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EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT REPORT

Accompanying the document

Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Regulation (EU) 2019/1242 as regards strengthening the CO_2 emission performance standards for new heavy-duty vehicles and integrating reporting obligations, and repealing Regulation (EU) 2018/956

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Executive Summary Sheet

Impact assessment on the Revision of the CO_2 emission performance standards for new heavy-duty vehicles

A. Need for action

What is the problem and why is it a problem at EU level?

Three key problems have been identified at the EU level: (1) heavy-duty vehicles (HDV) contribute insufficiently to increased ambition on GHG emissions reduction and need to reduce EU energy dependency; (2) transport operators and consumers missing out on the opportunities of energy-savings and related cost-reductions; and (3) the HDV value chain in the EU is at risk of losing its technological and innovation leadership.

What should be achieved?

The initiative aims to achieve the following specific objectives: (1) contribute to the 2030 at least 55% GHG emissions reduction target and to the 2050 climate neutrality objective, by reducing CO_2 emission from HDV cost-effectively, in line with the EU climate goals while contributing to improve EU energy security; (2) provide benefits for transport operators and users, resulting from a wider deployment of more energy-efficient vehicles; (3) strengthen the technological and innovation leadership of the EU automotive value chain and stimulating employment.

What is the value added of action at the EU level (subsidiarity)?

Climate change is a transboundary problem. Without EU action, national and local action are likely to be insufficient and risk fragmenting the internal market. EU action would provide the entire automotive value chain with the necessary long-term, stable market signal and regulatory certainty needed for large capital investments necessary to deploy zero-emission vehicles.

B. Solutions

What are the various options to achieve the objectives? Is there a preferred option or not? If not, why?

Various policy options were explored, grouped in three main categories: (i) extension of the scope; (ii) CO_2 emission target levels and timing for new HDV; (iii) specific regulatory mechanisms, such as incentive schemes for zero- and low-emission vehicles (ZLEV); (iv) mechanism to account the potential contribution of renewable and low-carbon fuels for the purpose of target compliance assessment; (v) governance issues.

Under the preferred option, several currently unregulated HDVs are included within the regulatory scope. The CO_2 emission targets decrease in five-year steps and are significantly strengthened as of 2030. Cost-optimal energy efficiency standards are set for trailers. Small volume manufacturers are exempted from meeting the targets. The possible excess emissions premium revenues remain part of the general EU budget.

The current incentive mechanism for ZLEV is removed as of 2030. A 100% mandate for zero-emission urban buses is set by 2030. No mechanism to account for the potential contribution of renewable and low-carbon fuels is introduced. On governance, some flexibility is included to ensure a cost-effective implementation of the legislation while safeguarding its environmental integrity.

What are different stakeholders' views? Who supports which option?

Based on the results of the OPC and the feedback of the CfE, stakeholders generally support the scope extension while exempting small volume manufacurers. Extending the scope to trailers was generally supported with the exception of some transport operators.

Environmental NGOs and ZEV manufacturers called for the greatest ambition supporting a 100% reduction by 2035 and the adoption of interim objectives between 2025 and 2030 combined with a strengthening of the 2030 target. Large vehicle manufacturers, transport operators, component suppliers and suppliers of fuels and gases supported less ambitious targets providing mixed views ranging generally from low to medium ambition levels. Large manufacturers and fuel suppliers in particular did not favour setting a 100% reduction target by a certain date. Large vehicle manufacturers, component suppliers and transport operators supported the current 5-year steps extension while NGOs and ZEV manufacturers called for targets decreasing in shorter steps.

Manufacturers and transport operators supported maintaining the ZLEV incentive mechanism after 2030 whereas NGOs called for its removal after 2030 and to limit the incentive up to 2030 only for specific vehicles categories. Suppliers of electricity and hydrogen support a scheme benefiting only ZEV. Setting a ZEV mandate for urban buses was supported by NGOs and ZEV manufacturers and by some larger manufacturers. The other large manufacturers and suppliers of fuels were against any ZEV mandate.

Suppliers of gases and fuels supported the introduction of a mechanism to account for fuels in the standards while NGOs argued against and large manufacturers expressed mixed views.

C. Impacts of the preferred option

What are the benefits of the preferred option (if any, otherwise of main ones)?

The projected (tailpipe) cumulative emission reductions between 2031 and 2050 are 35-48% for motor HDV, compared to the baseline and additional 1.4% for trailers as from 2031, compared to the medium scenario. The HDV standards contribute to reducing air pollutants by around 7 to 17% % in 2035, 15 to 38% in 2040 and by 66 to 80% in 2050, compared to the baseline.

Benefits in terms of average net savings in total cost of ownership for the first user are up to 6000-9800, 17 400 – 25 800 and 29100 – 47 000 EUR/vehicle for 2030, 2035 and 2040. Net savings for the second and third users show similar trends, with smaller benefits. Societal benefits over the lifetime are estimated at 2 400-6 300, 18 300-31 900 and 33 7000-59 800 EUR/vehicle for 2030, 2035 and 2040. Net savings for first users of new trailers registered in 2030 show savings of 9 000-29 000 EUR/trailer, depending of the type, while net economic savings over the vehicle lifetime from a societal perspective scale up to 11 500-42 500 EUR/vehicle.

Over the period of 2031 to 2050, final energy consumption from motor HDVs decreases by 11-19% compared to baseline. Savings in fossil fuels (mostly diesel) in the range 215 - 281 Mtoe are achieved with respect to the baseline, reducing the import dependency of the EU economy by 150-200 bn EUR. Setting energy efficiency standards in trailers saves additional 23 Mtoe of fossil fuel over the period 2031 to 2050, equivalent to 16 bn EUR.

Net jobs increase in 2030, and even more in 2040 and 2050, and GDP is projected to grow 0.06% -0.11% by 2040.

What are the costs of the preferred option (if any, otherwise of main ones)?

Costs for HDV manufacturers increase as additional technologies need to be deployed in new vehicles to meet the stricter CO_2 targets: 3 400-9 700, 5 300-11 800 and 6 500-13 100 EUR/vehicles for 2030, 2035 and 2040. This would need additional investments from manufacturers estimated at around EUR 4.9 to 8.7 billion annually, between 2031 and 2050.

Extra costs per average trailer or semitrailer are 2500-5 250 EUR/vehicle compared to a 2020 baseline.

What are the impacts on SMEs and competitiveness?

Medium and small enterprises find no affordability restrictions across any of the three ambition target scenarios. Their total cost of ownership also shows savings. Second hand ZEVs are always affordable.

The development and supply of ZEV (ZEV shares in %: 20-35, 35-57 and 57-100 by 2030, 2035 and

2040), leads to a positive impact on innovation and industry's technological leadership and competitiveness.
Will there be significant impacts on national budgets and administrations?
While the overall GDP impacts will be positive, the fuel duty revenue loss in 2030 is estimated at around 0.004% of the EU-27 GDP. These losses can be balanced at the Member State level, for example through indirect taxation. There are no significant administrative impacts on national administrations as needed provisions are already put in place.
Will there be other significant impacts?
Providing a clear regulatory signal and predictability for industry to develop and invest in fuel-efficient HDVs will encourage technological innovation development of the industry in the EU.
Proportionality?
The proposed action is proportionate to achieve the climate objectives that the EU has committed to.
D. Follow up
When will the policy be reviewed?
A review of the effectiveness of the new legislation will be foreseen, aligned with the review of other pieces of legislation contributing to the increased climate ambition.