

# CO<sub>2</sub> EMISSION TARGETS FOR LORRIES, VANS AND BUSES

Proposal COM(2023) 88 of 14 February 2023 for a Regulation amending Regulation (EU) 2019/1242 as regards strengthening the CO<sub>2</sub> emission performance standards for new heavy-duty vehicles

cepPolicyBrief No. 13/2023

**SHORT VERSION** [[Go to Long Version](#)]

## Context | Objective | Interested Parties

**Context:** The EU wants to reduce its emissions of greenhouse gases (GHG) to net zero by 2050 ("climate neutrality"). Heavy-duty vehicles (HDVs) – lorries, vans, buses and their trailers – account for more than 6% of all GHG emissions – especially CO<sub>2</sub> – and more than 25% of road transport, and the trend is upwards.

**Aim:** In order to achieve the goal of climate neutrality by 2050, CO<sub>2</sub> emissions from new HDVs will also be reduced. To this end, CO<sub>2</sub> emission targets for already regulated lorry types will be tightened and additional lorry types, vans, buses and their trailers will be included in the regulation of CO<sub>2</sub>.

**Affected parties:** Vehicle manufacturers, suppliers, transport companies, shippers, bus passengers, consumers

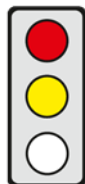
## Brief Assessment

### Pro

- ▶ In view of technology neutrality and the resilience of the transport sector, as well as specific types of use of lorries and coaches that are difficult to electrify, it is appropriate that their CO<sub>2</sub> emissions do not have to be reduced to zero until 2040 ("combustion engine ban").
- ▶ Continuing the possibility of "borrowing" and "banking" until 2039, and the transferability of vehicles between manufacturers, will reduce the inefficiency of CO<sub>2</sub> fleet regulation.

### Contra

- ▶ The lack of technology neutrality limits the ability of HDV producers and users to adapt to changing circumstances and to use hybrid solutions. The reduction targets should be lower in 2030 and increase later, and also take alternative fuels into account.
- ▶ The reduction targets for newly regulated lorries are too strict as, due to the progress already made in the electrification of many of these vehicle groups, the reduction requirements will start from a lower absolute level and would have to be achieved in a shorter time.
- ▶ Rapid 100% decarbonisation of urban and regional buses – as the most efficient form of non-rail passenger transport – without regard to the cost (100% quota) saves less CO<sub>2</sub> and is inefficient, thus hindering the expansion of local public transport for cost reasons.



## CO<sub>2</sub> emission targets for already regulated lorries [Long Version A.4.1, C.1.4.2]

**Commission proposal:** The average CO<sub>2</sub> emissions of the EU fleet of already regulated new lorries must be reduced by 15% in the reporting periods 2025-2029, 45% in 2030-2034, 65% in 2035-2039, and 90% from 2040 onwards, as compared to the 2019 reporting period in each case.



**cep-Assessment:** Lack of technology neutrality prevents providers and users from adapting to changing circumstances and crises and from using efficiency-enhancing hybrid solutions for decarbonisation. CO<sub>2</sub> emission targets should start lower in 2030 and only be tightened later. This will allow the transition to e-vehicles to take place predominantly when the technology is more mature and efficient by which time the energy provided will be lower in CO<sub>2</sub> and cheaper. Alternative fuels should count towards the achievement of the target.

## CO<sub>2</sub> emission targets for newly regulated lorries and vans [Long Version A.4.1, C.1.4.3]

**Commission proposal:** The average CO<sub>2</sub> emissions of the EU fleet of newly regulated new lorries and vans must be reduced by 45% in the reporting periods 2030-2034, 65% in 2035-2039, and 90% from 2040 onwards, as compared to the 2025 reporting period in each case.



**cep-Assessment:** The CO<sub>2</sub> emission targets for newly regulated lorries and vans are too strict as, due to the progress already made in the electrification of many of these vehicle groups, the reduction requirements will start from a lower absolute level and would have to be achieved in a shorter time. Overly strict targets impair resilience and offer little room for market innovation due to a lack of technology neutrality.

## CO<sub>2</sub> emission targets for coaches [Long Version A.4.1, C.1.4.4]

**Commission proposal:** The average CO<sub>2</sub> emissions of the EU fleet of new coaches must be reduced by 45% in the reporting periods 2030-2034, 65% in 2035-2039, and 90% from 2040 onwards, as compared to the 2025 reporting period in each case.



**cep-Assessment:** As coaches are among the most efficient means of passenger transport, their forced decarbonisation should start later in order to avoid stifling their increased use. As with newly regulated lorries and vans, CO<sub>2</sub> emission targets should start lower and be tightened later so that the conversion to e-vehicles predominately takes place at the time when the technology is more mature and efficient, and the energy provided will be lower in CO<sub>2</sub> and cheaper.

## CO<sub>2</sub> emission targets for trailers [Long Version A.4.1, C.1.4.5]

**Commission proposal:** From 2030, CO<sub>2</sub> emissions from new trailers must be reduced by 15% for semi-trailers and 7.5% for other trailers, as compared to the 2025 reporting period in each case. The basis for the calculation of CO<sub>2</sub> emissions is the analysis tool VECTO.



**cep-Assessment:** The required reductions in CO<sub>2</sub> emissions from trailers cannot be achieved using only the measures covered by VECTO, even with all possible improvements in aerodynamics, rolling resistance and weight. The CO<sub>2</sub> reduction achieved by recuperation of the braking energy in the trailer to support the drive cannot be captured. The requirements for determining and accounting for emission reductions from trailers therefore still need to be revised in this regard.

## Borrowing, banking, transfer and penalties [Long Version A.7-9, C.1.5-7]

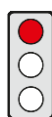
**Commission proposal:** Failures to meet the annual manufacturer-specific CO<sub>2</sub> emission target can still be set off against over-compliance in other years ("borrowing" and "banking"). For the purpose of calculating manufacturer-specific CO<sub>2</sub> emissions, vehicles can be transferred without limit between manufacturers in the same group, otherwise transfer is limited. The penalty for an emission exceedance of 1 g/tkm per vehicle is € 4,250.



**cep-Assessment:** Borrowing and banking and the transfer of vehicles between manufacturers reduces the inefficiency of CO<sub>2</sub> emission targets. Penalties are problematic as manufacturers do not have sole control over whether there will be a demand for zero-emission vehicles. Therefore, the extent to which the necessary charging and refuelling infrastructure and the CO<sub>2</sub> price keep pace with the desired market penetration of zero-emission HDVs should be considered. Targets should be adjusted accordingly or penalties suspended.

## 100% quota for zero-emission new urban buses [Long Version A.10.1, C.1.8.1]

**Commission proposal:** For new "heavy urban buses" the proportion of zero-emission vehicles must be 100% from the 2030 reporting period ("100% quota"). Member States can exempt a "limited share" of the urban heavy buses registered in each reporting period from this obligation if it is demonstrated to be in the public interest to allow a non-emission vehicle to fulfil the purpose of the journey.



**cep-Assessment:** A rapid 100% decarbonisation (100% quota) of the most efficient form of non-rail passenger transport without regard to the cost is inappropriate because, in view of the cost, it will hinder the expansion of local public transport, which in itself would save more CO<sub>2</sub> by replacing car journeys with conventional buses. Without a 100% quota, efficiency-enhancing hybrid solutions will also be able to contribute to decarbonisation in the EU and in export markets, especially if they are increasingly able to use alternative fuels.