REPORT


Committee on the Environment, Public Health and Food Safety

Rapporteur: Bas Eickhout
### Symbols for procedures

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(The type of procedure depends on the legal basis proposed by the draft act.)

### Amendments to a draft act

#### Amendments by Parliament set out in two columns

Deletions are indicated in *bold italics* in the left-hand column. Replacements are indicated in *bold italics* in both columns. New text is indicated in *bold italics* in the right-hand column.

The first and second lines of the header of each amendment identify the relevant part of the draft act under consideration. If an amendment pertains to an existing act that the draft act is seeking to amend, the amendment heading includes a third line identifying the existing act and a fourth line identifying the provision in that act that Parliament wishes to amend.

#### Amendments by Parliament in the form of a consolidated text

New text is highlighted in *bold italics*. Deletions are indicated using either the ▌ symbol or strikeout. Replacements are indicated by highlighting the new text in *bold italics* and by deleting or striking out the text that has been replaced.

By way of exception, purely technical changes made by the drafting departments in preparing the final text are not highlighted.
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DRAFT EUROPEAN PARLIAMENT LEGISLATIVE RESOLUTION

on the proposal for a regulation of the European Parliament and of the Council setting CO₂ emission performance standards for new heavy-duty vehicles

(Ordinary legislative procedure: first reading)

The European Parliament,

– having regard to the Commission proposal to Parliament and the Council (COM(2018)0284),
– having regard to Article 294(2) and Article 192(1) of the Treaty on the Functioning of the European Union, pursuant to which the Commission submitted the proposal to Parliament (C8-0197/2018),
– having regard to Article 294(3) of the Treaty on the Functioning of the European Union,
– having regard to the opinion of the European Economic and Social Committee of 17 October 2018¹,
– after consulting the Committee of the Regions,
– having regard to Rule 59 of its Rules of Procedure,
– having regard to the report of the Committee on the Environment, Public Health and Food Safety and the opinion of the committee on Transport and Tourism (A8-0354/2018),

1. Adopts its position at first reading hereinafter set out;
2. Calls on the Commission to refer the matter to Parliament again if it replaces, substantially amends or intends to substantially amend its proposal;
3. Instructs its President to forward its position to the Council, the Commission and the national parliaments.

Amendment 1

Proposal for a regulation
Recital 1

Text proposed by the Commission  Amendment

(1) The European Strategy for Low-Emission Mobility sets a clear ambition: (1) In order to meet the commitments taken by the Union at the 21st Conference

¹ Not yet published in the Official Journal.
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. Emissions of air pollutants from transport that harm our health need also to be drastically reduced without delay.

of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), the decarbonisation of the transport sector needs to be accelerated and greenhouse gas emissions from transport need to be firmly on the path towards zero by 2050. Emissions of air pollutants from transport that harm our health by causing the premature death of more than 400 000 European citizens per year and that pollute the environment need also to be drastically reduced without delay. That requires a further reduction of emissions from conventional combustion engines after 2020 as well as the deployment of zero- and low-emission heavy duty vehicles, which will need to be developed, produced and marketed in order to achieve a substantial share of the market in the Union by 2030.

Amendment 2
Proposal for a regulation
Recital 1 a (new)

Text proposed by the Commission

Amendment

(1a) The deployment of zero-emission heavy-duty vehicles should contribute to the solution of major urban mobility problems. While being essential to reduce CO₂ emissions from road transport, the promotion of such vehicles by manufacturers is also crucial for the effective reduction of air pollutants and excessive noise levels in cities and urban areas.

Amendment 3
Proposal for a regulation
Recital 2

Text proposed by the Commission

Amendment

(2) Following the Low-Emission Mobility Strategy, the Commission

(2) Following the Low-Emission Mobility Strategy, the Commission
adopted two mobility packages in May and November 2017. These packages set out a positive agenda delivering on the Low-Emission Mobility Strategy and ensuring a smooth transition towards clean, competitive and connected mobility for all.

19 Europe on the Move: An agenda for a socially fair transition towards clean, competitive and connected mobility for all, COM(2017) 283 final

20 Delivering on low-emission mobility A European Union that protects the planet, empowers its consumers and defends its industry and workers, COM(2017) 675 final

Amendment 4

Proposal for a regulation
Recital 3

Text proposed by the Commission

(3) This Regulation is part of the third "Europe on the Move" Package, which delivers on the new industrial policy strategy of September 2017, and is designed to complete the process of enabling the Union to reap the full benefits of the modernisation and decarbonisation of mobility. The aim of the Package is to make European mobility safer and more accessible, European industry more competitive, European jobs more secure, and the mobility system to be cleaner and better adapted to the imperative of tackling climate change. This will require the full commitment of the Union, Member States and stakeholders, not least in strengthening efforts to reduce CO₂ emissions and air pollution.

Amendment

(3) This Regulation is part of the third "Europe on the Move" Package, which delivers on the new industrial policy strategy of September 2017, and is designed to complete the process of enabling the Union to reap the full benefits of the modernisation and decarbonisation of mobility. The aim of the Package is to make European mobility safer and more accessible, European industry more competitive, European jobs more secure, and the sector to be firmly on the path towards zero emission by mid-century and fully in line with the Paris Agreement. In order to find a good balance between strengthening efforts to reduce CO₂ emissions and air pollution, boosting innovation in the Union’s automotive industry and enhancing the Union’s competitiveness, the full commitment of the Union, Member States and stakeholders is required.
Amendment 5
Proposal for a regulation
Recital 4

Text proposed by the Commission

(4) This Regulation provides, together with the CO₂ emission standards for passenger cars and light commercial vehicles, a clear pathway for CO₂ emissions reductions from the road transport sector and contributes to the binding target of at least a 40% domestic reduction in economy-wide greenhouse gas emissions by 2030 compared to 1990, as was endorsed in the Conclusions of the European Council of 23-24 October 2014, and approved as the Union Intended Nationally Determined Contribution under the Paris Agreement at the Environment Council meeting on 6 March 2015.


Amendment 6
Proposal for a regulation
Recital 4 a (new)

Amendment

(4) This Regulation provides, together with Regulation (EU) …/…22 of the European Parliament and of the Council, a clear pathway for CO₂ emissions reductions from the road transport sector and contributes to the binding target of at least a 55% domestic reduction in economy-wide greenhouse gas emissions by 2030 compared to 1990, required to be in line with the Paris Agreement.

CO₂ emissions reduction targets for the Union-wide fleets of new heavy-duty vehicles should therefore be set for 2025 and for 2030, taking into account the vehicle fleet renewal time and the need for the road transport sector to contribute to the Union climate and energy targets for 2030 and beyond. Such a stepwise approach also provides a clear and early signal for the industry not to delay the market introduction of energy efficient technologies and zero- and low-emission vehicles.

Amendment 7

Proposal for a regulation
Recital 5

Text proposed by the Commission

(5) The European Council Conclusions of October 2014 endorsed a greenhouse gas emissions reduction of 30% by 2030 compared to 2005 for the sectors that are not part of the Union’s emissions trading system. Road transport provided a major contribution to the emissions of those sectors and its emissions remain significantly above 1990 levels. If road transport emissions would increase further, it will off-set reductions made by other sectors to combat climate change.

Amendment 8

Proposal for a regulation
Recital 8 a (new)

Text proposed by the Commission

(8a) In view of the estimated increase to around 9 % as to the proportion of emissions from heavy-duty vehicles and the fact that there are currently no
requirements for reducing CO\textsubscript{2} emissions from heavy-duty vehicles, specific measures for this category of vehicles are needed.

Amendment 9

Proposal for a regulation
Recital 9

Text proposed by the Commission

(9) In order to fully realise the energy efficiency potential and ensure that the road transport sector as a whole contributes to the greenhouse gas emission reductions agreed, it is appropriate to complement the already existing CO\textsubscript{2} emission standards for new passenger cars and light commercial vehicles by setting CO\textsubscript{2} emission performance standards for new heavy-duty vehicles. These standards will be a driver for innovation in fuel-efficient technologies, contributing to the strengthening of the technological leadership of the Union’s manufacturers and suppliers.

Amendment

(9) In order to fully realise the energy efficiency potential and ensure that the road transport sector as a whole contributes to the greenhouse gas emission reductions agreed, it is appropriate to complement the already existing CO\textsubscript{2} emission standards for new passenger cars and light commercial vehicles by setting CO\textsubscript{2} emission performance standards for new heavy-duty vehicles. These standards will be a driver for innovation in fuel-efficient technologies, contributing to the strengthening of the technological leadership of the Union’s manufacturers and suppliers and securing high-skilled jobs in the long term.

Amendment 10

Proposal for a regulation
Recital 10

Text proposed by the Commission

(10) Taking into account that climate change is a trans-boundary problem and the need to safeguard a well-functioning single market both for road transport services as well as for heavy-duty vehicles, it is appropriate to set CO\textsubscript{2} emission standards for heavy-duty vehicles at Union-level. Those standards should be designed so as to be without prejudice to competition law.

Amendment

(10) Taking into account that climate change is a trans-boundary problem and the need to safeguard a well-functioning single market both for road transport services as well as for heavy-duty vehicles and avoid any market fragmentation, it is appropriate to set CO\textsubscript{2} emission standards for heavy-duty vehicles at Union-level. Those standards should be designed so as to be without prejudice to competition law.
Amendment 11

Proposal for a regulation
Recital 11 a (new)

Text proposed by the Commission

(11a) Trucks could be up to 18% more fuel efficient, saving hauliers EUR 5700 a year by using technologies that are already available. Such technologies are only being deployed in around 15% of new trucks mainly because manufacturers only sell many of them as expensive optional extras.

Amendment 12

Proposal for a regulation
Recital 12 a (new)

Text proposed by the Commission

(12a) A socially acceptable and just transition towards zero-emission mobility by mid-century requires changes in the whole automotive value chain, taking into consideration citizens and regions in all Member States that could be adversely impacted. It is important to consider the social impact of the transition and to be proactive in addressing the implications on jobs. It is of paramount importance, therefore, that current measures are also accompanied by targeted programmes at Union, national and regional levels for re-skilling, up-skilling and redeployment of workers, as well as education and job-seeking initiatives in adversely impacted communities and regions conducted in close dialogue with the social partners and competent authorities.

Amendment 13
Proposal for a regulation
Recital 12 b (new)

Text proposed by the Commission

(12b) Recharging and refuelling infrastructure needs to be put in place quickly in order to ensure consumer confidence in zero- and low-emission vehicles, while the various support instruments at both Union and Member State level need to effectively work together to mobilise significant public and private investment.

Amendment 14

Proposal for a regulation
Recital 12 c (new)

Text proposed by the Commission

(12c) The low-emission mobility strategy stressed the importance of ensuring that electric vehicles are powered by electricity from sustainable energy sources and that a long-term next-generation batteries initiative is launched at Union level as soon as possible. In order to meet those objectives, it will be necessary to step up funding for technological research into the production, management and disposal of electric motor batteries, making them increasingly environmentally sustainable;

Amendment 15

Proposal for a regulation
Recital 12 d (new)

Text proposed by the Commission

(12d) Most Union transport freight operators are small and medium-sized enterprises with limited access to finance. Therefore, future solutions have to be cost effective and balanced. It is essential that
there is a strong incentive structure to support uptake of more fuel-efficient vehicles, as well as the provision of Union funding mechanisms.

Amendment 16
Proposal for a regulation
Recital 13

Text proposed by the Commission

(13) In the light of innovation and to take account of the implementation of new technologies improving the fuel efficiency of heavy-duty vehicles, the VECTO simulation tool as well as Regulation (EU) 2017/2400 will be continuously and timely updated.

Amendment

(13) In the light of innovation and to take account of the implementation of new technologies improving the fuel efficiency of heavy-duty vehicles, as well as the evolution of the real-world representativeness of the CO₂ emissions values determined under Regulation (EU) 2017/2400, the VECTO simulation tool as well as Regulation (EU) 2017/2400 will be continuously and in a timely manner updated, and sufficient budget is to be allocated accordingly. Taking into account the role that those new technologies can have on the CO₂ emission reduction potential of the transport sector, the 2022 review should take fully into account the evolution of the VECTO simulation tool.

Amendment 17
Proposal for a regulation
Recital 14

Text proposed by the Commission

(14) The CO₂ emissions data determined pursuant to Regulation (EU) 2017/2400 are to be monitored under Regulation (EU) No …/2018 of the European Parliament and of the Council²⁵. Those data should form the basis for determining the reduction targets to be achieved by the four groups of the most emitting heavy-duty vehicles in the Union, as well as for determining a manufacturer’s average specific emissions.

Amendment

(14) The CO₂ emissions data determined pursuant to Regulation (EU) 2017/2400 are to be monitored under Regulation (EU) 2018/956²⁵ of the European Parliament and of the Council. Those data should form the basis for determining the reduction targets to be achieved by the four groups of the most emitting heavy-duty vehicles in the Union, as well as for determining a manufacturer’s average specific emissions.
in a given calendar year.

(This amendment applies throughout the text. Adopting it will necessitate corresponding changes throughout.)


Amendment 18
Proposal for a regulation
Recital 15

Text proposed by the Commission

(15) A reduction target should be set for 2025 as a relative reduction based on the average CO₂ emissions of those heavy-duty vehicles in 2019, reflecting the deployment of readily available cost-effective technologies for conventional vehicles. The 2030 target should be considered aspirational and the final target should be determined pursuant to a review to be carried out in 2022 as there are more uncertainties on the uptake of more advanced technologies which are not yet readily available.

Amendment

(15) A reduction target should be set for 2025 as a relative reduction based on the average CO₂ emissions of those heavy-duty vehicles in 2019, reflecting the deployment of readily available cost-effective technologies for conventional vehicles. A reduction target should also be set for 2030, pursuant to a review to be carried out in 2022 that should not lower the ambition of this Regulation, while taking into account that there are more uncertainties on the uptake of more advanced technologies which are not yet readily available.

Amendment 19
Proposal for a regulation
Recital 16

Text proposed by the Commission

(16) Liquefied natural gas (LNG) is an available alternative fuel to diesel for heavy duty vehicles. The deployment of current and upcoming more innovative LNG-based technologies will contribute to meeting the CO₂ emission targets in the

Amendment

(16) Efficient, technology neutral and sufficient refuelling and recharging infrastructure should, in line with the ambitions of this Regulation, be further deployed as part of national policy frameworks for alternative fuel
short and medium term as the use of LNG technologies leads to lower CO2 emissions as compared to diesel vehicles. The CO2 emission reduction potential of LNG vehicles is already fully reflected in VECTO. In addition, current LNG technologies ensure a low level of air pollutant emissions such as NOx and particulate matters. A sufficient minimum refuelling infrastructure is also in place and being further deployed as part of national policy frameworks for alternative fuel infrastructure.

Justification

Creating investment certainty for infrastructure providers and for the roll out of sufficient technology-neutral infrastructure is key in meeting the ambitions of this regulation.

Amendment 20
Proposal for a regulation
Recital 17 a (new)

Text proposed by the Commission

Amendment

(17a) Regarding vocational vehicles and vehicles in the M2 and M3 categories, the Commission should specify as soon as possible the technical criteria for the definition of the vocational purpose of a vehicle and for the definition of buses covered by this Regulation.

Amendment 21
Proposal for a regulation
Recital 17 b (new)

Text proposed by the Commission

Amendment

(17b) A validation mechanism for the 2019 baseline should be developed in order to guarantee the accuracy and benefits of this Regulation.
Amendment 22

Proposal for a regulation
Recital 20 a (new)

Text proposed by the Commission

(20a) In order to bring flexibility in the incentive mechanism for the development of zero-emission heavy-duty vehicles, connected manufacturers should be able to form a pool on an open, transparent and non-discriminatory basis. An agreement to form a pool should not exceed five years but should be able to be renewed. The Commission should have the powers to establish detailed rules and conditions for connected manufacturers to form a pool on an open, transparent and non-discriminatory basis, in accordance with Union competition law.

Amendment 23

Proposal for a regulation
Recital 21

Text proposed by the Commission

(21) Contrary to cars and vans, zero- and low-emission heavy-duty vehicles are not yet available on the market, except for buses. A dedicated mechanism, in the form of super credits, should therefore be introduced to facilitate a smooth transition towards zero-emission mobility. This will provide incentives for the development and deployment on the Union market of zero- and low-emission heavy-duty vehicles that would complement demand-side instruments, such as the Clean Vehicle Directive 2009/33/EC of the European Parliament and of the Council. In order to ensure the smooth transition towards zero-emission mobility and to provide incentives for the development and deployment on the Union market of zero- and low-emission heavy-duty vehicles that would complement demand-side instruments, such as the Clean Vehicle Directive 2009/33/EC of the European Parliament and of the Council, a benchmark for the share of zero- and low-emission heavy-duty vehicles in a manufacturer’s fleet should be set for 2025 and 2030.

Amendment 24
Proposal for a regulation
Recital 21 a (new)

Text proposed by the Commission

(21a) The minimum share of zero- and low-emission vehicles should be designed so as to ensure investment certainty for charging infrastructure providers and manufacturers in order to promote the rapid deployment on the Union market of zero- and low-emission vehicles, while allowing certain flexibility for the manufacturers to decide on their investment timeline. A mechanism should be introduced to incentivise manufacturers to put zero- and low-emission vehicles as soon as possible on the Union market.

Amendment 25
Proposal for a regulation
Recital 22

Text proposed by the Commission

(22) For the purpose of calculating the specific CO₂ emissions target of a manufacturer, its performance against the 2025 and 2030 benchmark of zero- and low-emission vehicles should be taken into account. In order to incentivise the development and deployment of such vehicles while avoiding a weakening of the environmental objectives and of the efficiency of conventional internal combustion engines, the resulting adjustments should be subject to a cap.
Amendment 26

Proposal for a regulation
Recital 24

Text proposed by the Commission

(24) In designing the incentive mechanism for the deployment of zero-emission heavy-duty vehicles, also smaller lorries, buses and coaches that are not subject to the CO₂ emission targets under this Regulation should be included. These vehicles also have significant benefits in terms of helping to address air pollution problems in cities. However, it should be noted that zero-emission buses are already on the market and are incentivised through demand-side measures such as public procurement. In order to ensure that the incentives are well balanced between the different types of vehicles, the savings resulting from the zero-emission smaller lorries, buses and coaches should therefore also be subject to a cap.

Amendment

(24) In designing the incentive mechanism for the deployment of zero-emission heavy-duty vehicles, also smaller lorries, and other categories of heavy-duty vehicles that are not yet subject to the CO₂ emission targets under this Regulation should be included. These vehicles also have significant benefits in terms of helping to address air pollution problems in cities.

Amendment 27

Proposal for a regulation
Recital 24 a (new)

Text proposed by the Commission

(24a) As zero-emission buses are already available on the market and are incentivised through demand-side measures such as public procurement, it is appropriate to set binding targets of 50% in 2025 and 75% in 2030 of zero-emission urban buses in a manufacturer’s fleet of new urban buses to ensure sufficient supply of these vehicles on the Union market.

Amendment

(24a) As zero-emission buses are already available on the market and are incentivised through demand-side measures such as public procurement, it is appropriate to set binding targets of 50% in 2025 and 75% in 2030 of zero-emission urban buses in a manufacturer’s fleet of new urban buses to ensure sufficient supply of these vehicles on the Union market.
Amendment 28

Proposal for a regulation
Recital 29

Text proposed by the Commission

(29) The Commission should impose a financial penalty, in the form of an excess emissions premium, where a manufacturer is found to have excess emissions, taking into account the emission credits and debts. In order to provide manufacturers with a sufficient incentive to take measures to reduce the specific CO\textsubscript{2} emissions from heavy-duty vehicles, the premium should exceed the average marginal costs of the technologies needed to meet the targets. The premium should be considered as revenue for the general budget of the Union. The methodology for collecting the premiums should be determined by means of an implementing act, taking into account the methodology adopted pursuant to Regulation (EC) No 443/2009.  

Amendment

(29) The Commission should impose a financial penalty, in the form of an excess emissions premium, where a manufacturer is found to have excess emissions, taking into account the emission credits and debts. In order to provide manufacturers with a sufficient incentive to take measures to reduce the specific CO\textsubscript{2} emissions from heavy-duty vehicles, it is important that the premium always exceeds the average marginal costs of the technologies needed to meet the targets. The amounts from the excess emissions premium should be considered as revenue for the general budget of the Union. Those amounts should be used to support, in close collaboration with social partners and competent authorities, the just transition of the automotive sector towards zero-emission mobility as well as innovative solutions that incentivise the rapid deployment of zero- and low-emission heavy-duty vehicles. The methodology for collecting the premiums should be determined by means of an implementing act, taking into account the methodology adopted pursuant to Regulation (EC) No 443/2009\textsuperscript{1a} of the European Parliament and of the Council.

Proposal for a regulation
Recital 30

Text proposed by the Commission

(30) A robust compliance mechanism is necessary in order to ensure that the targets under this Regulation are met. The obligations placed on manufacturers to deliver accurate data pursuant to Regulation (EU) No 2018/956 and the administrative fines that may be imposed in the case of non-compliance with that obligation, contributes to ensuring the robustness of the data used for target compliance purposes under this Regulation.

Amendment

(30) A robust compliance mechanism is necessary in order to ensure that the targets under this Regulation are met. The obligations placed on manufacturers to deliver accurate data pursuant to Regulation (EU) No 2018/956 and the administrative fines that may be imposed in the case of non-compliance with that obligation, contributes to ensuring the robustness of the data used for target compliance purposes under this Regulation. It is in the interest of consumers and the general public to know which manufacturers are and which are not complying with the new emission standards.

Amendment 30

Proposal for a regulation
Recital 31

Text proposed by the Commission

(31) It is essential for achieving the CO\textsubscript{2} reductions pursuant to this Regulation that the CO\textsubscript{2} emissions of heavy-duty vehicles in use and on road are in conformity with the values determined pursuant to Regulation (EC) No 595/2009 and its implementing measures. It should therefore be possible for the Commission to take into account, in the calculation of the average specific emissions of a manufacturer, any systematic non-conformity found by type approval authorities with regard to the CO\textsubscript{2} emissions of heavy-duty vehicles in use.

Amendment

(31) It is essential for achieving the CO\textsubscript{2} reductions pursuant to this Regulation that the CO\textsubscript{2} emissions of heavy-duty vehicles in use and on road are in conformity with the values determined pursuant to Regulation (EC) No 595/2009 and its implementing measures. It should therefore be possible for the Commission to take into account, in the calculation of the average specific emissions of a manufacturer, any systematic non-conformity found by type approval authorities with regard to the CO\textsubscript{2} emissions of heavy-duty vehicles in use and on the road. Third party independent testing of vehicles in use and on the road should also be introduced.
Amendment 31
Proposal for a regulation
Recital 33

Text proposed by the Commission

(33) The effectiveness of the targets set out in this Regulation in reducing CO\textsubscript{2} emissions is strongly dependent on the representativeness of the methodology used for determining the CO\textsubscript{2} emissions. In line with the Opinion of the Scientific Advice Mechanism (SAM)\textsuperscript{27} as regards light duty vehicles, it is appropriate also in the case of heavy-duty vehicles to put in place a mechanism to assess the real-world representativeness of the CO\textsubscript{2} emissions and energy consumption values determined pursuant to Regulation (EU) 2017/2400. The Commission should have the powers to ensure the public availability of such data and, where necessary, develop the procedures needed for identifying and collecting the data required for such assessments.

Amendment

(33) The effectiveness of the targets set out in this Regulation in reducing CO\textsubscript{2} emissions is strongly dependent on the representativeness of the methodology used for determining the CO\textsubscript{2} emissions. In line with the Opinion of the Scientific Advice Mechanism (SAM)\textsuperscript{27} as regards light duty vehicles, it is appropriate also in the case of heavy-duty vehicles to put in place a mechanism to assess the real-world representativeness of the CO\textsubscript{2} emissions and energy consumption values determined pursuant to Regulation (EU) 2017/2400. The Commission should have the powers to ensure the public availability of such data and, where necessary, develop the procedures needed for identifying and collecting the data required for such assessments. Where a significant gap is identified between real-world emissions values and those determined pursuant to Regulation (EU) 2017/2400, the Commission should have the power to adapt accordingly the average specific CO\textsubscript{2} emissions of a manufacturer and, where appropriate, the 2019 reference CO\textsubscript{2} emissions used for the purpose of compliance with this Regulation.

\textsuperscript{27} High Level Group of Scientific Advisors, Scientific Opinion 1/2016 “Closing the gap between light-duty vehicle real-world CO\textsubscript{2} emissions and laboratory testing”
Amendment 32

Proposal for a regulation
Recital 34 a (new)

*Text proposed by the Commission*

(34a) In its 2022 report, the Commission should also evaluate the possibility of developing a methodology for the assessment of the full life-cycle CO₂ emissions of heavy-duty vehicles. On the basis of that evaluation, the Commission should propose, if appropriate, to establish reporting obligations on manufacturers and specify the necessary rules and procedures for that reporting.

Amendment 33

Proposal for a regulation
Recital 36

*Text proposed by the Commission*


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Amendment 34

Proposal for a regulation
Recital 37

_text proposed by the Commission_

(37) In order to amend or supplement non-essential elements of the provisions of this Regulation, the power to adopt acts in accordance with Article 290 of the Treaty of the Functioning of the European Union should be delegated to the Commission in respect of adjusting the reference CO₂ emissions pursuant to Article 12(2) and in respect of amending Annexes I and II as regards certain technical parameters, including the weightings of the mission profiles, the payloads, and the annual mileages as well as the payload adjustment factors. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council should receive all documents at the same time as Member States’ experts, and their experts should systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

 Amendment

(37) In order to amend and supplement non-essential elements of the provisions of this Regulation, the power to adopt acts in accordance with Article 290 of the Treaty of the Functioning of the European Union should be delegated to the Commission in respect of specifying the technical criteria for defining the vocational purpose of a vehicle and for the definition of urban buses, establishing detailed rules and conditions which allow connected manufacturers to form a pool, establishing an annual testing scheme for a representative sample of components, units and systems, adjusting the reference CO₂ emissions, introducing an on-road in-service conformity test and in respect of amending Annexes I and II as regards certain technical parameters, including the weightings of the mission profiles, the payloads, and the annual mileages as well as the payload adjustment factors. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States’ experts, and their experts systematically have access to meetings of
Commission expert groups dealing with the preparation of delegated acts.


Amendment 35

Proposal for a regulation
Article 1 – paragraph 1 – introductory part

Text proposed by the Commission

In order to contribute to fulfilling the Union’s target of reducing its greenhouse gas emissions by 30% below 2005 levels in 2030 in the sectors covered by Article 2 of Regulation (EU) No 2018/842, and to achieving the objectives of the Paris Agreement and to ensure the proper functioning of the internal market, this Regulation sets CO₂ emission performance standards for new heavy-duty vehicles whereby the specific CO₂ emissions of the Union’s fleet of new heavy-duty vehicles shall be reduced compared to the reference CO₂ emissions as follows:

Amendment

In order to contribute to fulfilling the Union’s target of reducing its greenhouse gas emissions by 30% below 2005 levels in 2030 in the sectors covered by Article 2 of Regulation (EU) 2018/842, and to achieving the objectives of the Paris Agreement and to ensure the proper functioning of the internal market, this Regulation sets CO₂ emission performance requirements for new heavy-duty vehicles whereby the specific CO₂ emissions of the Union’s fleet of new heavy-duty vehicles shall be reduced compared to the reference CO₂ emissions as follows:

Amendment 36

Proposal for a regulation
Article 1 – paragraph 1 – point a

Text proposed by the Commission

(a) From 1 January 2025 to 31 December 2029 by 15%;

Amendment

(a) From 1 January 2025 to 31 December 2029 by 20 %;

Amendment 37

Proposal for a regulation
Article 1 – paragraph 1 – point b

Text proposed by the Commission

(b) From 1 January 2030 onwards by at least 30% subject to the review pursuant to

Amendment

(b) From 1 January 2030 onwards by at least 35 % subject to the review pursuant to
Article 13.

Amendment 38

Proposal for a regulation
Article 1 – paragraph 2 a (new)

*Text proposed by the Commission*

In order to ensure the smooth transition towards zero-emission mobility, and to provide incentives for the development and deployment of the Union market and infrastructure for zero- and low-emission heavy duty vehicles, this Regulation sets a benchmark for the share of zero- and low-emission heavy-duty vehicles in all manufacturers’ fleet for 2025 and 2030, pursuant to Article 5.

Specific CO\textsubscript{2} emissions shall be adjusted based on the performance against the benchmark, in accordance with point 4 of Annex I.

Amendment 39

Proposal for a regulation
Article 1 – paragraph 2 b (new)

*Text proposed by the Commission*

In order to ensure the appropriate level of supply of zero-emission urban buses in relation to demand-side measures such as public procurement objectives, this Regulation sets a binding minimum share of zero-emission urban buses in a manufacturer’s fleet of new urban buses of:

(a) 50 \% from 1 January 2025 to 31 December 2029;

(b) 75 \% from 1 January 2030 onwards.

Amendment 40

Proposal for a regulation
Article 2 – paragraph 1 – subparagraph 1 – introductory part
Text proposed by the Commission

This Regulation shall apply to new vehicles of the categories N2 and N3 that meet the following characteristics:

Amendment

This Regulation shall apply as a first step to new vehicles of the categories N2 and N3 that meet the following characteristics:

Proposal for a regulation
Article 2 – paragraph 1 – subparagraph 2

Text proposed by the Commission

It shall also apply, for the purposes of Article 5 and point 2.3 of Annex I, to vehicles of the categories M2 and M3, and to vehicles of the category N that do not fall within the scope of Regulation (EU) No 510/2011 and do not meet the characteristics set out in points (a) to (d).

Amendment

It shall also apply, for the purposes of Article 1(2a), Article 5 and point 4 of Annex I, to vehicles of the category N that do not fall within the scope of Regulation (EU) No 510/2011 of the European Parliament and of the Council and do not meet the characteristics set out in points (a) to (d). Furthermore, it shall apply, for the purpose of Article 1(2b) to vehicles of categories M2 and M3 that meet the technical criteria referred to in paragraph 2a of this Article.


Proposal for a regulation
Article 2 – paragraph 2 a (new)

Text proposed by the Commission

2a. The Commission shall adopt, no later than 1 July 2019, delegated acts in accordance with Article 15 in order to supplement this Regulation by specifying the technical criteria for the definition of
the vocational purpose of a vehicle and for the definition of urban buses covered by the Regulation.

Amendment 43

Proposal for a regulation
Article 3 – paragraph 1 – point h

Text proposed by the Commission

(h) ‘vocational vehicle’ means a heavy-duty vehicle not intended for the delivery of goods and for which the CO\textsubscript{2} emissions and fuel consumption have been determined, in accordance with Regulation (EC) No 595/2009 and its implementing measures, only for other mission profiles than those defined in point 2.1 of Annex I to this Regulation;

Amendment

(h) ‘vocational vehicle’ means a heavy-duty vehicle not intended for the delivery of goods, whose vocational purpose has been defined based on the technical criteria specified in accordance with Article 2(2a), and for which the CO\textsubscript{2} emissions and fuel consumption have been determined, in accordance with Regulation (EC) No 595/2009 and its implementing measures, only for other mission profiles than those defined in point 2.1 of Annex I to this Regulation;

Amendment 44

Proposal for a regulation
Article 3 – paragraph 1 – point k

Text proposed by the Commission

(k) ‘low-emission heavy-duty vehicle’ means a heavy-duty vehicle, which is not a zero emission heavy-duty vehicle, with specific CO\textsubscript{2} emissions of less than 350 g CO\textsubscript{2}/km as determined pursuant to point 2.1 of Annex I;

Amendment

(k) ‘low-emission heavy-duty vehicle’ means a heavy-duty vehicle, which is not a zero emission heavy-duty vehicle, with specific CO\textsubscript{2} emissions, as determined pursuant to point 2.1 of Annex I, below 50% of the reference CO\textsubscript{2} emissions for each sub-group as determined pursuant to point 3 of Annex I;

Amendment 45

Proposal for a regulation
Article 3 – paragraph 1 – point n a (new)

Text proposed by the Commission

(na) 'urban bus' means a vehicle of either category M2 or M3 intended for the
carriage of passengers, whose technical criteria has been specified in accordance with Article 2(2a).

Amendment 46

Proposal for a regulation
Article 4 – paragraph 1 – point b

Text proposed by the Commission

(b) the zero- and low-emission factor determined in accordance with Article 5.

Amendment

deleted

Amendment 47

Proposal for a regulation
Article 5 – paragraph 1 – subparagraph 1

Text proposed by the Commission

Starting from 2020 and for each subsequent calendar year, the Commission shall, by means of implementing acts referred to in Article 10(1), determine for each manufacturer the zero- and low-emission factor referred to in Article 4(b) for the preceding calendar year.

Amendment

Starting from 1 January 2025, the specific share of zero- and low-emission heavy-duty vehicles in the manufacturer’s fleet in a calendar year shall be benchmarked against the following values:

As of 2025: at least 5 %;
As of 2030: 20 %, subject to the review pursuant to Article 13.

Amendment 48

Proposal for a regulation
Article 5 – paragraph 1 – subparagraph 2

Text proposed by the Commission

The zero- and low-emission factor shall take into account the number and the CO₂ emissions of zero- and low-emission heavy-duty vehicles in the manufacturer’s fleet in a calendar year, including zero-emission vehicles of the categories referred to in the second sub-paragraph

Amendment

deleted
of Article 2(1), as well as zero- and low-emission vocational vehicles.

Amendment 49

Proposal for a regulation
Article 5 – paragraph 1 – subparagraph 3

Text proposed by the Commission

Amendment

The zero- and low-emission factor shall be calculated in accordance with point 2.3 of Annex I.

deleted

Amendment 50

Proposal for a regulation
Article 5 – paragraph 2 – subparagraph 1

For the purpose of paragraph 1, the zero- and low-emission heavy-duty vehicles shall be counted as follows:

(a) a zero-emission heavy-duty vehicle shall be counted as 2 vehicles;
(b) a low-emission heavy-duty vehicle shall be counted as up to 2 vehicles according to a function of its specific CO₂ emissions and the threshold emission level of 350 g CO₂/km.

Amendment 51

Proposal for a regulation
Article 5 – paragraph 3

Text proposed by the Commission

Amendment

3. The zero- and low-emission factor shall reduce the average specific emissions of a manufacturer by a maximum of 3%. The contribution of

deleted
zero-emission heavy-duty vehicles of the categories referred to in the second subparagraph of Article 2(1) to that factor shall reduce the average specific emissions of a manufacturer by a maximum of 1.5%.

Amendment 52
Proposal for a regulation
Article 7 – paragraph 2

Text proposed by the Commission

2. The CO₂ reduction trajectory referred to in paragraph 1(a) shall be set for each manufacturer in accordance with point 5.1 of Annex I, based on a linear trajectory between the reference CO₂ emissions referred to in the second subparagraph of Article 1 and the 2025 target specified in point (a) of that Article, and between the 2025 target and the 2030 target specified in point (b) of that Article.

Amendment

2. The CO₂ reduction trajectory referred to in point (a) of paragraph 1 shall be set for each manufacturer in accordance with point 5.1 of Annex I, based on a linear trajectory between the reference CO₂ emissions referred to in the second subparagraph of Article 1(1) and the 2025 target specified in point (a) of that Article, and between the 2025 target and the 2030 target specified in point (b) of that Article.

Amendment 53
Proposal for a regulation
Article 7 a (new)

Text proposed by the Commission

Amendment

Article 7 a
Pooling

1. Connected manufacturers may form a pool for the purposes of meeting their obligations under Article 5.

2. The Commission shall be empowered to adopt delegated acts in accordance with Article 15 to supplement this Regulation in order to establish detailed rules and conditions which allow connected manufacturers to form a pool on an open, transparent and non-discriminatory basis.
Amendment 54

Proposal for a regulation
Article 8 – paragraph 1

Text proposed by the Commission

1. Where a manufacturer is found to have excess emissions pursuant to paragraph 2 in a given calendar year from 2025 onwards, the Commission shall impose an excess emission premium calculated in accordance with the following formula:

\[
(\text{Excess emission premium}) = (\text{Excess emissions} \times 6\,800\,€/g\text{CO}_2/\text{tkm})
\]

Amendment

1. Where a manufacturer is found to have excess emissions pursuant to paragraph 2 in a given calendar year from 2025 onwards, the Commission shall impose on the manufacturer or the pool manager, as the case may be, an excess emission premium calculated in accordance with the following formula:

\[
(\text{Excess emission premium}) = (\text{Excess emissions} \times 6\,800\,€/g\text{CO}_2/\text{tkm})
\]

The Commission shall ensure that the level of the excess emission premium always exceeds the average marginal costs of the technologies needed to meet the targets referred to in Article 1(1).

Amendment 55

Proposal for a regulation
Article 8 – paragraph 4

Text proposed by the Commission

4. The amounts of the excess emissions premium shall be considered as revenue for the general budget of the Union.

Amendment

4. The amounts of the excess emissions premium shall be considered as revenue for the general budget of the Union. Those amounts shall be used to complement Union or national measures which, in close cooperation with the social partners and competent authorities, promote the development of skills or the reallocation of workers in the automotive sector in all affected Member States, in particular in the regions and the communities most affected by the transition, in order to contribute to a just transition towards zero- and low-emission mobility.

Amendment 56

Proposal for a regulation
Article 9 – paragraph 2

*Text proposed by the Commission*

2. The Commission shall take those deviations into account for the purpose of calculating the average specific emissions of a manufacturer.

*Amendment*

2. The Commission shall take those deviations into account for the purpose of calculating the average specific emissions of a manufacturer, *and adapting, where appropriate, the 2019 reference CO₂ emissions calculated in accordance with Point 3 of Annex I.*

Amendment 57

Proposal for a regulation

Article 9 – paragraph 3 a (new)

*Text proposed by the Commission*

3 a. To ensure the accuracy of the data reported by manufacturers pursuant to Regulation (EU) 2018/956 and of Regulation (EU) 2017/2400, the Commission shall be empowered to adopt delegated acts in accordance with Article 15 to supplement this Regulation in order to establish, as from 2019, an annual testing scheme, for a representative sample from each manufacturer of the components, separate technical units and systems specified in Article 12(1) of Regulation (EU) 2017/2400 of the vehicles falling within the scope of this Regulation. The results of those tests shall be compared with the data inserted by the manufacturers pursuant to Regulation (EU) 2017/2400 and, when systematic irregularities are found, their average specific emissions calculated in accordance with point 2.7 of Annex I and, where appropriate, the 2019 reference CO₂ emissions calculated in accordance with Point 3 of Annex I, shall be adjusted.

Amendment 58

Proposal for a regulation

Article 10 – paragraph 1 – subparagraph 1 – point b
(b) from 2020, the zero- and low-emission factor, referred to in Article 5;

Amendment
(b) from 2020, for each manufacturer its specific share of zero- and low-emission heavy-duty vehicles in the preceding calendar year, referred to in Article 5(1);

Amendment 59
Proposal for a regulation
Article 11

Text proposed by the Commission

Article 11
Real-world CO₂ emissions and energy consumption

1. The Commission shall monitor and assess the real-world representativeness of the CO₂ emissions and fuel consumption values determined in accordance with Regulation (EU) 2017/2400. It shall ensure that the public is informed of how that representativeness evolves over time.

2. For that purpose, the Commission shall ensure the availability, from manufacturers or national authorities, as the case may be, of robust non-personal data on real-world CO₂ emissions and energy consumption of heavy-duty vehicles.

Amendment

Article 11
Real-world CO₂ emissions and energy consumption

1. The Commission shall monitor and assess the real-world representativeness of the CO₂ emissions and fuel consumption values determined in accordance with Regulation (EU) 2017/2400.

2. For that purpose, the Commission shall ensure the availability, including to third parties for the purpose of independent testing, from manufacturers or national authorities, as the case may be, of robust data on real-world CO₂ emissions and energy consumption of heavy-duty vehicles, based on data from standardised fuel consumption meters.

2 a. The Commission shall adopt, no later than 31 December 2019, delegated acts in accordance with Article 15 in order to supplement this Regulation by introducing an on-road in-service conformity test which ensures that on-road CO₂ emissions and fuel consumption of heavy-duty vehicles do not exceed the monitoring data reported pursuant to Regulation (EU) 2017/2400 and to Regulation (EU) 2018/956 by more than 10%. The Commission shall take any
deviation exceeding that threshold into account for the purpose of calculating the average specific CO₂ emissions of a manufacturer, and adapting, where appropriate, the 2019 reference CO₂ emissions.

2b. The Commission shall ensure that the public is informed of how the real world representativeness referred to in paragraph 1 evolves over time.

3. The Commission may adopt, by means of implementing acts, the measures referred to in paragraphs 1 and 2 of this Article. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 14(2).

Amendment 60

Proposal for a regulation
Article 12 – paragraph 1

Text proposed by the Commission

1. In order to ensure that the technical parameters used for the calculation of the average specific emissions of a manufacturer pursuant to Article 4 and the calculation of the specific emission targets pursuant to Article 6 take into account technical progress and the evolution of freight transport logistics, the Commission shall be empowered to adopt delegated acts in accordance with Article 15 to amend the following provisions set out in Annexes I and II.

Amendment 61

Proposal for a regulation
Article 13 – paragraph 1

1. In order to ensure that the technical parameters used for the calculation of the average specific emissions of a manufacturer pursuant to Article 4 and the calculation of the specific emission targets pursuant to Article 6 take into account technical progress and the evolution of freight transport logistics, the Commission shall continuously and in a timely manner update the VECTO simulation tool and be empowered to adopt delegated acts in accordance with Article 15 to amend the following provisions set out in Annexes I and II.
By 31 December 2022, the Commission shall submit a report to the European Parliament and the Council on the effectiveness of this Regulation, the CO₂ reduction target to be determined for 2030 pursuant to Article 1 and the setting of CO₂ reduction targets to other types of heavy-duty vehicles including trailers. That report shall also include an assessment of the effectiveness of the modalities addressing, in particular, zero- and low-emission vehicles, notably buses taking into account the targets set out in Directive 2009/33/EC, and the CO₂ credit system and the appropriateness of prolonging the application of those modalities in 2030 and beyond and, where appropriate, be accompanied by a proposal for amending this Regulation.

By 31 December 2022, the Commission shall submit a report to the European Parliament and the Council on the effectiveness of this Regulation, the CO₂ reduction target to be adjusted, if necessary, for 2030 pursuant to Article 1, the benchmark for the share of zero- and low-emission vehicles to be adjusted, if necessary, for 2030 pursuant to Article 5, and the setting of CO₂ reduction targets to other types of heavy-duty vehicles including trailers and vocational vehicles such as refuse collection vehicles. That report shall also include an assessment of the effectiveness of the modalities addressing, in particular, the deployment of zero- and low-emission vehicles, notably buses taking into account the targets set out in Directive 2009/33/EC, the CO₂ credit system and the appropriateness of prolonging the application of those modalities in 2030 and beyond, the roll-out of the necessary recharging and refuelling infrastructure, the possibility of introducing engine CO₂ standards in particular for vocational vehicles, the different vehicle combinations beyond standard dimensions applicable to national transport, such as Modular Concepts, the real-world representativeness of the CO₂ emissions and fuel consumption values determined in accordance with Regulation (EU) 2017/2400 as well as an assessment of the update of the VECTO simulation tool. The report shall be, where appropriate, accompanied by a proposal for amending this Regulation.

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30 Clean Vehicle Directive 2009/33/EC as amended by Directive …/…/EU
Amendment 62

Proposal for a regulation
Article 14 – paragraph 1

Text proposed by the Commission

1. The Commission shall be assisted by the xxx Committee established by Regulation (EU) No …/2018 [Governance]. That Committee shall be a committee within the meaning of Regulation (EU) No 182/2011.

Amendment


Justification

The proposal maintains the existing committee structure and is in line with the new Regulation on the Governance of the Energy Union, which is to maintain the Climate Change Committee for the separate pieces of climate legislation.

Amendment 63

Proposal for a regulation
Article 15 – paragraph 2

Text proposed by the Commission

2. The power to adopt delegated acts referred to Articles 10(2) and 12(1) shall be conferred on the Commission for an indeterminate period of time from [the date of entry into force of this Regulation].

Amendment

2. The power to adopt delegated acts referred to Articles 2(2a), 7a, 9(3a), 10(2), 11(2a) and 12(1) shall be conferred on the Commission for an indeterminate period of time from [the date of entry into force of this Regulation].
**Amendment 64**

**Proposal for a regulation**

**Article 15 – paragraph 3**

*Text proposed by the Commission*

3. The delegation of power referred to in Articles 10(2) and 12(1) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated act already in force.

*Amendment*

3. The delegation of power referred to in Articles 2(2a), 7a, 9(3a), 10(2), 11(2a) and 12(1) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated act already in force.

**Amendment 65**

**Proposal for a regulation**

**Article 15 – paragraph 6**

*Text proposed by the Commission*

6. A delegated act adopted pursuant to Articles 10(2) and 12(1) shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended to two months at the initiative of the European Parliament or of the Council.

*Amendment*

6. A delegated act adopted pursuant to Articles 2(2a), 7a, 9(3a), 10(2), 11(2a) and 12(1) shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended to two months at the initiative of the European Parliament or of the Council.

**Amendment 66**

**Proposal for a regulation**

**Article 16 – paragraph 1**

Regulation (EC) No 595/2009
Article 5 – paragraph 4 – point l

Text proposed by the Commission

‘(l) a procedure to verify, on the basis of appropriate and representative samples, whether vehicles that have been registered and entered into service are in conformity with the CO\(_2\) emissions and fuel consumption values determined pursuant to this Regulation and its implementing measures;’

Amendment

‘(l) a procedure to verify, on the basis of appropriate and representative samples, whether vehicles that have been registered and entered into service are in conformity with the CO\(_2\) emissions and fuel consumption values determined pursuant to this Regulation and its implementing measures; that procedure shall also be carried out by accredited and independent third parties in accordance with Article 13(10) of Regulation (EU) 2018/858\(^1\) of the European Parliament and of the Council.’


Amendment 67

Proposal for a regulation
Annex I – point 2 – point 2.3

Text proposed by the Commission

2.3. Calculation of the zero- and low-emission factor as referred to in Article 5

For each manufacturer and calendar year, the zero- and low-emission factor (ZLEV) referred to in Article 5 shall be calculated as follows:

\[ ZLEV = \frac{V}{V_{\text{conv}} + V_{\text{zlev}}} \text{ with a minimum of 0.97} \]

Where:

\( V \) is the number of new heavy-duty

Amendment

deleted
vehicles of the manufacturer excluding all vocational vehicles in accordance with Article 4(a).

\( V_{\text{conv}} \) is the number of new heavy-duty vehicles of the manufacturer excluding all vocational vehicles in accordance with Article 4(a) and excluding zero- and low-emission heavy-duty vehicles;

\( V_{z\text{lev}} \) is the sum of \( V_{\text{in}} \) and \( V_{\text{out}} \),

Where,

\( \sum \) is the sum over all new zero- and low-emission heavy-duty vehicles with the characteristics set out in Article 2(1)(a) to (d);

\( CO_2 \) is the specific \( CO_2 \) emissions in g/km of a zero- and low-emission heavy-duty vehicle \( v \) determined in accordance with point 2.1.

\( V_{\text{out}} \) is the total number of zero-emission heavy-duty vehicles of the categories referred to in in the second sub-paragraph of Article 2(1), multiplied by 2 , and with a maximum of 1,5% of \( V_{\text{conv}} \).

**Amendment 68**

**Proposal for a regulation**

Annex I – point 2 – point 2.7 – formula

*Text proposed by the Commission*

\[
CO_2 = ZLEV \times \sum \text{share}_{sg} \times \text{MPW}_{sg} \times \text{avgCO2}_{sg}
\]

Where,

\( \sum \text{share}_{sg} \) is the sum over all sub-groups

\( ZLEV \) is as determined in point 2.3

\( \text{MPW}_{sg} \) is as determined in point 2.6

\( \text{avgCO2}_{sg} \) is as determined in point 2.2

*Amendment*

\[
CO_2 = \sum \text{share}_{sg} \times \text{MPW}_{sg} \times \text{avgCO2}_{sg}
\]

Where,

\( \sum \text{share}_{sg} \) is the sum over all sub-groups

\( \text{share}_{sg} \) is as determined in point 2.4

\( \text{MPW}_{sg} \) is as determined in point 2.6

\( \text{avgCO2}_{sg} \) is as determined in point 2.2
Amendment 69
Proposal for a regulation
Annex I – point 4 – paragraph 1 – formula – line 1

Text proposed by the Commission

\[ T = \sum_{s} \text{share}_{s} \times \text{MPW}_{s} \times (1 - \text{rf}) \times r\text{CO}_2 \]

Amendment

\[ T = Z\text{LEV}_\text{benchmark\_factor} \times \sum_{s} \text{share}_{s} \times \text{MPW}_{s} \times (1 - \text{rf}) \times r\text{CO}_2 \]

Amendment 70
Proposal for a regulation
Annex I – point 4 – paragraph 1 – formula – line 4

Text proposed by the Commission

rf is the CO\textsubscript{2} reduction target (in %) as specified in Article 1(a) and (b) for the specific calendar year;

Amendment

rf is the CO\textsubscript{2} reduction target (in %) as specified in points (a) and (b) of the first subparagraph of Article 1 for the specific calendar year;

Amendment 71
Proposal for a regulation
Annex I – point 4 – paragraph 1 a (new)

Text proposed by the Commission

For the period 2025 to 2029, Z\text{LEV}_\text{benchmark\_factor} is (1+y-x), unless this sum is larger than 1,03 or lower than 0,97 in which case the Z\text{LEV}_\text{benchmark\_factor} shall be set at 1,03 or 0,97 as the case may be.

Where,

x is 5 \%

y is the share of zero- and low-emission vehicles in the manufacturer's fleet of newly registered heavy duty vehicles calculated as the sum of the total number of zero-emission vehicles of the category N that do not fall within the scope of Regulation (EU) No 510/2011 and do not meet the characteristics set out in points (a) to (d) of Article 2(1) and of the total number of zero- and low-emission vehicles that meet the characteristics set
out in points (a) to (d) of Article 2(1), where each of them is counted as ZLEV_specific in accordance with the formula below, divided by the total number of vehicles registered in the relevant calendar year;

\[
ZLEV_{\text{specific}} = 1 - \left(\frac{\text{CO}_2v}{0.5 \times r\text{CO}_2_{sg}}\right),
\]

where:

\(\text{CO}_2v\) is the specific \(\text{CO}_2\) emissions in \(\text{g/km}\) of a zero- and low-emission heavy-duty vehicle \(v\) determined in accordance with point 2.1;

\(r\text{CO}_2_{sg}\) is as determined in Section 3.

Amendment 72

Proposal for a regulation
Annex I – point 4 – paragraph 1 b (new)

Text proposed by the Commission

For 2030, \(ZLEV_{\text{benchmark\_factor}}\) is \((1+y-x)\), unless this sum is larger than 1,05, in which case \(ZLEV_{\text{benchmark\_factor}}\) shall be set to 1,05;

if this sum is between 1,0 and 0,98, \(ZLEV_{\text{benchmark\_factor}}\) shall be set to 1,0;

if this sum is lower than 0,95, \(ZLEV_{\text{benchmark\_factor}}\) shall be set at 0,95.

Where,

\(x\) is 20 %, subject to review pursuant to Article 13;

\(y\) is the share of zero- and low-emission vehicles in the manufacturer’s fleet of newly registered heavy duty vehicles calculated as the sum of the total number of zero-emission vehicles of the category \(N\) that do not fall within the scope of Regulation (EU) No 510/2011 and do not meet the characteristics set out in points (a) to (d) of Article 2(1) and of the total number of zero- and low-emission
vehicles that meet the characteristics set out in points (a) to (d) of Article 2(1), where each of them is counted as ZLEV_specific in accordance with the formula below, divided by the total number of vehicles registered in the relevant calendar year

\[ ZLEV_{specific} = 1 - \left( \frac{CO_2_v}{0,5 \times rCO_2_{sg}} \right), \]

where:

- \( CO_2_v \) is the specific \( CO_2 \) emissions in g/km of a zero- and low-emission heavy-duty vehicle \( v \) determined in accordance with point 2.1;
- \( rCO_2_{sg} \) is as determined in Section 3.
EXPLANATORY STATEMENT

The Union and its Member States committed to the Paris Agreement, which aims at keeping the increase of global temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. The transport sector, whose emissions are increasing and were responsible for 25% of total GHG emissions in the EU in 2016, has to do a substantial part of the EU climate effort. The decarbonisation of the transport sector must be accelerated, and GHG and air pollutant emissions from transport should be net zero by mid-century at the latest.

Setting emission performance requirements for new HDVs has the potential to reduce CO2 emissions, thus contributing towards the reduction of greenhouse gas emissions and the mitigation of climate change, while at the same time delivering significant fuel savings to transport operators, maintaining a high level of innovation and technological leadership for EU HDV manufacturers, and bringing about substantial air quality improvements.

The rapporteur considers that decreasing CO2 emissions from the transport sector is key to fulfil the Union’s target of reducing its greenhouse gas emissions by at least 30% below 2005 levels in 2030 under Regulation (EU) 2018/842 [Effort Sharing Regulation] in the most cost-efficient way. Any delay in this sector would require substantial efforts from other sectors in order to respect our commitments under the Paris Agreement, including agriculture.

HDV CO2 emissions represented about 6% of total EU GHG emissions in 2015. Without EU action, this share is estimated to increase further by up to 6% between 2015 and 2030. In its 2014 Strategy for reducing Heavy-Duty Vehicles’ fuel consumption and CO2 emissions, the European Commission already acknowledged HDV CO2 emissions trends are unsustainable on the mid and longer term, and thus advocated for a ‘stepwise approach’ for regulating CO2 emissions in this sector. Following Regulation (EU) 2017/2400 [Certification] and Regulation (EU) 2018/956 [Monitoring & Reporting], this Regulation is the last and most important legislative piece for setting CO2 emission performance requirements for new HDVs. The rapporteur supports the approach favoured by the Commission to introduce CO2 emission performance requirements to the most polluting vehicles as a first step, before widening the scope to all HDV categories in the near future.

Significant HDV markets such as the United States, Canada, Japan or China have recently introduced fuel consumption and/or emission reduction requirements for HDVs in order to stimulate innovation and to ensure the rapid development and deployment of zero- and low-emission technologies in this sector. In order to respond to this increasing global competitive pressure, EU HDV manufacturers need to invest rapidly in zero- and low-emission technologies. To prevent such investments to target only non-EU markets where regulations have been put in place to curb emissions, EU emission reduction requirements must follow suit.

The rapporteur believes that setting the right ambition for HDV CO2 emissions is instrumental in giving a clear signal to manufacturers for investing in emission-reduction technologies in a timely manner. According to the Impact Assessment of the European Commission, a 20% reduction target for 2025 (compared to the 2019 baseline) is not only technologically feasible, but also results in the greatest net economic and social benefits. This would allow transport operators to benefit from between 33 002 and 37 589 of net savings in the first 5 years of use of a lorry, while considerably reducing CO2 and air pollutant emissions. Yet for EU transport operators to fully reap those benefits, loopholes such as ‘super credits’ must be avoided. Such
measures would indeed risk jeopardising the effective emission reduction effect of the targets, and even allow more emitting and consuming vehicles on the market after 2025.

The rapporteur considers it essential that the CO2 emissions and fuel consumption values determined pursuant to Regulation (EU) 2017/2400 [Certification] correctly reflect the real-world performance of HDVs. Any discrepancy would have significant implications for transport operators, air quality and climate change. The rapporteur’s view is that the introduction of on-road in-service conformity testing is necessary to ensure the real-world representativeness of the certified CO2 emissions and fuel consumption of HDVs.

The rapporteur acknowledges the specificities of the market for heavy-duty vehicles. In particular, the development of zero-emission technologies is not as advanced as for passenger cars, especially when it comes to long-haul trucks. On the other hand, the market for zero-emission regional and urban delivery trucks is changing fast, as those vehicles are expected to reach cost parity with diesel in Europe within the next five years. The rapporteur sees a clear environmental and economic interest in marketing such vehicles as soon as they are available. Therefore, he believes that this Regulation should introduce a binding minimum share of zero- and low-emission vehicles for each manufacturer both in 2025 and in 2030. This minimum share should be designed to ensure investment certainty for the rapid up-take of such vehicles on the Union market and for the development of adequate charging infrastructure, while rewarding early innovators for their effort to place zero- and low-emission vehicles as soon as possible on the Union market. This binding minimum share should cover as well other vehicles of the category N than the four sub-groups identified in the proposed Regulation. This stepwise approach would have the benefit of providing strong investment certainty as well as a clear signal not to delay the market introduction of such vehicles in the absence of CO2 emission reduction requirements.

Preoccupied by the deterioration of air quality in many European cities, an increasing number of public authorities and public transport operators are turning to zero-emission buses. In this context, and taking into account demand side measures such as public procurement requirements, the share of electric buses in the EU fleet of urban buses is supposed to reach about 60% in 2030. In order to ensure the adequate level of supply on the Union market, it is appropriate to set binding minimum shares of zero-emission urban buses in the manufacturers’ fleets of new urban buses for 2025 and 2030.

10.10.2018

**OPINION OF THE COMMITTEE ON TRANSPORT AND TOURISM**

for the Committee on the Environment, Public Health and Food Safety

Rapporteur for opinion: Henna Virkkunen

SHORT JUSTIFICATION

Mobility is a necessity: people and goods move more than ever and this trend will continue in the future. Freight transport is expected to grow by 60 per cent by 2050 compared to 2010 as supply chains become ever more global. The mobility sector plays a fundamental role in the EU economy and society. The road freight sector also accounts for a significant part of greenhouse-gas emissions and as the EU has committed to meet ambitious climate targets, these emissions will need to be reduced in the coming period. Achieving a reduction in this sense will require a mix of solutions that are viable, realistic, underpinned by a stable and predictable regulatory framework. Therefore, your rapporteur believes that it is important to regulate CO2 emissions standards of Heavy Duty Vehicles (HDV) at the European level to avoid market fragmentation and differences compliance regimes throughout the Union.

Your rapporteur believes that it is important to find a good balance among the ambition of transport emission targets, promoting innovation in the EU’s automotive industry and enhancing Europe’s competitiveness, while creating high-skilled employment. As such, your rapporteur believes that the proposed CO2 emission targets for HDVs are ambitious but realistic. Since fuel cost is a significant portion of the cost of operations of HDVs, their level of efficiency is relatively high, driven by economic reasons. Nevertheless, a clear signal to further improve their efficiency will enable the HDV research and development to increasingly focus on efficiency gains of their vehicles and thereby to the reduction of emissions from them.

More importantly, the future contribution of several measures involving the road transport sector, such as digitalisation, automation, alternative fuels, road infrastructure and vehicle technology is required to create a comprehensive approach to reduce the emissions in this sector. Legislation in this sense must plot a clear path, be unambiguous, and provide the right incentives to allow for investment stability in the long term in the sector.

As it is clear to your Rapporteur that the solutions to achieve CO2 emissions reductions from HDVs will stem from several sources, it is of utmost importance to maintain the technology neutral approach, also in order to allow for future new technologies to be deployed in a timely manner. All efforts by operators to reduce emissions should be rewarded and incentivised. Renewable fuels and energy sources are an efficient way to reduce emissions. To take account of this and to ensure a more accurate assessment of greenhouse gas emissions of HDVs, the European Commission should establish the methodology for the calculation of well-to-wheel emissions by 2022 and once deployed, review the legislation concerned, if needed. Another fundamental issue linked to emissions reductions of HDVs in the future will be the availability of alternative fuels infrastructure, as this will be essential to the transition to several new vehicle technologies.

Even though this Regulation is aimed at improving the energy efficiency of vehicles, in the case of HDVs, emissions reductions can also be achieved by developing solutions such as load optimisation, platooning, driver aids, driver training, creating incentives for fleet upgrades and renewal and securing investments in infrastructure development and maintenance.
Whereas the Commission’s proposal includes four categories that are said to represent 65-70% of the market, this begs the question on the possible compliance effects concerning the rest of the vehicles not being in the scope of this regulation. Whereas your Rapporteur understands that not all HDVs should be in the scope of this Regulation, it must be clarified that the new regulatory framework does not have a negative effect on the market access of those vehicles.

**AMENDMENTS**

The Committee on Transport and Tourism calls on the Committee on the Environment, Public Health and Food Safety, as the committee responsible, to take into account the following amendments:

**Amendment 1**

Proposal for a regulation
Recital 3

<table>
<thead>
<tr>
<th>Text proposed by the Commission</th>
<th>Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) This Regulation is part of the third &quot;Europe on the Move&quot; Package, which delivers on the new industrial policy strategy of September 2017(^ {21}), and is designed to complete the process of enabling the Union to reap the full benefits of the modernisation and decarbonisation of mobility. The aim of the Package is to make European mobility safer and more accessible, European industry more competitive, European jobs more secure, and the mobility system to be cleaner and better adapted to the imperative of tackling climate change. <strong>This will require</strong> the full commitment of the Union, Member States and stakeholders, <strong>not least in strengthening efforts to reduce CO(_2) emissions and air pollution.</strong></td>
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<tr>
<td>(3) This Regulation is part of the third &quot;Europe on the Move&quot; Package, which delivers on the new industrial policy strategy of September 2017(^ {21}), and is designed to complete the process of enabling the Union to reap the full benefits of the modernisation and decarbonisation of mobility. The aim of the Package is to make European mobility safer and more accessible, European industry more competitive, European jobs more secure, and the mobility system to be cleaner, <strong>more sustainable</strong> and better adapted to the imperative of tackling climate change. <strong>In order to find a good balance between strengthening efforts to reduce CO(_2) emissions and air pollution, boosting innovation in the Union’s automotive industry and enhancing the Union’s competitiveness,</strong> the full commitment of the Union, Member States and stakeholders <strong>is required.</strong></td>
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\(^ {21}\) Investing in a smart, innovative and sustainable Industry A renewed EU
Industrial Policy Strategy, COM(2017) 0479 final

Amendment 2
Proposal for a regulation
Recital 4 a (new)

Text proposed by the Commission

\[(4a)\] \textit{CO}_2\textit{ emissions reduction targets for the Union-wide fleets of new heavy-duty vehicles should therefore be set for 2025 and for 2030, taking into account the vehicle fleet renewal time and the need for the road transport sector to contribute to the Union climate and energy targets for 2030 and beyond. This stepwise approach also provides a clear and early signal for the industry not to delay the market introduction of energy efficient technologies and zero- and low-emission vehicles.}\n
Amendment 3
Proposal for a regulation
Recital 8 a (new)

Text proposed by the Commission

\[(8a)\] In view of the estimated increase to around 9% in the proportion of emissions from heavy duty vehicles and the fact that there are currently no requirements for reducing CO\textsubscript{2} emissions from heavy duty vehicles, specific measures for this category of vehicles are needed.}\n
Amendment 4
Proposal for a regulation
Recital 9
In order to fully realise the energy efficiency potential and ensure that the road transport sector as a whole contributes to the greenhouse gas emission reductions agreed, it is appropriate to complement the already existing CO\textsubscript{2} emission standards for new passenger cars and light commercial vehicles by setting CO\textsubscript{2} emission performance standards for new heavy-duty vehicles. These standards will be a driver for innovation in fuel-efficient technologies, contributing to the strengthening of the technological leadership of the Union’s manufacturers and suppliers.

**Amendment 5**

**Proposal for a regulation**

**Recital 10**

(10) Taking into account that climate change is a trans-boundary problem and the need to safeguard a well-functioning single market both for road transport services as well as for heavy-duty vehicles, it is appropriate to set CO\textsubscript{2} emission standards for heavy-duty vehicles at Union-level. Those standards should be designed so as to be without prejudice to competition law.

**Amendment 6**

**Proposal for a regulation**

**Recital 11 a (new)**

(11a) Emission reduction levels to be achieved by heavy vehicles and the time
required for renewal of the fleet should be taken into account.

Amendment 7

Proposal for a regulation
Recital 12 a (new)

Text proposed by the Commission

Amendment

(12a) Highlights that the most EU transport freight operators are SMEs with limited access to finance. Therefore, the future solutions must be cost effective and balanced. It is essential that there is a strong incentive structure to support uptake of more fuel-efficient vehicles, as well as the provision of EU funding mechanisms.

Amendment 8

Proposal for a regulation
Recital 13

Text proposed by the Commission

Amendment

(13) In the light of innovation and to take account of the implementation of new technologies improving the fuel efficiency of heavy-duty vehicles, the VECTO simulation tool as well as Regulation (EU) 2017/2400 will be continuously and timely updated.

(13) In the light of innovation and to take account of and stimulate the implementation of new technologies improving the fuel efficiency of heavy-duty vehicles, the VECTO simulation tool as well as Regulation (EU) 2017/2400 must be continuously and timely developed and updated to properly cover all available fuel saving technologies, including truck platooning, as well as the improvements to rigid bodies, trailer sand semi-trailers on the market. Given the key role of these new technologies in reducing CO2 emissions from the transport sector, the timely and comprehensive update of the VECTO simulation tool is essential element in reducing CO2 from heavy-duty vehicles. This update should take place on a yearly basis to keep VECTO on par with the state-of-the-art technologies, and the European institutions should allocate
Draft Proposal for a regulation Recital 15

Text proposed by the Commission

(15) A reduction target should be set for 2025 as a relative reduction based on the average CO₂ emissions of those heavy-duty vehicles in 2019, reflecting the deployment of readily available cost-effective technologies for conventional vehicles. The 2030 target should be considered aspirational and the final target should be determined pursuant to a review to be carried out in 2022 as there are more uncertainties on the uptake of more advanced technologies which are not yet readily available.

Amendment

(15) A reduction target should be set for 2025 as a relative reduction based on the average CO₂ emissions of those heavy-duty vehicles in 2019, reflecting the deployment of readily available, accessible, cost-effective technologies for conventional vehicles. The 2030 target should be considered aspirational and the final target should be determined pursuant to a review to be carried out in 2022 as there are more uncertainties on the uptake of more advanced technologies which are not yet readily available.

Proposal for a regulation Recital 15 a (new)

Text proposed by the Commission

(15a) The accounting of CO₂ emissions should be based on a ‘well-to-wheel’ approach in order to take into account the environmental performance of fuel or energy and the end use in vehicles. Such an approach would allow the environmental performance of vehicles to be assessed in a more realistic way. The Commission should, therefore, develop a methodology for recording ‘well-to-wheel’ emissions by 1 January 2022, and propose, if appropriate, to adjust the
targets of this Regulation accordingly as part of the review provided for in Article 13 of this Regulation.

Amendment 11
Proposal for a regulation
Recital 16

*Text proposed by the Commission*

(16) Liquefied natural gas (LNG) is an available alternative fuel to diesel for heavy duty vehicles. The deployment of current and upcoming more innovative LNG-based technologies will contribute to meeting the CO2 emission targets in the short and medium term as the use of LNG technologies leads to lower CO2 emissions as compared to diesel vehicles. The CO2 emission reduction potential of LNG vehicles is already fully reflected in VECTO. In addition, current LNG technologies ensure a low level of air pollutant emissions such as NOx and particulate matters. A sufficient minimum refuelling infrastructure is also in place and being further deployed as part of national policy frameworks for alternative fuel infrastructure.

*Amendment*

(16) *There is already a variety of alternative fuels available on the market.* Liquefied natural gas (LNG) is an available alternative fuel to diesel for heavy duty vehicles. *Hydrogen based technologies are also an interesting avenue for research and development, especially where the energy for synthesis comes from sustainable and renewable sources.* The deployment of current and upcoming more innovative LNG-based technologies will contribute to meeting the CO2 emission targets in the short and medium term as the use of LNG technologies leads to lower CO2 emissions as compared to diesel vehicles. In the medium to longer term, liquefied biogas LBG offers significant CO2 emissions cuts in heavy-duty transport. The CO2 emission reduction potential of LNG vehicles is already fully reflected in VECTO, and in the future, other sustainable alternative fuels should also be taken into account in VECTO. In addition, current LNG technologies ensure a low level of air pollutant emissions such as NOx and particulate matters. A sufficient minimum refuelling infrastructure is also in place and being further deployed as part of national policy frameworks for alternative fuel infrastructure.

Amendment 12
Proposal for a regulation
Recital 16 a (new)
Alternative fuels, especially synthetic and advanced renewable fuels as defined in article 2(s) and 2(ee) of Directive 2016/0382, can play a crucial role in the long-term decarbonisation of the transport sector. In order for these fuels to reach competitive prices, technological development and high-scale industrialization are essential. Acknowledging the CO₂-benefits of these fuels in this regulation further encourages this process.

Amendment 13
Proposal for a regulation
Recital 16 b (new)

The introduction of platooning-based technologies will contribute to reducing fuel-consumption and CO₂ emissions, as it cuts down significantly truck fuel consumption and CO₂ emissions of heavy-duty vehicles.

Amendment 14
Proposal for a regulation
Recital 16 c (new)

In order to achieve the decarbonisation of transportation, this Regulation should take into account alternative fuels listed in Article 2(1) of Directive 2014/94 of the European Parliament and of the Council. Alternative fuels which are already on the market should be added to the heavy duty CO₂ and fuel consumption regulation from the beginning. This Regulation should allow new generation fuels to be
taken into account without delay. Taking alternative fuels into account in CO$_2$ and fuel consumption would encourage vehicle manufacturers to market vehicles that run with an alternative fuel and also encourage fuel suppliers to increase market availability of alternative fuels. In the Commission’s public consultation, 83% of stakeholders fully agreed or tended to agree that CO$_2$ of heavy-duty vehicles should incorporate also alternative fuels.

Amendment 15
Proposal for a regulation
Recital 19

Text proposed by the Commission

(19) A fair distribution of the overall reduction requirements among the manufacturers needs to be ensured, taking into account the diversity of heavy-duty vehicles in terms of their design and driving pattern, annual mileage, payload and trailer configuration. It is therefore appropriate to distinguish the heavy-duty vehicles according to different and separate vehicle sub-groups that reflect the vehicles’ typical usage pattern and specific technical characteristics. By setting annual manufacturer specific targets as a weighted average of the targets defined for each such sub-group, manufacturers are also given the means to effectively balance a possible underperformance of vehicles in certain sub-groups with an overachievement in other vehicle sub-groups, taking into account the average lifetime CO$_2$ emissions of vehicles in the different sub-groups.

Amendment

(19) A fair distribution of the overall reduction requirements among the manufacturers needs to be ensured, taking into account the diversity of heavy-duty vehicles in terms of their design and driving pattern, annual mileage, payload and trailer configuration. It is therefore appropriate to distinguish the heavy-duty vehicles according to different and separate vehicle sub-groups that reflect the vehicles’ typical usage pattern and specific technical characteristics. By setting annual manufacturer specific targets as a weighted average of the targets defined for each such sub-group, manufacturers are also given the means to effectively balance a possible underperformance of vehicles in certain sub-groups with an overachievement in other vehicle sub-groups, taking into account the average lifetime CO$_2$ emissions of vehicles in the different sub-groups, thereby respecting the ‘polluter pays’ principle.

Amendment 16
Proposal for a regulation
Recital 20
A manufacturer’s compliance with its annual specific targets should be assessed on the basis of its average CO₂ emissions. In determining the average specific emissions, the specificities that are reflected in the different vehicle sub-group targets should also be considered. As a consequence, the average specific CO₂ emissions of a manufacturer should be based on the average emissions determined for each sub-group including a weighting based on their assumed average annual mileage and average payload, which reflects the total lifetime CO₂ emissions. Due to the limited reduction potential of vocational vehicles, those vehicles should not be taken into account for the calculation of the average specific emissions, unless they are low- or zero-emission vehicles.

Contrary to cars and vans, zero- and low-emission heavy-duty vehicles are not yet available on the market, except for buses. A dedicated mechanism, in the form of super credits, should therefore be introduced to facilitate and encourage a smooth transition towards zero-emission mobility. This will provide incentives for the development and deployment on the Union market of zero- and low-emission heavy-duty vehicles that would complement demand-side instruments, such as the Clean Vehicle Directive 2009/33/EC of the European Parliament and of the Council.
Amendment 18

Proposal for a regulation
Recital 22

*Text proposed by the Commission*

(22) For the purpose of calculating the average specific emissions of a manufacturer, all zero- and low-emission heavy-duty vehicles should therefore be counted multiple times. The level of incentives should vary according to the actual CO₂ emissions of the vehicle. In order to avoid a weakening of the environmental objectives, the resulting savings should be subject to a cap.

*Amendment*

(22) For the purpose of calculating the average specific emissions of a manufacturer, all zero- and low-emission heavy-duty vehicles should therefore be counted multiple times. The level of incentives should vary according to the actual CO₂ emissions of the vehicle. In order to avoid a weakening of the environmental objectives, the resulting savings should be subject to a cap. **Taking into account the difficulties in developing long-haul zero-and low-emission vehicles, those vehicles over 400 km in range, should be exempted from the cap.**

Amendment 19

Proposal for a regulation
Recital 24

*Text proposed by the Commission*

(24) In designing the incentive mechanism for the deployment of zero-emission heavy-duty vehicles, also smaller lorries, buses and coaches that are not subject to the CO₂ emission targets under this Regulation should be included. These vehicles also have significant benefits in terms of helping to address air pollution problems in cities. However, it should be noted that zero-emission buses are already

*Amendment*

(24) In designing the incentive mechanism for the deployment of zero-emission heavy-duty vehicles, also smaller lorries, buses and coaches that are not subject to the CO₂ emission targets under this Regulation should be included. These vehicles also have significant benefits in terms of helping to address air pollution problems in cities. However, it should be noted that zero-emission buses are already
on the market and are incentivised through demand-side measures such as public procurement. In order to ensure that the incentives are well balanced between the different types of vehicles, the savings resulting from the zero-emission smaller lorries, buses and coaches should therefore also be subject to a cap.

Amendment 20
Proposal for a regulation
Recital 30

Text proposed by the Commission

(30) A robust compliance mechanism is necessary in order to ensure that the targets under this Regulation are met. The obligations placed on manufacturers to deliver accurate data pursuant to Regulation (EU) No …/2018 [Monitoring & Reporting HDV] and the administrative fines that may be imposed in the case of non-compliance with that obligation, contributes to ensuring the robustness of the data used for target compliance purposes under this Regulation.

Amendment

(30) A robust compliance mechanism is necessary in order to ensure that the targets under this Regulation are met. The obligations placed on manufacturers to deliver accurate data pursuant to Regulation (EU) No …/2018 [Monitoring & Reporting HDV] and the administrative fines that may be imposed in the case of non-compliance with that obligation, contributes to ensuring the robustness of the data used for target compliance purposes under this Regulation. It is in the interest of consumers and the general public to know which manufacturers are or are not complying with the new emission standards.

Amendment 21
Proposal for a regulation
Recital 31

Text proposed by the Commission

(31) It is essential for achieving the CO₂ reductions pursuant to this Regulation that the CO₂ emissions of heavy-duty vehicles

Amendment

(31) It is essential for achieving the CO₂ reductions pursuant to this Regulation that the CO₂ emissions of heavy-duty vehicles
in use are in conformity with the values determined pursuant to Regulation (EC) No 595/2009 and its implementing measures. It should therefore be possible for the Commission to take into account, in the calculation of the average specific emissions of a manufacturer, any systematic non-conformity found by type approval authorities with regard to the CO₂ emissions of heavy-duty vehicles in use.

Amendment 22

Proposal for a regulation
Recital 34

Text proposed by the Commission

(34) In 2022, the Commission should assess the effectiveness of the CO₂ emission standards laid down in this Regulation and in particular the level of the reductions to be achieved by 2030, the modalities that should be available for achieving that target and beyond, as well as the setting of CO₂ reduction targets to other types of heavy-duty vehicles such as smaller lorries, buses, coaches and trailers. That assessment should also include, strictly for the purpose of this Regulation, considerations of heavy-duty vehicles and vehicle combinations beyond standard weights and dimensions applicable to national transport, for example Modular Concepts.

Amendment

(34) In 2022, the Commission should assess the effectiveness of the CO₂ emission standards laid down in this Regulation and in particular the level of the reductions to be achieved by 2030, the modalities that should be available for achieving that target and beyond, as well as the setting of CO₂ reduction targets to other types of heavy-duty vehicles such as smaller lorries, buses, coaches and trailers. That assessment should also include, strictly for the purpose of this Regulation, considerations of heavy-duty vehicles and vehicle combinations beyond standard weights and dimensions applicable to national transport, for example Modular Concepts. In case of the latter, when these trucks are used for high capacity transport, in accordance with Directive 719/2015⁴³, they shall be clearly identifiable by technical criteria and the Commission should acknowledge the CO2 benefit of this heavier transport. The Commission should change to Well-to-Wheel methodology for the targets 2022 onwards. Well-to-wheel and life-cycle CO2 emissions of heavy-duty vehicles should be monitored and made
Amendment 23

Proposal for a regulation
Article 3 – paragraph 1 – point h

\textit{Text proposed by the Commission}

(h) ‘vocational vehicle’ means a heavy-duty vehicle not intended for the delivery of goods and for which the CO\textsubscript{2} emissions and fuel consumption have been determined, in accordance with Regulation (EC) No 595/2009 and its implementing measures, only for other mission profiles than those defined in point 2.1 of Annex I to this Regulation;

\textit{Amendment}

(h) ‘vocational vehicle’ means a heavy-duty vehicle not intended for the delivery of consumer goods and for which at the time of registration a body work code according to Appendix 2 of Annex II of 2007/46/EC is allocated;

Amendment 24

Proposal for a regulation
Article 3 – paragraph 1 – point i a (new)

\textit{Text proposed by the Commission}

(i) For the purposes of this Regulation, a 'group of connected manufacturers' means a manufacturer and its connected undertakings. In relation to a manufacturer, 'connected undertakings' is defined as:

(a) undertakings in which the manufacturer has, directly or indirectly:

(i) the power to exercise more than half
the voting rights; or
(ii) the power to appoint more than half the members of the supervisory board, board of management or bodies legally representing the undertaking; or
(iii) the right to manage the undertaking’s affairs;
(b) undertakings which directly or indirectly have, over the manufacturer, the rights or powers listed in point (a);
(c) undertakings in which an undertaking referred to in point (b) has, directly or indirectly, the rights or powers listed in point (a);
(d) undertakings in which the manufacturer together with one or more of the undertakings referred to in points (a), (b) or (c), or in which two or more of the latter undertakings, jointly have the rights or powers listed in point (a);
(e) undertakings in which the rights or the powers listed in point (a) are jointly held by the manufacturer or one or more of its connected undertakings referred to in points (a) to (d) and one or more third parties.

Amendment 25

Proposal for a regulation
Article 3 – paragraph 1 – point k

Text proposed by the Commission

(k) ‘low-emission heavy-duty vehicle’ means a heavy-duty vehicle, which is not a zero emission heavy-duty vehicle, with specific CO₂ emissions of less than 350 g CO₂/km as determined pursuant to point 2.1 of Annex I;

Amendment

(k) low-emission heavy-duty vehicle’ means a heavy-duty vehicle, which is not a zero emission heavy-duty vehicle, with specific CO₂ emissions of less than 35 % below the reference value which derives from the 2019 baseline for each vehicle sub-group;

Amendment 26

Proposal for a regulation
Article 3 – paragraph 1 – point n a (new)

Text proposed by the Commission

Amendment

(na) CO2 Correction Factor is equal to the share of renewable gas sold at the refuelling stations, to be certified at the European Union level.

Amendment 27

Proposal for a regulation
Article 4 – paragraph 1 – point a

Text proposed by the Commission

Amendment

(a) the data reported pursuant to Regulation (EU) No …/2018 [monitoring & reporting HDV] for the manufacturer’s new heavy-duty vehicles registered in the relevant year, excluding vocational vehicles;

Amendment 28

Proposal for a regulation
Article 4 – paragraph 1 – point b a (new)

Text proposed by the Commission

Amendment

(ba) the CO2 benefits of synthetic and advanced renewable fuel as defined in Article 2(s) and 2(ee) of Directive 2016/0382, as long as manufacturers introduce the fuels to the fuel market voluntarily and the benefits do not count towards other decarbonisation obligations.

Amendment 29

Proposal for a regulation
Article 4 – paragraph 1 – point b b (new)
Text proposed by the Commission

(bb) the carbon correction factor (CCF), that can be calculated by using the following formula: \( CCF = \frac{\text{national share (\%) of sustainable renewable energy used}}{10} \). This shall be calculated separately for diesel and methane vehicles and fuels sold for each calendar year. The Commission should encourage the introduction of CCF, leading to the adoption of well-to-wheel methodology.

Amendment 30

Proposal for a regulation
Article 5 – paragraph 2 – point a

Text proposed by the Commission

(a) a zero-emission heavy-duty vehicle shall be counted as 2 vehicles;

Amendment

(a) a zero-emission heavy-duty vehicle shall be counted multiple times depending on its range: with a range of less than 100 km it shall be counted as 2 vehicles, with a range of more than 100 km, 200 km or 400 km it shall be counted as 3, 4 or 5 vehicles respectively;

Amendment 31

Proposal for a regulation
Article 5 – paragraph 2 – point b

Text proposed by the Commission

(b) a low-emission heavy-duty vehicle shall be counted as up to 2 vehicles according to a function of its specific CO\(_2\) emissions and the threshold emission level of 350 g CO\(_2\)/km.

Amendment

(b) a low-emission heavy-duty vehicle shall be counted as up to 2 vehicles according to a function of its specific CO\(_2\) emissions and the threshold emission level of 35 % below the reference value which derives from the 2019 baseline for each vehicle sub-group.

Amendment 32

Proposal for a regulation
Article 5 – paragraph 3

Text proposed by the Commission

3. The zero- and low-emission factor shall reduce the average specific emissions of a manufacturer by a maximum of 3%.

The contribution of zero-emission heavy-duty vehicles of the categories referred to in the second sub-paragraph of Article 2(1) to that factor shall reduce the average specific emissions of a manufacturer by a maximum of 1.5%.

Amendment

3. The zero- and low-emission factor shall reduce the average specific emissions of a manufacturer by a maximum of 3%.

The contribution of zero and low-emission heavy-duty vehicles from the long-haul category, of over 400 km range, shall be exempt from the cap.

Amendment 33

Proposal for a regulation
Article 8 – paragraph 1 – subparagraph 1

Text proposed by the Commission

(Excess emission premium) = (Excess emissions x 6 800 €/gCO2/tkm)

Amendment

(Excess emission premium) = (Excess emissions x 570 €/gCO2/tkm)

Amendment 34

Proposal for a regulation
Article 8 – paragraph 4

Text proposed by the Commission

4. The amounts of the excess emissions premium shall be considered as revenue for the general budget of the Union.

Amendment

4. The amounts of the excess emissions premium shall be considered as revenue for the general budget of the Union. Those amounts shall be used only for the purpose of supporting programmes conducted in close cooperation with social partners, promoting the just transition of the automotive sector towards low-emission mobility, and promoting innovative solutions that incentivise the rapid deployment of zero- and low-emission heavy-duty vehicles.
Amendment 35
Proposal for a regulation
Article 11 – paragraph 2

Text proposed by the Commission
2. For that purpose, the Commission shall ensure the availability, from manufacturers or national authorities, as the case may be, of robust non-personal data on real-world CO$_2$ emissions and energy consumption of heavy-duty vehicles.

Amendment
2. For that purpose, the Commission shall ensure the public availability, from manufacturers or national authorities, as the case may be, of robust non-personal data on real-world CO$_2$ emissions and energy consumption of heavy-duty vehicles, based on a standardisation of existing data collection systems covering different types of uses. It shall assess the feasibility of testing CO$_2$ emissions under real driving conditions with Portable Emission Measuring Systems (PEMS).

Amendment 36
Proposal for a regulation
Article 11 – paragraph 2 a (new)

Text proposed by the Commission
2 a. Update of the simulation tool ("VECTO"). The Commission shall update, on a yearly basis, the VECTO simulation tool, as set out in Regulation (EU) 2017/2400, to reflect the introduction of fuel saving technologies, including truck platooning, as well as the improvements to trailers, semi-trailers and rigid bodies. The updates should consider discrepancies between VECTO results and real-world road CO$_2$ emissions.

Amendment
1. In order to ensure that the technical...
parameters used for the calculation of the average specific emissions of a manufacturer pursuant to Article 4 and the calculation of the specific emission targets pursuant to Article 6 take into account technical progress and the evolution of freight transport logistics, the Commission shall be empowered to adopt delegated acts in accordance with Article 15 to amend the following provisions set out in Annexes I and II:

Amendment 38

Proposal for a regulation
Article 13 – paragraph 1

Text proposed by the Commission

By 31 December 2022, the Commission shall submit a report to the European Parliament and the Council on the effectiveness of this Regulation, the CO₂ reduction target to be determined for 2030 pursuant to Article 1 and the setting of CO₂ reduction targets to other types of heavy-duty vehicles including trailers. That report shall also include an assessment of the effectiveness of the modalities addressing, in particular, zero- and low-emission vehicles, notably buses taking into account the targets set out in Directive 2009/33/EC, and the CO₂ credit system and the appropriateness of prolonging the application of those modalities in 2030 and beyond and, where appropriate, be accompanied by a proposal for amending this Regulation.

Amendment

By 31 December 2022, the Commission shall submit a report to the European Parliament and the Council on the effectiveness of this Regulation, the methodologies for well-to-wheel emission accounting, the CO₂ reduction target to be determined for 2030 pursuant to Article 1 and the setting of CO₂ reduction targets to other types of heavy-duty vehicles including trailers and European modular system combinations. Commission shall also report on the progress in establishing a representative methodology for the calculation of life-cycle emissions. That report shall also include an assessment of the effectiveness of the modalities addressing, in particular, zero- and low-emission vehicles, notably buses, including their definition, while taking into account the targets set out in Directive 2009/33/EC, and the CO₂ credit system and the appropriateness of prolonging the application of those modalities in 2030 and beyond and, where appropriate, be accompanied by a proposal for amending this Regulation. For this report, the Commission shall assess all the major parameters influencing the ramp-up market uptake of alternative powertrains,
by considering the following indicators:

- Expansion of the charging infrastructure
- Range of vehicles on offer (battery electric vehicles [BEV], plug-in hybrid electric vehicles [PHEV], fuel-cell electric vehicles [FCEV], etc.)
- Average oil and fuel prices
- Levels of subsidies and non-monetary incentives
- Level of public procurement, etc

30 Clean Vehicle Directive 2009/33/EC as amended by Directive …/…/EU
## PROCEDURE – COMMITTEE ASKED FOR OPINION

<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>CO2 emission performance standards for new heavy-duty vehicles</th>
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<tbody>
<tr>
<td><strong>Committee responsible</strong></td>
<td>ENVI 5.7.2018</td>
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<td><strong>Date announced in plenary</strong></td>
<td>ENVI 5.7.2018</td>
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<td><strong>Opinion by</strong></td>
<td>TRAN 5.7.2018</td>
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<tr>
<td><strong>Rapporteur</strong></td>
<td>Henna Virkkunen 3.7.2018</td>
</tr>
<tr>
<td><strong>Date appointed</strong></td>
<td>Henna Virkkunen 3.7.2018</td>
</tr>
<tr>
<td><strong>Discussed in committee</strong></td>
<td>6.9.2018</td>
</tr>
<tr>
<td><strong>Date adopted</strong></td>
<td>9.10.2018</td>
</tr>
<tr>
<td><strong>Result of final vote</strong></td>
<td>+: 37, -: 8, 0: 2</td>
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<tr>
<td><strong>Members present for the final vote</strong></td>
<td>Daniela Aiuto, Marie-Christine Arnautu, Inés Ayala Sender, Georges Bach, Izaskun Bilbao Barandica, Deirdre Clune, Michael Cramer, Andor Deli, Ismail Ertug, Jacqueline Foster, Tania González Peñas, Dieter-Lebrecht Koch, Merja Kyllönen, Innocenzo Leontini, Peter Lundgren, Georg Mayer, Gesine Meissner, Renaud Muselier, Markus Pieper, Gabriele Preuß, Christine Revault d’Allonnes Bonnefoy, Dominique Riquet, Massimiliano Salini, Claudia Schmidt, Jill Seymour, Keith Taylor, Pavel Telička, Marie-Pierre Vieu, Elissavet Vozemberg-Vrionidi, Kosma Złotowski, Luis de Grandes Pascual, Peter van Dalen, Wim van de Camp, Elżbieta Katarzyna Lukacijewska, Claudia Ţapardel</td>
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<tr>
<td><strong>Substitutes present for the final vote</strong></td>
<td>Francisco Assis, Michael Detjen, Jill Evans, Maria Grapini, Karoline Graswander-Hainz, Ryszard Antoni Legutko, Marek Plura, Henna Virkkunen</td>
</tr>
<tr>
<td><strong>Substitutes under Rule 200(2) present for the final vote</strong></td>
<td>Nicola Danti, Angel Dzhabazki, John Howarth, Wajid Khan</td>
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### FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

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<table>
<thead>
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<tr>
<td>37</td>
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<tr>
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<td>Izaskun Bilbao Barandica, Gesine Meissner, Dominique Riquet, Pavel Telička</td>
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<td>Georg Mayer</td>
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<tr>
<td>8</td>
<td>-</td>
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<td>GUE/NGL</td>
<td>Tania González Peñas, Merja Kyllönen, Marie-Pierre Vieu</td>
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<tr>
<td>VERTS/ALE</td>
<td>Michael Cramer, Jill Evans, Keith Taylor</td>
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<td>2</td>
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<td>ECR</td>
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<td>ENF</td>
<td>Marie-Christine Arnautu</td>
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**Key to symbols:**
- **+**: in favour
- **-**: against
- **0**: abstention
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<thead>
<tr>
<th><strong>PROCEDURE – COMMITTEE RESPONSIBLE</strong></th>
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<tr>
<td><strong>Title</strong></td>
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<tr>
<td><strong>Date submitted to Parliament</strong></td>
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<tr>
<td><strong>Committee responsible</strong></td>
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<tr>
<td>Date announced in plenary</td>
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<tr>
<td><strong>Committees asked for opinions</strong></td>
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<tr>
<td>Date announced in plenary</td>
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<tr>
<td><strong>Not delivering opinions</strong></td>
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<tr>
<td>Date of decision</td>
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<tr>
<td><strong>Rapporteurs</strong></td>
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<td>Date appointed</td>
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<tr>
<td><strong>Discussed in committee</strong></td>
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<tr>
<td><strong>Date adopted</strong></td>
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<tr>
<td><strong>Result of final vote</strong></td>
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<tr>
<td><strong>Members present for the final vote</strong></td>
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<tr>
<td><strong>Substitutes present for the final vote</strong></td>
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<td><strong>Substitutes under Rule 200(2) present for the final vote</strong></td>
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<td><strong>Date tabled</strong></td>
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## FINAL VOTE BY ROLL CALL IN COMMITTEE RESPONSIBLE

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<td>Jan Huitema, Carolina Punset, Frédérique Ries, Nils Torvalds, Mirja Vehkaperä, Sophia in 't Veld</td>
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<tr>
<td>ECR</td>
<td>Mark Demesmaeker</td>
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<td>EFDD</td>
<td>Eleonora Evi, Piernicola Pedicini</td>
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<tr>
<td>GUE/NGL</td>
<td>Stefan Eck, Anja Hazekamp, Merja Kyllönen</td>
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<td>NI</td>
<td>Zoltán Balczó</td>
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<tr>
<td>PPE</td>
<td>Pilar Ayuso, Ivo Belet, Angélique Delahaye, José Inácio Faria, Karl Heinz Florenz, Francesc Gambús, Andrzej Grzyb, Giovanni La Via, Peter Liese, Annie Schreijer Pierik, Adina Ioana Vălean</td>
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<tr>
<td>VERTS/ALE</td>
<td>Marco Affronte, Bas Eickhout, Rebecca Harms, Martin Häusling, Davor Škrlec, Keith Taylor</td>
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<td>6</td>
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<td>Arne Gericke, Urszula Krupa, Boleslaw G. Piecha, John Procter</td>
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<td>EPP</td>
<td>Jens Gieseke, Renate Sommer</td>
</tr>
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</tbody>
</table>

**Key to symbols:**

+ : in favour

- : against

0 : abstention