

IEEP's response to the public consultation 'Revision of the CO₂ emission standards for cars and vans'

Context: CO₂ Emissions from transport [continue to grow](#) in the EU, unlike in most other sectors. CO₂ emissions were 23% higher in 2018 than in 1990. Within this, road transport constitutes the highest proportion of overall transport emissions (around 71 % in 2018), or about a fifth of total EU emissions. According to [EEA projections](#) based on existing policy measures in EU Member States ('with existing measures' scenario) transport emissions will increase by 32 % by 2030 compared with 1990 levels. Road emissions as a whole are also [a primary contributor](#) to unhealthy levels of air pollution, the top environmental threat to health in the EU. Reducing all emissions from cars and vans must be a top priority of EU policy in order to achieve the goals of the European Green Deal. Progress in reducing emissions from cars and vans will need to be substantially accelerated compared to efforts in recent decades.

5 February 2021 | IEEP welcomes the opportunity to submit its opinion to the European Commission's [public consultation survey](#).

The consultation survey covers several important aspects linked CO₂ emissions standards for cars and vans. This complementary written submission highlights several additional issues not fully addressed in the survey that IEEP considers of key importance for future discussions of emissions linked to cars and vans:

1. GHG emissions related to material use in cars and vans
2. Carbon inequality and equity implications of emissions standards legislation
3. Just transition

The revised CO₂ Emission Standards Regulation must be designed in a coherent and synergised way with other legislation such as the Effort Sharing Decision, the rest of the Mobility Package, batteries legislation, and Circular Economy legislation to ensure the full life-cycle emissions of cars and vans, as well as their role in terms of broader economic, social and environmental sustainability are taken into account.

Targets & Mechanisms in the Legislation

With regard to updating the existing Regulation, the following points are important:

- Update the CO₂ targets in line with the EU's net-zero target by 2050.
- This implies a -25% target (from 2021) by 2025, and -65% by 2030.
- The updated Regulation should enable a phase out of sales of internal-combustion engine vehicles (ICE) by 2035, and should empower Member States to set earlier phase-outs if they wish. (Noting that several countries such as the UK and Norway have now set earlier phase-out dates, and some EU MS have expressed a desire to do so, but have been warned by the EC that this could contravene Internal Market rules.) This is necessary to have the majority of ICEs off of European roads by 2050, given average retirement age of 15 years for cars.
- Annual targets are necessary to provide transparency, predictability and to avoid the use of accounting loopholes by manufacturers which can slow down progress under the current system.
- Eliminate the OEM-specific mass adjustment of the target. This loophole provides perverse incentives for manufacturers to produce more, larger cars, such as SUVs, which have a large number of negative impacts on environmental and social sustainability. On the contrary, manufacturers should be incentivised to create lighter, smaller vehicles. (see carbon inequality below for details).

Material Implications of Shift Away from ICEs

In the New Circular Economy Action Plan (CEAP), the European Commission recognises the importance of mobility as a service, reducing virgin material consumption, optimising infrastructure and vehicle use, increasing occupancy rates and load factors, and better connecting design and end of life for vehicles. These steps are essential to transitioning to a circular economy for mobility.

Private vehicles represent a significant investment of resources and emissions through manufacturing, maintenance and end of life. In battery electric vehicles powered by renewable energy, production and end of life account for more than

80% of emissions¹. Large-scale battery production for these vehicles has major environmental, social and economic consequences for the extraction and expanded use of certain natural resources such as cobalt and lithium.² These challenges need to be considered in this legislation, or in complementary legislation, such as forthcoming batteries legislation, and any other framework for the rest of the car manufacturing and certification process, or there risks to be a significant gap in addressing the sustainability challenges and real emissions of tomorrow's transport system.

By switching to an integrated, multimodal, on-demand mobility system, the embodied emissions in vehicles could be cut by 70% globally by 2050 compared to a baseline scenario.³ Particularly effective measures at offsetting such emissions are extending vehicle lifetime, car sharing, lightweighting, and reuse and remanufacturing. More broadly, embedding passenger cars within multi-modal mobility systems, in which different modes of transport can be shared as a service and designed for durability, reuse and public health, is an opportunity to cut costs and emissions, improve accessibility and quality of life, and reduce pollution.⁴ Such a system could reduce the costs associated with mobility for European households by as much as 70% by 2050, while slashing the CO₂ emissions associated with mobility by 40% by 2040.⁵

Climate and Environmental Equity

Emissions from land transport are disproportionately large among the biggest individual emitters and spenders in the EU.⁶ Thus action in this area is likely to affect those with the highest footprints, incomes, and expenditures most.

¹ European Environment Agency. *Range of life-cycle CO₂ emissions for different vehicle and fuel types*. (20th July 2020). <https://www.eea.europa.eu/signals/signals-2017/infographics/range-of-life-cycle-co2/view>

² Hensley, R., Knupfer, S., & Pinner, D. (2018) THREE SURPRISING RESOURCE IMPLICATIONS FROM THE RISE OF ELECTRIC VEHICLES. McKinsey Quarterly. <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/three-surprising-resource-implications-from-the-rise-of-electric-vehicles>

³ Valache-Altinél, C. Wachholz, C., Engstrom, M., & Watkins, E. (2020) *A Low-Carbon and Circular Industry for Europe*. Think2030 Paper.

⁴ Ellen MacArthur Foundation. *Completing the Picture. How the Circular Economy Tackles Climate Change*. (26th September 2019) <https://www.ellenmacarthurfoundation.org/publications/completing-the-picture-climate-change>

⁵ Ellen MacArthur Foundation. *10 Circular Investment Opportunities* (21st August 2020) <https://www.ellenmacarthurfoundation.org/assets/downloads/Mobility.pdf>

⁶ Ivanova, D., & Wood, R. (2020). The unequal distribution of household carbon footprints in Europe and its link to sustainability. *Global Sustainability*, 3, E18. doi:10.1017/sus.2020.12

However, the lowest income households also spend a large portion of their income on land transport, and this inequality needs to be considered.

Evidence is also clear that women have lower transport related emissions than men,⁷ and this clear gender related difference in behaviour should be taken into account when designing future policies.

- Thus, the most important implication within this legislation is that the OEM-specific mass adjustment, which disproportionately benefits expensive, luxury cars, is a completely counter-productive measure. It should be removed so that manufacturers are discouraged from producing these cars, and effectively subsidizing cars used disproportionately by the wealthy.
- More broadly the EU needs to ensure that a framework for affordable, accessible and sustainable transport is available to all.

Private cars, even if they are zero emission at tailpipe, still present significant social and environmental costs through their manufacture, operation, and disposal. These costs include through noise pollution, pollution from tire degradation, inefficient use of space and land-use through parking,⁸ induced urban sprawl, deaths and injuries through accidents, health problems arising from sedentary lifestyles, increased social isolation, and unequal access to mobility for those who do not have access to private vehicles (old, young, disabled, economically marginalised etc...). It is thus important not to subsidise their wide-scale use through public expenditure.

Strategies that can successfully target these structural losses must take into account the entire mobility system — from the manufacturing to the end of life of vehicles, while looking to maximise access and minimise resource and space requirements and other costs. While these costs are significant for the whole economy, the consequences of these effects fall disproportionately on marginalised groups who do not have the economic and social capital to avoid them.

⁷ Vinnova – Sveriges innovationsmyndighet. (2020) Jämställdhet och transportsystemet. https://www.vinnova.se/contentassets/70704ea8651b4b899c9192eb474fcdd/vr20-05rapport_jamstalldhet_och_transportsystemet1.pdf

⁸ Ellen MacArthur Foundation. *Growth Within*. (July 2015) https://www.ellenmacarthurfoundation.org/assets/downloads/publications/EllenMacArthurFoundation_Growth-Within_July15.pdf

Just Transition

The effect of the automotive transition on employment is not fully clear, with some conflicting research on the overall effect on jobs. ETUC research⁹ indicates a slight likely decline in overall employment, while others show a neutral overall effect or slightly positive effect overall, depending on the ability of European manufacturers to adjust to the new market and transition into battery technologies.¹⁰ However, it is clear that regional effects may be negative, and certain workers will have difficulty to transition, while others will need retraining and new skills. As such, it is important to assist the industry and its workers as much as possible.

- One way to help the industry is to provide clear signals of change to new technologies, allowing it to change as quickly as possible, and hopefully ahead of global rivals, to new business models.
- In addition, funding for just transition programming specifically geared toward the automotive industry and its workers would be a just way of spending revenues generated by the excess emission premiums.

More info

The response was compiled and submitted by Thorfinn Stainforth and Tim Gore. For more information on IEEP's work on this area please contact Thorfinn Stainforth ([tstainforth@ieep.eu](mailto:stainforth@ieep.eu)).



This work has been produced with the financial support of the LIFE Programme of the European Union. The response to the public consultation reflects only the views of its authors.

⁹ Galgóczi, Bela. (2019) ETUI. Towards a just transition: coal, cars and the world of work.

<https://www.etui.org/sites/default/files/19%20Towards%20a%20just%20transition%20Galgo%CC%81czi%20EN%20Web%20version.pdf>

¹⁰ Transport & Environment. (2021) Cars CO2 review: Europe's chance to win the mobility race.

<https://www.transportenvironment.org/sites/te/files/publications/Car%20CO2%202021%20revision%20-%20position%20paper%20%28T%26E%29.pdf>