

# Consultation on the revision of Regulation (EU) No 443/2009 and Regulation (EU) No 510/2011 setting CO<sub>2</sub> emission performance standards for light duty vehicles

Fields marked with \* are mandatory.

We are launching this consultation to collect the views of stakeholders and citizens with regard to the revision of the EU regulations setting CO<sub>2</sub> emission performance standards for cars and vans (together referred to as light duty vehicles (LDVs)).

The consultation is divided into two sections: the first section asks questions of a general nature and the second asks questions of a more technical nature related to the policy design and is thus intended for a well-informed audience. You may choose whether you wish to answer only the first or both of these sections.

## Background to the consultation

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Transport represents around one quarter of Europe's greenhouse gas emissions and is the main cause of air pollution in cities. Europe's answer to these challenges is an irreversible shift to low-emission mobility in terms of carbon and air pollutants. By mid-century, greenhouse gas emissions from transport will need to be at least 60% lower than in 1990 and be firmly on the path towards zero.

The shift towards low-emission mobility will contribute towards reducing the EU's overall emissions, as we have committed to do under the Paris Agreement on climate change. This shift also offers major opportunities for the European automotive industry to keep its competitive advantage and remain a front-runner through modernising, embracing new technologies and regaining the trust of consumers.

The shift towards low-emission mobility has already started, but its pace should be accelerated as set out in the Commission's Strategy for low-emission mobility.

The 2030 climate and energy policy framework agreed by EU Heads of State in October 2014 requires a 30% reduction greenhouse gas emissions in sectors not covered by the EU's Emission Trading System ("non-ETS sectors") by 2030 compared to 2005. The [impact assessment](#) accompanying the framework indicated that vehicle efficiency measures are the most important measure for achieving the needed reductions.

The EU's Regulations setting carbon dioxide (CO<sub>2</sub>) emission standards for new [cars](#) and [vans](#) have proven to be a strong driver for innovation and efficiency in automotive technology. A review of those Regulations to establish [post-2020 targets for cars and vans](#) was announced by the Commission in February 2015 and included into the Action plan of the Strategy for low-emission mobility.

An [extensive evaluation](#) of the existing Regulations has been carried out. This identifies that while the Regulations have been largely effective and have delivered CO<sub>2</sub> reductions at lower cost than originally foreseen, there are areas deserving consideration for the future revision. These include the measurement of the emissions and the utility parameter (a way to differentiate between manufacturers' fleets).

The existing Regulations foresee a review covering the emissions target and existing modalities and the use of a utility parameter (as a way to differentiate between manufacturers' fleets).

The Strategy for low-emission mobility also notes that the transformational change towards low- and zero-emission vehicles will need to be supported by a wide range of measures at all levels of policy-making to engage both manufacturers and users. The Commission will analyse the impact of different ways to incentivise low- and zero-emission vehicles in a technology neutral way, such as setting specific targets for them.

The Commission is carrying out this consultation in order to be properly informed by public opinion in preparation for possible future legislative action in this area. The results of the consultation will be summarised and published as well as being used to inform the Impact Assessment.

If data, other information or studies are available which are relevant to the assessment, these can be submitted as part of a stakeholder's general comments or directly to the mail box.

## General information about respondents

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\*In what capacity are you completing this questionnaire?

- ☐ As an individual / private person
- ☐ Public authority
- ☒ Academic / Research institution
- ☐ International organisation
- ☐ Civil society organisation
- ☐ Professional organisation
- ☐ Private enterprise
- ☐ Other

\*Please give your name if replying as an individual/private person, otherwise give the name of your organisation:

*Text of 3 to 200 characters will be accepted*

Technische Universität Berlin, Institute of Environmental Engineering, Chair of Sustainable Engineering

If your organisation is registered in the Transparency Register, please give your Register ID number:

*20 character(s) maximum*

If your organisation is not registered, you can [register now](#).

Please give your country of residence/establishment:

Germany

(Please note that regardless of the option chosen, your contribution may be subject to a request for access to documents under [Regulation 1049/2001](#) on public access to European Parliament, Council and Commission documents. In this case the request will be assessed against the conditions set out in the Regulation and in accordance with applicable [data protection rules](#).)

## Section one: General questions

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This section asks general questions about the policy of reducing CO<sub>2</sub> emissions from cars and light commercial vehicles (together referred to as LDVs) and is aimed at citizens as well as specialist stakeholders.

A free text section is available at the end of the questions to enable you to provide any additional clarifications or observations.

## Main problem to address

The Regulations setting CO<sub>2</sub> targets for new cars and light commercial vehicles request the Commission to bring forward proposals to set new targets for the period beyond 2020.

In your view, how important is the following action?

	Very important	Important	Somewhat important	Not important	I don't know
Setting CO <sub>2</sub> emission targets for new cars and light commercial vehicles in the EU in order to reduce emissions from this segment and contribute to meeting the EU's overall climate goals	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## The need for EU action

There is a single market for LDVs across the EU. If no EU action was taken to address the problem, Member States would adopt individual approaches to reduce LDV CO<sub>2</sub> emissions, in order to achieve the needed reductions for the non-ETS sector. As the evaluation of the Regulations highlighted, the use of differing tools and levels of ambition by Member States could lead to market fragmentation. This would lead to higher costs, both for industry and vehicle purchasers for achieving the goal and probably be less effective at actually reducing greenhouse gas emissions. Current evidence from the use of CO<sub>2</sub> linked vehicle taxation clearly demonstrates the widely differing approaches which would result from Member State action and the additional costs this would cause.

In your view, what would be likely to happen without EU action?

	Likely	Neutral	Unlikely
Member States would individually implement legislation to reduce LDV CO <sub>2</sub> emissions	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legislation introduced by individual Member States would lead to market fragmentation and higher costs	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Member States would have difficulty to achieve the necessary reductions to meet EU climate goals	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Main policy objectives

In your view, how important are the following objectives for future LDV CO<sub>2</sub> legislation?

	Important	Neutral	Unimportant
Continuing to reduce CO <sub>2</sub> emissions from cars and light commercial vehicles cost effectively and in line with EU climate and energy goals	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensuring technology neutrality (e.g. between different powertrains)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensuring competitive neutrality between manufacturers	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preserving the competitiveness of EU automotive manufacturing	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensuring that the legislation's impacts are socially equitable	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promoting the market uptake of low-emission and zero-emission vehicles	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Contributing to reducing air pollution caused by cars and light commercial vehicles (emissions of nitrogen oxides, particulate matter, ...)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Form that action should take to reduce LDV CO<sub>2</sub> emissions

Please indicate your preference for the following options to reduce new LDV CO<sub>2</sub> emissions, and contribute to the 2030 Energy and climate targets (with 1st being your most preferred option and 7th the least preferred)?

	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>
Legislation setting LDV CO <sub>2</sub> emissions targets at EU level	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of vehicle or fuel taxes or other incentives by Member States to affect vehicle choice and use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
A voluntary agreement with industry to reduce new vehicle CO <sub>2</sub> emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Member State actions to influence vehicle choice in other ways such as restricting access to urban areas for certain types of vehicles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Development of international standards for LDV fuel economy	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
No action	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other – please specify:

*100 character(s) maximum*

Base legislation on LDV CO<sub>2</sub> emission targets on an LCA to include also embedded emissions

## The level of future LDV CO<sub>2</sub> emissions targets

The EU Regulations currently set new vehicle fleet average CO<sub>2</sub> targets of 95gCO<sub>2</sub>/km for cars from 2021 on and of 147gCO<sub>2</sub>/km for light commercial vehicles from 2020 on. Without further action, these targets will remain unchanged after those dates.

The current targets require manufacturers to reduce new car emissions by about 5% per year between 2015 and 2021 and new light commercial vehicle emissions by about 5.5% per year between 2017 and 2020.

In comparison to the current reduction rates, do you think new targets for the period after 2020 should be set at levels which require:

- ☐ a rate of reduction **less** than that required under the current Regulations?
- ☐ a **similar** rate of reduction to that required under the current Regulations?
- ☐ a **higher** rate of reduction than that required under the current Regulations?

What is your view on the timetable for the post-2020 strategy on cars and vans?

*200 character(s) maximum*

## Innovation and competitiveness

The Paris Climate agreement and the obligations on participating countries may increase the global competition for technologies to reduce road vehicle CO<sub>2</sub> emissions.

Do you think EU legislation to regulate CO<sub>2</sub> emissions for LDVs will:

	Agree	Neutral	Disagree
Increase the competitiveness of EU industry on the global market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase the likelihood of the EU automotive industry developing further CO <sub>2</sub> reducing technology for conventional engines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase the likelihood of the EU industry developing technology for alternative powertrains	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Social impacts

LDVs have an average of 3 or 4 owners over their life. Lower income groups within a country's population and countries with lower GDP are likely to have larger shares of second hand vehicles entering their fleets. It may be the case that vehicle CO<sub>2</sub> emissions and fuel efficiency are viewed and experienced differently by purchasers of second hand vehicles than by purchasers of new vehicles. In turn, such differences may occur between income groups and Member States.

The following questions seek your views on this issue:

	Yes	No	Neutral
Is the distributional impact of LDV CO <sub>2</sub> legislation likely to lead to benefits for lower income social groups and countries?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Should the impact on second hand LDV purchasers be considered when assessing the social impacts of the legislation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Should cross-border trade in second hand vehicles be taken into consideration in assessing the impacts of the legislation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Any additional comments

If you have any comments or supplementary information to add to your replies to the questions in section 1, please insert this here:

*1000 character(s) maximum*

## Section two: policy design questions

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This section asks more specific question about potential policy design options for reducing CO<sub>2</sub> emissions from cars and light commercial vehicles and their impacts.

The questions below are based on the initial analysis carried out by the Commission and presented in its Inception Impact Assessment.

The evaluation of the existing legislation identified a number of areas to be considered. The co-legislators have also requested a number of aspects to be assessed in developing new legislative proposals and stakeholders have proposed options for consideration.

The following questions seek your views on which of these different possible aspects should be included in the future legislation and how important the different aspects are for you.

It is not mandatory to answer all questions.

### Aspects of the Regulatory approach

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	Yes	No	Neutral
In addition to cars (M1) and Light Commercial Vehicles (N1), should the legislation also cover heavier vehicles (N2 type)?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Should the car Regulation also include small Light Commercial Vehicles?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Should cars and Light Commercial Vehicles be covered by the same Regulation?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Should the current approach where manufacturers are the regulated entity be replaced by regulating manufacturer groups?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Should the current Tank To Wheel (TTW) metric be replaced by a Well To Wheel (WTW) metric?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Should the current approach based on CO2 emissions be replaced by an approach based on energy use?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Should the metric used to set the target also include emissions occurring during manufacturing and at the time of disposal of the vehicle ?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Measuring performance

Concerns over the growing divergence between test cycle CO<sub>2</sub> emissions and those experienced in real driving will be largely tackled by the foreseen change from the current NEDC test cycle to the World harmonised Light vehicle Test Procedure (WLTP) for regulatory purposes. However, this approach is different to the one taken for pollutant emissions where a 'real driving emissions' test is being introduced.

In view of this:

	Yes	No	Neutral
Do you think the Commission should explore what potential exists to further reduce the divergence between the test cycles and real world emissions?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Should supplemental driving tests be implemented to give values closer to real emissions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Should data based on mass monitoring of fuel consumption in vehicles be used for monitoring programmes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Technology specific requirements

	Yes	No	Neutral
Should manufacturers be given the freedom to choose the mix of technologies and emission levels for their vehicles provided they meet the overall target set for them?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Should specific CO <sub>2</sub> targets be set for different fuel types or technologies?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Should manufacturer's targets continue to be set based on their sales weighted average registrations (as in the current legislation)?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Should average mileage by fuel and vehicle segment be taken into account in establishing targets?	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

## How should the effort be shared between different actors?

	No	Yes	Neutral
Should a utility parameter be used to distribute the effort between different vehicle manufacturers (as in the current legislation)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Incentivising low- and zero-emission vehicles

The following questions relate to possible elements in future legislation relating to low- and zero-emission vehicles such as plug-in hybrid vehicles, battery electric vehicles and fuel cell electric vehicles.

	Yes	No	Neutral
Should there be a mechanism in the CO <sub>2</sub> legislation to encourage the deployment of low- and zero-emissions vehicles?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

What criteria should be used for defining low- and zero-emissions vehicles?

	Yes	No	Neutral
CO <sub>2</sub> emission performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What criteria should be used for defining low- and zero-emissions vehicles?

	Yes	No	Neutral
Zero emission range (km)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What criteria should be used for defining low- and zero-emissions vehicles?

	Yes	No	Neutral
Other	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other - please specify

*200 character(s) maximum*

life cycle emissions

Technologies which reduce CO<sub>2</sub> emissions but not during the type approval test

	Yes	No	Neutral
Should CO <sub>2</sub> emission reductions arising from the deployment of technology which reduces emissions in normal driving but whose benefit is not shown in the normal test cycle be taken into account in the legislation?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

If yes, please show your preference for the following options with 1st being your most preferred option:

	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
Continuation of the current eco-innovation scheme	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
List of technologies eligible for off-cycle credits	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
An approach based on measuring in-use fuel consumption from vehicles fitted with the technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other – please specify below	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other - please specify

*200 character(s) maximum*

The eco-innovation scheme should continue but supplemented with LCA credit option (see separate document provided by Eurofer/WorldAutoSteel).

## Small volume and niche manufacturers

	Yes	No	Neutral
Should derogations for small volume manufacturers (less than 10,000 registrations per year) be continued?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Should derogations for niche manufacturers (10,000 to 300,000 registrations per year) be continued	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If derogations are continued, should these be based on worldwide sales (instead of EU sales) for those manufacturers?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Should derogations be granted for certain types of vehicles rather than for manufacturers?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Additional Comments

If you have any comments or supplementary information to add to your replies to the questions in section 2, please insert this here:

*200 character(s) maximum*

Please note that a separate document providing additional data in response to the questions raised by this consultation was provided by Eurofer/WorldAutoSteel

## Contact

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