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NEWSLETTER

International Regulatory Developments

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Publication of Factsheet on Euro 7

On 1 September 2023, AECC and the International Platinum Group Metals Association (IPA) published a document summarising why Europe needs robust Euro 7 legislation.

The factsheet seeks to address several misunderstandings about the proposed Euro 7 emission standards, with evidence coming from the emissions control industry's research and testing, as well as from the outcome of the study underpinning the Commission's own impact assessment.

As discussions on the Euro 7 file enter a critical phase both in Council and in Parliament, it is fundamental that the new limits remain ambitious, future-proof and are adopted without undue delay, so that Europe's automotive sector can deliver on its commitments against pollution while remaining competitive on the global stage.

The QR code provides a direct link to the evidence supporting the statements given in the Euro 7 factsheet.

The factsheet can be downloaded from aecc.eu/euro-7-factsheet.

Joint Automotive Supply Value Chain Letter on Euro 7

On 4 September 2023, AECC and other representatives of the automotive supply value chain have published a joint letter calling on MEPs and Member States' Ministers to swiftly adopt the proposed Euro 7 regulation.

Co-signatories are: CECRA, representing European vehicle dealers and repairers; CEFI AGU, the Automotive Grade Urea Sector Group; CITA, the International Motor Vehicle Inspection Committee; CLEPA, the European Association of Automotive Suppliers; IPA, the International Platinum Group Metals Association; and MECA, the trade association of companies supplying clean mobility technologies.

Now that discussions on the legislative proposal are at a decisive point, the industrial sectors represented by the signatories call on EU institutions to take an ambitious and future-oriented position on Euro 7 without undue delay.

The letter can be found at aecc.eu/wp-content/uploads/2023/09/2023.09.04.-Joint-automotive-supply-value-chain-letter-on-Euro-7_final.pdf.

EUROPE

Appointment of new Executive Vice-President for European Green Deal

On 22 August 2023, following his decision to be a candidate in the forthcoming general election campaign in the Netherlands, Executive Vice-President Frans Timmermans submitted his resignation as Member of the European Commission.

European Commission President Ursula von der Leyen has decided to assign the role of Executive Vice-President for the European Green Deal to Vice-President Maroš Šefčovič. She has also decided to temporarily assign the portfolio responsibility for Climate Action Policy to Vice-President Šefčovič until the appointment of a new Member of the Commission of Dutch nationality.

The Commission announcement states that, 'now that the legislative framework of the European Green Deal is largely in place and the mobilisation of unprecedented amounts of funding for decarbonisation has been secured, the time has come to take the European Green Deal to the next level and shift the focus from rules to roll-out.'

Ms von der Leyen adds that the Commission's priority "will be to strengthen Industrial Clean Innovation, upgrading our grids and infrastructure for the energy transition and access to Critical Raw Materials. The implementation of the European Green Deal requires an even more intensive dialogue with industry, key stakeholders like forest owners, farmers, as well as citizens. And finally, we will continue to develop a stronger international strategy for the European Green Deal, in line with our economic and geopolitical

interests. The Commission will enhance its multilateral Green Deal diplomacy in order to consolidate Europe's leadership role on global renewables and energy efficiency targets."

The European Commission announcement is at ec.europa.eu/commission/presscorner/detail/en/ip_23_4223.

On 29 August, Commission President von der Leyen nominated Mr Wopke Hoekstra for the post of Commissioner in charge of climate action, under the guidance of Mr Šefčovič.

Ms von der Leyen's announcement can be found at ec.europa.eu/commission/presscorner/detail/en/statement_23_4293.

Publication of Regulation setting CO_2 Emission Standards for Cars and Vans

On 16 August 2023, the Delegated Regulation (EU) 2023/1634 amending Regulation (EU) 2019/631 setting CO_2 emission performance standards for new passenger cars and light commercial vehicles was published in the Official Journal of the European Union.

The document comprises amended Annexes I, II and III to those of Regulation (EU) 2019/631, including calculation methods, type and format of data to be collected, and the procedure for manufacturers to calculate CO_2 emissions and mass values for light commercial vehicles that are type-approved in multiple stages.

The Delegated Regulation is available to read at eurlex.europa.eu/legalcontent/EN/TXT/?uri=uriserv%3AOJ.L_.2023.203.01.0001.01.ENG&toc=OJ%3AL%3A2023%3A203%3.

Implementing Decision on Calculation of CO_2 Targets from 2025

On 10 August 2023, the European Commission Implementing Decision (EU) 2023/1623 was published in the Official Journal (OJ) of the European Union. This relates to the performance of manufacturers and pools of manufacturers of new passenger cars and new light commercial vehicles for the calendar year 2021 and the values to be used for the calculation of the specific emission targets from 2025 onwards.

The values relating to the performance of manufacturers and pools of manufacturers of new passenger cars and new light commercial vehicles, as referred to in Article 9(1) and (2) of Regulation
(EU) 2019/631, in respect of the 2021 calendar year, are specified in Annex I.

The 2025 and 2030 EU fleet-wide targets referred to in Article 9(3), point (a), of Regulation (EU) 2019/631 and the values for a2021, a2025, and a2030 referred to in Article 9(3), point (b), of Regulation (EU) 2019/631 are specified in Annex II.

Annexes I and II to Implementing Decision (EU) 2022/2087 are amended as set out in Annex III.

The Implementing Decision can be found in the OJ at eurlex.europa.eu/legalcontent/EN/TXT/?uri=uriserv%3AOJ.L_.2023.200.01.0005.01.ENG&toc=OJ%3AL%3A2023%3A200%3.

IMCO Opinion on Euro 7 Proposal

On 30 August 2023, the European Parliament Committee on the Internal Market and Consumer Protection (IMCO) published its opinion on the European Commission's proposal for a regulation on 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). Rapporteur for opinion is MEP Antonius Manders (EPP, NL).

The document contains 85 amendments, being the Compromise Amendments previously published (see AECC Newsletter of July 2023). The report was adopted on 18 July 2023 with 22 votes in favour, 17 against and one abstention.

The other opinion reports by the Committees on Industry, Research and Energy (ITRE) and Transport and Tourism (TRAN) were published in July.

The IMCO opinion is available to read at europarl.europa.eu/doceo/document/IMCO-AD-746967_EN.pdf.

Commission Report on CO_2 Neutral European Energy System

On 3 August 2023, the European Commission published a report on the impact of industry transition on a CO_2 neutral European energy system.

The study assesses hydrogen as a one of the two pillars for complete decarbonisation alongside renewable energy. It estimates that hydrogen and electricity will together represent up to 80% of all energy use by 2050.

The study highlights that hydrogen and/or its derivatives are required for low-carbon industrial production, but also states that if parts of the chemical value chain are offshored and products like green methanol, ammonia or ethylene are largely imported, the demand for domestic hydrogen from Europe's industries could be drastically lower.

The report can be found at op.europa.eu/en/publication-detail/-/publication/72954c87-327a-11ee-83b8-01aa75ed71a1.

NORTH AMERICA

US EPA Review of Ozone National Ambient Air Quality Standards

On 21 August 2023, the US Environmental Protection Agency (EPA) announced a new review of the Ozone National Ambient Air Quality Standards (NAAQS) to ensure the standards reflect the most current, relevant science and protect people's health from these harmful pollutants.

Nationally, due in part to EPA emission standards that reduce air pollution, ozone air quality is improving. Between 2010 and 2022, national average ozone air quality concentrations have dropped 7%. In many of the areas designated as not meeting the current 2015 standards, work remains. To continue progress in reducing ozone, EPA has initiated important regulatory actions including strong new federal emissions standards for cars and trucks and strengthening rules to reduce pollution from the oil and natural gas industry – a leading source of ozone forming volatile organic compounds.

The new review will allow EPA to consider fully the information about the latest ozone science and potential implications for the ozone NAAQS provided by the Clean Air Scientific Advisory Committee (CASAC) and the Ozone Review Panel. EPA will conduct the review according to well-established best practices and processes that embrace scientific integrity and the role of the public to provide input at multiple steps along the way.

Full details can be found at epa.gov/newsreleases/epa-initiates-new-review-ozone-national-ambient-air-quality-standards-reflect-latest.

CARB Omnibus Truck Rule Change Proposals for 2024-26 Legacy Engines

On 1 August 2023, the California Air Resources Board (CARB) Executive Officer proposed amendments to the Heavy-Duty Engine and Vehicle Omnibus (Omnibus) regulation to provide additional compliance flexibility for MY 2024-26 legacy engines.

The amendments are part of a recent deal (see AECC News of 14 July 2023) that was struck with engine manufacturers to ease the Omnibus requirements for MY 2024-26 transitional legacy engines and to align the key requirements of MY 2027 and later engines with EPA standards, in exchange for industry's support of the state's zero-emission vehicle (ZEV) mandates regardless of whether other parties challenge the state's authority to adopt them.

The proposed rule amendments allow manufacturers to sell a higher portion of MY 2024-26 engines certified to current standards (aka legacy engines) while generating emission offset credits through the sale of compliant Omnibus engines, zero emission trucks and by performing community projects.

Option 1 would provide legacy engine sales limits of 45% for MY2024, 25% for MY2025 and 10% for MY2026. If a manufacturer exceeds the legacy engine sales limits by up to 1%, deficits from the additional sales volume above the limit would have to be remediated at four times the deficit balance. Any additional legacy engine sales >1% above the sales limits would be considered as non-compliant engine sales.

Option 2 would be available to manufacturers that produce and sell medium heavy-duty diesel (MHDD) engines and another class of HD engines. Under this option, MHDD legacy engine sales would be limited to 60% in each of MY 2024 and MY 2025. The sales limits for combined light heavy-duty diesel (LHDD) and heavy heavy-duty diesel (HHDD) engines would be 15% in MY 2024 and 8% in MY 2025. If a manufacturer exceeds the MHDD legacy engine sales limits by up to 5%, deficits from the additional sales volumes would be remediated at four times the deficit balance. For LHDDs and HHDDs, sales beyond the limit of up to 1% would have to be remediated at four times the deficit balance. Any additional legacy engine sales that exceed the sales limits by more than +5% for MHDDs and +1% for HHDDs would be considered as non-compliant engine sales.

The notice and other associated documents are at arb.ca.gov/rulemaking/2023/hdomnibus2023?utm_medium=email&utm_source=govdelivery.

Announcement of California Strategy to Develop Hydrogen Economy

On 8 August 2023, California Governor Newsom announced that he has directed the Governor's Office of Business and Economic Development (GO-Biz) to develop California's Hydrogen Market Development Strategy, employing an all-of-government approach to building up California's clean, renewable hydrogen market. It will closely resemble the Zero-Emission Vehicle Market Development Strategy to help California collectively move forward and 'deliver zero-emission benefits to all Californians.'

The plan is intended to create a market development strategy that is focused on leveraging hydrogen to accelerate clean energy deployment and decarbonising the state's transportation and industrial sectors. It will identify shared strategies to deliver projects, which may include new financing models, permitting modifications, and procurement initiatives. It will ensure state agencies and partners continue to pull in a shared direction to accelerate the use of renewable energy throughout our economy and increase the resilience and reliability of California's energy system.

Governor Newsom's announcement can be found at gov.ca.gov/2023/08/08/governor-newsom-announces-new-strategy-to-develop-a-hydrogen-economy-of-the-future/.

Increased Proportion of Cleaner Fuels in California

On 23 August 2023, the California Air Resources Board (CARB) announced that California hit an important milestone in its shift away from polluting fuel sources, with clean fuels replacing over 50% of the diesel used in the state in the first quarter of 2023.

California's Low Carbon Fuel Standard (LCFS), which requires fuel producers to reduce the carbon intensity of fuel

sold in the state, is largely responsible for the shift by encouraging the use and production of cleaner alternatives.

Carbon intensity for the LCFS programme is measured through lifecycle analysis of a fuel which includes all steps from extraction, transport, and production. The LCFS is one of several programmes developed under AB 32 (the 2006 Global Warming Solutions Act) to cut California's emissions of climate warming greenhouse gas.

The LCFS programme helped to replace nearly two billion gallons of regular diesel fuel in 2022 with a combination of cleaner fuels, including renewable diesel, biodiesel, electricity, and hydrogen. Since compliance began, the programme has helped to replace more than 8.6 billion gallons of diesel.

The CARB announcement is at arb.ca.gov/news/first-time-50-california-diesel-fuel-replaced-clean-fuels.

ASIA-PACIFIC

India Green Hydrogen Standard

On 18 August 2023, the Indian Ministry of New and Renewable Energy announced its definition of 'Green Hydrogen'.

The ministry's statement says that 'Green Hydrogen' shall mean hydrogen produced using renewable energy, including, but not limited to, production through electrolysis or conversion of biomass.

The non-biogenic greenhouse gas emissions arising from the production of hydrogen shall not be greater than 2 kg CO_2 eq per kg of hydrogen, taken as an average over the last 12-month period.

The statement can be found at mnre.gov.in/img/documents/uploads/file_f-1692368402544.pdf.

UNITED NATIONS

International Day of Clean Air for Blue Skies

The UN's International Day of Clean Air for blue skies takes place on 7 September 2023.

The theme for the fourth annual International Day of Clean Air for blue skies, "Together for Clean Air", highlights the urgent need for stronger partnerships, increased investment, and shared responsibility for overcoming air pollution.

The UN says this year's theme highlights that it is time to invest, work together, and contribute to clean air. Collaboration with UN member states, development organisations, international and regional organisations, the private sector, and civil society is crucial to reducing pollution and improving air quality.

More details are available at unep.org/events/un-day/international-day-clean-air-blue-skies-2023.

GENERAL

NGO Letter to COP28 President

On 21 August 2023, a group of 47 NGOs, civil society organisations and health professionals wrote to the COP28 President to urge him to take steps to reduce air pollution and deliver win-wins for climate, public health and economies.

The letter says that for too long, COP and other international gatherings have failed to connect human and planetary health and to act on air pollution and its drivers. This inaction contributes to millions of premature deaths yearly, long and short-term health impacts and soaring economic costs.

The NGOs call on the Presidency to put air pollution firmly on the agenda and to catalyse national commitments and international funding to improve air quality.

They go on to say that the IPCC AR6 report highlights that clean air action will improve global public health to such a degree that it will pay for itself or even be cost-negative.

The letter identifies five key interventions, including eliminating uncontrolled diesel emissions and replacing diesel and gasoline-powered vehicles with electric in both the public and private sector.

The letter can be read in full at cleanairfund.org/news-item/open-letter.

RESEARCH SUMMARY

Effects of Emissions and Pollution

Traffic-related air pollution is associated with spontaneous extremely preterm birth and other adverse perinatal outcomes, Sara Jones, et al.; *American Journal of Obstetrics and Gynecology* (in press), doi: 10.1016/j.ajog.2023.07.040.

Role of different mechanisms in pro-inflammatory responses triggered by traffic-derived particulate matter in human bronchiolar epithelial cells, Magne Refsnes, et al.; *Particle and Fibre Toxicology* (2023), Vol. 20, Article number: 31, doi: 10.1186/s12989-023-00542-w.

Air Quality, Sources and Exposure

Tackling Car Emissions in Urban Areas: Shift, Avoid, Improve, Marion Leroutier and Philippe Quirion; *Ecological Economics* (November 2023), Vol. 213, 107951, doi: 10.1016/j.ecolecon.2023.107951.

Air quality changes in NE Romania during the first Covid 19 pandemic wave, Dumitru Mihăilă, et al.; *Heliyon* (August 2023), Vol. 9, Issue 8, e18918, doi: 10.1016/j.heliyon.2023.e18918.

Development of multi-scale indices of human mobility restriction during the COVID-19 based on air quality from local and global NO_2 concentration, Larissa da Silveira, et al.; *iScience* (September 2023), Vol. 26, Issue 9, 107599, doi: 10.1016/j.isci.2023.107599.

Truck transportation in California: Disaggregating public health costs from criteria pollutants, Sarah Dennis-Bauer and Miguel Jaller; *Transportation Research Part D: Transport and Environment* (September 2023), Vol. 122, 103850, doi: 10.1016/j.trd.2023.103850.

Emissions Measurements and Modelling

Characterisation of vehicle emissions in a road tunnel in Lisbon, I. Cunha-Lopes, et al.; *Atmospheric Research* (in press), doi: 10.1016/j.atmosres.2023.106995.

Recommendations for emission testing and control of exhaust particles from a late technology mono-fuel CNG vehicle, Z. Toumasatos, et al.; *Journal of Aerosol Science* (November 2023), Vol. 174, 106250, doi: 10.1016/j.jaerosci.2023.106250.

Emissions Control, Catalysis, Filtration

Impact of unintentionally formed CH_2O in oxygenated fuel exhausts on DeNOx-SCR at different NO_2/NOx ratios under close to real conditions, Ariel Alvarez, et al.; *Catalysis Science & Technology* (2023), Vol. 13, Issue 14, pp. 4069-4081, doi: 10.1039/d2cy01935c.

Effects of integrated aftertreatment system on regulated and unregulated emission characteristics of non-road methanol/diesel dual-fuel engine, Junheng Liu, et al.; *Energy* (November 2023), Vol. 282, 128819, doi: 10.1016/j.energy.2023.128819.

Pollutant emission characteristics of the close-coupled selective catalytic reduction system for diesel engines under low exhaust temperature conditions, Qiaonan Zhao, et al.; *Fuel* (December 2023), Vol. 354, 129303, doi: 10.1016/j.fuel.2023.129303.

Particle accumulation model in 3D reconstructed wall of a catalytic filter validated with time-resolved X-ray tomography, Marie Plachá, et al.; *Fuel* (January 2024), Vol. 356, 129603, doi: 10.1016/j.fuel.2023.129603.

Transport, Climate Change & Emissions

Optimal replacement scenarios for an average petrol passenger car using life-cycle assessment, Jacid Montoya-Torres, et al.; *Journal of Cleaner Production* (in press), doi: 10.1016/j.jclepro.2023.138661.

The potential of dimethyl ether (DME) to meet current and future emissions standards in heavy-duty compression-ignition engines, Patrik Soltic, et al.; *Fuel* (January 2024), Vol. 355, 129357, doi: 10.1016/j.fuel.2023.129357.

FORTHCOMING CONFERENCES

International Conference on Engines and Vehicles for Sustainable Transport
10-14 September 2023, Capri, Italy
ice2023.info

FISITA World Congress 2023
12-15 September 2023, Barcelona, Spain
fisita.com/diary/fisita-world-congress-2023

International Transport and Air Pollution Conference
25-26 September 2023, Gothenburg, Sweden
ivl.se/tapase

Aachen Colloquium Sustainable Mobility
9-11 October 2023, Aachen, Germany
aachener-kolloquium.de/en/attend/speaker/call-for-papers.html

FEV Zero CO_2 Mobility Conference
7-8 November 2023, Belin, 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#msdynttrid=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
Deadline for abstracts 30 September 2023

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

New Materials for future Mobility (NeMMo)
3-4 July 2024, Nantes, France
sia.fr/evenements/?year=2024
Deadline for abstracts 2 November 2023