

NEWSLETTER

International Regulatory Developments

TABLE OF CONTENTS

EUROPE	2
European Parliament's Environment Committee Position on Euro 7	2
European Council General Approach on CO ₂ Emission Standards for HDVs	2
ITRE Committee Vote on Heavy-Duty CO ₂ Emissions Standards	3
ENVI Committee Vote on Heavy-Duty CO ₂ Emissions Standards	3
Publication of Presidency Compromise Text on Air Quality and Cleaner Air	3
European Council Adoption of Renewable Energy Directive	3
New Green Rapporteur for Heavy-Duty CO ₂ Emissions Dossier	4
Commission Work Programme for 2024	4
Hearings of Commissioners-Designate Šefčovič and Hoekstra in Parliament	4
Commissioner Response on LEZs and Eco-Stickers in EU	5
EEA Report on Greenhouse Gas Trends and Projections in Europe	5
UK Consultation on Adoption of Euro 6e Vehicle Emissions Standard	6
NORTH AMERICA	6
CARB Hearing on Proposed Omnibus Heavy-Duty Amendments	6
CARB Workshop on Tier 5 Off-Road Proposal Amendments	7
ASIA-PACIFIC	7
New Zealand Euro 6/VI Implementation	7
GENERAL	7
NGO Responses to ENVI Decision on Euro 7 Standards	7
Industry Reaction to ENVI Committee Vote on Euro 7 Proposal	8
NGO Call to Member States for Ambitious Air Quality Standards	8
Call for Tighter Air Pollution Limits from Transport Companies	8
RESEARCH SUMMARY	9
FORTHCOMING CONFERENCES	10

EUROPE

European Parliament's Environment Committee Position on Euro 7

On 12 October 2023, the European Parliament's Environment (ENVI) Committee voted on the draft report on the proposal for a type-approval of motor vehicles and engines and of systems, components and separate technical units intended for such vehicles, with respect to their emissions and battery durability (Euro 7).

All of the Rapporteur's Compromise Amendments (CAs), other than CA7 on CO₂-neutral fuels, were adopted, with the report carried by 52 votes to 32, with one abstention.

MEPs agreed with the levels proposed by the Commission for pollutant emissions (such as nitrogen oxides, particulate matter, carbon monoxide, and ammonia) for passenger cars. But they propose an additional breakdown of emissions into three categories for light commercial vehicles based on their weight, allowing higher limits. Test conditions are based on the table proposed by the European Commission, but some values are set back to the level of Euro 6 boundary conditions (ambient temperature, ambient altitude and total trip driving dynamics).

The adopted text proposes stricter limits for exhaust emissions by buses and heavy-duty vehicles, including levels set for real driving emissions. Test conditions are those of Euro VI, with some modification to cover low power operation.

The agreed text foresees 12 months to the European Commission to develop secondary legislation. Implementation timings refer to the entry into force of relevant secondary legislation, being +24 months (New Types) and +36 months (All Types) for passenger cars and light commercial vehicles, and +48 months (New Types) and +60 months (All Types) for trucks and buses.

The emission standards currently in force (Euro 6/VI) are repealed by 1 July 2030 for cars and vans, and 1 July 2031 for buses and trucks, due to the extra time given for small volume manufacturers.

According to Rapporteur MEP Alexandr Vondra (ECR, CZ), the ENVI Committee has 'successfully struck a balance between environmental goals and the vital interests of manufacturers' and managed to 'steer clear of extreme positions.'

The report is scheduled to be adopted during the EP's plenary sitting on 8 and 9 November 2023 and will constitute Parliament's negotiating position with European governments and the EU Commission on the final shape of the future Euro 7 legislation.

The ENVI report is available to read at europarl.europa.eu/doceo/document/A-9-2023-0298_EN.html

while the ENVI Committee's press release is at europarl.europa.eu/news/en/pressroom/20231009IPR06746/euro-7-meets-back-new-rules-to-reduce-road-transport-emissions.

European Council General Approach on CO₂ Emission Standards for HDVs

On 16 October 2023, the European Council reached an agreement ('General Approach') on a proposal to update and strengthen the regulation on CO₂ emission standards for heavy-duty vehicles (HDVs). The aim of the proposal is to further reduce CO₂ emissions in the road transport sector and to introduce new targets for 2030, 2035 and 2040.

The proposal also aims to encourage an increasing share of zero-emission vehicles in the EU-wide heavy-duty vehicle fleet, while ensuring that innovation in the sector and its competitiveness are preserved and enhanced.

The proposal expands the scope of the regulation to make almost all new heavy-duty vehicles with certified CO₂ emissions – including smaller trucks, urban buses, coaches and trailers – subject to emission reduction targets.

An exemption from the CO₂ reduction targets set in the regulation will apply to small-volume manufacturers and to vehicles used for mining, forestry and agriculture; to vehicles for use by the armed forces and fire services; to vehicles for use in civil protection, public order and medical care; and to vocational vehicles such as garbage trucks.

Member States amended the definition of 'zero-emission heavy-duty vehicle' by further lowering the proposed threshold, which still covers hydrogen-fuelled vehicles. Furthermore, Member States added a sub-group of vehicles to include extra heavy combination (EHC) lorries in order to take better account of their characteristics, including with regard to their energy efficiency.

The Council maintained the targets set by the Commission. Besides the 2025 CO₂ emissions reduction target of 15% which was already provided for, the new rules introduce new targets of 45% emissions reduction from 2030 (increased from 30%), 65% emissions reduction from 2035, and 90% emissions reduction from 2040.

The proposed amendment introduces a 100% zero-emission target for urban buses by 2035, while setting an intermediate target of 85% for this category by 2030. The Council agreed to exempt inter-urban buses from this target.

The effectiveness and impact of the amended regulation on the abovementioned targets will be reviewed by the Commission in 2027, one year earlier than originally proposed by the Commission (Article 15). One of the issues the Commission will have to report on in its review is progress in the deployment of public and private recharging and refuelling infrastructure for alternative fuels for vehicles covered by this regulation.

In its review, the Council also added that the Commission will have to produce an assessment of the role of a carbon correction factor (CCF) in the transition towards zero-emission mobility in the heavy-duty vehicle sector.

The General Approach will serve as the Council's mandate for negotiations with the European Parliament on the final shape of the legislation.

The Council's General Approach is available at data.consilium.europa.eu/doc/document/ST-14284-2023-INIT/en/pdf and the European Council press release is at consilium.europa.eu/en/press/pressreleases/2023/10/16/council-agrees-on-new-rules-to-strengthen-co2-standards-for-hdvs.

ITRE Committee Vote on Heavy-Duty CO₂ Emissions Standards

On 12 October 2023, the Industry, Research and Energy (ITRE) Committee of the European Parliament voted to adopt its draft opinion on the proposed CO₂ emission performance standards for new heavy-duty vehicles. The vote was carried by 31 to three, with four abstentions.

The adopted Compromise Amendment includes a Carbon Correction Factor (CCF) recognising the contribution of sustainable renewable fuels. This has a cap to ensure that no more than 10 percentage points of the CO₂ emission reduction targets for 2030, 2035 and 2040 could be achieved through the effect of the CCF.

The adopted ITRE opinion can be found at europarl.europa.eu/doceo/document/ITRE-AD-749317_EN.pdf.

ENVI Committee Vote on Heavy-Duty CO₂ Emissions Standards

On 24 October 2023, the European Parliament's Environment (ENVI) Committee voted to adopt its report on revised heavy-duty CO₂ emissions standards. The vote was carried by 48 votes to 36, with one abstention.

Most of the Compromise Amendments (CAs) were adopted, in particular CA 7, which modifies the 2035 CO₂ reduction targets but retains the others from the European Commission proposal. This means that reduction targets adopted by the committee are -45% from 2030, -70% from 2035, -90% from 2040. CA 9 keeps the EC's proposed -100% target for urban buses by 2030 but adds an exemption for biomethane until 2035 where investments have already been made. CA 4 lowers the proposed threshold in the definition of 'zero-emission heavy-duty vehicle' (3 g/tkm and 1 g/pkm until 2034 and 1 g/tkm as of 2035). CA 4 requests a report on the possibility to develop LCA methodology by 31 December 2026.

CA 18 on a possible Carbon Correction Factor was rejected, meaning that the role of renewable fuels is not recognised.

The vote in the EP plenary session is expected on 20 November, following which trilogue discussions will start.

The full text of the compromise amendments is at europarl.europa.eu/meetdocs/2014_2019/plmrep/COMMITTEES/ENVI/AMC/2023/10-23/Item17-CAs1-28CO2forHDVs_EN.pdf with detail of the vote at europarl.europa.eu/cmsdata/276998/2023-10-24%20votes%20and%20roll-call%20votes.pdf.

Publication of Presidency Compromise Text on Air Quality and Cleaner Air

On 5 October 2023, the European Council published the Spanish Presidency's compromise text on the proposal for an ambient air quality and cleaner air directive.

The document uses language that would reduce the obligations of Member States, including 'taking into account' (rather than 'ensuring') alignment with the World Health Organization (WHO) Air Quality Guidelines and the latest scientific information.

The compromise text also 'moving closer to' (instead of achieving air quality 'in line with') a zero pollution objective.

Regarding timescales for intermediate targets, the document talks of 'the aim of providing a staged approach to improve the air quality', and removes the requirement to meet them by 2030.

The compromise text was due to be discussed by the Council Working Party on the Environment on 5 October.

It is available to read in full at data.consilium.europa.eu/doc/document/ST-12848-2023-INIT/en/pdf.

European Council Adoption of Renewable Energy Directive

On 9 October 2023, the European Council adopted the new Renewable Energy Directive to raise the share of renewable energy in the EU's overall energy consumption to 42.5% by 2030 with an additional 2.5% indicative top up to allow the target of 45% to be achieved. Each Member State will contribute to this common target.

Member states will have the possibility to choose between a binding target of a 14.5% reduction in greenhouse gas intensity in transport from the use of renewables by 2030, or a binding share of at least 29% of renewables within the final consumption of energy in the transport sector by 2030.

The new rules establish a binding combined sub-target of 5.5% for advanced biofuels (generally derived from non-food-based feedstocks) and renewable fuels of non-biological origin (mostly renewable hydrogen and hydrogen-based synthetic fuels) in the share of renewable energies supplied to the transport sector. Within this target, there is a minimum requirement of 1% of renewable fuels of non-biological origin (RFNBOs) in the share of renewable energies supplied to the transport sector in 2030.

The directive has been published in the EU's Official Journal and will enter into force 20 days later. Member states will

have 18 months after the entry into force of the directive to transpose it into national legislation.

More information can be found at consilium.europa.eu/en/press/pressreleases/2023/10/09/renewable-energy-council-adopts-new-rules and the full text of the directive can be found in the OJ at eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202302413.

New Green Rapporteur for Heavy-Duty CO₂ Emissions Dossier

On 1 October 2023, MEP Bas Eickhout (Greens/EFA, NL) replaced MEP Yannick Jadot as Rapporteur on the dossier proposing strengthening the CO₂ emission performance targets for new heavy-duty vehicles.

Following the elections of the French Senate on 24 September, Mr Jadot (Greens/EFA, FR) was elected Senator and had to step down from his position as MEP.

The ENVI Committee is provisionally scheduled to vote on its Report and the amendments tabled to it on the measure on 23 October 2023. The Report would be expected to be debated and voted on in the plenary session to be held on 20-23 November 2023.

Details of key players on the dossier are at [oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?referenc_e=2023/0042\(COD\)&l=en](https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?referenc_e=2023/0042(COD)&l=en).

Commission Work Programme for 2024

On 17 October 2023, the European Commission published its work programme for 2024.

With regard to the European Green Deal, the Commission's communication says that the main focus is now on implementation, although it will launch the process to establish a 2040 climate target, to keep the EU on course towards climate neutrality by 2050.

The net-zero industry act will support Europe's industry in developing and taking up the innovative and strategic technologies needed in an economy with net-zero emissions, such as wind turbines, heat pumps, solar panels, electrolysers, nuclear technologies as well as CO₂ storage.

The Euro 7 and heavy-duty CO₂ proposals are listed as pending proposals in Annex III.

The work programme documents can be downloaded from commission.europa.eu/publications/2024-commission-work-programme-key-documents_en.

Hearings of Commissioners-Designate Šefčovič and Hoekstra in Parliament

On 2 October 2023, the Committee on the Environment, Public Health and Food Safety (ENVI) questioned Mr Wopke Hoekstra from the Netherlands, Commissioner-designate for Climate Action.

During his introductory speech, Mr Hoekstra stressed that the Green Deal lays the foundation for the EU's green transition and underlined that it is of utmost importance to maintain continuity in the EU's climate ambitions. He hopes to ensure this by swiftly concluding pending climate negotiations and by proposing an ambitious climate target for 2040 in the first quarter of 2024, he said.

Mr Hoekstra emphasised that the EU "cannot reach climate neutrality alone". Global cooperation and climate finance are key during the upcoming UN climate change conference COP28, he stressed, vowing to work "non-stop for success in Dubai". He underlined that building a global "Loss and Damage coalition" is crucial to raise finance for developing countries and build trust.

Finally, Mr Hoekstra stressed the importance of phasing out fossil fuels, as well as fossil fuels subsidies. "The sooner fossil fuels become history, the better", he said, as they are "counterproductive for the EU's energy transition".

MEPs asked the Commissioner-designate if he would take into account the advice of the European Scientific Advisory Committee on Climate Change and commit to present a binding and science-based EU climate target for 2040, as well as an indicative greenhouse gas budget for 2030-2050.

Some MEPs called for the adoption of ongoing legislative files to be facilitated, such as on CO₂ standards for heavy-duty vehicles, Euro 7, energy taxation and carbon removals. Others questioned the Commissioner-designate on how he would finance the green transition. They asked what action he would take to promote investment in new clean technologies, to ensure EU competitiveness and regulatory certainty while upholding EU climate standards and to make sure the EU's green transition is socially balanced.

On 3 October, the ENVI Committee questioned Mr Maroš Šefčovič (Slovakia), after he was assigned the role of Executive Vice-President for the European Green Deal.

In his introductory speech, Mr Šefčovič underlined the need to finalise the work on the European Green Deal "with urgency and courage", while at the same time ensuring the proper implementation of already-agreed measures. He would focus on three main tasks in the remaining months of his mandate: seek the support of citizens for the Green Deal, bring all pending proposals to fruition and ensure the roll out of the files where agreement has already been reached.

Mr Šefčovič also mentioned a number of new proposals to be announced in the coming months, including the 2040 climate target in early 2024, measures for wind power and grids, and an initiative on relieving water stress.

MEPs asked Mr. Šefčovič how he would coordinate EU climate action and requested a commitment for the proposal by the Commission of a science-based EU climate target for 2040. They also probed Mr Šefčovič on how he would ensure the full and timely implementation of EU environmental laws

in all EU countries, including the legislation adopted under the Green Deal, and asked for an overview of new measures and proposals the Commission is scheduling for release before the European elections.

The need to work closer with industry was also raised by MEPs, who questioned the Executive Vice-President on how he would create sectoral roadmaps in line with the EU Climate Law. Other MEPs asked about animal welfare, REACH revision, micro plastics and the role of nuclear energy in the green transition.

Neither Mr Hoekstra nor Mr Šefčovič received the required two-thirds majority from the MEPs on the committee, which then requested in writing more detail and a clear timeline on upcoming legislative proposals from the two candidates.

On 4 October the committee met again to consider their written responses and approved their appointments, subject to final approval by Parliament's Conference of Committee Chairs, the Conference of Presidents (EP President Metsola and political group leaders) and the full Parliament.

On 5 October, Parliament approved Mr Hoekstra as Commissioner for Climate Action and Mr Šefčovič's new role as Executive Vice-President for the European Green Deal. 279 MEPs voted in favour of Wopke Hoekstra's appointment, 173 voted against, and 33 abstained. Maroš Šefčovič's new responsibilities were approved with 322 votes in favour, 158 votes against and 37 abstentions.

Details of Mr Hoekstra's hearing can be found at europarl.europa.eu/news/en/pressroom/20230929IPR06141/hearing-of-commissioner-designate-wopke-hoekstra and information on the hearing of Mr Šefčovič at europarl.europa.eu/news/en/pressroom/20230929IPR06143/hearing-of-commission-executive-vice-president-maros-sefcovic. The European Parliament press release is at europarl.europa.eu/news/en/pressroom/20230929IPR06138/meps-back-wopke-hoekstra-vice-president-sefcovic.

Commissioner Response on LEZs and Eco-Stickers in EU

On 9 October 2023, EU Commissioner Ms Adina Vălean responded to a written question from MEP Antonius Manders (EPP, NL) regarding the application of low emission zones and eco-stickers throughout the European Union.

Mr Manders asked if the Commission agrees that the requirements of the various Member States as regards low emission zones and eco-stickers hamper the freedom of movement of persons in the EU, and if it is willing to take steps during this mandate with the aim of establishing a common European approach to the issue, for example through a universal EU eco-sticker or mutual recognition of eco-stickers.

In response, Ms Vălean said that a study will be launched this year to map and clarify which interoperable digital and technical solutions could achieve more effective and user-

friendly urban vehicle access regulations, while respecting the principle of subsidiarity. The study will also assess and propose user-friendly interoperable technical/digital solutions for demonstrating compliance with the respective local requirements, which is the goal of current (physical) eco-stickers when entering UVARs or low emission zones.

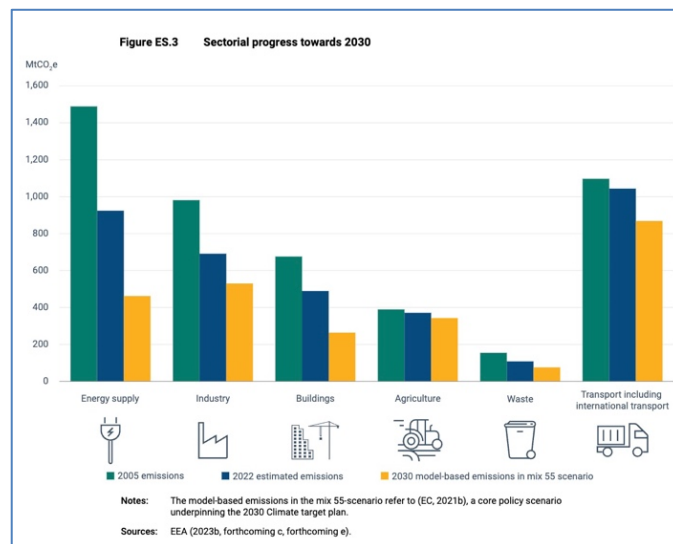
The question from Mr Manders can be read in full at europarl.europa.eu/doceo/document/E-9-2023-002258_EN.html and Ms Vălean's answer is at europarl.europa.eu/doceo/document/E-9-2023-002258-ASW_EN.html.

EEA Report on Greenhouse Gas Trends and Projections in Europe

On 24 October 2023, the European Environment Agency (EEA) published its 'Trends and Projections in Europe' report for 2023, which details progress made in delivering on greenhouse gas emissions reduction targets.

While the report highlights some encouraging signs of progress, it also emphasises that efforts will need to at least double to reach the targets set for the end of this decade.

It says the EU has reduced net greenhouse gas emissions including international aviation, by 31% compared to 1990 levels, while simultaneously fostering economic growth. Against the backdrop of soaring natural gas prices, 2022 witnessed a 2% reduction in greenhouse gas emissions, driven by substantial decreases in the buildings and industrial sectors, while emissions from energy supply and transport saw an increase.



EEA says that to achieve the 2030 emission reduction target, the pace of annual greenhouse gas emission reductions in Europe must more than double compared with the annual progress seen since 2005. More rapid reductions are particularly needed for the emissions from road transport, buildings, agriculture, waste and small industries, all of which are covered under the Effort Sharing Regulation. Reductions in energy consumption and growth of renewable energy

must accelerate even faster to reach the 2030 targets as included in the recently adopted Energy Efficiency and Renewable Energy Directives.

At the same time, the report indicates noticeable progress in specific areas. While wind and solar held a modest presence in the 2005 electricity sector, their estimated share in electricity production has surpassed 20% in 2022. The report also notes a surge in the sales of heat pumps during 2022 and the increasing share of electric vehicles, accounting for a 22% share in the total new car sales last year.

In March 2023, Member States reported more than 3000 policies and measures to achieve the energy and climate objectives. They project that measures already in place across Europe would lead to a reduction of 43% in 2030 for total net greenhouse gas emissions including international aviation, while further measures that are currently being planned would boost reductions to 48%. Last year, Member States only projected this reduction to total 41%, indicating a joint increase in ambition across Europe in the past year. However, this will still leave a seven percentage point gap to the 55% EU climate 2030 target.

Looking beyond 2030, the gap between the projected effect of policies and measures and the targets is wider, the EEA report says. It cautions that the window of opportunity to put in place the right decisions and technologies is limited, making it imperative that climate neutrality is taken into account in policies that address many sectors. In particular, the report highlights that there is an urgent need to speed up efforts in transportation and agriculture towards 2050, which have so far lagged other sectors in reducing emissions and mentions the crucial contribution of increasing the CO₂-removal capacity within Land Use, Land-Use Change and Forestry sector.

The EEA report can be downloaded from eea.europa.eu/en/newsroom/news/eus-greenhouse-gas-emissions-dropped-last-yearEEATrendsandProjections2023.

UK Consultation on Adoption of Euro 6e Vehicle Emissions Standard

On 12 October 2023, the UK government launched a consultation on whether to accept the latest internationally agreed emissions standards for cars and light goods vehicles (LGVs), known as Euro 6e.

The government has recently introduced an independent type approval scheme, GB type approval. Manufacturers currently using provisional GB type approval, which recognises vehicles approved to EU requirements, for road vehicles will need to apply to the Vehicle Certification Agency (VCA) for GB type approval.

For motor vehicles, this applies to new models introduced to the market on or after 1 February 2024, and to all models which are to be produced on or after 1 February 2026. For trailers towed behind motor vehicles, the applicable dates are

one year later, in other words 1 February 2025 and 1 February 2027.

The consultation covers two proposals. The min one is that the government proposes to accept approvals to some international (UNECE) regulations which the UK has signed and thus undertaken to accept. It says the most important proposal here is whether to accept the latest internationally agreed emissions standards for cars and light goods vehicles, sometimes known as Euro 6e.

The document explains that as the EU has already adopted Euro 6e into its type approval scheme which applies to vehicles sold in Northern Ireland under the obligations set out in the Windsor Framework, Euro 6e will become compulsory for vehicles sold in Northern Ireland in due course.

Manufacturers who operate in both EU and GB markets have indicated that they intend to sell models of vehicles complying with Euro 6e in both markets but would naturally prefer not to also test those models against the Euro 6d requirements, which would amount to double testing.

The consultation closes on 10 November 2023.

It is available to read at gov.uk/government/consultations/updating-gb-type-approval-for-road-vehicles/updating-gb-type-approval-for-road-vehicles.

NORTH AMERICA

CARB Hearing on Proposed Omnibus Heavy-Duty Amendments

On 20 October 2023, the California Air Resources Board (CARB) held a hearing on the Proposed Amendments to the Heavy-Duty Engine and Vehicle Omnibus regulation. The amendments are part of a deal (see AECC News of 14 July 2023) that was struck with engine manufacturers to ease the Omnibus requirements for MY2024-26 transitional legacy engines and to align the key requirements of MY2027 and later engines with EPA standards, in exchange for industry's support of the state's zero-emission vehicle (ZEV) mandates.

At the hearing, staff provided a summary presentation of the proposed changes. A brief outline of the proposed MY2024-26 legacy engine changes can be found in the table below. Emissions deficits from all legacy engine sales need to be offset using existing credit mechanisms in the regulation or by performing supplemental projects targeted at California disadvantaged communities.

	2024 MY	2025 MY	2026 MY
Current Omnibus	45%	25%	0%
Proposed Option 1	45%	25%	10%
Proposed Option 2	MHDD* - 60%	MHDD* - 60%	0%
	Other Engine Classes - 15%	Other Engine Classes - 8%	0%

*MHDD: medium heavy-duty diesel

It was also revealed that 15-day changes will be issued after the hearing which will include a revision of the California sales volume definition, a change in the number of decimal

places for the reporting of legacy engine family emissions limits and minor OBD related changes in the regulation text. All 15-day changes are forecast to be emissions, manufacturer and operator cost neutral.

Subsequently, on 24 October, CARB staff held a virtual public workshop to discuss approaches to offset legacy engine emissions using projects targeted in disadvantaged communities, as per the provisions in the Heavy-Duty Engine and Vehicle Omnibus regulation. Staff presented initial programme concepts including project plan requirements.

Details of the hearing can be found at arb.ca.gov/ma102023.

Information on the public workshop is at arb.ca.gov/our-work/programs/heavy-duty-low-nox/heavy-duty-low-nox-meetings-workshops.

CARB Workshop on Tier 5 Off-Road Proposal Amendments

On 30 and 31 October 2023, the California Air Resources Board (CARB) held a workshop on its updated proposal for Tier 5 off-road engines and equipment.

The updates include the implementation schedule, standards, certification requirements, new off-road in-use testing (ORIUT) provisions, useful life, warranty, defects reporting, on-board diagnostics and monitoring (OBD/OBM), manufacturer incentives and flexibility provisions.

The proposed Tier 5 criteria emissions standards are summarised in the table below. The most significant change is the inclusion of Tier 5 interim standards beginning in 2029, while Tier 5 final standards begin later in 2033. The inclusion of interim standards is to allow the industry to build competencies required for Tier 5 final implementation. The delay may also allow the EPA to develop and implement a national off-road programme.

Table 1. Proposed Tier 5 Criteria Standards (g/kW - hr) Over the Nonroad Transient Test Cycle (NRTC) and Steady-State/Ramped Modal Cycles (RMC)

Power Category	Implementation Period	NO _x Interim	NO _x Final	PM Interim	PM Final	NMHC ⁺ Final	CO
< 8 kW (< 11 HP)	2031-2033	6.0*	-	0.3	-	-	8.0
	2034 +	-	5.0*	-	0.2	-	
8 ≤ kW < 19 (11 ≤ HP < 25)	2031-2033	5.5*	-	0.2	-	-	6.6
	2034 +	-	4.0*	-	0.1	-	
19 ≤ kW < 56 (25 ≤ HP < 75)	2031-2033	3.7	-	0.015	-	0.19	5.0
	2034 +	-	2.5	-	0.008	-	
56 ≤ kW < 130 (75 ≤ HP < 175)	2031-2033	0.22	-	0.005	-	0.080 ¹	5.0
	2034 +	-	0.040	-	0.005	-	
130 ≤ kW ≤ 560 (175 ≤ HP ≤ 750)	2029-2032	0.22	-	0.005	-	0.080 ¹	3.5
	2033 +	-	0.040	-	0.005	-	
> 560 kW (Gen Sets) (> 750 HP)	2030-2033	0.50	-	0.015	-	0.080 ¹	3.5
	2034 +	-	0.35	-	0.008	-	
> 560 kW (Mobile) (> 750 HP)	2030-2033	3.5	-	0.040	-	0.19	3.5
	2034 +	-	3.0	-	-	-	

Notes: * = NMHC + NO_x; ¹ = The NMHC standard for lean-burn NG engine families remains at 0.19 g/kW-hr

CARB also presented a proposal for Tier 5 final GHG standards over the NRTC and RMC test cycles. For 56 ≤ kW ≤ 560 engines, there would be a 6% CO₂ reduction based on the parent engine configuration which would cover child variants. For 19 ≤ kW ≤ 56 and > 560kW engines, the CO₂ standard would be capped at 962.5 and 726.5 g/kWhr

respectively. The proposed GHG standards also include N₂O and CH₄ caps.

Table 3. Summary of Proposed Tier 5 Final GHG Standards

POLLUTANT	POWER CATEGORIES				
	kW < 19 (g/kW-hr)	19 ≤ kW < 56 (g/kW-hr)	56 ≤ kW < 130 (g/kW-hr)	130 ≤ kW ≤ 560 (g/kW-hr)	kW > 560 (g/kW-hr)
CO ₂ Reducing	n/a	n/a	773.4-724.2*	724.2-690.9*	n/a
CO ₂ Capping	n/a	962.5	n/a	n/a	726.5
N ₂ O Capping	n/a	0.150	0.150	0.150	0.150
CH ₄ Capping	n/a	0.130	0.130	0.130	0.130

CARB staff will continue to draft the proposed regulation and supporting documents which are scheduled to be considered by the board in the Spring of 2025.

Details of the workshop, including presentations, are at arb.ca.gov/our-work/programs/tier-5/meetings-workshops.

ASIA-PACIFIC

New Zealand Euro 6/VI Implementation

On 12 October 2023, the New Zealand government agreed the timetable setting out when stricter pollutant emission standards apply to vehicles entering the country.

For mopeds and motorcycles, compliance with Euro 4 will be required from April 2025, and with Euro 5 standards from January 2027.

Euro 5 standards will be applied to light-duty vehicles from April 2024, with Euro 6d being phased in from July 2027 to July 2028 (or sooner if Australia moves sooner).

Heavy-duty Euro V standards will be applied from April 2024, followed by a phase-in of Euro VI-C from November 2024 to November 2025.

Further information on the implementation is at transport.govt.nz/area-of-interest/environment-and-climate-change/reducing-noxious-vehicle-emissions-from-road-transport.

GENERAL

NGO Responses to ENVI Decision on Euro 7 Standards

On 12 October 2023, Transport & Environment published its response to the Euro 7 vote in the European Parliament's Environment (ENVI) Committee.

T&E says that compared to the Commission's draft, the ENVI proposal will weaken limits for trucks and light commercial vehicles while weakening testing for cars and trucks. It also highlights the delays in implementation.

Eurocities and POLIS expressed 'profound disappointment and concern' over the vote, saying it has fallen short of the expectations of many cities grappling with deteriorating air quality and its detrimental effects on the health of their

residents. The statement says that cities can only achieve so much without supportive regulations at the national and continental levels. Without such backing and ambitious Euro 7 standards, they say it will not be possible for municipalities to safeguard residents' right to clean the air, in line with WHO guidelines.

T&E's press release can be found at transportenvironment.org/discover/european-parliament-final-chance-to-act-on-air-pollution-from-cars-vans-and-trucks.

The Eurocities & POLIS press release is at eurocities.eu/latest/cities-deeply-concerned-over-eu-parliaments-decision-on-euro-7.

Industry Reaction to ENVI Committee Vote on Euro 7 Proposal

On 12 October 2023, the European Association of Automotive Suppliers (CLEPA) published a statement following the Euro 7 vote in the ENVI Committee of the European Parliament.

CLEPA says a weak Euro 7, with delayed implementation, will neither support cleaner air, nor stimulate innovation in the EU. It adds that the technology for a more ambitious Euro 7 is there, and it is economically viable. CLEPA believes Europe should not lag behind China and the US, who have both set ambitious targets on pollutant emissions.

Looking ahead to the plenary vote, CLEPA calls for further improvements, such as shortening the implementation dates and tightening limit values and testing conditions as this will pave the way for a cleaner and more competitive future mobility.

The CLEPA statement can be found at clepa.eu/mediaroom/environment-committee-rejects-improved-pollutant-emission-standards.

The European Automobile Manufacturers' Association (ACEA) also responded to the European Parliament's Environment (ENVI) Committee vote on Euro 7, saying that it improves the Commission proposal but still 'falls short in key aspects.'

The press release goes on to say that European vehicle manufacturers have made 'huge progress' in reducing pollutant emissions from road transport over the past years, and that it is 'simply incorrect to describe Euro 6/VI vehicles as highly polluting.' ACEA states that Euro 6/VI regulations have delivered and are continuing to do so.

ACEA's press release is at acea.auto/press-release/auto-industry-european-parliament-euro-7-vote-improves-commission-proposal-but-still-falls-short.

NGO Call to Member States for Ambitious Air Quality Standards

On 17 October 2023, the Health and Environment Alliance (HEAL) and seven other health organisations sent a letter to

EU environment ministers about the EU's clean air standards (Ambient Air Quality Directives – AAQD). The organisations, representing the European health sector, including medical doctors, healthcare professionals, patient organisations and health insurance funds, urge the ministers to step up on the Commission's proposal, to reduce ill-health and health costs swiftly and significantly.

The letter is written in advance of the upcoming decision on the Council General Approach on the AAQD revision. It urges the Council to go beyond the ambition of the September 2023 European Parliament's position (see AECC News of 22 September 2023). This includes especially adopting a date of 2030 for ensuring the full alignment of EU clean air standards with the guidelines of the World Health Organization (WHO), in view of the urgency to swiftly and significantly reduce the health burden of air pollution.

The NGOs also urge Member States to follow up on the July 2023 adoption of the "Budapest Declaration" of the Seventh Ministerial Conference on Environment and Health and show their commitment in protecting people's health and saving on health economic cost by tightening the flexibilities and derogations foreseen in the draft law (especially article 18).

The NGO letter can be downloaded from env-health.org/eu-enviministers_aaqd.

Call for Tighter Air Pollution Limits from Transport Companies

On 31 October 2023, 15 companies and associations – representing more than 100 transport sector companies – wrote to EU governments to call for stricter air pollution limits. They say they believe that every European citizen should have access to a healthy and safe environment, including the right to breathe clean air.

The companies state that they stand ready to support the EU's vision towards Zero Air Pollution by 2050, and strongly support the Commission's objective to strengthen the Ambient Air Quality Directive and the European air quality standards by 2030, and also to align them with the 2021 World Health Organization's air quality guidelines by 2035.

They call on national governments to support an ambitious revision of the Ambient Air Quality Directive at least in line with the level of ambition adopted by the European Parliament in its vote on September 13, and to adopt their position by November at the latest, so that negotiations on the final law can be concluded before the end of the current EU Commission and Parliament mandates.

The letter can be found at transportenvironment.org/wpcontent/uploads/2023/10/2023_10_Transport_companies_associations_AAQD_letter.pdf.

RESEARCH SUMMARY

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The Effect of Catalyst Composition on Electric Field-Mediated Catalytic Reactions for Exhaust Emission Control, Toru Uenishi and Yasushi

FORTHCOMING CONFERENCES

FEV Zero CO₂ Mobility Conference

7-8 November 2023, Berlin, Germany

fev-live.com/zero-co2-mobility

Heavy-Duty, On- and Off-Highway Engines

7-8 November 2023, Nuremberg, Germany

atzlive.de/en/events/heavy-duty-on-and-off-highway-engines

European E-fuels Conference

8-9 November 2023, Dusseldorf, Germany

wplgroup.com/aci/efue4-mkt-agenda

POLIS Annual Conference

29-30 November 2023, Leuven, Belgium

polisnetwork.eu/2023-annual-polis-conference

IMechE Powertrain Systems for a Sustainable Future conference 2023

29-30 November 2023, London, United Kingdom

events.imeche.org/ViewEvent?code=CON7568#msdyntrtid=P31DYp9_uO9BcgMpB1eDYE_yyLahi1N1sHvWz0Zd1JU

International Engine Congress

27-28 February 2024, Baden-Baden, Germany

atzlive.de/en/events/international-engine-congress/information/information-for-speakers/call-for-papers

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

fkfs-veranstaltungen.de/index.php?id=100

Deadline for abstracts 15 December 2023

Sekine; *Emiss. Control Sci. Technol.* (2023), [doi: 10.1007/s40825-023-00230-3](https://doi.org/10.1007/s40825-023-00230-3).

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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>