



Raising standards for consumers

The Consumer Voice in Europe

Empower EU consumers through visible and clear labelling information on CO2 emissions from new passenger cars

ANEC & BEUC call for a review of the car labelling Directive 1999/94/EC

Long version

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Summary

The EU strategy to reduce CO₂ emissions from passenger cars partly relies on the requirement that information on fuel consumption and CO₂ emission values of new cars is easily accessible for consumers. The EU Directive 1999/94/EC requires that this information must be displayed on a label attached to the windscreen of all new passenger cars at the point of sale, on posters and other promotional material, and in specific printed guides which have to be published to provide consumers with relevant information on all car brands and models.

Due to a lack of specific requirements, the Directive has been implemented very differently by EU Member States. Recent market surveys revealed that consumer awareness of the label – while still low – appears to be growing steadily, particularly in those EU countries that make use of a colour-coded rating scale.

Unfortunately however, in many EU Member States the CO₂ and fuel consumption label has not reached a high level of recognition and/or the requirements by the Directive have not been implemented in a way that maximizes their impact.

For instance, in several countries, including the Czech Republic and Poland, no standardised label format exists. This makes it much more challenging for consumers to compare at one glance the fuel consumption and related CO₂ emissions of a particular car with other models available on the market.

Nevertheless, many Member States already present CO₂ or fuel consumption information in the EU Energy Labelling-style format. Due to the lack of clear rules set by the Directive, some Member States, however, have adopted controversial labelling designs such as the “weight-based relative scheme” applied in Germany which bears a high risk for confusion when large and heavy cars with absolute high emissions receive a better rating than small cars with lower emissions.

We therefore support a revision of the car labelling Directive by standardising and optimising the format of the label across the European Union in order to make sure that all EU consumers are provided with information that is given in an intuitive and user-friendly way allowing simple and accurate comparisons between cars.

More precisely, we support harmonisation of the key elements of the Directive. However, some flexibility should be included in order to enable countries to adapt the Directive to national circumstances.

We support the introduction of a harmonised format of the CO₂ label where the **key elements** of the format of the label should be standardised:

- Use of a colour-coded comparative rating scale ranging from class A to class G as the main focus of the label;
- Classification of cars along the A-G rating scale according to their absolute emission levels (“absolute labelling scheme”);
- The long-term objective should be that the classification of the rating scale should be based on well-to-wheel CO₂ emissions as the measure of comparison in order to make all vehicle types comparable;
- Set CO₂ thresholds of the labelling classes at EU level;
- Periodically tighten the criteria for achieving the rating classes to keep up with technological changes.

In addition, we recommend that Member States should provide the following information on the label **in a standardised way**, but adapt the label to **national circumstances**:

- Information on fuel consumption to be expressed in the metric used in the Member State;
- Mandatory information on fuel costs based on national fuel prices;
- Mandatory information on tax related information adapted to national circumstances;
- Additional information provided in the country-specific language (s).

Moreover, the Directive should be extended to cars rented or leased by professional companies and to second-hand cars sold by professional sellers, and to two- and three-wheelers.

We also strongly call on the European Commission to ensure that the newly developed test to measure fuel consumption of cars, the Worldwide harmonized Light vehicles Test Procedure (WLTP) will be swiftly introduced into EU law to enable consumers to get a more realistic picture on fuel consumption. If the introduction of the new test into EU law takes more time than anticipated, or does not sufficiently mimic real-life conditions, a scaling factor should be applied to convert fuel consumption values measured under test conditions into values that the average driver experiences in real life.

We also require that clearer and more visible information must be provided via all kinds of advertisements (including radio, the Internet, TV and cinema) as an additional measure to more effectively encourage consumers to buy cars that use less fuel and thereby steer the market towards more sustainable vehicles. All kinds of advertisements (except radio) should display the full A-G rating scale information.

Furthermore, the EU car labelling scheme must be accompanied by a more effective market surveillance system in all Member States.

Finally, we urge the European Commission to conduct further consumer testing and come forward with a proposal for a revision of the Directive in **2015 at the latest**.¹

¹ Our UK member Which? has contributed extensively to this paper and supports its direction and ambition but taking into account the specificities of the UK context, for example UK tax legislation, does not share certain key elements regarding the harmonization of the A to G band ratings or advertising requirements.

1. Introduction

The EU strategy to reduce CO₂ emissions from passenger cars relies on a three-pronged strategy:

- (1) **Mandatory emissions standards** aimed to increase the production of cleaner vehicles,
- (2) **Fiscal measures** to promote fuel-efficient cars, and
- (3) **Provision of information** to consumers on fuel consumption and CO₂ emissions aimed at steering consumers towards buying cleaner cars.

The information leg of the three-pronged strategy is regulated through Directive 1999/94/EC (*The car labelling Directive*). Its purpose, as stated in Article 1, "is to ensure that information relating to the fuel economy and CO₂ emissions of new passenger cars offered for sale or lease in the Community is made available to consumers in order to enable consumers to make an informed choice".²

According to the Directive, information should be provided to consumers through the following means:

- A fuel economy **label** for all new cars to be displayed at the point of sale;
- A **poster** (or a display) showing the official fuel consumption and CO₂ emission data of all new passenger car models displayed or offered for sale or lease at or through the respective point of sale;
- A **guide** on fuel economy and CO₂ emissions; and
- All **promotional literature** must contain the official fuel consumption and specific CO₂ emission data for the passenger car model to which it refers.

It is our assessment that in several EU Member States this instrument has not reached a high level of recognition and that the scheme has not been implemented in all countries in a way that maximises its impact. A recent survey among ten European Member States for instance revealed that still a large share (44.5%) of Europeans (car purchasers and non-purchasers) were not familiar with the CO₂ car label (Codagnone et al. 2013).³

However, recent market surveys also revealed that consumer awareness of the CO₂ and fuel consumption label – while remaining low – appears to be growing steadily. According to a survey conducted by the German Energy Agency (dena), awareness of the car labelling scheme among surveyed car buyers has risen slightly from 29 to 34 percent in the two years since the introduction of the new design of the car label in Germany.⁴ Similar results can be found in the United Kingdom. A study by the LowCVP showed that in 2009, 49% of new car owners and 29% of new prospective car buyers could spontaneously recall the car label in 2009, compared to only 36% of new car owners and 22% of new prospective car buyers in 2006.⁵

² See Directive 1999/94/EC of the European Parliament and of the Council of 13 December 1999 relating to the availability of consumer information on fuel economy and CO₂ emissions in respect of the marketing of new passenger cars.

³ Codagnone, C., Bogliacino, F., Veltri, G. (2013): Testing CO₂/Car labelling options and consumer information. Annex III Preliminary survey summary tables and graphs. Available for download at: http://ec.europa.eu/clima/policies/transport/vehicles/labelling/studies_en.htm.

⁴ http://www.dena.de/fileadmin/user_upload/Presse/Meldungen/2013/13-12-27_Umfrageergebnisse_pkw-label.pdf.

⁵ LowCVP (2009): Low CVP Car Buyer Attitude Survey: www.lowcvp.org.uk/assets/reports/LowCVP.pdf.

Even though familiarity with car labels in several Member States is still low, those consumers who are aware of the car label consider it as valuable in their purchase decisions. The LowCVP study revealed that 71% of those car buyers in the UK who remembered seeing the fuel economy label, agreed that the label helped them to choose the brand and model of their new car. These findings strengthen the label's role as a trustworthy source of information for car buyers, provided that consumers are aware that such information exists and given that the information is provided in an intuitive and user-friendly way allowing simple and accurate comparisons between cars. This is in line with the conclusion of the research performed by Codagnone et al. (2013) who revealed the way the information is presented will have a positive influence on familiarity and trust of the label and through that will have a long-term effect on label usage. In other words, the researchers suggest that "the most effective and easiest to understand label should be used to gradually improve comprehension and thus affect familiarity and trust and eventually impact label usage"⁶. Training of sales staff and better advertisement will play an additional important role in making consumers more acquainted with the label.

Unfortunately however, despite positive trends in terms of consumer awareness as mentioned above, the CO₂ and fuel consumption label has not reached a high level of recognition. Also, the requirements by the Directive have not been implemented in a way that maximises their impact in many EU Member States. For instance, the Directive does not require that information must be comparative across retailers. Hence, in several countries, including the Czech Republic and Poland, no standardised label format is foreseen in national legislation. This makes it much more challenging for consumers to compare at one glance the fuel consumption and related CO₂ emissions of a particular model with other models available on the market.⁷ Nevertheless, many Member States⁸ already present CO₂ or fuel consumption information in EU Energy Labelling-style format. Due to the lack of clear rules set by the Directive, some Member States even have adopted controversial labelling designs such as the "weight-based relative scheme" applied in Germany which bears a high risk for confusion when large and heavy cars with absolute high emissions receive a much better rating than small cars with lower emissions (e.g. in Germany, a BMW 7er Active Hybrid emitting 158 g CO₂/km is rated with an "A" whereas the smart fortwo coupé 62 kw emitting 120 g CO₂/km is rated with the class "E")⁹.

Thus, even though we consider setting ambitious minimum emissions performance standards for passenger vehicles as the major cornerstone of reducing CO₂ emissions from cars¹⁰, revising the car labelling Directive by specifying more clearly the requirements with regard to label design and advertisement will thus also be fundamentally important to enable consumers to better factor in efficiency and running costs when choosing a car and thus to better shape the market through increased consumer demand for more efficient vehicles.

⁶ Codagnone, C., Bogliacino, F., Veltri, G. (2013): Testing CO₂/ car labelling options and consumer information. Report produced for the European Commission, DG Climate Action: http://ec.europa.eu/clima/policies/transport/vehicles/labelling/docs/report_car_labelling_en.pdf, page 11.

⁷ Other Member States (e.g. Sweden, Hungary and Italy) only meet the minimum requirements of the Directive by using a simple format listing the required information in a list or table format.

⁸ Denmark, France, Finland, Germany, Romania, Spain, the Netherlands and the UK. See for more information: <http://www.europarl.europa.eu/document/activities/cont/201203/20120301ATT39663/20120301ATT39663EN.pdf>.

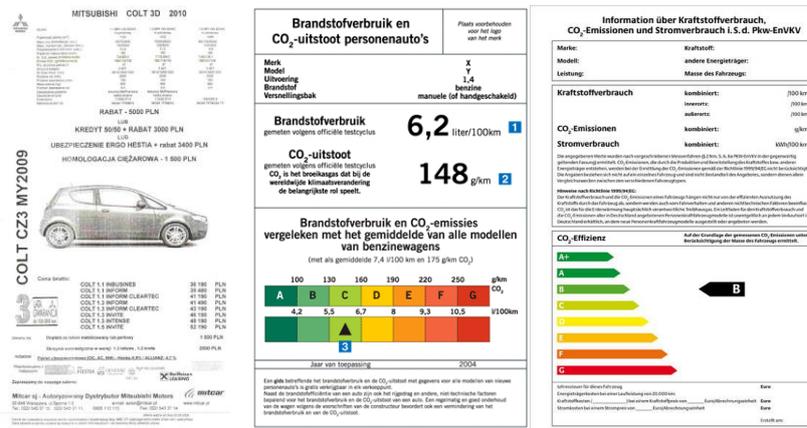
⁹ http://www.pkw-label.de/uploads/media/DAT_Leitfaden_2Qu_2014.pdf

¹⁰ See BEUC position papers on setting CO₂ emission standards for cars: <http://www.beuc.eu/publications/2012-00459-01-e.pdf>; <http://www.beuc.eu/publications/2013-00208-01-e.pdf>

2. Current situation with the car labelling Directive and its potential for revision

At the moment, the EU Directive allows Member States plenty of room for divergent national implementation. As a consequence, the car labelling scheme has not been implemented in the same way in the different Member States. More precisely, neither the layout of the label nor the concrete information it contains have been harmonised across the EU. For examples of differences in label design, see Figure 1.

Figure 1: Comparison between labels in Poland (*left*), Belgium (*centre*) and Germany (*right*)



Moreover, the Directive does not require that information must be comparative across retailers. Hence, in several countries, including the Czech Republic and Poland, where no standardised label format is foreseen in national legislation, every car dealer can use a different format. This makes it much more challenging for consumers to compare at one glance the fuel consumption and related CO₂ emissions of a particular model with other models available on the market.¹¹

Countries that have opted for displaying comparative information via the EU Energy Labelling-style format have chosen diverging rating approaches. Most countries have decided to opt for an **absolute labelling scheme** (e.g. Denmark, Belgium, France, Austria, UK and Portugal) whereas a few other countries have decided to opt for a **relative labelling scheme** (e.g. the Netherlands, Spain and recently Germany). An absolute labelling scheme means that absolute thresholds of CO₂ emissions are used in order to classify cars into specific categories. In contrast, a relative comparison means that cars are compared only to cars of the same category. Figure 2 shows that with a rating that is applied in Germany, a very confusing situation can occur where a small car (e.g. Citroen C1 with absolute emissions of 99 g CO₂/km) can receive the **exact same grading** (i.e. C) as a heavy and powerful car (e.g. Porsche Cayenne with absolute emissions of 189 g CO₂/km¹²).

¹¹ Other Member States (e.g. Sweden, Hungary and Italy) only meet the minimum requirements of the Directive by using a simple format listing the required information in a list or table format.
¹² http://www.pkw-label.de/uploads/media/DAT_Leitfaden_2Qu_2014.pdf

Figure 2: Classification of exact same car models

Country	Format	Porsche Cayenne Diesel (189 g CO ₂ /km)	Citroen C1 (99 g CO ₂ /km)
United Kingdom ¹³	Absolute A to M		
Switzerland ¹⁴	Relative A to G		
Netherlands ¹⁵	Relative A to G		
Germany ¹⁶	Relative A+ to G		
Belgium ¹⁷	Absolute A to G		
Denmark	Absolute A to G		

In addition, the Directive does not guarantee that information is provided to consumers in a visible way via all kinds of media. Only printed advertisements, including in newspapers, magazines and posters must display the fuel consumption/CO₂ emissions of the cars they refer to. Other means of communication, including television, the internet, radio and cinema are not required by the Directive to include such information. Finally, despite the Directive requiring information to be easily understood even at a quick glance, the wording is particularly weak regarding the specific requirements of the font size and the space which needs to be dedicated to such kind of information.

¹³ Car fuel data VCA UK: <http://carfueldata.direct.gov.uk/search-new-or-used-cars.aspx>

¹⁴ Verbrauchskatalog 2013: Fahrzeugliste mit Verbrauchsabgaben. Energie schweiz.

¹⁵ <http://www.rdw.nl/SiteCollectionDocuments/VRD/handleidingen/Brandstofverbruiksboekje%202013.pdf>

¹⁶ http://www.pkw-label.de/uploads/media/DAT_Leitfaden_2Qu_2014.pdf

¹⁷ http://www.health.belgium.be/internet2Prd/groups/public/@public/@mixednews/documents/ie2divers/3142391_nl.pdf

It is therefore our assessment that in several EU Member States, the Directive has not reached a high level of recognition and that the scheme has not been implemented in all countries in a way that maximises its impact.

For the purpose of providing better and more consistent information to consumers, the European Commission has been weighing up the opportunity to revise the car labelling Directive for several years already. Because of this, some Member States have put revisions of the national scheme on hold. The Commission's stated intention in 2008 to revise the car labelling scheme went unheeded. The file nevertheless resurfaced in 2010 when the European Parliament commissioned a study on the implementation of the car labelling Directive¹⁸ and again in 2011 when the Commission (DG Climate Action) followed suit and ordered its own report.¹⁹ In June 2013, a report commissioned by DG CLIMA was published where the effectiveness of different CO₂/car labelling options was tested.²⁰ Nevertheless, the work programmes for 2013 and 2014 by the European Commission have not included plans to revise the Directive. BEUC and ANEC feel that this is a worrying lapse and a *missed opportunity*. We urge:

- The European Commission should come forward with a proposal for a revision of the Directive by 1 January 2015 at the latest.

3. Key recommendations for an improvement of the Directive

We support a harmonisation of the **key elements** of the Directive in order to create synergies between Member States. However, we also believe that **some flexibility** should be included in order to enable Member States to adapt the Directive to national circumstances. It is therefore recommended to find a balance between allowing Member States to enforce legislation that is suitable with the national culture but at the same time is consistent with the requirements of the internal market.

Most importantly, we support harmonisation of the **key elements** of the format of the **label**:

- Use of a colour-coded comparative rating scale ranging from class A to class G as the main focus of the label (for more information see 3.1.).
- Classification of cars along the A-G rating scale according to their absolute emission levels ("absolute labelling system") (for more information see 3.2.)
- Use of well-to-wheel CO₂ emissions as the measure of comparison in order to make all vehicle types comparable (for more information see 3.3.)
- Set CO₂ thresholds of the labelling classes at EU level (for more information see 3.4.)
- Periodically tighten the criteria for achieving the rating classes to keep up with technological change (for more information see 3.5.)

¹⁸ Study on consumer information on fuel economy and CO₂ emissions of new passenger cars, Ecologic 2010: http://ecologic.eu/download/projekte/800-849/849/FC_4/849-14.pdf.

¹⁹ http://ec.europa.eu/clima/policies/transport/vehicles/labelling/docs/final_report_2012_en.pdf.

²⁰ Codagnone, C., Bogliacino, F., Veltri, G. (2013): Testing CO₂/ car labelling options and consumer information. Report produced for the European Commission, DG Climate Action.

In addition, we recommend that Member States should provide the following information on the **label** in a standardised way, but **adapt** the label to **national circumstances**:

- Information on fuel consumption to be expressed in the metrics used in the Member State (for more information see 3.6.)
- Mandatory information on fuel costs based on national fuel prices (for more information see 3.7.)
- Mandatory information on tax related information adapted to national circumstances (for more information see 3.8.)
- Additional information provided in country-specific language (s) (for more information see 3.9.)

3.1. Use of a colour-coded uniform labelling scale ranging from class A to class G as the main focus of the label

We suggest that in all Member States the label should make use of a colour-coded comparative rating scale ranging from class A to class G.²¹ Such a system is easy to understand and based on the model of the original energy label for household appliances (before it was revised in 2010 and allowed the introduction of additional plus classes), which is very well-known among consumers.²² Research by Consumer Futures (2009) showed that consumers have difficulties understanding the numerical measure of CO₂ used in advertisements.²³ A rating system therefore provides context for the numbers and helps people understand whether a certain number indicates good or bad performance.

Classifying cars against such a ranking scale would allow consumers to identify at a glance which car performs best in terms of CO₂ emissions. The simultaneous use of a similar label design for cars, household appliances and buildings will reinforce the impact and recognition of the labelling scheme in the several areas of application. A recent study ordered by the European Commission's Directorate for Energy has also recommended an alignment of car labelling with the EU Energy Label format in order to avoid consumer confusion across all products²⁴. Finally, recent research by LowCVP also confirmed that the rating class was a very strong visual element that was very much liked by consumers.²⁵

²¹ Many countries already use a seven-level rating scale ranging from A to G with 5 classes in between, based on the original rating scale used for household appliances. The UK, however, has decided to use a rating scale ranging from A to M with 10 scale classes in between. Germany, in addition, currently uses an 8-level rating scale ranging from A+ to G. In addition, Germany has already foreseen the introduction of the additional classes A++ and A+++ on top of the current highest class A+ in case a minimum of five per cent of the registered vehicles meet the requirements for achieving these efficiency classes in one calendar year.

²² The EU Energy Labelling scheme for household appliances had proven to be successful in increasing consumer demand for more sustainable products and had moved the market towards more energy efficient appliances. The high level of recognition enjoyed by the original energy label for household appliances stemmed from the convenient comparability of products it enabled.

²³ Consumer Focus (2009): Green expectations – consumers' understanding of green claims in advertising. <http://www.consumerfocus.org.uk/files/2011/01/Green-expectations-single-page.pdf>.

²⁴ Ecofys (2014) Evaluation of the Energy Labelling Directive and specific aspects of the Ecodesign Directive. http://www.energylabevaluation.eu/tmce/Final_technical_report-Evaluation_ELD_ED_June_2014.pdf

²⁵ Low CVP (2013): Future labels – Green Global NCAP Labelling / Green Scoring Workshop Global Fuel Economy Initiative. <http://www.lowcvp.org.uk/assets/presentations/IEA%20-%20FutureLabel.pdf>.

Therefore we recommend:

- The label should include a colour coded comparative rating scale ranging from class A to class G with five classes in between as the main element.

3.2. Classification of cars along the A-G rating scale according to their absolute emission levels (“absolute labelling scheme”)

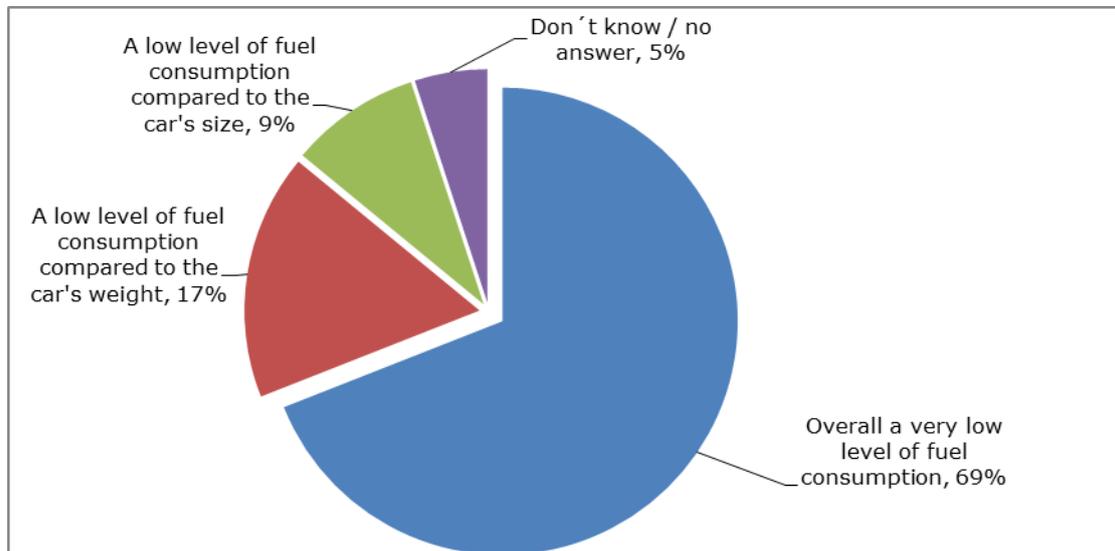
We consider that all information provided to consumers on the label should be expressed in absolute terms. Therefore, we recommend that cars should be classified along the suggested A-G rating scale according to the cars’ absolute CO₂ emissions (i.e. absolute labelling scheme) and *not* along a scale that is related to the cars’ CO₂ emissions compared to cars of the same size, weight or type (i.e. relative rating scheme).

The Netherlands for instance applies a relative label which is predominantly based on the size of a vehicle. Germany on the other hand uses a relative labelling system which is based on the weight of a car whereas the relative scheme of Spain is based upon the vehicle’s footprint (area between the wheels of the vehicle).

If the emission levels were expressed in relative terms, a large car which uses a lot of fuel and thereby emits a lot of CO₂, could still receive a top rating when amongst the most efficient cars of its class. Under the German labelling system for instance, the Audi Q7 3.0 TDI (CO₂: 189 g/km, weight: 2345 kg) falls under the energy class “B”, whereas the small car Toyota Aygo 1.0 (CO₂: 105 g/km, weight 930 kg) falls under the energy class “C”. Thus, a relative approach does not readily allow consumers to compare e.g. a sports utility vehicle (SUV) with a small city car.

A survey by the consumer centre of North Rhine-Westphalia with 1,006 German consumers conducted in July/August 2012 also showed that a large number of consumers expect a car that receives a top rating (i.e. A+) should have an overall very low level of fuel consumption, despite the fact that Germany follows a relative labelling approach. More precisely, consumers were asked what they personally expect from a car that receives the highest energy efficiency class A+ (which is currently the top rating in Germany). More than two thirds of the respondents responded that the A+ class stands for an overall very low level of fuel consumption of the car. Nine percent of consumers expected the top rating shows a car that has a low level of fuel consumption in comparison to other cars of similar size. Only 17% of the respondents expected that the A+ rating stands for a low level of fuel consumption compared on the basis of similar car’s weight, the system that is actually applied in Germany.

Figure 3: Expectations of German consumers towards a car with a top rating of A+ (1006 respondents; survey conducted in July/August 2012)



We see a high risk that this kind of misinterpretation of the label will lead to distrust towards the labelling system which undermines the effectiveness of the system. The recent report commissioned by DG CLIMA also concludes that "in a policy that in the short term should aim at increasing familiarity, trust, and comprehension [of the label] it seems more appropriate to use the absolute system [...]"²⁶ In addition, an absolute labelling scheme could be more easily linked to fiscal measures which are commonly related to absolute CO₂ emissions in many Member States.

Another argument against a relative labelling system based on weight as pursued by Germany is that less incentive would be provided to manufacturers to invest in light-weighting which is seen as a very efficient way of achieving CO₂ reductions. Using mass as the parameter to assign cars to efficiency classes might have the unintended negative consequence that manufacturers increase the mass of the cars in order to achieve a better rating without actually improving the CO₂ performance of the car.

Critics of an absolute comparison system state that such a labelling system would not provide consumers with useful information as most consumers already have one particular vehicle category in mind when starting with the purchase decision. Critics fear that applying an absolute labelling scheme would result in grouping all cars with high emissions under one class resulting in insufficient distinction between these cars. It has also been claimed in the past that smaller cars would always be classified in one of the top energy categories, allowing for no differentiation in this segment. Consequently, some argue that manufacturers of big cars would not be encouraged to invest in fuel efficient technologies and pressure to optimise fuel efficiency in the small-car sector would be low.

However, we believe that the capacity to distinguish between these high emitting cars is not hampered under an absolute scheme. Figure 4 provides an overview of the energy classes of different petrol model versions of several car models (Audi A3, Fiat 500, Opel Insignia) under the absolute labelling system applied in Belgium.

²⁶ Codagnone, C., Bogliacino, F., Veltri, G. (2013): Testing CO₂/Car labelling options and consumer information. Final report to DG CLIMA: http://ec.europa.eu/clima/policies/transport/vehicles/labelling/docs/report_car_labelling_en.pdf.

Figure 4: Comparison of the energy efficiency class ranges in Belgium of different car models

Audi A3 3D/P (petrol) (four classes B to E)

MODEL - MODELE - MODELL	CC	KW	PK-CV	VERSN. - TRAMS - GETRIEBE	VERBR. - CONS.	CO ₂	ENR-KLASSE
A3 3D/P - 1.2TFSI STRONIC	1197	77	7	S	5,3	123	B
A3 3D/P - 1.4TFSI	1390	92	8	M	5,7	132	C
A3 3D/P - 1.4TFSI STRONIC	1390	92	8	S	5,3	124	B
A3 3D/P - 1.8TFSI	1798	118	10	M	6,6	152	C
A3 3D/P - 1.8TFSI QUATTRO	1798	118	10	M	7,3	170	D
A3 3D/P - 1.8TFSI STRONIC	1798	118	10	S	6,5	149	C
A3 3D/P - 2.0TFSI AMBITION	1984	147	11	M	7,1	164	D
A3 3D/P - 2.0TFSI STR	1984	147	11	S	7,5	174	D
A3 3D/P - 2.0TFSI STRONIC AMBIT	1984	147	11	S	7,2	166	D
A3 3D/P - S3 2.0TFSI195	1984	195	11	M	8,5	198	E

Fiat 500 C (petrol) (three classes A to C)

500 - 0,9	875	63	5	M	4	92	A
500 - 0,9 MTA	875	63	5	S	3,9	90	A
500 - 1,2	1242	51	7	M	4,8	113	B
500 - 1.4 16V 99KW ABARTH	1368	99	8	M	6,5	155	C
500 C - 0,9	875	63	5	M	4	92	A
500 C - 0,9 MTA	875	63	5	S	3,9	90	A
500 C - 1,2	1242	51	7	M	4,8	113	B
500 C - 1,2 MTA	1242	51	7	S	4,7	110	B
500 C - 1.4 16V 103KW ABARTH	1368	103	8	S	6,5	155	C

Opel Insignia 4D/P (petrol) (five classes C to G)

INSIGNIA 4D/P - 1.4TURBO ECOFLEX	1364	103	8	M	5,7	134	C
INSIGNIA 4D/P - 1.6TURBO	1598	132	9	M	7	164	D
INSIGNIA 4D/P - 2.0TURBO	1998	162	11	M	8,1	189	D
INSIGNIA 4D/P - 2.0TURBO AUT.	1998	162	11	A	8,7	204	E
INSIGNIA 4D/P - 2.0TURBO184 4X4	1998	184	11	M	8,5	199	E
INSIGNIA 4D/P - 2.8 V6 TURBO 4X4 AUT. OPC	2792	239	15	A	10,7	251	G
INSIGNIA 4D/P - 2.8 V6 TURBO 4X4 OPC	2792	239	15	M	10,6	249	F

The comparisons include different versions of the same car models. For instance, the CO₂ emissions of the petrol version of the Audi A3 three-door model range from 123-198 g CO₂/km (the energy classes range from B to E). The CO₂ emissions of the petrol version of the Opel Insignia 4-door model range from 134 g CO₂/km to 251 g CO₂/km (the energy classes range from C to G). Finally, the CO₂ emissions of the Fiat 500 petrol models also range between 90 and 155 CO₂/km (energy classes from A to C).

These three examples therefore clearly show that the CO₂ emissions of the model versions can vary widely in one single vehicle model. To conclude, it can be shown that also under the absolute labelling system, the energy classes of the model versions can range quite remarkably, allowing sufficient differentiation within one vehicle segment. We therefore recommend:

- The classification of cars along an A-G rating scale should be based on the absolute emission values ("absolute labelling system").

In addition, it is suggested making use of targeted communication, highlighting that the fuel consumption and CO₂ emission values within each vehicle class can widely differ so that cutting down on fuel costs is not necessarily related to downsizing of the car but also through the choice of a more efficient model of the same category. Focus group research from the UK performed by the LowCVP (2010)²⁷ revealed that many car buyers still significantly underestimate the wide range in fuel consumption performance within one particular vehicle class. In addition, research by Anable et al. (2008)²⁸ revealed that drivers often hold the opinion that the only way to cut down on fuel costs would be through purchasing a small car.

3.3. Base label rating scale on well-to-wheel CO₂ emissions

It is of utmost importance that all kinds of cars independent of the fuel type used should be treated in the same way in order to ensure direct comparison of the environmental impact and the level of related fuel costs.

We therefore suggest basing the rating scale on CO₂ emissions in order to make all vehicle types (including diesel, petrol and alternative fuelled vehicles) comparable through using one technology neutral labelling scheme. Diesel engines emit more CO₂ per litre of fuel used than petrol-driven cars. Diesel on the other hand has a higher energy density, so less fuel is needed to cover the same distance with a diesel car in comparison with a petrol car. If the rating scale would be based on fuel consumption values instead, e.g. litres/100 km, it would not be possible for consumers to directly compare the impact on the environment of a diesel car with a petrol car.

In addition, even though alternative fuelled vehicles such as electric cars or plug-in hybrid electric vehicles do not cause any or only little emissions at the tailpipe, they are responsible for emissions at the electric power plant. As sales of such vehicles are likely to increase as more and more car models become commercially available, it is important in the long term to be transparent as in most cases electric cars are not truly zero emission vehicles.

As a long-term approach we recommend taking into account all well-to-wheel greenhouse gas emissions for all types of cars (petrol, diesel and alternatively powered vehicles), which include not only tailpipe emissions (emissions produced by the vehicle as it runs), but also all emissions related to fuel production, processing, distribution and use. We recognise that there are challenges to doing this in the short-term, particularly as long as CO₂ emissions targets regulations continue to use tailpipe emissions, as is likely to be the case until at least 2020. We are also aware that introducing well-to-wheel emissions across all vehicle technologies would greatly increase the complexity of the CO₂ calculations.

²⁷ LowCVP Car Buyer Survey (2010): Improved environmental information for consumers. Research conducted by Ecolane & Sustain on behalf of the Low Carbon Vehicle Partnership.

²⁸ Anable, J., Lane, B. and Banks, N. (2008): From "mpg paradox" to "mpg mirage": How car purchasers are missing a trick when choosing a new car. Low Carbon Vehicle Partnership.

However, provided that a robust methodology will be developed which can be applied consistently across all types of cars, we suggest the following:

- The long-term objective should be that the classification of the rating scale should be based on well-to-wheel CO₂ emissions.

In order to calculate the indirect CO₂ emissions for vehicles that are powered at least in part by electricity, it is important that the underlying principles are set at EU level in estimating the CO₂ emissions. Nevertheless, even though with cross-border electricity trading, the “national energy mix” becomes a less relevant concept, we feel that using an EU electricity mix can be particularly misleading in informing consumers properly about the environmental impact of the electrified vehicle. As the share of renewables and fossil fuels still significantly differs between Member States, using the national electricity mix seems to have more advantages over using the EU electricity mix in informing consumers properly. We therefore suggest:

- The national electricity mix should be used to calculate the well-to wheel CO₂ emissions for vehicles that are powered by electricity.

However, the environmental benefits of electrified vehicles will continue to improve over time as conventional power plants are replaced with cleaner sources. When electricity is sourced from renewable energies, the CO₂ emissions per unit of electricity generated will be very low. In contrast, under certain circumstances when hardly any renewable energies are used for generating the electricity, electric vehicles can even have a greater impact on global warming than conventional cars. Thus, the long-term shift to the use of renewable electricity as the main transportation fuel is necessary in order to offer significant reductions in CO₂ emissions and air pollution. Therefore, it is important to inform consumers about the fact that electric or plug-in hybrid electric vehicles powered with renewable electricity have higher environmental benefits over electric cars fuelled by conventional electricity.

One option for doing so could be to include a disclaimer on the label stating that the actual emissions of the vehicle will depend on the specific electricity mix used to power the vehicle. More precisely, the label should inform that the amount of CO₂ emissions released into the environment can span a wide range, from close to zero emissions when powering the car with electricity sourced from renewable/zero-carbon energy sources, to a large amount of emissions when the car is powered with electricity sourced from a high percentage of fossil fuels.

Another option could be to display the CO₂ emissions and corresponding energy classes depending on different electricity mixes. Nevertheless, we see further research needs with regard to the correct understanding of this message. Therefore, before deciding on the final label design, a thorough consumer assessment would need to be carried out in order to test if that kind of information would actually be understood by consumers. If consumer research would show that such an approach of displaying different energy classes simultaneously would lead to an information overload, we suggest that the energy class based only on the national electricity mix should be displayed on the label.

Consumers should also be enabled to access an online tool via their smartphones, computers and laptops (e.g. via a QR (Quick Response) code or other technologies that will represent the state-of-the art in the future) to measure the vehicle’s emissions based on the exact household electricity mix (see 3.9 for further information).

Finally, for plug-in hybrid electric vehicles, we support indicating only one aggregate value in order not to overwhelm consumers with information. However, the current test ECE R101 does not provide realistic test results. In case there will only be indicated one aggregate value, it is fundamental that a more realistic test cycle/procedure/weighting formula is developed for plug-in hybrids and range-extended electric vehicles.

3.4. Set CO₂ thresholds of the labelling classes at EU level

Currently, Member States follow different approaches in defining thresholds for the energy classes of the rating. We support harmonising the thresholds of the A to G bands at EU level.

More and more consumers in Europe are making use of the so-called “parallel import” of cars and it would therefore be helpful if the rating class on the energy label of a car would be the same in all Member States of the European Union to avoid confusion of consumers involved in cross-border purchasing. In addition, because of the fact that the internet has become a major – if not the primary – source of consumer information and advertisement of cars, displaying the same rating class of the energy label on internet advertisements available across the European Union would also contribute to avoiding confusion in case consumers view foreign advertisements when accessing international webpages.²⁹

In addition, setting the classes at EU level would be the cornerstone of guaranteeing that consumers in all European countries would receive valuable and meaningful information. More precisely, by setting the CO₂ thresholds of the labelling classes at EU level, it could be better ensured that cars would be distributed equally across all the classes. A situation could be avoided where cars would be bundled in a small number of classes in case a Member State would not regularly perform updates to defining the thresholds of the rating classes.

We suggest that:

- The thresholds of the A to G bands should be harmonised at EU level.

3.5. Periodically tighten the criteria for achieving the rating classes to keep up with technological change

To ensure good functioning of the scheme, it is crucial that the classes are initially distributed so as to leave enough leeway at the top of the scale to accommodate future technological developments, i.e. the top class should be set at a very ambitious value. Hence, only few of the most efficient vehicles should be able to meet the criteria of the top class at the time when the scheme will be put into practice.

However, through expected technological innovations it is very likely that more and more cars will qualify for the top classes over time. In order to avoid a situation with too many vehicles crowded into the top of the scale, further differentiation through adjusting the system to keep up with technological advances must be guaranteed. We consider as a top priority to revise the labelling scheme by maintaining the existing seven point rating scale ranging from A to G but periodically tighten the criteria for achieving the energy classes. A vehicle that used to be placed at the top of the scale could be reclassified into a lower efficiency class.

²⁹ An exception would be allowed for electric vehicles due to the reasons explained under 3.3.

We are absolutely against adding of additional classes on top of A such as A⁺, A⁺⁺ and A⁺⁺⁺.³⁰ This view is more generally supported in the 2014 report ordered by the European Commission on energy labelling which states: "It is also becoming increasingly clear that the A+ categories are less effective at attracting consumers to the higher classes than the A class on an A-G scale. The evolution of energy labels to the A+++ categories is one that has little support among stakeholders, and where there is an overwhelming recognition of the need for change."³¹

We urgently recommend avoiding a similar situation as in the household appliances sector. Originally, energy labels for household appliances adopted by the European Commission ranked products according to their energy consumption on an A to G scale. The labelling system has proven to be successful in transforming the market. Because no re-classification has been carried out on time, the highest class "A" became a de facto standard in many product categories, hence not allowing manufacturers and consumers to identify in a meaningful way the best product on the market. In order to overcome this problem, the European Union decided to allow the introduction of up to three additional classes on top of class A (A+, A++ and A+++). In the process, the "buy A" message was lost, as an "A"-rated product was most often well below the average-performing products.³² On the other side of the spectrum, classes below B or C were most often virtually empty. Consumer research has provided evidence that the extension of the seven band A-G energy efficiency rating scale for household appliances by adding new classes resulted in a decrease in importance of energy efficiency in consumer decision-making.³³

We consequently argue that open scales (e.g. with classes on top of A) are not the right way forward to ensure meaningful dynamism of the car labelling scheme. We therefore recommend the following actions:

- The label should anticipate foreseeable technical improvements and therefore set ambitious threshold for achieving the "A" class.
- If there is a need for revision of the labelling scheme, the existing seven band rating scale ranging from A to G should be maintained and the criteria for achieving the fuel efficiency classes should be tightened rather than to add additional classes on top of A (e.g. A+, A++, etc.).

³⁰ Unfortunately, Germany has already decided that two additional classes, A++ and A+++ will be introduced if at least 5% of newly registered vehicles in a calendar year meet the requirements. In addition, Denmark has also proposed the introduction of additional plus classes.

³¹ Ecofys (2014) Evaluation of the Energy Labelling Directive and specific aspects of the Ecodesign Directive. http://www.energylabelevaluation.eu/tmce/Final_technical_report-Evaluation_ELD_ED_June_2014.pdf

³² That latter observation is supported by market monitoring exercises conducted by several organisations, including ANEC and BEUC through the newly established *Energy Label Observatory*.

³³ Heinzle, S. and R. Wüstenhagen (2012). Dynamic adjustment of eco-labeling schemes and consumer choice – the Revision of the EU Energy label as a missed opportunity? *Business Strategy and the Environment*, 21, 60-70; Waide, P. and Watson, R. (2013). Energy labelling. The new European energy label: Assessing consumer comprehension and effectiveness as a market transformation tool: http://www.clasponline.org/en/Resources/Resources/StandardsLabelingResourceLibrary/2013/~/media/Files/SLDocuments/2013/2013_05_EU-Energy-Labeling-Comprehension-Study_Appendices.pdf; London Economics and Ipsos (2014): Study on the impact of the energy label – and potential changes to it – on consumer understanding and on purchase decisions: http://www.energylabelevaluation.eu/tmce/Energy_label_consumer_understanding_and_behaviour_study_interim_report.pdf.

3.6. Information on fuel consumption should be included on the label and should be expressed in the metrics used in the Member State

In a series of studies by the LowCVP it was revealed that fuel economy and running costs were much more important to UK consumers than information related to CO₂ emissions during the purchase decision.³⁴ The LowCVP concludes from these studies that the label would be more effective if information on fuel economy and running costs would be given more prominence on the label. Codagnone et al. (2013) also found that 'nudges' related to fuel economy work better than emissions related nudges.

We therefore support that information on fuel consumption based on a tailpipe basis should be included on the label and should be expressed in the metrics used in the Member State. Otherwise there would be high risk that consumers do not make use of the relevant information in case they are not used to the metrics which is displayed. For instance, a large share of consumers in the United Kingdom are more used to "miles per gallon". In Spain and Denmark, on the other hand, consumers are more used to the metric "km per litre". In most other European countries, the metric of litres/100 km is used to express fuel consumption. In addition, we also suggest conducting additional research to see whether fuel consumption information should be given more prominence on the label (e.g. through better positioning and larger text size). We recommend:

- Information on fuel consumption should be expressed in the metrics used in the Member State, either in form of fuel economy (distance travelled per unit of fuel used, e.g. miles per gallon or kilometres per litre) or in form of fuel consumption (amount of fuel required to move the vehicle over a given distance, expressed in litre per 100 km)
- Additional research would be valuable to see whether fuel consumption information should be given more prominence on the label

3.7. Information on fuel costs should be included on the label and should be based on national fuel prices

In addition to the series of studies conducted by LowCVP as described above, Codagnone et al. (2013) also revealed that running costs (in both per mile/km format and in a 5 year format) were the most effective nudge among all tested during the laboratory and online experiment.³⁵ In addition, a Dutch study by ANWB also revealed that the Dutch label would benefit from the inclusion of financial information, including the fuel costs and tax related costs.³⁶ Thus, available research points into the direction that respondents' attention can be better reached by providing information on operating costs (in addition to fuel consumption) than by environmental information on CO₂ emissions.

³⁴ LowCVP Car Buyer Survey (2010): Improved environmental information for consumers. Research conducted by Ecolane & Sustain on behalf of the Low Carbon Vehicle Partnership; Anable, J., Lane, B. and Banks, N. (2008): From "mpg paradox" to "mpg mirage": How car purchasers are missing a trick when choosing a new car. Low Carbon Vehicle Partnership.

³⁵ Codagnone, C., Bogliacino, F., Veltri, G. (2013): Testing CO₂/ car labelling options and consumer information. Report produced for the European Commission, DG Climate Action.

³⁶ ANWB et al. (2008): "Evaluatierapport Werkgroep evaluatie energielabel en bonus/malus regeling BPM 2006". Den Haag.

As fuel consumption of conventional cars (e.g. l/100 km) cannot be directly compared to electricity consumption of electric cars (displayed in kWh/100 km), a fuel cost metric would also enable the direct comparison.

We have reservations on the methodology to be used to calculate such costs at a European level as fuel prices and average distances travelled significantly differ between the Member States. We therefore suggest calculating fuel and electricity costs based on national data. The Directive should therefore provide clear guidance to Member States how to calculate those numbers, and provide a source of default value if relevant national information is not available.

In addition, a minimum period after which the information on cost should be reviewed (e.g. every year) should be defined. In order to overcome a potential source of buyer confusion of the possibility of seeing models with old information next to models with updated information, the dealer must be required to relabel the car that is already presented in the showroom within a 1-month period. Therefore, the period of validity of the label should be indicated very clearly on the label. Periods of validity have been established in other areas too, e.g. the old French “vignette” for cars, which used a different colour every year.

For this purpose, we suggest setting up **one database** for the EU, listing the CO₂ emissions of all car brands, models and types which can be used by the manufacturers and the car dealers to print the label.³⁷

We recommend:

- Fuel costs should be calculated based on national fuel price data.
- The minimum period after which the information should be reviewed (e.g. every year) should be defined.

In addition, there are indeed two important additional limitations to communicating cost information in monetary terms: fuel costs can change rapidly, causing the information on the car label to become outdated. Moreover, fuel costs depend significantly on the driving style and would be based on the current official test to measure fuel consumption of cars which is regarded to provide unreliable test results.

We therefore suggest that an additional disclaimer is shown on the label which states that fuel costs depend significantly on the price of fuel at the time of refuelling the car and the own driving style. We also call on the European Commission to ensure that the new test to measure fuel consumption (WLTP) is swiftly introduced into EU law (see 4.). Moreover, it is also suggested to provide a link to an interactive web-based tool where fuel costs can be calculated based on individual driving style, actual fuel costs and actual fuel consumption of the car. Recent research in the UK by the LowCVP has also indicated that incorporating a Quick Response (QR) code reader to allow for access to online information would also be attractive to car drivers.³⁸ We therefore recommend:

- An interactive web-based tool should be made available where fuel costs can be calculated based on personal data.

³⁷ Best practice example from Germany where dealers are able to print the most up-to-date information: <http://www.pkw-label.de/haendler/hinweise-zum-label.html>; it allows car retailers to print the label online: <http://www.pkw-label.de/pkw-label-erstellen.html>

³⁸ Car Buyer Survey: Testing alternative fuel economy labels. LowCVP, 2012.

Research by the Low CVP also investigated whether other costing periods than annual fuel consumption values which are currently indicated on the UK label would be preferred by consumers. Some focus group participants mentioned that a “per month” cost figure would help them to compare the fuel costs to the overall expenses that are commonly budgeted at a monthly basis. Other participants of the focus group however also mentioned that a “per mile” estimate would be a straightforward figure to calculate travel costs by multiplying the cost per mile with the travel distance. When comparing the preferences for three different costing periods (per month, per week, per mile frame), the web-based survey in the UK by LowCVP found that 58% of the respondents would prefer a “per mile” estimate, 31% of the respondents a “per month” costing period whereas only 12% of the respondents would prefer a “per week” costing period. Despite the evidence on consumer preferences, there is however a lack of empirical evidence with regard to the effectiveness of the different costing frames on consumer decision-making. Codagnone et al. (2013) revealed that running costs (in both per mile/km and in per 5 years tested) was the relatively more effective nudge among all those they have tested. Previous research in the field of household appliances shows for instance that disclosing lifetime energy operating cost information proves to be most effective in guiding consumers towards more energy-efficient shopping behaviour.³⁹ However, presenting lifetime cost information might be difficult to implement given its complex methodological discussion. Thus, thorough consumer research should be conducted on the most efficient format of providing cost relevant information (e.g. over a distance travelled, per month, per year(s), per holding period of the car, or over the life time of the car etc.), or even a combination of two formats.

In addition, we also suggest conducting additional research to see whether fuel cost information should be given more prominence on the label (e.g. through better positioning and larger text size).

Finally, we recommend that:

- Thorough consumer testing should be performed on how the information on fuel costs in monetary terms should be presented to consumers, either as “€ per km/mile”, “€ per month”, “€ per year(s)”, “€ over the holding period of the car” or “€ over the lifetime of a car”, or even a combination of two formats.

3.8. Mandatory information on tax related information adapted to national circumstances

When the taxation rates are linked to a car’s CO₂ emissions, then this information would be very valuable to help consumers to take more informed choices.

However, it may be difficult to provide this information in a standardised way as current car tax schemes differ widely amongst EU Member States. The Netherlands, France and Spain, for instance, link registration taxes to the environmental performance of cars. Germany in contrast links annual car taxes to CO₂ emissions. In addition, tax schemes might change within one tax year and there is a risk that the label seen by the consumers gives wrong information in case the information is not regularly updated. We suggest that if a tax scheme exists in the specific Member States, it should be made obligatory to communicate about it on the label for new cars. If there would be changes required to the labelling, in advance of a due review date of the labelling (as described in 3.7.), retailers would be required to inform

³⁹ Heinzle, S. (2013): Disclosure of energy operating cost information: A silver bullet for overcoming the energy-efficiency gap? *Journal of Consumer Policy*, 35(1), 43-64.

consumers and to issue printed material with concrete information as to what impacts the changes will have on their tax load. We therefore recommend:

- Mandatory information on tax related information should be provided on the label.

3.9. Additional information provided in country-specific language(s)

A disclaimer should be included at the bottom of the label containing the following elements:

- (a) Information on the influence of on-board equipment (air conditioning, radio, etc.), personal driving style, and maintenance of the car, tyre pressure, weather and road conditions and load of the vehicle on the overall fuel and electricity consumption of the vehicle (and also on the driving range of electrified vehicles); and
- (b) Information with regards to the assumptions used to calculate the estimated fuel costs.

It is also suggested to include information with regards to driving range and recharging time for electrified vehicles (electric vehicles, plug-in hybrids, etc.). The driving range should define the approximate number of kilometres (or miles in the UK) that can be travelled before the car must be recharged. The charging time should define how long it takes to recharge a fully empty battery using both fast and slow charging. It is of utmost importance that the information on the label should be given in written text in the language, or languages, that are understood by the consumers in the country where the product will be placed on the market.

Furthermore, for vehicles that can run on two different fuel types (so-called flex-fuel vehicles, e.g. vehicle that can run both on petrol or diesel and ethanol E85) it is important to include a disclaimer that when the car is run on E85, fuel consumption might be higher. Since ethanol contains less energy per volume than gasoline, such flex-fuel vehicles typically achieve about 25-30% fewer miles per gallon when fuelled with E85.⁴⁰ The same applies to cars running on a combination of traditional fuel and LPG or CNG.

Although we generally support additional information on the label, it is also important that the use of such disclaimers does not distract consumers from the most important pieces of information (rating scale, fuel consumption and cost related information) on the label. Additional research would thus be valuable to test whether this information would not lead to consumers being overloaded with too much information on the label.

Finally, we would support that under EU competences, a smart phone and internet tool should be developed (e.g. accessible through a QR Code or any other state-of-the-art technology with easy accessibility for consumers) where consumers could easily compare the fuel consumption values of all vehicles available on the market, and could obtain more personalised information, adapted to different factors, including for instance the local fuel price, electricity mix and individual driving habits, in order to obtain the best possible cost-benefit analysis.

⁴⁰ West, Brian H., Alberto J. Lopez, Timothy J. Theiss, Ronald L. Graves, John M. Storey, and Samuel A. Lewis. 2007. Fuel Economy and Emissions of the Ethanol-Optimized Saab 9-5 Biopower. SAE Technical Paper 2007-01-3994.

To conclude, we recommend:

- To include a disclaimer on (a) the influence of different factors (e.g. personal driving style, etc.) on the real fuel consumption and driving range (for electrified vehicles) of the car; (b) the assumption with regards to calculating the fuel costs;
- To include information with regard to driving range and recharging time for electrified vehicles;
- To include a disclaimer for flex-fuel vehicles that the fuel consumption might be higher when alternative fuels are used;
- Written standard text must be translated into national language (s).
- To develop a smart phone and internet application where consumers can obtain more personalised information;

4. Swift introduction of new test to measure fuel consumption WLTP into national law

To determine the fuel consumption of cars, the existing car labelling Directive refers to "official fuel consumption data". This data is currently calculated by using a testing mode (the New European Driving Cycle – NEDC) that does not represent realistic consumer driving conditions.⁴¹

We are very much supportive of the development of a better, harmonised testing standard. This is the objective of a World Light Duty test procedure in the framework of the United Nations Economic Commission for Europe (UNECE) which is intended to enable consumers to get a more realistic picture on fuel consumption which is badly needed. On November 14, 2013, the formal text for the new test WLTP was adopted by the United Nations Working Party on Pollution and Energy. The World Forum for Harmonization of Vehicles Regulation (WP.29) confirmed the first phase of GTR 15 (Global Technical Regulation) concerning the definition of the test cycle and measurement procedure at its March 2014 session; thus, the European Union will be able to implement the first phase of WLTP into national law. The EU has already started this exercise by developing a simulation-based correlation in order to convert CO₂ targets under the NEDC into targets under the WLTP.

If the new test will be introduced into EU law later than anticipated (i.e. later than 2017), we would support the development of a scaling factor to multiply the emissions measured by the current NEDC test cycle to better represent real-world emissions. The same request would apply when the WLTP will be introduced into EU law but would still not be able to produce realistic fuel consumption and CO₂ values that consumers experience under normal driving conditions. We also support that in-service conformity checks on production vehicles (i.e. mass produced vehicles that are offered for sale) are introduced in order to better ensure that fuel consumption and CO₂ emissions values match with those of type-approval vehicles.

⁴¹ Consumer organisations members of ANEC and/or BEUC have measured more realistic fuel consumption values up to 47% higher than the figures indicated on the label, see Que Choisir magazine, February 2011: <http://www.quechoisir.org/auto/achat-vente-location/enquete-consommation-des-voitures-les-constructeurs-minimisent>), Test-Aankoop/Test-Achats magazine, July 2008: <http://www.test-aankoop.be/Auto-en-vervoer/Auto-s-en-accessoires/Stadsauto-s-s530123.htm>. In addition, a study by the International Council on Clean Transportation also found that the gap between type-approval and "real-world" fuel consumption/CO₂ values increased from about 8% in 2001 to 25% today: http://www.theicct.org/sites/default/files/publications/ICCT_LabToRoad_20130527.pdf.

In addition, we would also support the creation of an EU-wide type approval authority to ensure more coherent standards and procedures applied across the EU.⁴²

Therefore, we recommend:

- We strongly call on the European Commission to ensure that the WLTP will be swiftly introduced into EU law to enable consumers to get a more realistic picture on fuel consumption.
- If the introduction of the new test into EU law takes more time than anticipated, or does not sufficiently replicate EU real world emissions, a scaling factor should be applied to convert test cycle emissions to real world emissions.
- The creation of an EU-wide type approval authority to ensure more coherent standards and procedures applied across the EU.

5. Cover more consumer-relevant vehicles

New passenger cars are only part of the picture when it comes to individual motorised transportation. A big share of consumers does not buy a new passenger car but a second-hand car. In many countries of the European Union, the used car sales volumes exceed the sales of new cars. We suggest that the label should be extended to the second-hand car sold by professional sellers. The label should be applied for used cars sold by individual consumers only on a voluntary basis.

The New European Driving Cycle (NEDC) has only been in force since 1 January 1996. It is therefore suggested to re-issue the label only for those used cars which have been tested under the NEDC (or the WLTP in the future). Used cars that have been sold before 1996 thus do not need to be labelled.

In addition, as described above, the European Commission intends to make the new test WLTP applicable by 2017 at the latest. When the WLTP has been introduced into EU law, new cars will be tested with this new test whereas used cars have been tested under the NEDC. In order to make the emissions of new and used cars comparable, the original fuel consumption/CO₂ values of the used cars measured under the NEDC would need to be translated into values applicable under the WLTP.

This can be achieved by making use of the data currently developed by the European Commission under the simulation-based correlation exercise as described in chapter 4.

In addition, depending on their situation (financial, professional, geographical etc.), consumers may consider purchasing a two- or three-wheeler instead of a car, and use that vehicle as their primary mean of motorised transportation. As all categories of individual motorised transportation entail fuel consumption and related CO₂ emissions, it would be only logical to investigate the feasibility to apply the labelling Directive also to these modes of transportation.⁴³

⁴² http://www.transportenvironment.org/sites/te/files/publications/2013%2002%20RWE%20Executive%20summary_final.pdf

⁴³ As two-wheelers are a broad category (including mopeds, scooters, motorbikes and potentially also electric bicycles) it is fundamental that methodological questions are first resolved whether one label is sufficient to cover all vehicles belonging to this category or whether there is a need to develop separate labels for each sub-category.

Finally, some consumers may prefer to rent or share a vehicle, be it occasionally (e.g. during their vacations) or through short or long-term leasing, which is a more and more frequent business model.⁴⁴ Because these alternative options entail fuel consumption and CO₂ emissions, we argue that consumers should be informed about these parameters before having to decide on the exact car model they wish to rent. To that end, the fuel consumption and CO₂ label should be placed on all car rental advertisement mentioning specific models, on online and paper catalogues as well as on brochures and leaflets handed to consumers in rental agencies.

We recommend:

- The label should be extended to cars rented or leased by professional companies.
- The label should be extended to second-hand cars sold by professional sellers, two- and three-wheelers.

6. Improve compliance

There has been a clear lack of enforcement of the current labelling scheme in Member States. Tests by consumer organisations in the past have shown that existing requirements by the Directive were often not fully implemented. For instance, the consumer centre of North Rhine-Westphalia, together with the European Consumer Centre Germany, found that in 2004, only 57% of all investigated car dealers displayed the CO₂ label on or near all new cars available at the point of sale.⁴⁵ A repetition of the same mystery shopping test in 2009 revealed that only 53% of the car dealers in North Rhine-Westphalia displayed the label on or near all new cars available at the point of sale.⁴⁶ A follow-up investigation in 2013 showed that the situation had significantly improved over the last years. In 2013, 79% of all car dealers in North Rhine-Westphalia had displayed the label on or near all vehicles available at the point of sale.⁴⁷ Nevertheless, there is still a lot of room for improvement, particularly in those member states with insufficient market surveillance of the labelling scheme.

In addition, the German organisation "Deutsche Umwelthilfe" (DUH) complained to the European Commission in February 2008 about the insufficient market surveillance of the labelling scheme in Germany. Research of DUH found that massive non-compliance of car manufacturers and shops had not even been investigated nor punished.⁴⁸ Work completed by the environmental organisation Friends of the Earth Europe (FoEE) together with a coalition of national partners on the "Advertise CO₂ campaign" showed that a large part of advertisements on cars were not in line with the requirements under the Directive.

⁴⁴ See e.g. *Autolib* in Paris (<http://www.autolib.fr/autolib/>) or *Cambio* in Brussels (<http://www.cambio.be/>).

⁴⁵ Verordnungsscheck CO₂-Label für Neuwagen, Verbraucherzentrale NRW & Europäisches Verbraucherzentrum, October 2005.

⁴⁶ Kennzeichnung und Verbraucherinformationen über Energieverbrauch und CO₂-Emissionen von Neu-Pkw im Autohandel, Verbraucherzentrale NRW, June 2009.

⁴⁷ Kennzeichnung und Verbraucherinformation von Neu-Pkw im Autohandel 2013, September 2013.

⁴⁸ According to DHU, half of the German States (*Bundesländer*) have not even notified the relevant market surveillance authorities regarding the enforcement of the EU Labelling Directive. Therefore market surveillance seems not to take place although DUH itself found over 1000 cases of non-compliance in advertisements and on the internet between April 2005 and December 2007. For further information see:

http://www.duh.de/pressemitteilung.html?&no_cache=1&tx_ttnews%5bttn_news%5d=1339&cHash=d8ac6dddc8 and

http://www.duh.de/uploads/media/Beschwerde_DUH_wegen_Pkw-EnVKV.pdf

A follow up campaign (“the Car Fuel Efficiency Campaign”) in 2009 showed that despite improvements achieved in this field, still only 30% of all advertisements analysed were fully in line with the demands of the Directive. In contrast, compliance rates in car dealerships were higher, with the label being displayed on or near the car in 79% of all investigated cases. In addition, the study showed that hardly any fines were levied for non-compliance despite the fact that Article 11 of the Directive states that “there should be proportionate, dissuasive penalties for non-compliance”. When penalties were levied, FoEE and partners found that the amounts however were not set at a level that would have prevented violations. In case fines for car makers or advertisers were charged, the level was often set only between €250 and €1000, which is only a tiny fraction of the general budget that is usually spent on advertising campaigns.⁴⁹

Moreover, research carried out by Ecologic for the European Parliament⁵⁰ showed that most cases of non-compliance with the requirements of the Directive were related to the label and promotional material. Ecologic listed a series of examples of non-compliance cases in different Member States. These examples illustrate the need to ensure a proper enforcement of a scheme throughout the EU, despite the fact that the actual number of violations in the Member States seem to decrease in recent years. This might be related to the fact that several Member States have put advertising codes in place. For instance, the Netherlands have issued an “Advertising Code” which also specifies requirements concerning car advertisements, including the minimum size of letters and space to be used for the information. In the UK too, there are Best Practice Principles for environmental claims in automotive marketing⁵¹ to consumers which complement the UK Advertising Codes of Practice. For instance, the minimum size of letters and the space to be used for fuel consumption related information have been specified. We therefore support specifying more clearly the requirements of the Directive with regards to promotional material (see 9.), but also to establish effective market surveillance systems in all Member States.

A coherent European market surveillance system is thus urgently needed to achieve better compliance of EU product legislation. We therefore welcome the draft Market Surveillance Regulation which has been published by the EU Commission on 13 February 2013 which aims to ensure more cooperation at EU level. We also welcome that the scope of this horizontal instrument would cover the protection of public interests such as health and safety of consumers and ensuring protection of the environment. The draft regulation contains a number of useful proposals which potentially could in the future contribute to better enforcement of the car labelling. For example, as soon as the new EU car label will be in place, we recommend to Member States carrying out a joint enforcement cooperation project through which national market surveillance authorities should gather experience with the new label and ensure a consistent enforcement. Similar co-ordination already takes place between national authorities in the frame of the Consumer Protection Cooperation (CPC) Network⁵² for the enforcement of consumer rights across the EU, which could serve as a model to improve the enforcement of car labelling legislation.

⁴⁹ Friends of the Earth Europe and a coalition of national partners (2009): A case for change – How car manufacturers are dismissing the EU’s fuel labelling Directive:
http://www.amiciidellaterra.it/adt/images/stories/File/downloads/pdf/Campagna%20CO2%20Auto/reports/A_case_for_change.pdf.

⁵⁰ Study on consumer information on fuel economy and CO₂ emissions of new passenger cars (2010):
<http://www.europarl.europa.eu/document/activities/cont/201203/20120301ATT39663/20120301ATT39663EN.pdf>

⁵¹ <http://www.smmr.co.uk/wp-content/uploads/sites/2/Best-Practice-Principles.pdf>

⁵² Regulation (EC) 2006/2004 on consumer protection cooperation.

In addition, we suggest that the future Market Surveillance Regulation (MSR)⁵³ should explicitly cover car labelling in its scope. The draft MSR brings forward very important improvement options such as the goal to:

- Equipping national market surveillance authorities with adequate human and financial resources;
- Enabling authorities to carry out a meaningful number of controls;
- Allowing authorities to request financial penalties in cases of non-compliance;
- Exchanging information about non-compliant products more effectively across the EU.

Finally, Member States should monitor and exchange information on the level of compliance regularly for instance through a dedicated working group of the planned European Market Surveillance Forum. We therefore ask:

- The requirements of the Directive with regards to promotional material must be clearly specified.
- An effective market surveillance system must be established in all Member States.
- Member States are recommended to carry out a joint enforcement cooperation project through which national market surveillance authorities should gather experience with the new label and ensure a consistent enforcement.
- Member States should monitor and exchange information on the level of compliance regularly for instance through a dedicated working group of the planned European Market Surveillance Forum.

7. Provide information to consumers in a visible way via all media

When the original car labelling Directive was adopted in 1999, online advertisement was only in its initial stage. The internet has now become a major – if not the primary – source of consumer information. A web-based survey with more than 1,000 car owners in the UK showed that websites and the internet were the most important source of information for consumers during the decision-making process of buying a car. Almost 2/3 of all car buyers that recently bought a car made use of that source of information.⁵⁴

⁵³ On 13 February 2013, the European Commission published a Product Safety and Market Surveillance package. The draft market surveillance regulation covers environmental requirements of products in its scope. Hence, we argue that the car labelling scheme could be covered under this framework. However, the package is currently (July 2014) blocked in the Council. If no agreement on an ambitious cross-cutting market surveillance strategy covering all products can be found, the future car labelling rules should set very specific requirements to ensure better market surveillance.

⁵⁴ Car Buyer Survey: Testing alternative fuel economy labels. LowCVP, 2012.

The study by Codagnone et al. (2013)⁵⁵ showed that 13.1% of the respondents surveyed in 10 European countries looked for information about a new car on a search engine every day or almost every day. An additional 23% and 18.2% used a search engine at least once per week or at least once per month, respectively. Only 22.5% of all consumers surveyed in 10 European countries have either not used an online search engine for looking up information or were not aware of the existence of this source of information.

Yet, although information on CO₂ emission levels of cars must currently be provided in showrooms and in all printed advertisements (including in newspapers, magazines and posters), non-printed media such as the internet, television, radio and cinema, under the current Directive, are not required to provide this information to consumers. Not requiring the display of information on fuel consumption and CO₂ emissions in internet advertisements and other non-printed media is an old-fashioned approach towards consumer information. We therefore call on the Commission to set strict rules on print advertisements (e.g. technical manuals, brochures, advertisements in newspapers, magazines, posters), but also on internet, TV, cinema and radio.

The continued exposure to label information through making use of the promotional channel will have a positive influence on familiarity of the label.⁵⁶

We therefore recommend:

- Other media (e.g. radio, internet, TV, cinema) should be included into the scope of the Directive.

In addition, the study by Codagnone et al. (2013) found that promotional material would be more effective when both a graphic illustration of CO₂ emissions, and a more visible element showing fuel costs for a period of 5 years, would be used. In Denmark, there is already a requirement to include the colour-code arrow indicating the cars' energy class in advertisements, both in print and on the internet. When different models are displayed, the highest and lowest energy class must be displayed.⁵⁷

An additional study by YouGov (2009)⁵⁸ with more than 2,000 people investigated the reaction of consumers to advertisements displaying the CO₂ and fuel consumption data making no use of a colour-coded label and an advert making use of a colour-coded label (see figure 5). They showed that four times as many people said that they find the colour-coded format easier to understand (67% vs. 16%).

⁵⁵ Codagnone, C., Bogliacino, F., Veltri, G. (2013): Testing CO₂/Car labelling options and consumer information. Annex III Preliminary survey summary tables and graphs. Available for download at : http://ec.europa.eu/clima/policies/transport/vehicles/labelling/studies_en.htm.

⁵⁶ As shown by the study by Codagnone et al. (2013), increased familiarity with the label will also have a positive effect on the long-term effect on label usage.

⁵⁷ http://ec.europa.eu/clima/policies/transport/vehicles/labelling/docs/final_report_2012_en.pdf.

⁵⁸ http://www.wearfutureproof.org.uk/assets/images/futureproof/YouGov_results_1.pdf.

Figure 5: Consumer test on advertisement with/without colour-coded label



In line with these research results, we ask that all ads should include information on the well-to-wheel CO₂ emissions and fuel consumption of the car by displaying the **full A-G rating scale**.

In addition, running costs and taxes should also be included as key information in advertisements and all other promotional materials, as suggested also by the latest study by Codagnone et al. (2013). However, additional research would be valuable to test the potential effect of the inclusion of such information in advertising on consumers' preferences and decision-making.

We recommend:

- All advertisements (printed promotional material, Internet, TV, cinema) should include information on the CO₂ emissions and fuel consumption of the car and display the full A-G rating scale.
- Running costs and taxes should be included as key information in advertisements and all other promotional materials.

Annex IV of Directive 1999/94/EC states that the information should be "easy to read and no less prominent than the main part of the information provided in the promotional literature".

We strongly support that the information on the CO₂ emissions and fuel consumption, and information with regards to running costs and taxes should be presented as prominently as the main piece of the information, e.g. information on technical characteristics or features of the car. It is therefore recommended to define and harmonize clear criteria on what is deemed to be the "main piece of the information".

We support the call by Friends of the Earth and the coalition of national partners who recommend that (a) the information which is next in size after the slogan be considered as the main body of information; (b) for advertisements where the logo is the only piece of information, it is suggested that a minimum standardised size is set.⁵⁹ Annex IV also states that the information must be easy to understand even on superficial contact. We strongly support that the full A-G scale is displayed prominently, so that all consumers can see it at a glance, easily read it, quickly understand the information provided and be able to make comparison between products. It is important that it is clearly defined and standardised what is meant by "superficial contact". We support the resolution of the European Parliament⁶⁰ that at least 20% of advertising space needs to be dedicated to the information on fuel consumption and CO₂ emissions. In addition, we support that the minimum font size requirement for written information and the location of the information must be clearly defined.

Finally, we also recommend further conducting research on how to convey technical information in a more readable and clear way in the broadcast media. We therefore recommend the following actions:

- At least 20% of advertising space / advertising time needs to be dedicated to environmental/cost information.
- The minimum font size requirement for written information must be defined.
- More research is needed into how to convey technical information in a readable and clear way in the broadcast media.

The newspaper and broadcasting industry has raised concerns about imposing specific legislative requirements for advertising on manufacturers, claiming that the car industry would stop investing into advertising if they were obliged to address CO₂ emissions and fuel efficiency.⁶¹ However, unlike advertising requirements which have been imposed on the tobacco industry, information on CO₂ emissions and fuel efficiency is not aimed to make cars appear "less attractive" for consumers. On the contrary, in view of climate change and rising fuel prices, such information would be key for consumers and certainly useful for their purchasing decisions.

⁵⁹ Friends of the Earth Europe and a coalition of national partners (2009): A case for change – How car manufacturers are dismissing the EU 's fuel labelling Directive:
http://www.bund.net/fileadmin/bundnet/publikationen/verkehr/20100928_verkehr_europ%C3%A4ische_studie_zur_autowerbung.pdf linkb.

⁶⁰ On 25 October 2007, the European Parliament adopted a Resolution on the strategy on CO₂ from cars. This non-binding resolution also includes the recommendation that 20% of car advertising space should be reserved for CO₂ and fuel consumption data.

⁶¹ See point 6 of the minutes of the stakeholders meeting on the revision of Directive 1994/99/EC organised on 5 June 2008:
http://ec.europa.eu/clima/policies/transport/vehicles/labelling/docs/stakeholder_meeting_5_6_08_minutes_en.pdf.

8. Take additional measures on misleading car advertising

It is often assumed that consumers buy increasingly bigger and heavier cars because it is their preference. However, consumer preferences are strongly influenced by the messages communicated in advertisements. Until recently, commercials and newspaper advertisements for cars rarely communicated about CO₂ emissions and fuel consumption of the car. Instead, car manufacturers tried to encourage consumers to buy always more robust, bigger and faster cars. The marketing and advertising of cars have clearly influenced consumer purchasing decisions.

The raising awareness on climate change and increasing fuel prices led some manufacturers to mislead consumers with environment-related information. For instance, it is not rare that an advertisement for a big SUV claims that the car has a good environmental performance - which may be true in relative terms (when comparing the car to other cars of the same category) but not in absolute terms. The misleading potential of ads was well illustrated by the ban of an ad for a Lexus hybrid car by the UK advertising standards authority (ASA) in May 2007. The Lexus RX 400h car with absolute emissions of 192 g CO₂/km was advertised with the slogan "High performance. Low emissions. Zero guilt". The UK Advertising Standards Authority (ASA) decided that even though the car's CO₂ emissions were low compared to similar cars, absolute emissions were still very high and this would give a misleading impression that this car was environmentally friendly.⁶²

It is also relevant in this context that official test figures are not reflective of real-life conditions. In 2013 the ASA upheld a complaint that it was unlikely to be clear to the average consumer that the official figures quoted for fuel consumption and CO₂ emissions were based on a standardised test and were not necessarily representative of what they would achieve when driving the car themselves. The ASA therefore ruled that official fuel consumption figures should be accompanied by qualifying text to make clear that they were official EU test figures to be used as a guide for comparative purposes and may not reflect real driving results⁶³. The Directive should therefore include this requirement too so that other Member States need to apply the same ruling.

Finally, information regarding 'green' offers should help consumers identify more ecologically-friendly cars, if at all they can be.⁶⁴ In this context, we advocate for a better enforcement of the mandatory rules regarding misleading advertising and unfair commercial practices (UCPD) to the car sector.

END

⁶² http://www.asa.org.uk/asa/adjudications/Public/TF_ADJ_42574.htm.

⁶³ ASA Adjudication on Volkswagen Group UK Ltd, 27 March 2013. At http://asa.org.uk/Rulings/Adjudications/2013/3/Volkswagen-Group-UK-Ltd/SHP_ADJ_210019.aspx

⁶⁴ See examples of misleading environmental advertisement for cars in *BEUC calls for an effective ban on Misleading green claims*: <http://www.beuc.org/publications/2011-09991-01-e.pdf>