International Regulatory Developments

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EUROPE

Euro 7 Vote in European Parliament

On 9 November 2023, the European Parliament adopted its negotiating position on revamping EU rules for type-approval and market surveillance of motor vehicles (Euro 7) with 329 votes in favour, 230 against and 41 abstentions. The new regulation will update current limits for exhaust emissions (such as nitrogen oxides, particulate matter, carbon monoxide, and ammonia), and will introduce new measures to reduce emissions from tyres and brakes, and increase battery durability.

The Parliament's press release says that MEPs agree with the levels proposed by the Commission for pollutant emissions for passenger cars and propose an additional breakdown of emissions into three categories for light commercial vehicles based on their weight. They also propose stricter limits on exhaust emissions measured in laboratory and in real driving conditions for buses and heavyduty vehicles.

In the debate on 8 November, Rapporteur MEP Vondra (ECR, CZ) said he supports the objective of achieving better air quality, but the Commission proposal would have disproportionate negative effects on consumers and manufacturers. Mr Vondra said there were several questions about feasibility and implied costs, and that it was imperative to rework the balance of the text with a successful outcome in the ENVI report, of which he summarised the key items.

EU Commissioner for Equality, Ms Helena Dalli, represented the European Commission. She reminded Parliament of the key objectives of Euro 7: improving air quality to reduce premature deaths, offering clean vehicles at affordable prices, and preserving the competitiveness of the automotive industry. She recognised and welcomed that the overall structure and objectives of the proposal were kept in the Parliament draft text. She noted some important differences, including the longer lead time which shortens the time to recoup investments.

Interventions were made by the TRAN opinion committee rapporteur and ENVI shadow-rapporteurs. MEP Marinescu (EPP, RO) supported the ENVI report and also the additional amendments on type approval provisions for CO2-neutral fuels. MEP Gieseke (EPP, DE) asked for support for the ENVI report, striking the correct balance between investments and air quality improvements. He additionally asked for a technology-neutral approach to include CO2-neutral fuels. MEP Schaldemose (S&D, DK) said the Commission proposal already struck the right balance, which is now destroyed by further weakening it. She added that it is embarrassing that Euro 7 will almost be the same as Euro 6, so S&D would not support it. MEP Solis-Perez (Renew, ES) said the ENVI report is a sensible balance and asked to support it. MEP Eickhout (Greens, NL) noted the debate seemed to be more about the car industry whereas it should have been about air quality and

public health. Euro 6 was formed in 2009 and this would still be maintained, whereas many vehicles with internal combustion engines will still be put on the roads. He said this would be the best example of a greenwashing label.

Rapporteur MEP Vondra expressed thanks to EPP and Renew shadow-rapporteurs as well as the EU Commission. He finished with a comment to the Socialists and Greens, saying the rationale on Euro 7 is to "avoid the real disaster for the environment" which, according to him, is the shipment of pre-Euro 6 vehicles to the East of Europe.

Following the vote, Rapporteur Vondra reported on the outcome of the vote during a press conference.

He repeated his statement from the closing debate that the original EC proposal would have a devastating effect on consumers as they would only be able to purchase pre-Euro 6 second hand cars, which would also have a negative effect on the environment. He thanked shadow-rapporteurs MEP Gieseke (EPP, DE) and Solis-Perez (Renew, ES), as well as ENVI chair MEP Canfin (Renew, FR). He noted the EP report is close to the Council position, so he expects a swift conclusion of the trilogue discussions, before the end of the year. Two rounds of discussions are expected, one in late November and another in December. Following a question on the remaining differences between Council and EP, he said the Council is closer to the Euro 6 level for emissions, whereas the Parliament's position gives more lead time. He noted that he sees two possible options for the trilogue, either a tougher position on some emissions with longer lead time, or a more relaxed position on the emission with shorter lead time.

The Parliament's press release is at <u>europarl.europa.eu/news/en/pressroom/20231106IPR09026/euro-7-</u> <u>meps-support-new-rules-to-cut-down-pollutant-emissions</u>.

The debate can be replayed at <u>multimedia.europarl.europa.eu/en/webstreaming/20231108-0900-</u> <u>PLENARY</u> and the press conference is available to view at

multimedia.europarl.europa.eu/en/webstreaming/press-conference-byalexandr-vondra-rapporteur-on-euro-7-standards.

European Parliament Vote on CO₂ Emissions Standards for HDVs

On 21 November 2023, the European Parliament adopted its negotiating position on new measures to strengthen CO_2 emission reduction targets for new heavy-duty vehicles, with 445 votes in favour, 152 against and 30 abstentions.

Parliament's press release says MEPs want strong CO_2 emissions reduction targets for medium and heavy trucks, including vocational vehicles (such as garbage trucks, tippers or concrete mixers) and buses. The targets would be 45% for the period 2030-2034, 65% for 2035-2039 and 90% as of 2040, same as what the European Commission proposed.



They agree with the Commission proposal to allow the register only of zero-emission new urban buses from 2030 but they propose a temporary exemption (until 2035) for urban buses fuelled by biomethane, under strict conditions.

On plenary amendments, adopted amendments 87-135 (similar) will add the definition of 'CO₂ neutral fuel', amendments 92-108-138 (similar) call on the Commission to develop a methodology for the registration of heavy-duty vehicles running exclusively on CO₂-neutral fuels and amendments 85-124-133 (similar) propose a new recital 15b on the recognition of the role of CO₂ neutral fuels.

A debate was held before the vote. Rapporteur Bas Eickhout (Greens/EFA, NL) recalled that heavy-duty vehicles were responsible for 25% of GHG emissions in road transport and thus stressed the need to accelerate the decarbonisation of the sector to reach climate neutrality in time.

While the Rapporteur expressed doubts about the target proposed being sufficient to reach climate neutrality for trucks and hoped for further acceleration in the future beyond the objectives put on the table, the MEP promoted a balanced report with a good definition of carbon neutrality and carbon-neutral fuels.

On behalf of the Commission, the EU Commissioner for Climate Action Wopke Hoekstra stressed that the transport sector required special attention, as it is the only sector where emissions have continued to rise.

The Commissioner highlighted that the file was an opportunity to shift to zero emissions mobility and argued that stagnation was not and could not be the answer in this competition. The Commissioner welcomed the ENVI Report, which confirmed the Commission's ambition, and called MEPs on the need to give the sector clarity, investment certainty and stability.

Shadow Rapporteur Jens Gieseke (EPP, DE) criticised the lack of openness for new technology and eFuels proposed by the Greens/EFA and the S&D and described the proposed approach as anti-industrial and against people.

Shadow Rapporteur Christel Schaldemose (S&D, DK) underlined that a lot of work remained ahead to keep the EU as a green technology leader. However, the MEP welcomed the proposed Report providing high emission reductions and a clear signal for the industry to remain in a global leadership position.

Shadow Rapporteur Pascal Canfin (Renew, FR) highlighted the EU's responsibility to be both ambitious and pragmatic before COP28. On ambition, the MEP argued that the EU should not give up on targets and clarified that the majority of the Renew group will vote against the amendments tabled in plenary on eFuels and the CCF, which would bother the measure, arguing that eFuels should be kept for hard-toabate sectors.

Shadow Rapporteur Pietro Fiocchi (ECR, IT) agreed with the need to reduce CO_2 emissions but argued that his political group favoured a pragmatic approach to make sure that all Member States would reach their goals. Therefore, the MEP supported CCF and the different types of less impacting fuels and stressed that smaller cities would have a hard time reaching the 100% target by 2030.

Shadow Rapporteur Silvia Sardone (ID, IT) also supported amendments on eFuels and argued that the legislation was a danger for the transport sector and would put at risk businesses and small cities because of the ideology promoted in the text.

Finally, Shadow Rapporteur Nikolaj Villumsen (GUE/NGL, DK) declared that while the ENVI Report was perhaps not as good and green as the group might wish, the ambition proposed would lead to important improvements. The MEP also stressed that the amendments tabled by the right coalition would cost jobs that would move to China and the U.S. while making it harder for the EU to achieve its climate objective.

In the press conference following the debate and vote, Mr Eickhout said he expected the main items for negotiation with the Council would be the phase-out of non-zeroemission city buses and the definition of what is classified as zero emission. He did however say that he thought the Parliament and Council are "quite close."

The Parliament's press release can be found at <u>europarl.europa.eu/news/en/pressroom/20231117IPR12204/parliament-</u> <u>backs-new-rules-to-reduce-air-pollution-from-HDVs</u> and the recording of the press conference is at <u>multimedia.europarl.europa.eu/en/webstreaming/press-conference-by-</u> <u>bas-eickhout-rapporteur-on-HD-co2-emissions.</u>

European Council Negotiating Position on Air Quality Standards

On 9 November 2023, the European Council adopted its mandate for negotiating talks with the European Parliament on a proposal to set EU air quality standards to be achieved by 2030 and to put the EU on a trajectory closer to its zero-pollution vision for air by 2050. It says it also seeks to align EU air quality standards more closely with World Health Organization (WHO) guidelines.

The Council's press release says that the position strikes a balance between, on the one hand, keeping the Commission proposal's main ambition of improving air quality standards in the EU and moving closer to realising the 2050 zero-pollution objective and, on the other hand, introducing some flexibility for Member States in the implementation of the directive.

It member states that the annual limit values for the pollutants with the highest documented impact on human health, particulate matter (PM2.5) and nitrogen dioxide (NO₂), would be reduced from 25 μ g/m³ to 10 μ g/m³ and from 40 μ g/m³ to 20 μ g/m³ respectively (the WHO guideline values are 5 μ g/m³ for PM2.5 and 10 μ g/m³ for NO₂).



The Council's text adds some flexibility with regard to the attainment of the air quality limit values for areas where compliance with the directive by the deadline would prove unachievable due to site-specific dispersion characteristics, adverse climatic conditions or transboundary contributions. The Council added the reason of a high share of low-income households if the Member State in question has a lower national GDP per capita than the EU average.

The text includes requirements for air quality plans, measures to keep exceedance periods as short as possible, and short-term action plans.

The Council's text calls on the European Commission to review the air quality standards by 2030 and as frequently as necessary thereafter, to assess whether they need to be updated based on the latest scientific information.

The Council is now ready to start negotiations with the European Parliament to agree on the final shape of the legislation. Once a provisional agreement has been found, the final text will have to be formally adopted by both institutions.

The Council's press release can be found at <u>consilium.europa.eu/en/press/press-releases/2023/11/09/air-quality-council-ready-to-start-talks-with-parliament-on-new-rules</u>.

EEA Air Quality Health Assessment

On 24 November 2023, the European Environment Agency (EEA) published a briefing titled 'Harm to human health from air pollution in Europe: burden of disease 2023.' The assessment presents the latest information, estimated for the year 2021, of the harm to human health caused by three key air pollutants: fine particulate matter, nitrogen dioxide and ozone.

According to the air quality health assessment, 253 000 deaths could have been avoided in the EU if the fine particulate matter concentrations had met WHO recommendations. The EEA says further measures to reduce air pollution to WHO guideline levels would prevent these 253 000 attributable deaths and also reduce the number of people who are living with the debilitating health effects of air pollution-related diseases such as diabetes and asthma.

Between 2005 and 2021, the number of deaths in the EU attributable to fine particulate matter (PM2.5) fell by 41%. Still, air pollution continues to be the top environmental health risk to Europeans (followed by other factors such as exposure to noise, chemicals and the increasing effects of climate-related heatwaves on health).

In addition, nitrogen dioxide pollution led to 52 000 deaths and short-term exposure to ozone led to 22 000 attributable deaths in the EU. Air pollution also causes ill health and adds significant costs on health care systems. These WHO recommended concentrations are set based on the level of pollution above which there is clear evidence of associated health effects.

The EEA briefing can be downloaded from <u>eea.europa.eu/en/newsroom/news/health-impacts-from-airpollution</u>.

Political Agreement on Critical Raw Materials Act

On 12 November 2023, the European Parliament and Council reached a political agreement on the Critical Raw Materials Act (CRMA). The Act sets out a series of comprehensive actions to ensure the EU's access to a secure, diversified, affordable and sustainable supply of critical raw materials. The Commission says this is essential for the competitiveness of Europe, including for green and digital industries as well as defence and aerospace.

The new rules help to increase domestic capacities for critical raw materials along the supply chain, complementing initiatives to diversify their supply through international partnerships supported by the Global Gateway facility. The agreed benchmarks specify that the EU should have the capacity to extract 10%, process 40%, and recycle 25% of its annual consumption of strategic raw materials by 2030. In terms of recycling, the deal also ensures that the EU will progressively take into account waste to determine recycling objectives. The compromise also includes the objective to mitigate demand through resource efficiency and technological progress. The EU should also diversify its imports of strategic raw materials, so that it does not rely on a single source of supply for more than 65% of its consumption.

To strengthen the EU domestic capacities, the Commission with Member States will identify Strategic Projects along the value chain that will benefit from more streamlined, faster and more efficient permitting procedures as well as facilitated access to finance. The agreement also extends the scope of Strategic Projects to those allowing the production of materials that substitute strategic raw materials. Moreover, the Act ensures that efforts to build secure and sustainable critical raw material value chains, through Strategic Projects in the EU or in third countries, are made in compliance with high environmental, social and governance standards.

The agreement includes that the list of critical and strategic raw materials will now become part of EU law, and adds aluminium and synthetic graphite to the list. These raw materials have been identified given their strategic importance for green, digital, defence and space sectors and their forecasted increase in demand that will exceed the foreseeable supply. The Act also introduces an effective monitoring of critical raw materials supply chains, and an obligation for large companies to perform risk assessments of their supply chains. It also foresees the coordination of strategic raw materials stocks among Member States.

The European Commission press release is at <u>ec.europa.eu/commission/presscorner/detail/en/ip_23_5733</u>.



NORTH AMERICA

CARB Workshop on Advanced Clean Cars II Amendments

On 15 November 2023, the California Air Resources Board (CARB) held a kick-off workshop to provide an overview of possible amendments to the greenhouse gas (GHG), criteria pollutant and zero emission vehicle (ZEV) assurance measures under the Advanced Clean Cars II (ACC II) regulations. The amendments are predominantly to consider alignment where appropriate with elements of the proposed EPA Light-Duty Multipollutant Rule (GHG and criteria pollutant) and ZEV assurance measures to further support the ZEV market.



The current ACC II regulation retains the 2026 combined fleet average (includes ZEVs) of 163 grams CO_2 /mile throughout 2027 to 2035 and was to be re-visited in the future. Under the amendments to be developed, CARB will target alignment with the EPA proposal of 82 g CO_2 /mile in 2032 as well as incorporate an anti-backsliding mechanism, reconsider the treatment of plug-in hybrid electric vehicles (PHEVs), air conditioning credits and the projected use and availability of ethanol (E85).

CARB advised that LEV IV programme amendments will likely align with the final EPA Multipollutant Rule including the number and levels of certification bins, particulate matter standards (CARB's current FTP and US06 at 1mg/mile vs. EPA's proposed 0.5mg/mile over all test cycles), onboard refuelling vapour recovery requirements for incomplete vehicles, medium duty vehicle provisions as well as test procedure and regulatory language updates.

Alignment with EPA's proposal will increase the stringency of medium-duty vehicle (MDV) emission standards. The EPA NMOG+NOx fleet average would be reduced to 60 mg/mile with certification bins ranging from 10 to 160 mg/mile as shown in the figure below. The current CARB LEV IV NMOG+NOx fleet average would be 150 or 175 mg/mile for Class 2B and 3 MDVs respectively with certification bins which range from 75 to 230 mg/mile after MY2028.

CARB would also be considering aligning its LEV IV MDV particulate standards with the far more aggressive final EPA standards which would require the use of GPFs.

CARB LEV IV Requirement	EPA Proposed Tier 4
 Lowers Class 2b fleet average to 150 mg/mi and Class 3 fleet average to 175 mg/mi by 2030 MY 	 Lowers combined class 2b/3 NMOG+NOx fleet average to 60 mg/m by 2032 MY
 Excludes ZEVs from average 	 Includes ZEVs in average EPA assumes non-ZEVs to emit at 100 mg/mi and increasing ZEVs sales can lower fleet average below standard
	 Excludes heavy-tow diesels that must meet HD engine standards
Watch for EPA's final, co RCARB Medium-duty Particula	onsider potential changes te Matter (PM) Emission
Watch for EPA's final, co ₩CARB Medium-duty Particula Stan	onsider potential changes te Matter (PM) Emission dard
Watch for EPA's final, co CARB Medium-duty Particula Stan	te Matter (PM) Emission dard
Watch for EPA's final, co CARB Medium-duty Particula Stan CARB LEV IV Requirement Maintained FTP standard at: Class 2b: 8 mg/mi Class 3: 10 mg/mi	te Matter (PM) Emission dard EPA Proposed Tier 4 • Reducing standard for all test cycles to 0.5 mg/mi • Feasible to achieve with gasoline particulate filters
Watch for EPA's final, co CARB Medium-duty Particular Stan CARB LEV IV Requirement Maintained FTP standard at: • Class 2b: 8 mg/mi • Class 3: 10 mg/mi • Lowered US06 standard to: • Class 2b: 8 mg/mi (Full US06), 6 mg/mi (US06 bag 2)	te Matter (PM) Emission dard EPA Proposed Tier 4 • Reducing standard for all test cycles to 0.5 mg/mi • Peasible to achieve with gasoline particulate filters • Phase-in counts ZEVs

CARB will continue to develop proposals and consider stakeholder input received until 15 January 2024.

Details of the workshop, including presentation, are at <u>arb.ca.gov/our-work/programs/advanced-clean-cars-program/meetings-workshops.</u>

CARB Workshop on Hydrogen Internal Combustion Engines

On 28 November 2023, the California Air Resources Board (CARB) held a workshop on hydrogen internal combustion engines (H₂-ICE) and their use in California's trucks. CARB, Engine Manufacturers Association (EMA) and OEMs agreed to this workshop as part of their agreement with CARB under the Clean Truck Partnership for supplying engines in California for the 2024-2025 model years and complying with the sales mandate required by the Advanced Clean Truck regulation (ACT).

The workshop's main agenda comprised of a CARB presentation followed by presentations from academia (Sandia Heavy-Duty Optical Engine Lab, Argonne National Laboratory and Southwest Research Institute) and industry stakeholders (PACCAR, Daimler Trucks, Volvo, Toyota and Hyundai) speaking about the science and technology of hydrogen combustion and fuel cells and TCO projections,



powertrains. A panel discussion followed.

The CARB presentation looked at the need for emissions reductions, including the 'extreme non-attainment' for ozone in some areas, as well as the regulatory framework for cleaning the heavy-duty fleet in California. It then considered aspects of planning already in place for medium- and heavyduty fuelling infrastructure, such as regulation, incentives and construction.

CARB stated at the end of the workshop that there is no current plan to make a regulatory change or continue a dialogue on this topic until the agency sees some data and results of current test programmes. CARB needs to review the information received during the workshop and also review a complementary fuels policy.

The agenda, presentation and recording of the workshop are available to view and download at arb.ca.gov/clean-truck-partnership.

UNITED NATIONS

UNEP Emissions Gap Report 2023

On 20 November 2023, the United Nations Environment Programme (UNEP) published its Emissions Gap Report 2023: Broken Record.



The report finds that there has been progress since the Paris Agreement was signed in 2015. Greenhouse gas emissions in 2030, based on policies in place, were projected to increase by 16% at the time of the agreement's adoption. Today, the projected increase is 3%. However, predicted 2030 greenhouse gas emissions still must fall by 28% for the Paris Agreement 2°C pathway and 42% for the 1.5°C pathway.

As things stand, fully implementing unconditional Nationally Determined Contributions (NDCs) made under the Paris Agreement would put the world on track for limiting temperature rise to 2.9°C above pre-industrial levels this

followed by heavy-duty deployment of H2-ICE and fuel cell century. Fully implementing conditional NDCs would lower this to 2.5°C.

> The report calls for all nations to accelerate economy-wide, low-carbon development transformations. It says countries with greater capacity and responsibility for emissions will need to take more ambitious action and support developing nations as they pursue low-emissions development growth.

> The report looks at how stronger implementation can increase the chances of the next round of NDCs, due in 2025, bringing down greenhouse gas emissions in 2035 to levels consistent with 2°C and 1.5°C pathways. It also looks at the potential and risks of Carbon Dioxide Removal methods such as nature-based solutions and direct air carbon capture and storage.

The full report can be downloaded from unep.org/resources/emissions-gap-report-2023.

COP28 Side Event on 'Unbearable Heat and Unbreathable Air'

On 30 November 2023, a side event was held at the COP28 summit titled 'Unbearable heat and unbreathable air - finding win-win solutions for climate and health.' The event was planned to explain how extreme heat and polluted air, are the most direct outcomes of climate change and its drivers on health, and suggest win-win solutions, arguing for greater inclusion of health in the UN Framework Convention on Climate Change (UNFCCC) agenda.

Panellists were Dr Bente Mikkelsen of the World Health Organization, Tony Capon (Monash Sustainable Development Institute), Salvatore Vinci (WHO), Jostein Nygard (World Bank Group) and Arunabha Ghosh (Council on Energy, Env and Water).

There was agreement that health must be at the centre of the climate negotiations, and that inequities of health impacts should be addressed. The chronic disease impacts of air pollution kill 7 million people a year, and this is the first COP meeting to hold a 'Health Day' at ministerial level.

Details of the event can be found at who.int/news-room/events/detail/2023/11/30/default-calendar/cop28side-event-unbearable-heat-and-unbreathable-air.

GENERAL

Industry Reaction to Parliament Euro 7 Vote

On 9 November 2023, trade associations reacted to the European Parliament's vote on Euro 7 emission standards.

AECC expressed disappointment with the outcome, saying that it significantly weakens the Euro 7 proposal of the European Commission in parallel to delaying its implementation. This is in contrast with its own report on the Revision of the Air Quality Directive from 13 September 2023, where the European Parliament requests higher



ambition than the proposal from the European Commission. As a consequence, Euro 7 would fall short as a supporting tool for better air quality.

However, AECC added that in contrast to the Council's General Approach on Euro 7 dated 25 September 2023, the European Parliament report retains key overarching objectives of Euro 7 from the Commission Proposal. It maintains setting fuel-neutral limits for light-duty vehicles, and allows shorter trips with the application of an emissions budget up to 10 km. It also keeps the PN10 procedures developed at UNECE, and which are already adopted and endorsed by the EU.

AECC called on the co-legislators to maintain these key overarching objectives for exhaust emissions of vehicles during the Euro 7 trilogue, and also to continue working on swift adoption of Euro 7 before the upcoming EU elections in June 2024.

The European Automobile Manufacturers' Association (ACEA) said Parliament voted for a 'more realistic' approach to Euro 7, compared to what the European Commission put forward last year. It claimed however, that Euro 7 still comes with a 'heavy price tag.'

It repeated previous messages regarding the industry's 'commitment to improving air quality, stating that 'exhaust emissions are barely measurable today.'

ACEA called on policy makers to ensure that 'realism prevails' during the trilogue negotiations, and not to let a 'disproportionate Euro 7' derail progress already made by manufacturers.

Focusing on the upcoming trilogue discussions between the Parliament and Council, the European Association of Automotive Suppliers (CLEPA) said it would welcome an agreement in the trilogue which is oriented towards the Parliament's position on limits and test conditions. It added that it will be very important to at least streamline the implementation timeline with the review of the Air Quality Directive, which is being negotiated in parallel.

CLEPA concluded that the proposal by the European Commission, with some safeguards, would have stimulated further innovation, but that with the direction the regulation takes now, the anticipated cost for its implementation can no longer be seen as an issue.

AECC's comments are available to read at aecc.eu/wp-content/uploads/2023/11/231109-AECC-statement-on-EP-Euro-7-report-final.pdf.

The ACEA press release can be found at acea.auto/press-release/euro-7-parliament-vote-auto-industry-calls-on-policy-makers-to-let-realism-prevail.

CLEPA's statement is at <u>clepa.eu/mediaroom/euro-7-trilogues-ahead</u>.

T&E Response to European Parliament Euro 7 Decision

On 9 November 2023, Transport & Environment (T&E) responded to the European Parliament vote on Euro 7 by saying that Euro 7 in that form is "worse than useless." The NGO says it should be renamed as Euro 6 F to "avoid the wholesale greenwashing of 'dirty' cars."

Highlighting what it sees as the flaws in the Parliament's position compared to the original proposal, T&E says it will weaken limits for trucks and vans, weaken testing conditions for cars including on acceleration, temperature and altitude back to Euro 6 requirements, severely weaken testing requirements for trucks, almost entirely reverting back to Euro 6 standards, and severely delay implementation of Euro 7, meaning cars will not have to comply with limits until three years after all associated regulation is adopted. For trucks the rules will not apply until 2030 at the earliest.

T&E concludes by saying that if the Council and Parliament do not rename the law during trilogue negotiations, the EU Commission should exercise its power to withdraw the legislation, as the "harm caused by 'greenwashing' dirty cars would outweigh any minor advances in Euro 7."

T&E's press release is at <u>transportenvironment.org/discover/air-pollution-standard-backed-by-</u> meos-is-worse-than-useless/.

Industry Reactions to Parliament Vote on HDV CO₂ Emissions Standards

On 21 November, industry associations reacted to the European Parliament vote on CO_2 emissions standards for heavy-duty vehicles.

The European Automobile Manufacturers' Association (ACEA) says that to meet the agreed targets, Europe will need a complete system transformation involving all public and private actors across the heavy-duty transport ecosystem. It adds that in the trilogue negotiations, colegislators should establish annual monitoring of enabling conditions at the Member State level. Close monitoring is essential to ensure that any shortcomings in infrastructure rollouts or other enabling conditions are promptly addressed. In the absence of these robust enabling conditions, it says non-compliance penalties on manufacturers would be highly unfair.

The International Road Transport Union (IRU) says that the Parliament's plenary vote 'sets unrealistic targets for zeroemission vehicles, feebly tries to factor the role of carbonneutral fuels in decarbonisation and attempts to bring the EU transport sector in line with totalitarian regimes by mandating purchase targets for transport operators.'

It adds that the potential for carbon-neutral fuels was only 'feebly recognised' by a broad definition, leaving open the possibility for these to be accounted for in the future, notably



by setting up a methodology for the registration of heavyduty vehicles running exclusively on carbon-neutral fuels.

IRU goes on to say that mandatory purchasing targets are 'completely unacceptable.' It says there must be a 'limit to economic interventionism that unproportionally and unnecessarily breaches the enshrined European rights to property and freedom to conduct business.'

ACEA's press release can be found at <u>acea.auto/press-release/co2-targets-for-trucks-and-buses-much-more-needed-than-targets-on-paper-caution-manufacturers.</u>

The IRU release is at

iru.org/news-resources/newsroom/eu-truck-and-bus-co2-vote-madeeven-worse-absurd-mandatory-purchase-idea.

T&E Response to European Parliament Vote on Heavy-Duty CO₂ Emissions

On 21 November 2023, Transport & Environment (T&E) responded to the European Parliament vote on revised CO₂ emissions standards for heavy-duty vehicles.

Commenting on the amendments to add a definition of CO₂neutral fuel and for the Commission to develop a methodology for the registration of vehicles running exclusively on such fuels, T&E says the Parliament has 'voted for a biofuels and e-fuels loophole that weakens climate targets for trucks', claiming that 'even the most unsustainable biofuels, such as palm and soy' will be counted as climate neutral.

T&E supports the move to include vehicles exempted by the original Commission proposal, such as garbage and construction trucks and other small trucks.

The T&E press release is at

transportenvironment.org/discover/meps-vote-on-co2-standards-for-heavy-duty-vehicles/.

Report on Impact of US EPA Emissions Proposal on PM Emissions and GPFs

On 21 November 2023, the International Council on Clean Transportation (ICCT) published a report looking at what the US EPA's new multi-pollutant means for particulate matter (PM) emissions and gasoline particulate filters (GPFs).

ICCT explains that the EPA has proposed new Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles. The proposed regulation would go beyond existing standards by setting the PM limit at 0.5 mg/mile on both the Federal Test Procedure (FTP) and US06 test cycles with the addition of the cold temperature FTP test cycle.

The NGO adds that the US lacks the particle number limit present in the standards for both the EU and China. The combination of particle mass and number limits in the EU and China effectively regulates both fine and ultrafine particulates. Due to these tighter PM limits, gasoline

particulate filters (GPFs) have become increasingly widespread among new vehicles in Europe and China. In the US, new vehicles can meet EPA's particle mass standards on average without GPFs. According to ICCT, average certification PM emissions data, recent EPA testing described in its proposed rule, and the small size of gasoline particulates from direct injection engines suggest that even the proposed PM limit of 0.5 mg/mi may be met without GPFs. However, due to the requirement of meeting the standard over the cold temperature FTP test (-7°C/20°F), ICCT says GPFs are likely to be the most cost-effective solution to meet the proposed standard, catching the US up with Europe and China.

The report goes on to provide cost information for bare and catalysed GPFs, concluding that GPF incremental direct costs represent less than 1% of vehicle price. In contrast to these findings, it points out that the Alliance for Automotive Innovation and several automakers claim that the direct and indirect costs of widespread GPF implementation at the pace proposed by EPA are unreasonable. ICCT goes on to say that by EPA's own modelling of the market impacts of the proposal, virtually no gasoline-fuelled light-duty vehicles will need GPFs in 2027 to comply with the proposed standard. By 2028, around three-fifths of gasoline cars and no gasoline trucks will need GPFs to comply. Only by 2030 will all new gasoline light-duty vehicles need GPFs to comply with the proposed PM standard.

The ICCT fact sheet is available to read at theicct.org/wp-content/uploads/2023/11/ID-48-%E2%80%93-U.S.-GPF-fact-sheet-letter-70112-v3.pdf.

4th European Clean Air Forum

The 4th EU Clean Air Forum was organised by the European Commission's DG Environment on 23 and 24 November 2023.

The Clean Air Forum is held every two years, and stems from EU clean air legislation. This edition was the first one dealing with maritime emissions in particular in the midst of negotiations on the Ambient Air Quality (AAQ) review. The Forum brought together in total - in-person and virtually some 700 clean air stakeholders and interested parties, including competent authorities of the EU Member States, the Commission, industry, civil society, and scientific community.

Mr Maroš Šefčovič, Executive Vice-President of the EU Commission, responsible for EU Green Deal (EGD) gave a keynote at the start of the Forum. He stressed the social aspect of air pollution and climate change. He said the zeropollution action plan is agreed as the framework for new technologies and now there is the ongoing revision of the AAQ Directive to align with WHO guidelines. This will need legislating and implementing in transport, buildings, agriculture, energy and industry.



Ms Vivianne Heijnen, Dutch Minister for the Environment, introduced Europe's biggest seaport in Rotterdam. She noted clean air is and has to stay at the top of EU priorities and mentioned the revision of Industrial Emissions Directive (IED) might thus be more ambitious. Concrete actions for clean air are needed; let's take actions to shape the future – we need "deeds not words", she said.

A first panel discussed the topic of "Linking clean air, climate and social inequality" immediately followed by a second panel on "Maritime transport and air pollution". These panels focused on the inequalities in the exposure to and health impacts of air pollution and climate change and the impacts of maritime transport emissions on air quality in coastal areas, as well as challenges for port and ship operators towards cleaner and decarbonised transport.

European Commissioner for Environment, Ocean and Fisheries Mr Virginijus Sinkevičius reviewed the current status of EU air quality and pollution, and the path to better AQ targets for 2030 and zero pollution by 2050. He mentioned the new EC AAQ proposal, including new standards, improved monitoring network, information for citizens and provisions for authorities and governments. Now the European Parliament and Council have started their considerations, he is confident a compromise will be reached. He noted the AAQ file is linked to other rules and the light-duty CO_2 and Euro 7 standards for cars are key. He said Euro 7 had a mixed reception but strong standards for brakes and tyres are needed as these are big contributors to particulate matter. Clean air for all and everywhere is the goal, he said.

The next panel considered the "Revision of the Ambient Air Quality Directives" focusing on the revision of the Ambient Air Quality Directives (recast) proposed by the Commission in October 2022 which is currently being discussed by the co-legislators in the European Parliament and in the Council of the European Union.

Another panel was on "Spreading knowledge for cleaner air". Remote sensing, citizen science and different monitoring tools were explored, as well as what is done with this data by the health community and how to engage citizens in taking clean air actions.

Mr Maron, Minister of the Government of the Brussels-Capital Region, noted that in Brussels diesel Euro 4 cars have been banned for two years already and this was not a complicated measure. He said Euro 5 diesels are to be banned in 2025. He presented the 'CurieuzenAir project' conducted in Brussels in 2021. Ms Schouten, the mayor of Nieuwegein city, said air pollution is a problem but citizens need clean(er) cars. She said Euro 7 is important and manufacturers need to dare going there. She also presented the idea of trial testing with "sniffer-bikes". Mr Bakke, Vice President, Standing Committee of European Doctors, said his group calls for full alignment of the future AAQ standards with WHO guidelines by 2030.

More information on the forum is available from environment.ec.europa.eu/topics/air/clean-air-forum_en.

RESEARCH SUMMARY

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NOVEMBER 2023

FORTHCOMING CONFERENCES

International Engine Congress 27-28 February 2024, Baden-Baden, Germany atzlive.de/en/events/international-engine-congress/information/information-for-speakers/call-for-papers

10th AVL High Power Systems Conference 17-18 April 2024, Graz, Austria avl.com/en/events/avls-10th-high-power-systems-conference?sfmc_id=120623423

45th International Vienna Motor Symposium 24-26 April 2024, Vienna, Austria wiener-motorensymposium.at/en

SIA Powertrain International Conference 19-20 June 2024, Lille, France event.fourwaves.com/79651605-96c9-454f-9129-fe5986450f40/pages Deadline for abstracts 6 November 2023

Stuttgart International Symposium on Automotive and Engine Technology 2-3 July 2024, Stuttgart, Germany <u>fkfs-veranstaltungen.de/index.php?id=100</u> **Deadline for abstracts 15 December 2023**

New Materials for future Mobility (NeMMo) 3-4 July 2024, Nantes, France sia.fr/evenements/?year=2024

International Congress on Catalysis 14-19 July 2024, Lyon, France https://www.icc-lyon2024.fr

Rostock Large Engine Symposium 12-13 September 2024 rgmt.de **Deadline for abstracts 15 December 2023**

Aachen Colloquium Sustainable Mobility 7-9 October 2023, Aachen, Germany aachener-kolloquium.de/en **Deadline for abstracts 15 February 2023**