

NEWSLETTER

International Regulatory Developments

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EUROPE

European Council Debate on Revision of Car and Van CO₂ Standards

On 17 March 2022, EU Environment Ministers held a debate on the proposal revising EU rules on CO₂ emission performance standards for new cars and vans, together with other 'Fit for 55' package files.

In relation to the CO₂ emission proposal, the French Presidency expressed understanding for the different positions on the file but urged Member States to quickly reach a compromise and a general consensus as soon as possible, possibly by June 2022.

Overall, compared to the previous Environment Council debate on the proposal of 20 December 2021, Ministers expressed greater support for the proposal, with some Member States advancing more ambitious targets, while others are still maintaining cautious positions on the possible phase-out of the internal combustion engine (ICE). This concern arises from the Commission's proposal tailpipe-only approach which means that a 100% CO₂ emissions reduction by 2035 represent a phase-out of the ICE.

In particular, the delegations of Sweden, Belgium, Greece and Ireland maintained their supportive position on the proposal. Notably, they called on the other delegations to anticipate the phase-out of ICE by 2030, instead of 2035. Sweden also urged the Council to quickly find a consensus on the proposal for a revision of the Alternative Fuels Infrastructure Directive (AFIR) which will be essential to the electrification of new vehicles.

A significant statement came from Germany's environment Minister Ms Lemke, who expressed its support for the European Commission proposal, including the 100% CO₂ reduction for cars and vans target by 2035.

Some delegations expressed greater caution in relation to the phase-out of fossil-fuelled vehicles by 2035, urging more assessments of the proposal for its social costs and in light of the current energy crisis. In particular, Poland argued that electric vehicles will not be affordable anytime soon by the majority of families in the EU, especially in Eastern Europe and considering the recent costs of energy. Similarly, Slovakia could not express its support for the proposal at the time being, as it is still assessing the direct impact of the consequences of an ICE ban by 2035 on its citizens, especially in light of recent energy costs. Cyprus also maintained a cautious approach to the proposal, arguing that the EU must always ensure the competitiveness of its own economy. Finally, Romania similarly argued that the proposal will negatively affect its citizens who are not able to afford electric vehicles. The delegation thus called for a more realistic and feasible framework, with a more gradual phase-out of fossil-fuelled vehicles compared to the Commission proposal.

Environment Council meeting information is at consilium.europa.eu/en/meetings/env/2022/03/17.

Transport Commissioner Exchange of Views with TRAN Committee

On 15 March 2022, Transport Commissioner Ms Adina Vălean held an exchange of views with the European Parliament's TRAN Committee on the state of implementation of this year's Commission Work Programme.

The discussion was dominated by the impact of the conflict in Ukraine. Ms Vălean said that the 'Fit For 55' and Efficient and Green Mobility Packages now have a new relevance. She stated that the EU must make sure the packages support this overarching strategy for energy security. Security of supply should be a concept imbedded in any economic policy from now on, regardless of whether it is in the area of energy, microchips or aerospace.

Commissioner Vălean added that the Commission must take urgent steps to decarbonise existing fuel supplies by boosting e-fuels production for all transport modes. Cheap renewable and low carbon energy is available around the world waiting to be transformed in liquid clean fuels, she said.

The Transport Commissioner's speech can be found at ec.europa.eu/commission/presscorner/detail/en/SPEECH_22_1788.

New European Scientific Advisory Board on Climate Change

On 24 March 2022, the European Environment Agency (EEA) announced the members of the new European Scientific Advisory Board on Climate Change have been designated, making the new independent advisory body ready to provide the European Union (EU) with scientific knowledge, expertise and advice relating to climate change. The Advisory Board's work will underpin the EU's climate action and efforts to reach climate neutrality by 2050.

The European Climate Law includes the establishment of a European Scientific Advisory Board on Climate Change, composed of 15 independent senior scientific experts covering a broad range of relevant disciplines. The Advisory Board will provide independent scientific advice on EU measures and climate targets and their coherence with the European Climate Law and the EU's international commitments under the Paris Agreement.

The Advisory Board will build on the best available and most recent scientific evidence, including the latest reports of the Intergovernmental Panel on Climate Change (IPCC) and other national and international bodies. It will follow a fully transparent process and make its reports publicly available.

The first tasks of the Advisory Board will be to elect its chairperson and to define its work programme. The Advisory Board will be supported in its work by a Secretariat hosted by the European Environment Agency.

The EEA press release, including board member details, is at eea.europa.eu/highlights/new-european-scientific-advisory-board?utm_source=EEASubscriptions.

Commission Vice-President Answer on Renewable and Low-Carbon Fuels

On 1 March 2022, European Commission's Executive Vice-President Timmermans replied to a question raised by several members of the European Parliament belonging to the Identity and Democracy (ID) political group.

The group of parliamentarians asked if the Commission was aware that many European research centres have developed technologies that enable the production of organic or synthetic-based fuels using waste materials or hydrogen. They also inquired whether the Commission is aware of the possible risk of thousands of redundancies in the automotive sector and how it intends to exploit European technologies in order to compete on foreign markets.

Mr Timmermans answered on behalf of the Commission, stating that the Commission is aware of technological developments related to renewable and low-carbon fuels. The 'Fit for 55' package presented by the Commission includes legislative proposals to incentivise renewable and low-carbon fuels, such as the revision of the Renewable Energy Directive. This is in line with the 2030 Climate Target Plan which clarified that, in order to achieve climate neutrality and ensure that sectors with emissions that are more difficult to abate (such as aviation and shipping) have access to sufficient quantities of renewable and low-carbon fuels, conventional cars will need to be gradually displaced by zero-emission vehicles.

Furthermore, the Commission recognises that the transition towards zero-emission mobility will require a transformation along the entire value chain of the automotive sector. The impact assessment underpinning the proposal to revise the CO₂ emission standards for cars and vans shows net positive impacts on economy-wide employment. At the same time, it is key to support the reskilling of the impacted workforce in this transition. The Commission states that several EU funding opportunities are available for this purpose.

Mr Timmermans' answer can be found at europarl.europa.eu/doceo/document/E-9-2021-005349-ASW_EN.pdf and the question is at europarl.europa.eu/doceo/document/E-9-2021-005349_EN.html.

European Union Position on UNECE Vehicle Regulations

On 8 March 2022, the Council Decision (EU) 2022/387 of 3 March 2022 was published in the Official Journal of the European Union. The document contains the position to be taken on behalf of the European Union in the World Forum for Harmonisation of Vehicle Regulations (WP.29) of the United Nations Economic Commission for Europe (UNECE) as regards the proposals for modifications to several UN Regulations.

The proposals listed in the Council Decision include the series 02 and 03 of amendments to UN Regulation No 154 on Worldwide harmonized Light vehicles Test Procedure (WLTP), a proposal for a

new UN Global Technical Regulation (GTR) on In-vehicle Battery Durability for Electrified Vehicles as well as the proposal for the final status report of this GTR.

The document includes the authorisation to develop a new UN GTR on brake particulate emissions as well.

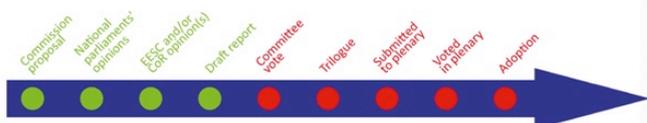
The Council Decision can be found at eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2022.078.01.0038.01.

Think Tank Review of AFID Deployment

On 18 March 2022, the European Parliament's Think Tank published a review of the deployment of the Alternative Fuels Infrastructure Directive (AFID) as part of the 'Fit for 55' package.

The review looks at the timing of the revision to the AFID. It goes on to look at the existing situation, Parliament's starting position, preparation of the proposal and the changes the proposal would bring.

Proposal for a regulation of the European Parliament and of the Council on the deployment of alternative fuels infrastructure, and repealing Directive 2014/94/EU of the European Parliament and of the Council		
<i>Committee responsible:</i>	Transport and Tourism (TRAN)	COM(2021) 559 14.07.2021
<i>Rapporteur:</i>	Ismail Ertug (S&D, Germany)	2021/0223(COD)
<i>Shadow rapporteurs:</i>	Jens Gieseke (EPP, Germany) Caroline Nagtegaal (Renew, the Netherlands) Anna Deparnay-Grunenberg (Greens/EFA, Germany) Roman Haider (ID, Austria) Carlo Fidanza (ECR, Italy) Elena Kountoura (The Left, Greece)	Ordinary legislative procedure (COD) (Parliament and Council on equal footing – formerly 'co-decision')
<i>Next steps expected:</i>	Committee vote on draft report	



The diagram shows a horizontal timeline with a large blue arrow pointing right. Above the arrow, several stages are marked with colored dots: Commission proposal (green), National parliaments' opinions (green), EEC and/or ECR opinions (green), Draft report (green), Committee vote (red), Triologue (red), Submitted to plenary (red), Voted in plenary (red), and Adoption (red).

It then considers stakeholders' views. In the months ahead of the announcement of the European Green Deal initiative, vehicle and electricity producers and clean transport campaigners called on the EU to boost the development of the smart charging infrastructure for electrically chargeable vehicles. The automotive industry has also voiced concern that the market uptake of alternatively fuelled vehicles is uneven across the EU, citing affordability as a barrier for consumers, but also pointing out the shortage of alternative fuels infrastructure.

Following the announcement in the Green Deal of the revision of the AFID, car manufacturers and alternative-fuel producers and suppliers have stressed that the revision should take a technology neutral approach and adhere to the definition of alternative fuels set out in the AFID. On the other hand, clean transport campaigners have called for zero-emission road transport to be treated as a priority and suggested transforming the AFID into a regulation. With regard to truck refuelling and recharging points, vehicle manufacturers have called for ambitious binding targets per Member State for electric charging and hydrogen and natural gas refuelling infrastructure.

Following the presentation of the proposal, automotive industry representatives stated that the infrastructure roll-out plan was not ambitious enough to meet the 'fit for 55' ambitions and pointed to the uneven roll-out of infrastructure and affordability of vehicles for citizens in a number of Member States. In a position paper published in October 2021, natural gas suppliers and vehicle manufacturers pointed out that, as the discussions on CO₂ emissions standards for vehicles will also be ongoing, the proposal should not phase out support for CNG and LNG infrastructure prematurely and that advanced biofuels such as bioCNG and bioLNG should be included in the scope of 'alternative fuels'.

Clean transport campaigners Transport & Environment (T&E) welcomed the requirement to increase infrastructure proportionally to vehicle uptake, and also welcomed the distance-based requirements, but advocated an earlier implementation date for the latter. While pleased with the new targets for charging infrastructure for heavy-duty vehicles, T&E argued that the Commission was underestimating the roll-out of electric trucks in the coming decade and wanted to see provisions that could lead to more gas infrastructure removed from the proposal.

The file was referred to Parliament's TRAN committee, which appointed MEP Ismail Ertug (S&D, Germany) as rapporteur. The Committees on Environment, Public Health and Food Safety (ENVI), on Industry, Research and Energy (ITRE), and on Regional Development (REGI) will adopt opinions. This file has been discussed at working level in the Council of Ministers and was one of the main topics of discussion at the informal meeting of transport ministers held on 23 September 2021. The draft report was published on 14 February 2022 and submitted the TRAN committee on 14 March 2022. It makes several amendments to strengthen the Commission's proposed provisions.

The rapporteur has proposed to strengthen the fleet-based target through a higher minimum power output per vehicle, linking the power output requirement per vehicle to the share of electric vehicles in the fleet, with higher output requirements initially. The rapporteur proposes to remove requirements proposed by the Commission for developing LNG refuelling infrastructure for HDVs, arguing that this fuel has no significant potential to reduce GHG emissions. He also proposes to deploy more hydrogen refuelling stations along the TEN-T network than proposed by the Commission (a refuelling station every 100km as opposed to 150km) and to do so earlier (from the end of 2027 as opposed to 2030).

The Think Tank review can be found at [europarl.europa.eu/RegData/etudes/BRIE/2021/698795/EPRS_BRI\(2021\)698795_EN.pdf](https://europarl.europa.eu/RegData/etudes/BRIE/2021/698795/EPRS_BRI(2021)698795_EN.pdf).

UK Environment Act Air Quality Targets

On 16 March 2022, the UK Government published a consultation on environmental targets in its Environment Act. The consultation closes on 11 May 2022.

Targets are proposed for biodiversity on land and in the sea, for woodland cover, resource efficiency and waste reduction, and for improved water and air quality.

For air quality, the government proposes an Annual Mean Concentration Target ('concentration target'), a target of 10 micrograms per cubic metre ($\mu\text{g m}^{-3}$) to be met across England by 2040. Additionally, there is a Population Exposure Reduction Target ('exposure reduction target'), a 35% reduction in population exposure by 2040 (compared to a base year of 2018).

The consultation says that the targets focus on reducing concentrations of fine particulate matter (PM_{2.5}) as evidence shows that this is the pollutant of greatest harm to human health.

Two areas where further action may be needed are domestic burning and road transport. The government says the use of electric vehicles will eliminate tailpipe emissions but there is some debate about the magnitude of emissions from non-exhaust sources (brakes, tyres and road wear – as well as resuspension of road dusts from vehicle movements) compared to traditionally powered vehicles. Further assessment is needed to determine the impacts of increased electric vehicle use (e.g. from regenerative braking) and research into innovative abatement technologies is already underway and will need to continue.

The consultation document can be found at consult.defra.gov.uk/natural-environment-policy/consultation-on-environmental-targets.pdf.

Plans for Expansion of London Ultra Low Emission Zone

On 4 March 2022, the Mayor of London Mr Sadiq Khan announced that Transport for London (TfL) will consult on expanding the Ultra-Low Emission Zone London-wide in 2023 to make London a greener, healthier and less congested city.

The mayor says the move is in response to overwhelming evidence showing further bold measures are required to reduce toxic air pollution, tackle the climate emergency and cut congestion in the capital.

Early assessments indicate that making it London-wide would: reduce NO_x emissions from cars and vans by between 285 and 330 tonnes; lead to a reduction of around 10% NO_x in emissions from cars and vans in outer London on top of building on the 30% reduction in road transport NO_x emissions expected from the expanded ULEZ and tighter Low Emission Zone standards; reduce CO₂ emissions in outer London by between 135 000 to 150 000 tonnes; and reduce the number of the most polluting cars on London's roads by between an additional 20 000 and 40 000 a day.

The Mayor of London's press release can be found at london.gov.uk/press-releases/mayoral/mayor-sets-out-london-wide-ulez-plans.

NORTH AMERICA

US EPA Proposals for Stronger Heavy-Duty Vehicle Standards

On 7 March 2022, the US Environmental Protection Agency (EPA) proposed new, stronger standards to promote clean air and reduce pollution from heavy-duty vehicles and engines starting in model year (MY) 2027. The proposed standards would reduce emissions of nitrogen oxides (NOx) from heavy-duty gasoline and diesel engines and set updated greenhouse gas (GHG) standards for certain commercial vehicle categories.

EPA is proposing two regulatory options for new NOx standards which would lower emissions of NOx and other air pollutants (PM, HC, CO, and air toxics) starting in MY 2027. The proposed rulemaking would also change key provisions of the heavy-duty emission control programme, including test procedures, regulatory useful life, emission-related warranty, and other requirements.

Table 1. Proposed Options 1 and 2 NOx Standards for HD CI and SI Engines Over Regulatory Test Cycles. (mg/hp-hr)

Duty Cycle	Model Years 2027-2030	Proposed Option 1			Proposed Option 2
		Model Years 2031 and later			Model Years 2027 and later
		All HD Engines	Spark Ignition HDE, Light HDE, and Medium HDE	Heavy HDE through Intermediate Useful Life (IUL)	Heavy HDE from IUL to Full Useful Life (FUL)
FTP (transient mid/high load conditions)	35	20	20	40	50
SET (steady-state conditions)	35	20	20	40	50
LLC (low-load conditions)	90	50	50	100	100

* The current FTP and SET standard for all HD engines is 0.20 g/hp-hr or 200 mg/hp-hr; we are proposing the LLC test procedure and therefore there is not a current standard for the LLC.

Option 1 would implement stronger NOx standards in two steps. In MY 2027, the FTP and SET Emissions NOx Limits would be set to 35 mg/bhp-hr over 600 000 miles, and the second step would occur in MY 2031 when the FTP and SET Emissions NOx Limits would tighten further to 20 mg/bhp-hr over 435 000 miles and 40 mg/bhp-hr over 800 000 miles. Option 1 would also set a NOx limit of 90 mg/bhp-hr over the new Low Load Cycle (LLC) in MY 2027 while further tightening to 50 mg/bhp-hr in MY 2031 over 600 000 miles and 100 mg/bhp-hr over 800 000 miles.

Under Option 2, full implementation of a NOx standard of 50 mg/bhp-hr would occur in MY 2027 over the FTP and SET and 100 mg/bhp-hr over the LLC with a single useful life value of 650 000 miles. The EPA proposals also introduce stronger standards for PM = 0.005 g/bhp-hr, HC = 0.040 g/bhp-hr, and CO = 6.0 g/bhp-hr.

EPA encourages public input into this rulemaking and will hold a virtual public hearing for this rule. The date for this hearing is to be confirmed.

The EPA press release and proposed rule are at [epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-and-related-materials-control-air-1](https://www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-and-related-materials-control-air-1).

Publication of US EPA Heavy-Duty Clean Truck NPRM in Federal Register

On 28 March 2022, the United States Environmental Protection Agency (US EPA) published its Heavy-Duty Clean Truck Notice of Proposed Rulemaking (NPRM) in the Federal Register. This starts the public comment period, which closes on 13 May 2022. The proposed standards would reduce emissions of NOx and other pollutants from heavy-duty diesel and gasoline engines, and set updated 'Phase 2' GHG standards for certain categories of commercial vehicles.

The proposed emission standards are largely harmonised – beginning with MY 2027 – with the California low NOx standards, so-called Omnibus regulation, adopted in August 2020. However, there are some differences in the emission limits and other provisions.

The EPA has proposed two regulatory options, both of which would set stronger emission standards for NOx beginning in MY 2027, adopt the LLC test cycle and emission standards in addition to the FTP & SET standards, increase regulatory useful life, and increase emissions-related warranty periods.

Option 1 would implement stronger NOx standards in two steps. The first increase in stringency would be in MY 2027 (NOx = 0.035 g/bhp-hr over 600 000 mi), and the second would be in MY 2031 (NOx = 0.020 g/bhp-hr over 435 000 mi and 0.040 g/bhp-hr over 800 000 mi). Option 2 would immediately jump to full implementation of a NOx standard of 0.050 g/bhp-hr in MY 2027. The proposed useful life period is 650 000 mi.

The EPA proposal also introduces stronger standards for other pollutants: PM = 0.005 g/bhp-hr, HC = 0.040 g/bhp-hr, and CO = 6.0 g/bhp-hr.

The proposal is the first step in EPA's "Clean Trucks Plan" – a series of clean air and climate regulations that the agency intends to develop over the next three years. These planned future regulatory actions include setting stronger emissions standards for medium-duty commercial vehicles for MY 2027 and later, along with setting 'Phase 3' GHG standards for heavy-duty vehicles beginning as soon as MY 2030 that are significantly stronger than the MY 2027 GHG standards.

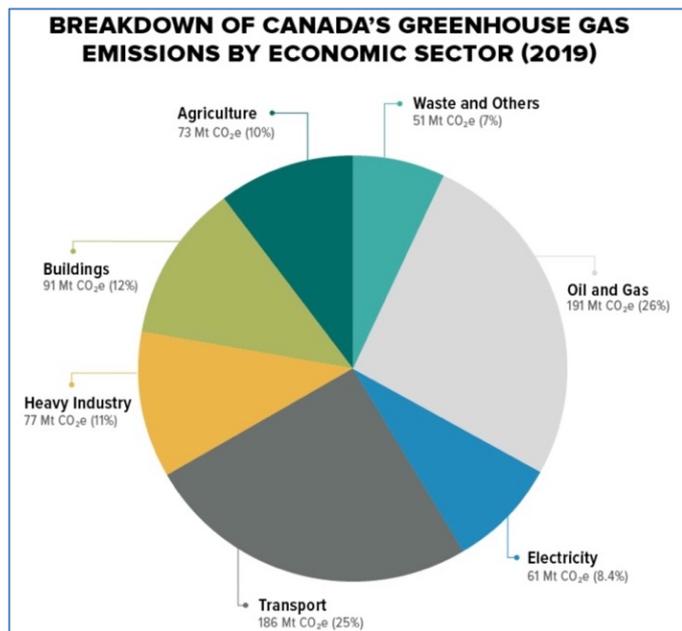
The proposed rule is in the Federal Register at [govinfo.gov/content/pkg/FR-2022-03-28/pdf/2022-04934.pdf](https://www.govinfo.gov/content/pkg/FR-2022-03-28/pdf/2022-04934.pdf).

Canada 2030 Emissions Reduction Plan

On 29 March 2022, the Canadian government published its 2030 Emissions Reduction Plan, the first issued under the Canadian Net-Zero Emissions Accountability Act. Progress under the plan will be reviewed in progress reports produced in 2023, 2025, and 2027. Additional targets and plans will be developed for 2035 through to 2050.

In the area of transport, which makes up a quarter of Canada's total CO₂ emissions, the plan only mentions road transport. The government says it is making it easier for Canadians to switch to

electric vehicles through additional funding of \$400 (€289) million for zero-emission vehicles (ZEVs) charging stations, in support of the objective of adding 50 000 ZEV chargers to Canada’s network. In addition, the Canada Infrastructure Bank will also invest \$500 (€361) million in ZEV charging and refuelling infrastructure. The Government of Canada will provide \$1.7 (€1.23) billion to extend the Incentives for Zero-Emission Vehicles (iZEV) programme, which will make it more affordable and easier for Canadians to buy and drive new electric light-duty vehicles.



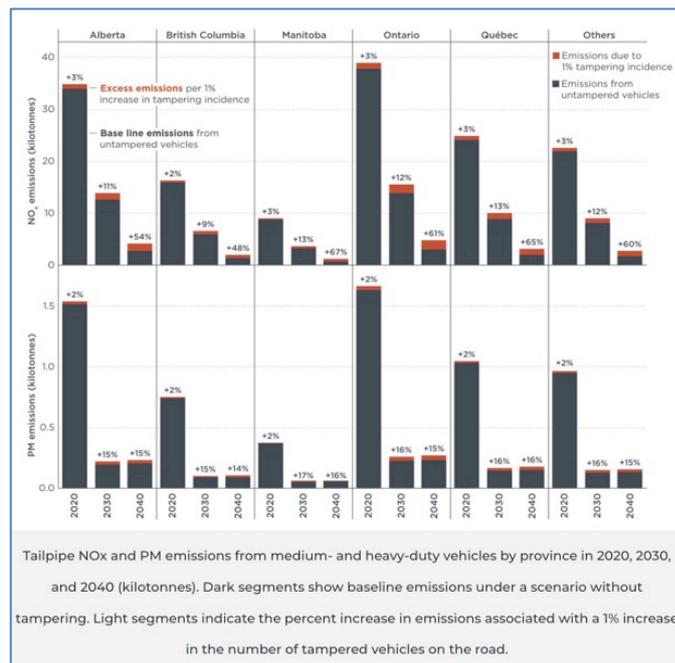
The Government will also put in place a sales mandate to ensure at least 20% of new light-duty vehicle sales will be zero-emission vehicles by 2026, at least 60% by 2030 and 100% by 2035. To reduce emissions from medium- and heavy-duty vehicles (MHDVs), the Government of Canada will aim to achieve 35% of total MHDV sales being ZEVs by 2030. In addition, the Government will develop a MHDV ZEV regulation to require 100% MHDV sales to be ZEVs by 2040 for a subset of vehicle types based on feasibility, with interim 2030 regulated sales requirements that would vary for different vehicle categories based on feasibility and explore interim targets for the mid-2020s.

The full Emissions Reduction Plan is available at canada.ca/en/environment-climate-change/news/2022/03/2030-emissions-reduction-plan--canadas-next-steps-for-clean-air.

ICCT Report on Heavy-Duty Emissions Control Tampering in Canada

On 21 March 2022, the International Council on Clean Transportation (ICCT) published a report on heavy-duty emissions control tampering in Canada. The study provides a holistic assessment of the issues that facilitate emission control system tampering in heavy-duty vehicles in Canada and estimates the impacts of tampering on the emissions inventory and public health.

ICCT says that through analysis of the best-available data, each percentage-point increase in the tampering rate in 2020 increases fleetwide PM and NOx emissions by 2%–3%. In 2040, by which point nearly all vehicles in the fleet should meet US 2010 or later standards, each percentage-point increase in the tampering rate would increase fleetwide PM emissions by 14%–16% and NOx by 48%–67%, depending on the province. A tampering rate of 1% is associated with 690 excess premature deaths and 11 700 years of life lost over the next 20 years.



The NGO adds that inspection and maintenance programmes with technical designs coherent with modern emission control systems have the potential to be an effective hurdle against tampering. Additional targeted market surveillance activities, such as the combination of remote sensing screening with subsequent roadside inspections, can be an effective measure to identify and penalise tampering.

It goes on to say that technology-forcing regulations that mandate the development and deployment of anti-tampering technologies can also increase the technology barrier to tampering. Such technologies include data authentication of emissions control components, anomaly detection through enhanced on-board diagnostics systems, and on-board monitoring and reporting of emissions related data.

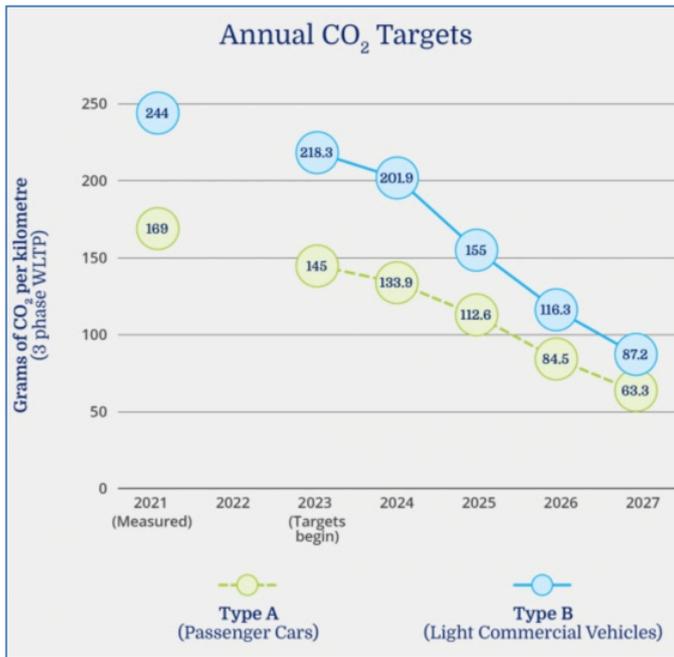
The report can be downloaded from theicct.org/publication/hdv-emissions-tampering-can-mar22.

ASIA-PACIFIC

New Zealand Clean Vehicles Act

In March 2022, the New Zealand government passed the Clean Vehicles Act, which amends the Land Transport Act 1998 and Land Transport Management Act 2003.

From 1 April 2022, charges will be imposed on high emitting vehicles, and rebates given to low-emitting ones. This will be done on a sliding scale. This is an expansion of the Discount Scheme that started on 1 July 2021 and provided rebates to buyers of battery electric and plug-in hybrid vehicles. Charges on high emission vehicles are intended to act as a purchase disincentive and will fund rebates for zero and low emission vehicles.



Part 13 of the Land Transport Act 1998 (as amended by the Clean Vehicles Act) sets out the legislative framework for the Clean Vehicle Standard, including targets for reducing CO₂ emissions. CO₂ targets for vehicle importers apply from 2023 and will strengthen significantly each year through to 2027. CO₂ targets for 2028 and later years may be set later by regulation. There are variations by vehicle type and weight - stricter targets apply for passenger cars than do for light commercial vehicles. During 2022, regulations will be made to prescribe formulas for the weight adjustment of targets, specify the types of vehicles excluded from the policy.

The new Vehicle Efficiency and Emissions Data Rule prescribes how tailpipe CO₂ emissions for vehicles are to be determined from 1 April 2022, and the Vehicle Energy Economy Label regulation requires that CO₂, any rebate/fee, and other information be displayed both physically and online on vehicles for sale by motor vehicle traders from April 2022.

Further details of the new legislation can be found at transport.govt.nz/area-of-interest/environment-and-climate-change/clean-cars.

GENERAL

ACEA's Automotive Regulatory Guide

On 20 March 2022, the European Automobile Manufacturers' Association (ACEA) published the 2022 edition of its Automotive Regulatory Guide, a publication that provides a comprehensive overview of the national and international regulations governing the automotive industry. It covers regulations in the areas of safety, environment, technical, radio and aftersales.

Item	Subject	Regulatory Act	Applicability to spare parts
Safety - external, internal, active safety, operation, occupant protection	Title or short description of regulation / topic	Relevant regulation(s) / legal reference(s)	Yes: regulation applicable to type approval and spare parts No: regulation applicable to type approval only Empty cell: no clear statement available, needs to be checked
Environment - engine power, fuel consumption, substances, emissions, noise emissions			
Technical - technical requirements for vehicles, components and separate technical units			
Radio - relevant for telecommunication and wireless devices			
Mixed - diverse requirements, other categories			
Aftersales - relevant for aftersales only			

The guide has been expanded this year to include regulations for the United States, the United Kingdom, Canada, Mexico and Australia.

ACEA says that increased global harmonisation will allow the industry to get to carbon-neutral mobility faster and more efficiently.

The Automotive Regulatory Guide can be found at acea.auto/files/ACEA-Regulatory-Guide-2022.pdf.

Letter from Cities, Companies and NGOs on Tighter Van CO₂ Limits

On 10 March 2022, a coalition of cities, companies, health groups and NGOs, including Transport & Environment (T&E), published an open letter to Members of the European Parliament and EU governments about the need for tighter van CO₂ limits.

The group – which brings together more than 600 companies and organisations – calls on lawmakers to strengthen the EU Commission's proposed van CO₂ limits for the 2020s. As currently drafted, the proposal does not require manufacturers to increase their sales of electric vans above a 10% share before the end of the

decade. Cities say that vans need to shift to zero emissions much faster to improve air quality and address the growing climate impact of home deliveries. Vans are a major source of air pollution, including 14% of NO_x emissions from vehicles in cities.

The letter is signed by: Dublin, Gothenburg, Haarlem, Palermo, Paris, Rotterdam, Tilburg, Walbrzych, C40, Polis, European Clean Trucking Alliance, Climate Group/EV 100, Clean Cities Campaign, Transport & Environment, European Public Health Alliance, European Respiratory Society.

The letter can be found at transportenvironment.org/tighter-van-co2-limits-needed-to-drive-electrification-coalition-of-cities-companies-health-groups-and-ngos.

ICCT White Paper on CO₂ Standards for Trucks and Buses in Europe

On 30 March 2022, the International Council on Clean Transportation (ICCT) published a white paper on the CO₂ standards required for trucks and buses for Europe to meet its climate targets.

ICCT explains that the currently adopted CO₂ emission standards for heavy-duty vehicles (HDVs) require most new trucks to reduce their emissions by 15% in 2025, and 30% in 2030. However, growing levels of activity in the HDV sector offset the CO₂ benefits from the standards, with emissions projected to grow by 8% by 2050 under the current adopted policies. This study seeks to inform the stringency of CO₂ emission standards necessary to align the HDV sector with the European Climate Law.

The study finds that the HDV specific milestones falls short of the 98% emission reduction required to comply with the European Climate Law, achieving a 78% reduction between 2019 and 2050.

ICCT goes on to say that the landscape for zero-emission vehicles has changed dramatically since the implementation of the CO₂ standard. All major HDV manufacturers have since committed towards increasing the number of zero-emission vehicles. If achieved, and supplemented by consistent efficiency improvements, these commitments would correspond to an emission reduction of 96% by 2050 relative to 2019 – closely in line with the goal of the European Climate Law.

To achieve Europe's climate goals, the study finds that the European Commission should increase the HDV CO₂ standard to a reduction of at least 60% in 2030, introduce a target of at least 90% for 2035, and introduce a phase-out date for new combustion-powered trucks and buses of no later than 2040.

The ICCT study can be found at theicct.org/publication/hdv-co2standards-recs-mar22.

RESEARCH SUMMARY

Effects of Emissions and Pollution

PM_{2.5} exposure during pregnancy is associated with altered placental expression of lipid metabolic genes in a US birth cohort, Kirtan Kaur, et al.; *Environmental Research* (August 2022), Vol. 211, 113066, [doi: 10.1016/j.envres.2022.113066](https://doi.org/10.1016/j.envres.2022.113066).

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FORTHCOMING CONFERENCES

SAE WCX World Congress

5-7 April 2022, Detroit, USA and Online
[sae.org/attend/calls-for-papers](https://www.sae.org/attend/calls-for-papers)

Vienna Motor Symposium

27-29 April 2022, Vienna, Austria
[wiener-motorensymposium.at/en](https://www.wiener-motorensymposium.at/en)

AECC will make a presentation.

CLEPA Materials Regulations Event

3-5 May 2022, Online
[clepa.eu/events/materials-regulations-event-2022](https://www.clepa.eu/events/materials-regulations-event-2022)

CLEPA Aftermarket Conference

1-2 June 2022, Brussels
[clepa.eu/events/clepa-2022-aftermarket-conference](https://www.clepa.eu/events/clepa-2022-aftermarket-conference)

CITA International Conference

1-2 June 2022, Amsterdam, Netherlands
[citainsp.org/cita-conferences](https://www.citainsp.org/cita-conferences)

SIA Powertrain & Electronics

15-16 June 2022, Rouen, France
[sia.fr/evenements/263-sia-powertrain-energy-rouen-2022](https://www.sia.fr/evenements/263-sia-powertrain-energy-rouen-2022)

AECC will make a presentation.

ETH Conference on Combustion-Generated Nanoparticles

21-23 June 2022, Online
[nanoparticles.ch](https://www.nanoparticles.ch)

Cambridge Particle Meeting

24 June 2022, Cambridge, UK and online
[cambridgeparticlemeeting.org](https://www.cambridgeparticlemeeting.org)

Catalysis and Automotive Pollution Control (CAPoC12)

29-31 August 2022, Brussels, Belgium
[capoc.ulb.ac.be](https://www.capoc.ulb.ac.be)

SAE Powertrains, Fuels and Lubricants

6-8 September 2022, Krakow, Poland
[sae.org/attend/pfl](https://www.sae.org/attend/pfl)

3rd SAENA Conference on Sustainable Mobility

25-28 September 2022, Catania, Italy
[universitacusano.com/csm2022](https://www.universitacusano.com/csm2022)

31st Aachen Colloquium Sustainable Mobility

10-12 October 2022, Aachen, Germany
[aachener-kolloquium.de/en](https://www.aachener-kolloquium.de/en)

Transport Research Arena 2022

14-17 November 2022, Lisbon, Portugal
[traconference.eu/about-tra](https://www.traconference.eu/about-tra)

POLIS Annual Conference

30 November – 1 December 2022, Brussels, Belgium
[polisnetwork.eu/2022-annual-polis-conference](https://www.polisnetwork.eu/2022-annual-polis-conference)