the cost is going to be there. Apart from those figures, that's just taking up space and it's a picture...

BL Any other... anyone agree or disagree with that? That we could just lose the battery information? Steve, nodding? Is it no use to have that? To see it and compare it?

F We've established that nobody knows what a kilowatt hour, whatever, is – so all you really need to know is, how far you're going to go on a full charge – that's what you want to know

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.22% Coverage]

Reference 1 - 0.22% Coverage

BL [02:02:48] Ok, I'll take it we're back as a group. Having said that, do these labels mean anything?

F That means petrol and that means electric, because of the symbols – that is it#

BL Ok, that's a good start

Quotes\\Plug-in hybrids (PHEVs)\Technology - PHEV range on electric

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.22% Coverage]

Reference 1 - 0.22% Coverage

M The big one is the 40 miles on electric range – we need to know that

BL Yeah, even though it can go further on petrol, you want to know what it can do on electric only

Kevin I think you need to know

Quotes\\Plug-in hybrids (PHEVs)\Technology - PHEVs understood

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.93% Coverage]

Reference 1 - 0.93% Coverage

M Could I add... This is actually something that I know a bit about and have a great deal of faith in, because, petrol and diesel engines, it's the accelerating and decelerating, that's when you get the biggest squirt of fuel in. They also, when you're breaking, they, these cars turn that energy, basically, the braking energy, the energy to stop you or slow you down or stop you, goes back into the battery – it charges the battery as well. This is important, so basically your engine is just ticking over at a very modest steady sort of speed all the time, and the electric motor is just kind of evening out things and whatever, so basically, I've always thought it is the way to go, but then that's because...

M2 Then town driving you could use it as electric, and for long distance...

M Well, it's all – every time you pull forward, and then stop – it's adding up...

Quotes\\Plug-in hybrids (PHEVs)\Units - complexity of PHEV labels

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 4 references coded [1.26% Coverage]

Reference 1 - 0.40% Coverage

F I haven't got a clue. I haven't got a clue – it doesn't really mean anything to me. I don't know – I mean we were saying that we were understanding it a little in miles per gallon, in the other ones – but, that's about it. We couldn't really understand what...

F2 Part of our problem is in the subject – it's all a bit new. I've never looked at anything like this before

Reference 2 - 0.14% Coverage

Cath Yeah, really just confusing, like lot's of sort of techno... measurements and stuff that I don't really know what they mean

Reference 3 - 0.29% Coverage

Kev JX's tried to explain to me, I still don't get this 235 miles per gallon. What they can go from, electricity is 149 miles per gallon and then the petrol is 56, but, I don't, I think I've got brain freeze, but it says fuel consumption, but then, I don't know, I don't get...

Reference 4 - 0.43% Coverage

BL That's fine. AX, any comments

And I just, I mean, I agree – I don't really understand it. It is... I don't think there's any... It doesn't come over as being, sort of fraudulent and trying to sort of trick me into something, but I just see it as a whole lot of stuff that I just, that would be important if I buy a Vauxhall Ampera, but I have not realised, from this – it's of no use to me [laughing]

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.13% Coverage]

Reference 1 - 0.13% Coverage

F That is it – it's too complicated, and I don't think you go and buy a car to do all that

F2 That F1 is just a nightmare, sorry

Quotes\\Plug-in hybrids (PHEVs)\Units - discussion of 'weighted combined'

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [1.11% Coverage]

Reference 1 - 1.11% Coverage

M3 [Is mpg equivalent appropriate?] No, because it completely irrelevant

BL Explain, why do you think that?

M3 Well 235 mile per gallon – if I buy one of these, if I go and buy a Vauxhall Ampera today, with the type of driving I do I would not get 235 miles per gallon. I go to Bristol every day, Ok, so assume I go to Bristol every day, which is a round trip of roughly 80 miles, and I do a couple of business trips a week – so let's say I do roughly 500 miles per week – I'm not going to do that on 2 gallons of petrol

BL Ok, if, remember earlier on when we were talking about the limitations of standard mpg, and at that point you said, oh, it's useful for comparison...

M3 It is useful for comparison, but the point I'm getting at is, if I was doing 235 miles around town and charging it up every night, yeah, I may do that – if I'm doing that 235, if I'm doing a series of long runs where the battery is exhausted after the first 30 minutes, then I'm not going to get 235 miles

BL What figure do you need to see?

M3 I don't know – you hadn't asked me that, what you asked me was is that useful to me, and I'm answering, no it's not

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 3 references coded [1.21% Coverage]

Reference 1 - 0.13% Coverage

F2 And also, what I was querying – weighted combined – what's weighted combined? Does that mean how many passengers, or... luggage?

Reference 2 - 0.60% Coverage

BL Just a little bit of information – I'm not sure it will help. Weighted combined means, there's a test on electric only, there's a test on petrol only and then they combine them, they weight it, as if you're doing 80% of your miles on electric and 20% on petrol. But that is a sort of technical term that has to be there for the lawyers, but that's what it means. It's sort of in the small print, but I know it's hard

F I don't read the small print, until a lot later – I look at the actual outstanding numbers, because that's what's attracting me – the rest, to me, is just small print, which...

Reference 3 - 0.47% Coverage

M [Referring to 80:20 electric:petrol split in weighted combined] I'm thinking if it's always an 80/20 – what that means is that you are actually using less petrol than you are electricity, so presumably you would have to keep on topping up the electricity to get the 124 miles per gallon. Because if you don't you're going to get less than 124 – like 80 or something

BL Quite right – it's based upon the assumption that that's the average way that people will use the car

Quotes\\Plug-in hybrids (PHEVs)\Units - general support for MPG equivelent

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.43% Coverage]

Reference 1 - 0.43% Coverage

BL There is an alternative unit for electricity, we can turn it into mpg equivalent

F Yeah

BL So, yeah?

M Yeah

F Yeah, because it's more standardised then and that's what people are used to isn't it

M Yeah, that would be good

BL Yeah? So at the moment you're saying ditch it because the units are rubbish – if it was mpg equivalent it might be of some use? What about the large mpg value, is that of interest?

M Yeah

M2 Yes

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.28% Coverage]

Reference 1 - 0.28% Coverage

F I haven't got a clue. I haven't got a clue – it doesn't really mean anything to me. I don't know – I mean we were saying that we were understanding it a little in miles per gallon, in the other ones – but, that's about it. We couldn't really understand what...

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.31% Coverage]

Reference 1 - 0.31% Coverage

BL Just going on to F2, what I've done is turn one of the numbers into units that have gone down well so far – mpg. So is that a step in the right direction?

F Yes

F2 Yeah

M Its better, but I still don't understand the 130?

F No

M Is it, I don't understand it

F We need to be educated on this

Quotes\\Plug-in hybrids (PHEVs)\Units - support for Condition A & B shown separately

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 4 references coded [1.95% Coverage]

References 1-2 - 0.95% Coverage

BL Ok, because there isn't time I'll suggest one. What about the mpg on petrol only with no electricity? Would that, essentially that would be on the motorway...

M Well if there were miles per gallon on petrol, miles per gallon equivalent electricity and you knew how that was done. What I'm not sure about and don't know about, if you had those, would you then need a sort of combined one? I'm not sure you would, but certainly if you had those two different ones, and you could convert that...

BL That's what they do in the states. At the moment, the figures on offer in the UK are combined – in the states they do electric only, in mpg equivalent, and petrol only

M Well that's more useful

F And it would be more in keeping with the fact that on the second one underneath you've got a split. On that one they are combined and on this one they're split. So surely this should be split as well

BL So on the cost then you prefer them split?

F I prefer them split yeah

Reference 3 - 0.62% Coverage

M Well, I've just read that paragraph there, and that just convinces me that that number means absolutely nothing because, if you read it, the amount of variables in that paragraph BXeath it of what can cause that value to

switch, and change significantly one way or another, are quite a few. If it was split it would help clarify the issue and there would be less variables to swing that number

BL So, I appreciate that these are very complicates issues, and they are because even in the industry they are, but essentially what I'm taking away is that you would like everything separated and mpg equivalent if possible

F Yeah

M Yeah

Reference 4 - 0.38% Coverage

M Yeah, because this paragraph, I mean the different things that that can affect that value there – if you read that paragraph it just means that that number can be significantly swayed one way or another. If you split it out and said this car, on petrol only can do this, on electric only it can do this – you can then accurately say to yourself, well I know how far I can go. Whereas that...

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.88% Coverage]

Reference 1 - 0.88% Coverage

Do you have any preference about whether you want – you just want to know how it works on average, or would you like to know the petrol and electric separately?

F Yeah I think I would – yeah

BL You'd like to know...

F Yeah, like this bit has got a bit for electric and a bit for petrol – I think it is clear to me when it split's it up

BL You like it... its clearer when they're separated?

F Yeah

F2 I would probably want both, just because of the kind of driving I was doing. Because saying electric range is 40 miles – that would get me to work and back, so if I could drive in electric to work and back that would be great. But then, if I went further, I would want to know what the combined mileage I would get out of it – so, if it gets me from A to B, to a charging point, then onto C. So I would want both bits

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.85% Coverage]

Reference 1 - 0.85% Coverage

BL Just for RX's BXefit – this one doesn't give you an 80/20 split, this one just shows you what you get if you just use electricity or what you get if you just use petrol, day in day out – and then turned into mpg

M But that's good for what you were saying, if you're taking the kids to school, you'd make sure your battery was charged, during the week you'd go on electric wouldn't you. When you go on your holidays, to Scotland, you'd fill it with petrol wouldn't you

M2 Yeah

BL Oh, so you're saying if you saw this you can understand when you're using petrol and when you're using electricity

M Yeah, if you go a long distance, you can't go all the way on electric because you know you can just do 52 miles, if you're going further than 52 miles, to save you plugging it in every time you go, you'd put on your fuel wouldn't you

Quotes\\Plug-in hybrids (PHEVs)\Units - support for overall MPG equivalent

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 7 references coded [3.95% Coverage]

Reference 1 - 0.92% Coverage

BL Just coming back to the 235 miles per gallon, and the 130 – MX has already said, Ok, you sort of, I think you were nodding, yeah, that's good – the mpg – don't get that. Because, the battery's sign follows on from what you were talking about with NX about the units – can you see why we gave you that micro survey about what units do you think are used for electric vehicles. And probably, I haven't had a chance to look at them, but the mpg equivalent seems to go down well for the pure electric, but I think RX had a good point – you could have maybe both. But am I right in thinking that keeping those two number in your head at the same time is the problem, or...

F Yeah

M If you're buying a car you want to know miles per gallon – you're not bothered about kilowatts per kilometre or watt hours – I want to know how many miles I get out of my car, whether it's combined or single – I want one figure

Reference 2 - 0.25% Coverage

F [Lookig at F5] That doesn't look as frightening, because to me, my car will do 124 miles per gallon

M That's it – I'm happy with that

BL Sorry, I didn't get the first bit – did you say that does look right, or wrong?

F That looks better

Reference 3 - 0.30% Coverage

F Yeah. That, Ok, the F2 is confusing – well that's not confusing it's just a disaster...

BL Yeah, F1

F But this new one – to me, it's just going straight to the point, rather than – if people want to break it down it's there underneath. But for me, just being a basic woman, that is all that counts

Reference 4 - 1.06% Coverage

BL Does it bother you, which does go back to the pure electric, because there was some really good comments about that – does it bother you that, this is lumping together petrol and electric all into one number, 124 – does it bother you that some of that, you don't have to know how the calculation is done, but some of it is from electricity, it's not really petrol, does that bother you? Or is it just a useful guide?

F No

M It doesn't matter what it is as long as you know what you're getting, in miles per gallon, again, combined – you know that you can go 124 miles on a gallon, from what you put in that car – that's all that matters

M2 Mpg, we're not talking, its gallons, and we know it's not gallons because it's electric – it's just a title... maybe you could change it to miles per unit, or whatever you want to call it. It's just a title, mpg, but everybody knows mpg

M It's universal isn't it

F Yeah

BL So, the general consensus is that – even though you know some of it is electricity, that's Ok, it's a useful number

F Yeah

Reference 5 - 0.55% Coverage

BL But RX, earlier on you said about the pure electric car, I think you indicated that both units might be useful

Rich Yeah

BL So in a sense, that's what this does [F5] – it sort of gives you the official figures – which no-one understands, and it gives you a more understandable number that you can – that means more

Rich Yeah

BL Yeah? But maybe it needs to be clearer about what the assumption is? Would that help?

Rich I would, because it might not be relevant, is what I'm saying. It might say 124 but you might get 70 to 80

Reference 6 - 0.66% Coverage

BL Overall then, just to, I still appreciate this is difficult – overall, would you prefer F5 or F6? F5 gives you an overall mpg of everything together, with some efficiency figures underneath, or would you like to know about the petrol and electric...

Lind I prefer the F5

BL LX prefers the F5. Quick shows of hands – who's for the F5? Yeah, MX, James, Linda, Carol, any others? Ok. And who likes the F6 more?

M I like the F6 with the F5 underneath

[Laughing]

BL Ok, so you want to see that there, and those two instead of those two

F Yeah

F2 Yeah

M Yeah

M2 Just have this one as the main one, then have...

F The other way around

Reference 7 - 0.21% Coverage

BL So, the message there, is, everything in mpg please, but we like to know what it is with petrol and electric together, and petrol and electric separate

M Yeah

F Yeah

M Hybrid

F Put them two together

Quotes\\QR Code issues\Cost calculator tool - against and issues

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 1 reference coded [0.41% Coverage]

Reference 1 - 0.41% Coverage

BL Ok, any comments before we move on?

Kieron I just wanted to ask whether it took into consideration the traffic congestion?

BL Oh the...

Kieron Because I always find, when I am at a standstill, trying to get somewhere, I will spend more on petrol than I do if I was just to go from A to B without any traffic

BL Good point. The current tool doesn't, but theoretically it could do. So are you usually stuck in traffic

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.43% Coverage]

Reference 1 - 0.43% Coverage

M Well, I was just going to say, that was fun to do, but actually it's pretty irrelevant, you know, that tells me it costs 5 pence per mile – I can't compare that with my car now. And that's what I want to look at different cars and I want to know, what's the most efficient one? The more calculations that you put on this, make it harder to look at the basic data – miles per gallon. That's what I want to know, and what the range is. With that...

Quotes\\QR Code issues\Cost calculator tool - improvements

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.75% Coverage]

Reference 1 - 0.75% Coverage

NB DX, you had a thought about what it meant by your average fuel consumption at the beginning – you thought that was a bit confusing

Deb Yes, why, I can't remember I went to put something in, and...

[Laughing]

NB Because you thought you had to add in your own personal fuel consumption rather than the consumption of the vehicle in the picture...

F Yes, yes, it was something like that – whatever you said [laughing]

BL Would you prefer to put in a number, rather than have a drop down menu when it got to that bit about fuel consumption?

F Umm...

BL Do you know what your fuel consumption is?

F That's the problem, you don't always know the number when you can guess much more easily about your... you know

F2 No, yes I think i would rather have the drop down

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.42% Coverage]

Reference 1 - 0.33% Coverage

Russell Is there like, on that software that you can save your details, your mileage whatever whatever, and then swap across – is that what you're saying you could do?

NB Yeah, for different kinds of car

Russell Yeah, so then you can just jump it across

NB Would that be helpful?

F Yeah

Russell That would be quite good. Once you've saved it, put your stuff in then just move it across, on those cars

Reference 2 - 0.09% Coverage

M I'm assuming these codes would be on brochures that you could take home with you as well, presumably

NB Possibly

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 2 references coded [1.78% Coverage]

Reference 1 - 0.74% Coverage

M2 Yes, I think what it does is – there are two practical applications of that. The first one is, once you've scanned, if you, assuming you've got a smart phone – and I think there are all sorts of demographics and different groups of society that would use it – it would relevant for some people and irrelevant for others, but for the people that's relevant, the one thing it does allow you to do is you've got that – as soon as you've scanned that in it's in your phone, and you can scan that in for 7, 8, 9, 10 cars and take it home and you've got the whole information – all the brochures, everything you need – you've got it there, on your phone

BL So some save function would be important for you?

M2 Well it would be in the phone's history anyway – yeah

Reference 2 - 1.05% Coverage

M2 I was just going to say, we are looking at two separate things here... QR codes and this little application – that's nothing to do with QR codes. What would perhaps be more useful is if, because this is basically restricted by

your internet connection and your browser for your webpage – you've got one QR code that can do anything, but this isn't about that, it's an application in itself. So, what would be useful, you could have an app on a phone, and then for instance rather than going and collecting, going to a webpage and collecting individual pieces of information, it would be better if you had a single app on your phone and you go round to a dealership, and scan the code and it would add the information into your application so you could go round scan them all, and then you could compare in the app on your phone

BL So in a way, you're going to a second level of capability, rather than just looking at one car at a time, it's almost like...

M Everyone compares more than one car

BL ...Yeah its sort of like you're collecting cars and your...

M2 I agree,

Quotes\\QR Code issues\Cost calculator tool - support

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 3 references coded [1.35% Coverage]

Reference 1 - 0.63% Coverage

BL Great, brilliant. Ok, let's come to the detail of the two tools. Just one tool versus the other – one was the calculator to work out your fuel costs for a particular car, the other one was information about an electric or a petrol vehicle. What are your thoughts on one versus the other tool? Pro's and con's?

F Your thing we thought was excellent...

F2 I think it's horses for courses, I mean my husband would be all in to the information, but it wouldn't particularly interest me because I'm not particularly into cars. They do a job for me – they get me from A to B. But I am interested in the cost because obviously that reflects on everything else

Reference 2 - 0.43% Coverage

BL No, that's actually an ipod touch, it does everything but the phone though. Ok KX and JX, what did you think about... which tool was more useful?

F Yeah I really liked it

F2 I preferred...

F Probably the top one, yeah

BL The calculator tool?

F Yeah, but I wouldn't really read all that...

F2 Too much information in there...

BL What did you think about the tool? Was it useful?

F I'm going to get the app as soon as I get home

Reference 3 - 0.29% Coverage

BL Any general comments about, obviously, earlier on we were talking about the label having pound, fuel, cost per litre – essentially you were saying that you didn't really like that information because it was fixed. The fact that this is all....

F Yes, it was variable wasn't it

F That was very good

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.22% Coverage]

Reference 1 - 0.12% Coverage

NXy I thought that calculator – to be able to put in your miles, the sort of driver you are, the cost of fuel – and to calculate was a brilliant idea

Reference 2 - 0.10% Coverage

Janice Everybody's different, mileage is different, type of driving is different – everything is different so you can personalise it

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 6 references coded [1.79% Coverage]

Reference 1 - 0.03% Coverage

F The calculator is very useful

Reference 2 - 0.84% Coverage

BL Mike? What are you comments on the whole...

Mike I've seen these but I didn't realise that you could use them like this – I think it would be a really good feature. If you're in the showroom and you want to know a little bit more – rather than ask the dealer, you can just go, bang, and you've got the information to hand – so it's great

F Yeah, it puts you a little bit more in control doesn't it

BL Yeah, it puts you in control, that's an interesting comment. Jo?

Jo Yeah, you can, it's... you don't, it just doesn't give you the information generally, but you can make the information, just like tailor it to yourself. So, if you would purchase the car it's tailored for you

BL So that was the calculator?

Jo It's brilliant, yeah

BL Did you feel that that tool could have been useful?

F It's brilliant – I think it's brilliant [cost calculator].

Reference 3 - 0.13% Coverage

BL Any other comments, RX? And Clive?

RX Very useful information, very interesting. In fact it's making me get one of these phones

References 4-5 - 0.57% Coverage

GX Great. I was really impressed – I've never really used one of these before, and when we did the calculator I thought that was brilliant. See if you could even have that on – I'm sure they could put that on the pictures in What Car? magazine or whatever, or somewhere, you know, on the brochure or something, then you can do your own calculations instead of being in the showroom. Wherever that can be – brilliant, I thought the calculator was excellent and so it came up with per mile, per whatever... And you know, it was giving me a good bit of information that I thought was brilliant.

Reference 6 - 0.22% Coverage

M I mean, in two years when I... you know, because every three years I get a BMW... I will do that. For my next vehicle I will make a real point of doing that because I can find out so much more information that's going to help me

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 2 references coded [1.82% Coverage]

Reference 1 - 0.67% Coverage

Lisa Obviously if you haven't got a smart phone it's irrelevant – and JX said everyone's got a smart phone, well my mum hasn't and my brother who is majorly into cars hasn't got a smart phone, and he would use something like this, you know he would steel my iphone to be able to do it. I do like it because I like things like that – it is a bit fiddly , you know, if you're not used to it and so on, but its' more specific, and I think one of the things we raised earlier was this whole average mpg and average fuel costs – it gives you a more tailored sort of idea specific to your driving style and you know, if you thrash your car or whatever, it gives you a better idea of what it might be...

Reference 2 - 1.15% Coverage

JX There's two things – one is this should be in addition to the information that is already laid out, so if it's a poster then at the end of the board, the stand, this should be actually on the stand as a means of giving you some more information. Second thing is, that this, the QR code, essentially doesn't mean anything unless what's behind the QR code – so the site you're going to – actually has, that's where the value lies. So if I for instance clicked on one, and I saw it and I, instantly it didn't really appeal to me, I would just close off and forget it. Whereas this one in particular is quite useful – it's the functionality behind it in that you can tailor it for yourself. If it was just a single webpage behind it with information about the car, the spec sheet of the car for instance, you probably might use it/might not. That one's got a little bit of activity...

BL The fact that it's calculating...

JX Yeah, there's a little bit of activity isn't there, so it makes you do something. So you haven't volunteered, it actually brings you in as opposed to something that's just another form of more information. It's another activity that probably keeps you keen

Quotes\\QR Code issues\Information tool - negative

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 2 references coded [0.27% Coverage]

Reference 1 - 0.21% Coverage

BL Alright, before we move on, any comments about the two types of tool – one was a calculator and one was more information

F Oh I didn't even read that, since it came up with all words I was like, oh, not interested

M Too much

Andy Yeah, boring

M2 Yeah

Reference 2 - 0.06% Coverage

M I'm like NXy – I read the first two lines then got fed up

NXy Yeah

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 2 references coded [0.43% Coverage]

Reference 1 - 0.30% Coverage

F It's brilliant – I think it's brilliant [cost calculator]. Whereas the other one that we used is too much information, too much print and like, you know just standing in the showroom you have to read it all – it wouldn't interest me

BL So you would prefer some calculator rather than flat information

F Yeah

Reference 2 - 0.13% Coverage

Clive Well it just tells you everything you need to... and like you said, it's probably too much in your head isn't it

F Yeah. It is

Quotes\\QR Code issues\QR Codes - awareness

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 2 references coded [0.47% Coverage]

Reference 1 - 0.21% Coverage

BL So you don't know what they are called but you know what you do with them? What do you do with them?

F You point your iphone or you smart phone whatever you've got to it, and it downloads the information onto your phone

Reference 2 - 0.26% Coverage

BL What do you think they are for?

F Quickly downloading information

BL Quickly downloading information, any other

F I thought to get more information – I thought it took you – I have never used one but I thought it took you to the website, and, get more information

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.17% Coverage]

Reference 1 - 0.17% Coverage

The starting question is, do you recognise those patterns?

M Yeah

F Yeah

BL Yeah? Ok, to start off with, a quick show of hands if you know what they are, or have seen them before. 4, 4 or 5 – 5 and a half.

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 4 references coded [0.49% Coverage]

Reference 1 - 0.19% Coverage

TX I could scan that on my phone

F Yeah

F2 I know what I'm going to say to you...

BL TX's already trying to scan. Has anyone not seen this before?

F2 It's a QR reader, yeah a QR code

Reference 2 - 0.07% Coverage

BL Yeah, not. Ok – 2. Has everyone else seen them before?

F Yeah

F2 Yep

Reference 3 - 0.15% Coverage

BL Ok, DX, you obviously recognise them, and you TX, do you DX, know what they do?

DX Yeah, they take you straight through to a website

Reference 4 - 0.08% Coverage

F I see them all over the place – literally, on ads, in magazines, on bill boards...

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 1 reference coded [0.16% Coverage]

Reference 1 - 0.16% Coverage

BL Martin, no? RX and Hue?

Hue Yes I've seen them

BL Rob? Yeah. KX and Sonya?

BL For JX... No for Sonya, yes for Kath. So most of you have seen them but...

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 2 references coded [0.32% Coverage]

Reference 1 - 0.18% Coverage

BL Jane, have you seen them before? Yeah?

Jane I've seen them but I haven't used them

BL Ok, Brian?

Brian Yeah I've seen them

BL Kevin?

Kev I haven't, no

Reference 2 - 0.14% Coverage

BL Ok, JX, yeah?

JX Never seen them

BL Never seen them? AX?

And I've started seeing them but don't know much about it

Quotes\\QR Code issues\QR Codes - how tools might be used

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 2 references coded [0.37% Coverage]

Reference 1 - 0.20% Coverage

M I suppose it's accessibility as well – the fact that you have got the information to hand when you are going out looking for vehicles, whereas normally when you're researching it you are at home on the computer

Reference 2 - 0.17% Coverage

M (Ton) I think it's accessibility – it's having the information available if you want to use it, depending on your technical knowledge, your need to know. It's as simple as that

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.18% Coverage]

Reference 1 - 0.18% Coverage

M I think the QR codes want to be available when you're at home, not just in the showroom

BL Yeah right, so you need it away from the label as well

M In the brochure – take away the brochure and it's there. Straight to it

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 2 references coded [0.74% Coverage]

Reference 1 - 0.57% Coverage

GX Great. I was really impressed – I've never really used one of these before, and when we did the calculator I thought that was brilliant. See if you could even have that on – I'm sure they could put that on the pictures in What Car? magazine or whatever, or somewhere, you know, on the brochure or something, then you can do your own

calculations instead of being in the showroom. Wherever that can be – brilliant, I thought the calculator was excellent and so it came up with per mile, per whatever... And you know, it was giving me a good bit of information that I thought was brilliant.

Reference 2 - 0.17% Coverage

TX Yeah I do think it's good because you don't have to stand around in the showroom reading things, you can take it home. Once you've zapped it you can then store it on your phone

Quotes\\QR Code issues\Reactions to using QR Code reader - negative

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.32% Coverage]

Reference 1 - 0.32% Coverage

TX To be quite honest BX, I was just thinking, if you were involved in a traffic accident and you had killed somebody, for arguments sake, your iphone is available for evidence in that inquiry – and you have recorded yourself as a boy racer – I mean...

BL So maybe we need some t's and c's on there. So just to reflect, generally..?

<Internals\\Round 2\\Car Label Survey Transcription CARDIFF vFINISHED> - § 4 references coded [1.05% Coverage]

Reference 1 - 0.10% Coverage

F I've seen them but I don't use them, because for me, it's too technical. I'm just not interested

Reference 2 - 0.20% Coverage

JX It's particularly limited. Generally it will take you to a third party website with the information there – so it will essentially cost you money to scan it and see the data. So for me, it's very useless

Reference 3 - 0.17% Coverage

Martin You know, I'm interested in things like this but, yeah, if you didn't know what this was you'd be stuffed. Like, I've never seen this before in my life, so for me...

Reference 4 - 0.59% Coverage

M2 I agree, I think in fact you are far too excited about the QR code – the QR code is the equivalent of your finger – that's all it is

M Yeah

F Yeah

M The crucial aspect is the app

M2 So this, all the QR code does is take you back to an internet site – so whether you're sitting in your office, whether you're sitting at home, whether you're sitting in Starbucks, it doesn't matter – all you are doing is linking to a website. You know, it's the website behind it – how you access the website, whether it's through a QR code or with your finger typing into the keyboard, I think is less important

Quotes\\QR Code issues\Reactions to using QR Code reader - positive

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 4 references coded [1.28% Coverage]

Reference 1 - 0.61% Coverage

BL Ok, if we can come back as a group. The first question for you is really easy. What are your impressions about the technology? 6 of you had seen the QR code...

Marg Brilliant

BL Margret, you say it's brilliant?

Marg Yeah it's brilliant

BL Yeah, we've got a fan. What about those of you who hadn't seen it? What it Heather, JX KX and JX?

F Yeah, yeah

BL What did you think?

F I thought it was amazing

F2 We thought it was really good

BL You thought it was good?

F Yeah, really simple

BL Even though you had never seen it before, using it was simple?

F Yes, I thought so

F2 It was easy and simple

Reference 2 - 0.26% Coverage

TX I think the technology is brilliant – we both thought that. I don't have this facility on my phone at the moment. The only concern I really did have was when you come to the categories of your style of driving, is this information going straight to your insurance company?

Reference 3 - 0.17% Coverage

M (Ton) I think it's accessibility – it's having the information available if you want to use it, depending on your technical knowledge, your need to know. It's as simple as that

Reference 4 - 0.24% Coverage

BL Last bit, do you think that the calculator tool – does it address all the problems that you mentioned before about not being an average driver, 12,000 miles?

F Yeah

F2 Yes it does

M Yes

F Yes

F3 Because you put your style of driving in

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.18% Coverage]

Reference 1 - 0.18% Coverage

BL [1:44:44] Ok, if we can come back together as a group now. What are your initial reactions about the technology, and where you ended up?

Russell It's very good, but I would say you've got the wrong age group here [laughing].

<Internals\\Round 1\\Car Label Survey Transcription LONDON FINISHED vf> - § 2 references coded [0.74% Coverage]

Reference 1 - 0.57% Coverage

GX Great. I was really impressed – I've never really used one of these before, and when we did the calculator I thought that was brilliant. See if you could even have that on – I'm sure they could put that on the pictures in What Car? magazine or whatever, or somewhere, you know, on the brochure or something, then you can do your own calculations instead of being in the showroom. Wherever that can be – brilliant, I thought the calculator was excellent and so it came up with per mile, per whatever... And you know, it was giving me a good bit of information that I thought was brilliant.

Reference 2 - 0.17% Coverage

TX Yeah I do think it's good because you don't have to stand around in the showroom reading things, you can take it home. Once you've zapped it you can then store it on your phone

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.12% Coverage]

Reference 1 - 0.12% Coverage

So even those of you who haven't seen the technology before, broadly thumbs up?

M Yeah

M2 Yeah

F Yeah

Quotes\\Trade-offs\Fuel efficient cars cost more

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 1 reference coded [0.82% Coverage]

Reference 1 - 0.82% Coverage

F2 They are just trying to inform us, aren't they, that there are much better ones there, but the trouble is that better one is probably £8,000 more, anyway, so...

BL Ok, so your observation is that, better in this sense...

F Yeah, like if you went to the best one, which is this What Car? one, you would save £1,220, but it would probably cost you another £8,000

BL So what do you feel about that figure that they have given you...

F Well I think that it is a really negative way of showing the car that you are interested in. I know that we have to be informed, but I think everybody knows that if you have got the money to buy the best car, you are going to get the best emissions, you are going to get the best fuel – you are going to get everything the best

BL Do you actually think that it is necessarily going to cost more?

F Yeah

F2 Well yeah

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.35% Coverage]

Reference 1 - 0.35% Coverage

NB Ok, that's an interesting point, is that everyone else's perception, also is that...

Jan We would all like to be able to drive those cars, and have those cars, but we can't all afford to purchase them

NB So the more efficient cars, or the cars with the lowest miles per gallon...

Jan Are out of our price range

NB ...are more expensive initially

Jan Yes

NB Is that something that a lot of people think?

M Yeah

M2 Yeah

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 6 references coded [2.30% Coverage]

Reference 1 - 0.10% Coverage

M If the price was better I would, yeah. They hike cars up based on the fact that it's eco friendly.

Reference 2 - 0.06% Coverage

F But if it was going to cost me more I wouldn't get an eco one

Reference 3 - 0.45% Coverage

BL Yeah? Anyone want to say a little bit more? Would it change your mind if you knew that there was a more efficient model – not the one that you were just about to buy – would it make any difference to you?

M Yeah

F Yes. It probably would. But it would probably be more expensive to buy outright anyway

BL So you think that you might have to fork out a bit more?

F Yeah

F2 Yeah

BL Is that a general...

F Yeah

M Probably yeah

Reference 4 - 0.80% Coverage

Kev When you work that out over a year £950 saving, monthly and weekly, it's not a great saving is it. It is over the year when you look at it, but...

M It is about £20 a week isn't it. A grand a year is about £20 a week, give or take

NB How do other people - £950 saving a year – is that...

M But, you've got to weigh that up – how much is it going to cost to buy it

M Yeah

F Yeah

M That's only half the tale

NB So from this, it's only showing half the story?

F Yeah

M Yes it is

NB Is that a general view?

F Yeah

M Yeah

M2 It might cost a little bit more, £2,000 more, just to buy a diesel instead of a petrol – so diesel can cost you £2,000 or £3,000 more for the actual car

NB Right, and would you like to see all of that information on a label?

M Yeah

Reference 5 - 0.66% Coverage

BL Ok, apart from the typo – so would you like to explain, just for the record, why it is extra useful information [on C2]?

Lin Because, it's showing you three examples, and it's also comparing to three different models of the Renault Scenic

BL Is that clearer in this one?

Lin Well it is, than the other ones were

BL Ok, can you put your finger on why it's clearer?

Lin Because to me, that looks like it's the basic model. That one is slightly more expensive and then that one will probably be the top of the range

BL Ok, so back to... there's an assumption that you will have to pay more for one that's more fuel efficient?

Lin Yeah

Reference 6 - 0.23% Coverage

M It would be incredibly useful to see the price of each car, and what it's showing, you know, the price of each one

F To buy outright

BL We've come back to, yeah, the key issue that, yeah, you've probably got to pay more

Quotes\\Trade-offs\Newer cars have lower emissions

<Internals\\Round 1\\Car Label Survey Transcription BIRMINGHAM FINISHED vf> - § 2 references coded [0.97% Coverage]

Reference 1 - 0.27% Coverage

M Yeah, what's it mean? Also, the fact that the B to C on the best BMW could relate to a brand new one, but if you are buying a second hand vehicle you wouldn't expect it to be in the lower exhaust emissions, sorry, the higher exhaust emissions, because the technology wasn't there...

Reference 2 - 0.70% Coverage

M But NX this... this comes back to what I was saying before about costs of a second hand car, the technology available at the time of the building of that vehicle, and what you're purse can afford. I mean, if you are buying a car three years on, you don't expect it to perform in the same category as a brand new 3 Series BMW – with the exhaust emissions being so low. So, this has a particular purpose, bespoke to the particular vehicle that you are interested in buying, but some of the figures, maybe are not fair to do a comparison on what is a brand new vehicle, one year old vehicle, two year old vehicle, to a six or seven year old vehicle, that maybe somebody is still interested in buying, but these then would confuse the issue

<Internals\\Round 1\\Car Label Survey Transcription EXETER vFINISHED> - § 1 reference coded [0.22% Coverage]

Reference 1 - 0.22% Coverage

Jan But you know, to avoid paying high taxes, and having cars that are more economical, you've got to initially pay out for a new vehicle, to get those issues with... so that your running costs are cheaper, your tax is cheaper. But initially you've got to purchase that car

Quotes\\Trade-offs\Other trade-offs

<Internals\\Round 2\\Car Label Survey Transcription EDINBURGH vFINISHED> - § 1 reference coded [0.58% Coverage]

Reference 1 - 0.58% Coverage

F I suppose, looking at it, if you look at the first one and you're like, you save some money, you won't loose all the features of what you like – you're going to do a little bit of sacrifice on maybe one or two features, but then you're saving, rather than saving loads by giving up all the nice extra that you have. So it's showing you more options

BL How do you know you're going to lose some extras?

F Just because it's a different car – I'm just guessing

BL Ok, that's your intuition is it?

F That's what I would think, definitely, yeah

<Internals\\Round 2\\Car Label Survey Transcription LEEDS vFINISHED> - § 1 reference coded [0.21% Coverage]

Reference 1 - 0.21% Coverage

Rich Less efficient is probably more expensive

BL You don't think it would necessarily be more expensive?

Rich No. If you got for like a Porsche 3-litre V8, whatever it is – that's not efficient at all

LowCVP
low carbon vehicle partnership

LowCVP Car Buyer Survey:

Testing alternative fuel economy labels

Research conducted by Ecolane Consultancy & Centre for Sustainable Energy on behalf of the Low Carbon Vehicle Partnership

Dr Ben Lane (Ecolane Consultancy)
Dr Nick Banks (Centre for Sustainable Energy)
Dr Jillian Anable (University of Aberdeen)

Appendix 6 – Test label development (John Alderson)

Centre for Sustainable Energy

Ecolane Transport Consultancy

UNIVERSITY OF ABERDEEN

LowCVP Car Buyer Survey: Testing alternative fuel economy labels

Project commissioned by the Low Carbon Vehicle Partnership

Project managed by Dr Ben Lane, Ecolane Transport Consultancy

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Appendix 6 – Test label development (John Alderson)

Acknowledgements

Design work was in great part the product of a regular and productive dialogue between myself, Gloria Esposito (LowCVP), also referencing regulations and coordinating stakeholder input, and Ben Lane (Ecolane).

Professor Rob Waller (Simplification Centre at University of Reading) advised on a design approach connecting with behavioural economics and closely integrated research methods.

This report is a think piece

Ben Lane has contributed an account of the design development and findings of research, also presented in the webinar hosted by LowCVP on their website, 'Behavioural and Other Measures'. Rather than producing a similar account, this report reflects on challenges and opportunities encountered during the work relevant in the designer's opinion for the bigger challenge to come: to shape a whole ecosystem of information to support consumers in choosing more fuel efficient vehicles and driving behaviours.

Design has not always been a stakeholder in consumer labelling and regulation, even if a form of designing always took place. Energy labels have made an arguably slow evolution in design and technological terms from the first instruments of regulation. Many schemes in circulation today can be recognised as archaic in the current media landscape, itself changing fast. So the think piece aims to stimulate decidedly new and near-future ways of looking at the problem and potential solutions.

The report begins with a short review of the project scope, process and deliverables.

Scope

UK DfT have asked LowCVP to oversee the revision of the current fuel economy label that can more directly drive an increase in purchases of the most fuel efficient cars.

The requirements accompanying the brief were focused on a small set of amendments to the visual presentation of information on the label. A then recent review by Ecolane called for the display of comparative information, clearer cost information, more visibly linked consumption and emissions metrics and the incorporation of a QR code.

Through the design and testing process, the ultimate scope of the initial design and testing phase was to start to establish an information architecture and core design language for a paper label as the initial representative of a comprehensive system of labelling information and tools. The testing looked to find out what elements and arrangements, including those designed to influence behaviour, were most acceptable by would-be consumers (though not what is effective in real purchasing decisions).

Process

The design work followed a process typical for the design of user interfaces (UI) – or the rather less documented practice of information design for complex communications.

The process included: a Discovery phase to base work in the context of the current consumer landscape, the mechanics and language of fuel efficiency, and research on attitudes and behaviour; a Content Strategy to compile and consider alternatives for sets of information the labelling could present; the schematic layout of Wireframe label concepts to trial the content strategy within the constraints of the artefact; finally Prototype designs to using the tools of graphic design to explore alternative executions and prepare realistic labels for testing.

The shape or 'envelope' of this process brought a higher level of enquiry and divergence to the challenge than a focus on graphic presentation alone would have allowed – not simply design, but elements of design thinking. It made room for fresh thinking and iterative development.

Deliverables

The more explorative and iterative process led to a proposals for a new label that both satisfied and reached beyond the stated requirements.

As an additional deliverable, the large number of ideas and prototypes created during the process and the conversation that took place around them form a potential resource for faster learning and innovation in the creation of broader labelling solutions.

Challenges faced in designing

The most significant challenges faced during the design process are discussed in order of their appearance, along with the response and learnings.

Mandatory information

The mandatory prescription of information by the EC regulation posed some challenges. For example, the label prototypes describe city and motorway driving as urban and exta-urban 'drive cycles' with no additions in the interests of keeping the quantity of information low. The regulation also introduced a mix of imperial and metric units, best seen in the pairing of miles per gallon (MPG) and L/100km.

The design responded to these challenges mainly by placing less relevant or confusing units lower in the typographic hierarchy, in small grey text. Testing participants called for consistency. Most stated preference for units in miles and supported MPG equivalent on EV and PHEV labels.

Consistent names for car models

Reference to a small number of major car listings websites led to the observation that car range and model names, such as 'Renault Scenic Dynamique TomTom 1.6 VVT 110' were inconsistent. The design responded by aligning to the listings website where the names were at their least cryptic, with no less of specificity.

Which is best, more or less?

This challenge concerned the logic of the major metrics, CO2 emissions, MPG and fuel cost, where respectively less is: less; more; less. Not just confusing for the designer, but potentially also for

consumers, especially those new to the label information. The design that responded best to this challenge was the dashboard design, working particularly hard to arrive at 'dial' design for MPG that visually explained that further is better and another for fuel cost that underlined the concept of less is better (inspired by the air heating dial in cars).

Forgoing usability

Without testing labels in use in the actual context of a showroom, the design needed to forgo relying on evidence about usability. Unanswered questions included the optical size necessary to read certain elements from a distance and what consumers considered the most appropriate distances would be. For example, the first placement of the QR code sized it at around a quarter of the overall size of the label, the size allowing for scanning of a label on the windshield from a standing position at the front bonnet. (See questions and opportunities: best balance).

Transferability

A challenge might be found in future work where comparisons of cars within model range need to be made clearly distinct from comparisons within class or other categories. Clear language and design is especially important to respond to this challenge, since testing participants already experienced difficulty with the concept of model range.

Better questions, new opportunities

The design work prompted better questions and highlighted new opportunities. Please note: there's a distinction to point out below between references made to the paper label and speculation about a future labelling system in which the paper label is one of a number of information touch points and tools.

More ways to influence behaviour

Jillian Anable (University of Aberdeen) commented on the lack of applicability of subconscious, nudge-style influencing techniques to car labelling. In contrast, the MINDSPACE framework developed by the Behavioural Insight Team in the Cabinet Office can be more directly applicable to communications, since it includes many rather more overt techniques that marketers and communication designers have drawn upon for decades. The design proposal listed ideas to try against all nine strategies in the framework (Messenger, Incentives, Norms and so forth), but the work has explored some of these paths more than others.

Branding

There remain opportunities to explore partner logos, co-branding and visual similarity to other schemes to lend the labelling the most credibility and influence (Messenger). Who do consumers trust the most, for what kind of car information?

Wireframe concepts proposed label versions in the style of What Car and co-branded with DfT. Final prototype designs for testing included a label with a What Car panel. Findings recorded a positive reaction to information from an independent source. Would partnering with What Car and DVLA really have the same effect?
Meanwhile, there's the 'own brand'. The findings in two rounds of testing of prototype designs add strength to the argument that the coloured energy scale, perhaps more reliably than its function as an information device, operates for many consumers as a brand mark. There is an opportunity to build a strong national-level scheme or campaign brand around this key visual asset, where it can come to stand

for values we want to ascribe to and incentives we've experienced across areas of life: car; insulation; smart meters; etc (Commitments).

Peer influence

Web-based solutions can grasp opportunity to incorporate opinion-poll results, car sales figures, and peer reviews, data and ratings (Norms). The web service Fuelly (fuelly.com) is an example of a potential source for real-world MPG information about over 125,000 vehicles. Alternatively digital data could be fed from in-car MPG monitors included in the dashboards of new vehicles. Incidentally, some of these new dashboard displays encourage 'hypermiling' through game-like dynamics, producing scores during a journey.

Tone of voice

The work on improving messaging for prototype labels focused on clearer English. The opportunity is to shift from the current label's bureaucratic DNA to a still more personal tone of voice (Affect). Who is speaking and to whom? Is there more than one voice: for messages about savings; for Ts&Cs?

Best balance

What should be biggest on the label? (Salience) It is not yet known what physical interactions with a paper label in the real-world context of a showroom will be most conducive and engaging for consumers.

Designing and researching prototypes for multi-channel solutions can uncover this. For example, how close to the paper label will consumers expect to go: to glance or read more closely; when viewing up to ten new cars in a showroom, or many times than in an used car lot? What fresh constraints does this place on the presentation of information, its quantity and size?

An ecosystem of labelling information

There is an opportunity to design a labelling system comprising a range solution across other channels and at other points in the car buying process: a small box version for quoting in an ad; ensuring the shape fits on a smart phone screen; and an in-line set of symbols that might appear in the What Car listings, dealer stock lists etc. The life of the information continues outside of these applications, for example in social media and person-to-person interactions, forming the wider ecosystem.

Digital media

The digital media landscape is changing fast and in ways that are hard to predict. A future-proofed labelling system is digital first, multi-platform and adaptable, that can be versioned, built and rebuilt. Why digital first? Because digital labelling applications will be richer and more engaging than paper solutions. They can provide up-to-date information, tailored to personal preferences, more powerful comparison tools and other functions such as sharing and tracking. They enjoy greater traction than paper labels. Developing digital applications can help us shape the role and content of the paper label and plan version updates for both.

With an average of 300-400 mobile apps released daily, a fuel economy mobile app is in the sights for entrepreneurial third parties. The opportunity is to start developing now.

The mobile web

By 2015 more people will access content and services via the mobile web on smart phones and tablets than via fixed line services on laptops and computers, according to the International Telecommunication Union (ITU). This is greatly relevant for car labelling, because labels are encountered by people viewing cars in person, on the move.

Linking print and digital content

With the rapid growth mobile web, where's the place for paper?

Two prevailing affordances of paper labels could be to capture attention and offer an instant link to information delivered on digital platforms. Trend watchers refer to 'Point & Know', the desire for 'instant visual gratification'. There's an opportunity to discover the ways the paper label can perform this linking role best for the most seamless, gratifying and repeatable experience.

If QR codes are being superseded by more integrated or invisible linking technology – such as Blippar (blippar.com) – which will work best? Is the label designed to become obsolete? An extreme endpoint is scannable vehicles, via license plates or advanced model recognition.

Inclusive design

For now, a new paper label can be accessible to people with grasp of basic English and no significant visual impairments. Digital applications can ensure an inclusive system of information with other sensory aids (audio and so forth) for people with hearing and visual impairments and mental health difficulties.

Print on demand

As well as making paper label templates compatible with existing data and printing systems, there may be opportunities to innovate with print. For example, what if consumers could request to print labels for selected cars showing today's fuel costs?

John Alderson
Information Designer

Appendix 7 - LowCVP member's views and comments on the alternative label design testing study results and recommendations.

Ricardo

In full agreement with the findings of the paper for conventional and hybrid vehicles – I think the "Dashboard" approach is much clearer, and mpg is a more intuitive metric for most buyers of these types of vehicles. I also applaud the cost/mile calculator.

The area where I am not in agreement however is around presenting Electric energy consumption as mpg equivalent.

Our work for ETI for instance has shown us that consumer attitudes, behaviours and messaging change significantly after real world exposure to electric vehicles, and that prior to this exposure (as was the case for the focus groups) consumers don't understand the questions to ask. I suspect the results of the study are therefore highly questionable in this area. Further study would be required on how they would rationally use this data in purchasing a vehicle.

I can fully understand that a focus group may feel more familiar with mpg than with units like Wh and km, but that is due in part to their complete unfamiliarity with the technology. In practice they cannot use an mpge number to make any rational calculation regards the costs, energy use, or emissions of an EV, or any rational comparison with another technology.

In practice, UK consumers will buy electricity in kWh and consume it by driving miles (or km). They will never engage with a gallon of anything, and conversion to "gasoline equivalent" is equally meaningless - do you do it by energy content (in which case is that at the wheels, at the power station, or the energy content of the power station fuel) – or do you do it by running cost equivalent or CO2 equivalence (taking into account the grid mix). I believe this approach is fundamentally flawed and I strongly oppose it.

For an EV or a PHEV running in electric mode, I would strongly suggest the use of miles/kWh or km/kWh as these are the units with which the consumer engages.

For a PHEV, the messaging is inevitably more complex, but I would advocate quoting separately:

- EV mode miles/kWh, pence/mile and maximum EV range (A mode)
- Hybrid mode mpg and pence per mile (B Mode)
- Combined cycle (kWH + gallons)per mile and pence per mile (weighted A+B)

This has the advantage of referencing the A and B mode data from the conformity certificate, and gives the user a true picture of the resources they will consume when driving. Most PHEV buyers work on the basis that their daily commute will be electric (for which A mode is relevant) and long journeys in hybrid mode (for which B mode is relevant) the combined cycle gives some indication of the total cost of ownership. This messaging will also encourage EV mode use in PHEVs by making apparent the lower costs/mile.

Nissan

We feel very strongly against displaying the charging times as the charging issue is so complex. It would be much better placed on a QR code where types of charger and the amp of cables which vary the charging times can be carried out.

Finally, for us it is not clear on range extenders that the mpg is purely in electric mode. On the Vauxhall website it says the when the petrol generator starts the mpg is in the 50s. It is misleading because the 234mpg is shown on the liquid drop + a battery charge.

Recharge time

- This is too complicated an area to feature on the label as it depends on the cable, type of charger, type of current etc
- Future models within an EV range could feature onboard chargers (potentially halving the recharge time), how would the label adjust for this? Would individual model derivatives then have different labels?
- Would recommend using a QR code to link to a website covering more of this or it will be very confusing for customers

Energy Savings Trust

In terms of state of charge where it says 8 hours on first label – do we need to caveat this with standard charge – rather than rapid or other?

On label 2 I like the VED/fuel cost bar I think this is quite good.

On label 4 I think the text under the pictures looks confusing and muddled as it is almost a table but not quite and starring at it for a while I was still a bit confused as to why it is there and what it is trying to say. But again maybe consumer reaction is most important on this.

Comcar

EV label

I don't know how the MPG equivalent has been calculated. Whilst it is good to have such a figure, it needs to be recognisable and explained.

ICE label

At first glance I got the impression that the "Pay ....more" and "Save £220" applied to the car that I had selected. Most people will assume this, so the numbers should be from the point of view of the selected car. The "Save £220" is very confusing because it is next to this car. Also the description of the most efficient car lies underneath "this car".

PHEV label

I would like to see the usage and cost per mile split between running on just electricity or just petrol. Then I can make my own decision on which mix best applies to my driving

SMMT

This report is an interesting and genuinely collaborative attempt at resolving a difficult issue with numerous competing demands. SMMT has the following comments to offer:
1. SMMT members are very keen to have a harmonised design for EV/PHEV labels rather than VMs being left to design their own labels.

2. All the research is consistent in emphasising the importance of simplicity in label design. Beware of the label's intended impact on consumer behaviour being diluted or negated by "information overload."

3. The LowCVP research is an interesting and genuinely collaborative attempt at resolving a difficult issue. However, further work is needed to develop something workable. SMMT would echo Ecolane's own conclusions that the designs proposed are just one interpretation of the findings of the research and further testing is needed.

4. It is core business for SMMT members to know their customers and they have serious reservations that the proposed label designs are too complex for the average customer both visually and linguistically.

5. Unfortunately the designs bear the hallmarks of design by committee and, in this case, by focus group. There are numerous metrics and comparators and it seems to have lost sight of **the primacy of simplicity** and the fact that less can be more.

6. To optimise the label for the desired outcome (changing purchasing behaviour), simple metrics and simple comparisons are required, based on type approved data. The label needs to remain focussed on CO2 output and, in the UK, this has traditionally been related to the annual cost of fuel and VED.

7. If a consumer is asked whether ten different pieces of information are interesting or helpful they will inevitably say yes. However, it seems that there is a need to ask them to prioritise and limit them to just a few metrics.

8. SMMT members object to the proposal for an "MPG equivalent" metric for PHEVs and pure EVs, which aims to satisfy the logical and frequently sought after efficiency comparison between EVs and conventional vehicles. The customer understands that EVs are charged with electricity and not with gallons of fuel. Customers understand that liquid fuels and electricity have different impacts (oil dependency, emissions, footprint, etc). MPG equivalent risks confusion over what is the type approved MPG data and why there are two contradictory MPG ratings on the label.

9. Given that several years ago many VMs chose to invest in their in-house systems to print labels rather than use the VCA label system, on cost grounds, any new design will have significant additional costs for them. It is important to consider the foreseeable result of imposing a new design with such additional costs at a time of financial difficulty: dealers returning to the plain black and white label, which is the minimum required in law. This would be undesirable given all the hard work that has gone into promoting the colour coded label to the extent that it is displayed in 93% of dealerships.

10. SMMT recommends that serious consideration is given to deferring the decision on how to proceed until the outcome of the European Commission's consumer research on the effectiveness of different label formats is known at the end of 2012.

11. Given the time pressure for pure EVs to have a label available to them from 3 January 2013, SMMT welcomes the approach agreed with DfT and VCA for the Vauxhall Ampera, ie to make limited adaptations to the existing label design to reflect the core metrics for a PHEV/E-REV. A limited number of PHEV and pure EV models are anticipated in showrooms in the next year, so these labels could be made available as PDFs on a static web page (as is the case for the Ampera), rather than investing in new capabilities for the labelling system.

12. There is no need to have different labels for an extended range EVs (E-REVs) and plug-in hybrid EVs (PHEV). The PHEV terminology is used in UNECE Regulation 101 and this should be used on the label. Such complexity for the label is unnecessary, product differentiation will come in the marketing materials.

13. Implications for the label design may also arise from E85, dual fuel and hydrogen fuel cells.

14. There remains some debate amongst stakeholders about whether the label should be on an absolute or relative scale.

15. Some members remain to be convinced that the comparison within a model range is useful. It may be worth considering whether there is value in explicitly referencing the reasons for:

a) including a comparison: there are cars with CO2 emissions around 30% below the segment average available in every segment; and

b) for buying a new car (new cars are 18.0% more efficient than the average car in use in the UK).