

NEWSLETTER

International Regulatory Developments

TABLE OF CONTENTS

| | |
|--|---|
| EUROPE | 2 |
| Delay of Euro 7 Proposal | 2 |
| Informal Meeting of EU Transport Ministers | 2 |
| European Commission Stakeholder Consultation on the Mobility Ecosystem | 2 |
| Regulation on Functional Requirements for Market Surveillance of Vehicles | 3 |
| Regulation on Motor Vehicle Documentation | 3 |
| European Union Industry Days | 3 |
| TRAN Committee Exchange with French EU Presidency Representatives | 4 |
| Committee of the Regions Debate on Future of Transport | 4 |
| EP Think Tank Briefing on CO ₂ Emission Standards for New Cars and Vans | 4 |
| ENVI CO ₂ Emission Standards Draft Report Amendments | 5 |
| ITRE Draft Report on Revision of Renewable Energy Directive | 5 |
| Parliamentary Question on Transition to Electro-Mobility | 5 |
| Publication of JRC Urban PM _{2.5} Atlas | 5 |
| EEA Briefing on Managing Air Quality in Europe | 6 |
| New Particulate Measurement Method for Swiss PTI | 6 |
| NORTH AMERICA | 6 |
| Impacts of ZEV Crediting Schemes on Federal Heavy-Duty NO _x Emissions | 6 |
| CASAC Recommendation for US EPA Tightening of Air Quality Standards | 7 |
| GENERAL | 7 |
| T&E Letter to European Commission on Euro 7/VII | 7 |
| ICCT Commentary on Achievement of EU New Car CO ₂ Standards | 7 |
| RESEARCH SUMMARY | 8 |
| FORTHCOMING CONFERENCES | 9 |

EUROPE

Delay of Euro 7 Proposal

On 2 February 2022, the European Commission published a list of possible items for the College of Commissioners' meeting agendas from February to July 2022.

The meeting of 20 July 2022 will consider the 'Development of post-Euro 6/VI emission standards for cars, vans, lorries and buses'. Back in December 2021, the dossier was listed as an item to be discussed at the beginning of April 2022.

This delay of the Euro 7 proposal is very concerning as it will imply further delays in the adoption process. So far, the Commission has not disclosed the reasons for the delay.

On 14 February, AECC wrote to the European Commissioner for Internal Market, Mr Thierry Breton, copying Ms Margrethe Vestager, Executive Vice-President for a Europe fit for the Digital Age, to express concern over the delay.

AECC said that it regrets this further delay as it implies further delays in the adoption process, including its possible date for implementation.

The letter goes on to say that the upcoming Euro 7 is a unique opportunity to ensure truly clean vehicles on European roads and an integral part of Europe's zero-emissions transport objectives. A swift implementation of Euro 7 emission standards is key to allow hybrid internal combustion engine (ICE) vehicles to achieve ultra-low pollutant emissions in all real-world driving conditions. A clear roadmap for the implementation of Euro 7 is urgently needed to give certainty to the automotive industry sector, and to incentivise and promote innovation.

AECC continues to provide robust scientific data to discuss how to improve local air quality and to mitigate climate change whilst maintaining the global competitiveness of the European automotive industry through the application of modern emission control technologies to ICEs.

Details of upcoming Commission meetings are at [ec.europa.eu/transparency/documents-register/detail?ref=SEC\(2022\)2405&lang=en](https://ec.europa.eu/transparency/documents-register/detail?ref=SEC(2022)2405&lang=en).

AECC's letter to the European Commission can be found at aecc.eu/wp-content/uploads/2022/02/220214-AECC-open-letter-on-Euro-7-delay.pdf.

Informal Meeting of EU Transport Ministers

On 21 and 22 February 2022, the French Minister Delegate for Transport Mr Jean-Baptiste Djebbari hosted an informal meeting of EU transport ministers in Le Bourget, France.

At the meeting, ministers reaffirmed the shared ambition of all the Member States to build the future of European transport around three main priorities: decarbonise, regulate and innovate.

With regard to decarbonisation, the ministers reiterated their shared commitment to accelerating and facilitating the

widespread installation of electric recharging stations to meet current and future needs, in particular for light vehicles, as well as to encouraging the development of renewable and low-carbon hydrogen. The quality of service and information for users, interoperability and affordable prices are key factors in these developments.

With regard to heavy vehicles, in particular over long distances, ministers agreed that discussions must be continued to find the right balance to provide sufficient visibility to manufacturers and carriers, while taking into account the timeframes for the emergence of the various technologies designed to meet each use case.

During the discussions, participants emphasised the need to meet the climate imperative while taking into consideration the issues concerning the competitiveness of European operators and risks of carbon leakage.

More details on the ministers' meeting can be found at presidence-francaise.consilium.europa.eu/en/news/informal-meeting-of-transport-ministers-three-major-priorities.

European Commission Stakeholder Consultation on the Mobility Ecosystem

On 24 January 2022, the European Commission opened a stakeholder consultation on its Staff Working Document "For a resilient, innovative, sustainable and digital mobility ecosystem: Scenarios for a transition pathway".

This update of the EU Industrial Strategy highlights the need to accelerate the green and digital transitions of the EU Industry. Among the various instruments, the Commission proposed to co-create, in partnership with industry, public authorities, social partners and other stakeholders, transition pathways for ecosystems, where needed. Priority is given to sectors heavily affected by the crisis, which benefit from accelerating their transition in order to boost their recovery. The mobility ecosystem has been recognised to be one of these critical ecosystems and therefore, it will be tackled among the first ones, by co-creating its transition pathway together with its stakeholders.

The Commission services have prepared a Staff Working Document outlining possible scenarios for a transition pathway for a resilient, innovative, sustainable and digital mobility ecosystem. This document aims to launch a co-creation process for concrete actions, milestones and commitments with all stakeholders of the mobility ecosystem.

Based on the consultation results, the Commission will organise further meetings with stakeholders in the course of 2022 to deepen the discussions and finalise the transition pathway for the mobility ecosystem.

The survey will be open until 31 March 2022 and more info is at ec.europa.eu/growth/news/commission-kicks-consultations-greening-and-digitalisation-mobility-transport-and-automotive-2022-01-24_en.

Regulation on Functional Requirements for Market Surveillance of Vehicles

On 7 February 2022, Implementing Regulation (EU) 2022/163 was published in the Official Journal of the European Union.

The measure amends the Type Approval Framework Regulation (EU) 2018/858 with regards to data to be made available by manufacturers, the methodology for the selection of vehicles and tests to be performed, the requirements to be met by third parties and the templates for reporting purposes for market surveillance. In particular, it establishes the adequate scale of the compliance verification checks and common criteria for the format Member States annual overview planned market surveillance checks, with reporting planned every two years.

The Regulation can be found in the Official Journal at eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_2022.027.01.

Regulation on Motor Vehicle Documentation

On 11 February 2022, Implementing Regulation 2022/195 was published in the Official Journal of the European Union. This amends and corrects Implementing Regulation (EU) 2020/683 as regards the information document, the vehicle approval certificates, the test result sheet and the certificates of conformity in paper format.

Since 1 January 2021, compliance with the CO₂ emission targets is determined on the basis of Worldwide harmonised Light-duty vehicles Test Procedures (WLTP) CO₂ emissions only. It is therefore necessary to amend the templates for the information document, the test result sheet and the certificate of conformity in paper format by removing references to the New European Driving Cycle.

With the entry into force of Commission Regulation (EU) 2017/2400, new entries for CO₂ emissions and fuel consumption of heavy-duty vehicles, such as heavy buses and medium lorries as well as individually approved heavy-duty vehicles, were added to the certificates of conformity of heavy-duty lorries. It is therefore necessary to add the relevant entries to the templates for the certificate of conformity in paper format of the corresponding vehicle categories as well as to the EU and national individual vehicle approval certificate.

Taking into account the diversity of heavy-duty vehicles in terms of their design and driving pattern, annual mileage, payload and trailer configuration, Regulation (EU) 2017/2400 and Regulation (EU) 2019/1242 of the European Parliament and of the Council have introduced a classification of vehicle groups and sub-groups that reflect the vehicles' typical usage pattern and specific technical characteristics. In order to accommodate also national CO₂ abating initiatives and to have a correct interpretation of the CO₂ emissions and fuel consumption, it is essential to know to which vehicle group or sub-group a vehicle belongs. It is therefore necessary to add the relevant vehicle group or sub-group to the templates for the certificate of conformity in paper format as well as to the EU individual vehicle approval certificate.

Taking into account the increasing deployment in the Union of plug-in hybrids (OVC-HEVs), it is important to ensure that national authorities and consumers are provided with harmonised and coherent information on their environmental performance. Consequently, it is appropriate to clarify that in the case of OVC-HEVs, the values to be reported in the certificate of conformity are the phase specific CO₂ emissions and fuel consumption values using the CO₂ mass emission and fuel consumption values for charge-sustaining conditions as well as the phase specific electric energy consumption of such vehicles. It is therefore necessary to add the relevant entries to the templates for the certificate of conformity.

Other provisions are included in the new Regulation, and the approval authorities, market surveillance authorities, registration authorities of the Member States and the manufacturers are allowed up to a period of 12 months after the publication date in the Official Journal of the European Union of the amendments to the certificate of conformity in paper format to implement any necessary amendments thereto in their respective systems.

The Regulation is published in the Official Journal at eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv.

European Union Industry Days

From 8 to 11 February 2022, the European Commission hosted the EU Industry Days 2022 Conference.

On the first day of the conference 'The mobility ecosystem on the path to the green and digital transition' session was held, where the speakers represented all available transport modes. The session was chaired by Mr Nunes de Almeida, European Commission's Mobility & Energy Intensive Industries Director for Internal Market, Industry, Entrepreneurship and SMEs.

Mr Huitema, Director General of ACEA, talked about the main challenges facing the automotive industry. Decarbonisation requires a focus on infrastructure, affordability and supply chain security. Digitalisation and social transformation are also impacting the industry.

Mr Berkvens, Chairman of Shipyards' & Maritime Equipment Association (SEA) Europe, talked about the maritime shipping industry challenges. He mentioned that the shipping industry needs to have the technology and the availability of infrastructure and fuels.

Mr Triangle, General Secretary of IndustryAll, said that the EU's Green Deal is the most important challenge for Europe's industry. He mentioned the challenge for infrastructure for electric vehicle charging in Europe as a very important one. Mr Triangle added that an ambitious industrial strategy is needed to cope with decarbonisation and digitalisation, but that decarbonisation cannot mean de-industrialisation.

The EU Industry Days programme can be found at ec.europa.eu/info/policies/business-and-industry/eu-industry-days_en.

TRAN Committee Exchange with French EU Presidency Representatives

On 2 February 2022, the Transport and Tourism (TRAN) Committee of the European Parliament held a debate with the incoming French EU Presidency representatives, Mr Jean-Baptiste Djebbari, Minister Delegate for Transport, attached to the Minister for the Ecological Transition, and Mr Jean-Baptiste Lemoyne, Minister Delegate for Tourism.

The French Ministers presented to the Members the priorities of the French Presidency in the field of transport and tourism, including those linked to the EU recovery after the pandemic and building its resilience, ecological transition, leading to a commitment to reduce greenhouse gas emissions by at least 55% by 2030 and climate neutrality by 2050, as well as those on sustainable and smart mobility.

Transport Minister Djebbari highlighted three main priorities being fighting climate change through the decarbonisation of the transport sector, better regulation and employment conditions in the transport sector, and innovation.

Tourism Minister Lemoyne thanked MEPs for supporting the EU COVID digital certificate in order to save the 2021 holiday season and promised to put great effort into rebuilding the tourism sector, which has been badly hit by pandemic.

Transport Committee MEPs urged ministers to ensure timely agreement on the 'Fit for 55' package, make progress on the Single European Sky and unblock the Council debate on air passengers' rights and airport slots. They also stressed the importance of the Social Climate Fund in protecting the most vulnerable people during the green transition, pointing out that it is key to striking the right balance between climate objectives and the competitiveness of EU companies.

Highlights of the debate in EP can be found at europarl.europa.eu/news/en/press-room/20220119IPR21311/french-presidency-briefs-ep.

Committee of the Regions Debate on Future of Transport

On 26 January 2022, the European Committee of the Regions (CoR) held a plenary debate on the future of transport. In its opinion on stronger CO₂ emission standards for cars and vans and the deployment of alternative fuel infrastructure for cities and regions in the EU, CoR members in particular highlighted the need for equal treatment between urban and rural areas.

During the plenary debate with the EU Commissioner for Transport, Ms Adina Vălean, local and regional leaders emphasised the need to support all regions and cities in delivering more sustainable transport, a key element if the EU is to reach its legally committed 2050 goal of climate neutrality. The debate focused on how to make transport more sustainable in light of the EU's Green Deal target of cutting 90% of transport emissions by 2050. While fully supporting the Commission's cuts, regions and cities

highlighted the need for a fair and equal approach, especially between urban and rural areas, as the European Commission proposes significant investments in recharging and refuelling stations to encourage the switch to electric or sustainable mobility.

Ms Vălean stated that by 2030 the Commission expects to see at least 30 million electric cars on EU roads, compared to about 1 million today. But infrastructure must match demand. She said the proposal for an Alternative Fuels Infrastructure Regulation takes a market-based approach, ensuring the construction of the recharging and refuelling stations needed to both meet this demand and to encourage yet more individuals and businesses to make the switch to electric – or hydrogen fuel cell – vehicles.

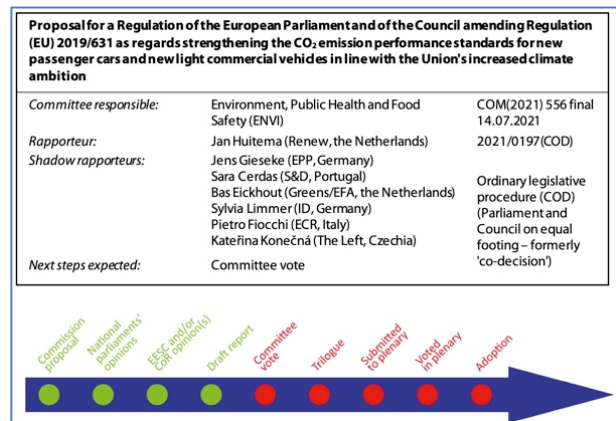
The CoR's opinion on stronger CO₂ emission standards for cars and vans and the deployment of alternative fuel infrastructure calls for a European co-financing mechanism that enables every region to upgrade their infrastructure to offer greener fuels and drive demand for more sustainable vehicles. But, the CoR stressed, a more integrated approach to planning is needed, particularly to connect up urban and rural areas more effectively.

The full CoR press release is available to read at cor.europa.eu/en/news/Pages/zero-transport-emissions.aspx.

EP Think Tank Briefing on CO₂ Emission Standards for New Cars and Vans

On 10 February 2022, the European Parliament Think Tank published a briefing on CO₂ emission standards for new cars and vans as part of the 'Fit for 55' package.

The briefing explains that on 14 July 2021, as part of the 'Fit for 55' package, the Commission presented a legislative proposal for a revision of the Regulation setting CO₂ emission performance standards for passenger cars and light commercial vehicles (vans). To raise the contribution of the road transport sector to the EU's climate targets, the proposal sets more ambitious 2030 targets for reducing the CO₂ emissions of new cars and vans and allows only zero-emission vehicles from 2035. In the European Parliament, the proposal has been referred to the Committee on Environment, Public Health and Food Safety (ENVI). Jan Huitema (Renew, NL), who was appointed as rapporteur, presented his draft report on 8 December 2021.



The document highlights the wider set of measures that complement the CO₂ targets for cars and vans and provides background on the existing situation. It then explains the preparation of the proposal and what changes the proposal would bring.

The briefing concludes with a summary of stakeholder views, in particular those of ACEA, CLEPA, ICCT and T&E, as well as associations representing the biogas and electricity industries.

The EP Think Tank's briefing can be found at [europarl.europa.eu/RegData/etudes/BRIE/2022/698920/EPRS_BRI\(2022\)698920_EN.pdf](https://europarl.europa.eu/RegData/etudes/BRIE/2022/698920/EPRS_BRI(2022)698920_EN.pdf).

ENVI CO₂ Emission Standards Draft Report Amendments

On 11 February 2022, the European Parliament's Committee on the Environment, Public Health and Food Safety (ENVI) released the amendments proposed to the draft report Amending Regulation (EU) 2019/631 as regards strengthening the CO₂ emission performance standards for new passenger cars and new light commercial vehicles in line with the Union's increased climate ambition.

There are in total 658 amendments presented by Members of the ENVI Committee. In particular, the Parliamentarians notably proposed to amend the current CO₂ fleet targets for 2025, 2030 and 2035 and to add new EU fleet-wide interim targets.

Some amendments presented by the European Conservatives and Reformists (ECR), Identity and Democracy (ID), Renew and the Europeans People's Party (EPP) political groups are about the implementation of a crediting mechanism to recognise the role of alternative renewable fuels on the reduction of the CO₂ emissions for cars and vans. Other amendments include the implementation of a well-to-wheel (WtW) methodology to assess the CO₂ emissions, while other amendments call for the European Commission to develop a methodology to consider the Life Cycle Assessment (LCA) of the vehicles.

The ENVI Committee is provisionally scheduled to vote on the draft report and the amendments tabled to the draft report on 11 May 2022.

The draft report can be found at europarl.europa.eu/doceo/document/ENVI-PR-697678_EN.pdf.

While the amendments can be found at europarl.europa.eu/doceo/document/ENVI-AM-704659_EN.pdf and europarl.europa.eu/doceo/document/ENVI-AM-704795_EN.pdf.

ITRE Draft Report on Revision of Renewable Energy Directive

On 14 February 2022, the European Parliament's Committee on Industry, Research and Energy (ITRE) published a draft report on the proposal for a revision to the Renewable Energy Directive (RED).

This will amend Directive 2018/2001, Regulation 2018/1999 and Directive 98/70/EC, and repeals Directive 2015/652. The Rapporteur is MEP Markus Pieper (EPP, DE).

The draft report states that if Europe is to contribute to the Paris Climate Agreement, it is crucial to revise the Renewable Energy Directive (RED III), increasing the amount of renewable energy as a percentage of total gross energy consumption from 32% to 40% by 2030. This ambitious target can be achieved only through a massive expansion of renewable forms of energy in all sectors by means of innovative technology.

It adds that the increase in the share of renewable forms of energy – through electrification, the use of electricity-based fuels and through bioenergy – must be technology neutral and allow for transitional solutions. However, the 40% share must consist of 100% renewables.

The ITRE report says that the greenhouse gas reduction target in the transport sector should be increased to 20%. At the same time, sub-targets for biofuels, synthetic fuels and e-fuels need to be increased to send a real signal with regard to technological openness and also to provide options for economic/transport sectors and regions which are hard to electrify.

The ITRE draft report is available to read at europarl.europa.eu/doceo/document/ITRE-PR-719550_EN.pdf.

Parliamentary Question on Transition to Electro-Mobility

On 21 February 2022, MEP Ioannis Lagos (NI, GR) asked a question to the European Commission about two-speed electro-mobility in the EU risking to become a pipe dream.

Mr Lagos said that the target to sell exclusively zero-emission vehicles from 2035 is indicative of a wealthy northern European mindset alone that fails to take into account the situation in the poorest Member States. In countries such as Greece that lack the necessary infrastructures and power supply networks and are faced with prohibitive megawatt-hour costs, the 2035 deadline is impracticable. He added that the 'exorbitant' price of electric vehicles, coupled with their limited range and battery lifetime support the view that the EU mass transition to electro-mobility is premature and ill conceived.

MEP Lagos asked the Commission to say what assistance it will provide for Member States that lack the infrastructures and resources for a transition to electro-mobility, and also questioned whether the EC has made provision for the disposal of millions of electric car batteries.

The question can be read in full at europarl.europa.eu/doceo/document/E-9-2022-000730_EN.html.

Publication of JRC Urban PM_{2.5} Atlas

On 8 February 2022, the European Commission's Joint Research Centre (JRC) published its Urban PM_{2.5} Atlas 2021 report.

The report says that many European cities still suffer from poor air quality and exceed the EU air quality standards. This is the case in particular for PM_{2.5} (focus of this Atlas) which is responsible for adverse health effects and premature deaths. It adds that a key issue is to determine at which scale to act in order to abate these remaining air pollution problems most effectively. In this Atlas, both the spatial (e.g., urban, country) and sectoral (transport, residential, agriculture...) contributions are quantified for 150 urban areas in Europe.

The JRC concludes that for many cities, local actions at the city scale are an effective means of improving PM_{2.5} air quality in that city. Further conclusions are that target sectors and scales to abate air pollution are city specific; for many cities, sectoral measures addressing agriculture at country - or EU - scale have a clear benefit on urban air quality and finally, because of methodological choices and assumptions, the responsibility of a city in generating its air pollution is often underestimated.

The report is available to download from publications.jrc.ec.europa.eu/repository/handle/JRC126221.

EEA Briefing on Managing Air Quality in Europe

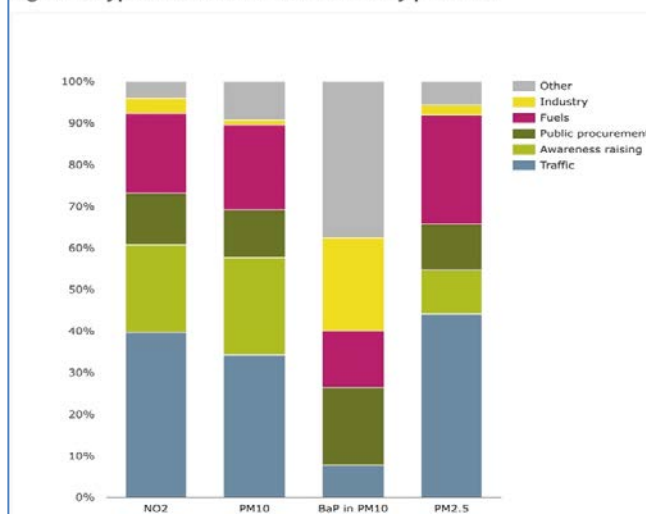
On 16 February 2022, the European Environment Agency (EEA) published a briefing on managing air quality in Europe. The briefing reviews the status of countries' air quality plans, put in place for situations where air pollution limits are exceeded. It also identifies the sources behind such exceedances.

A total of 944 air quality plans were reported. Of these, 59% were reported to have been implemented, 15% to be in their first year of implementation and 17% to be under revision. EEA says this suggests that, while most plans were successfully implemented, a significant proportion needed further attention. The rest of the plans were in the preparation or adoption phase or had been completed.

The majority of air quality plans aim to protect health, with most focusing on reducing levels of NO₂ and coarse particulate matter (PM₁₀). Only 5% of the exceedances reported were of other pollutants, including fine particulate matter (PM_{2.5}) ozone, nickel in PM₁₀, lead in PM₁₀, cadmium in PM₁₀, Sulphur dioxide SO₂ and benzene (in descending order). Most exceedances (65%) were reported in urban areas, with 21% in suburban areas and the remainder in rural areas.

Road traffic was the principal driver of the exceedances of NO₂ reported. In fact, 64% of all reported exceedances were linked to dense traffic in urban centres and proximity to major roads. For six countries, namely Austria, Denmark, Finland, the Netherlands, Portugal and the United Kingdom, road traffic was the only major source of exceedances reported. In Germany and France, road traffic was behind 95% and 73% of all exceedances, respectively. In contrast, in other countries, road traffic was a less important source, behind only 8% of exceedances in Poland, 15% in Bulgaria and 20% in Lithuania.

Figure 3. Type and number of measures by pollutant



Across all the countries that reported putting in place measures through the air quality plans required by the ambient air quality directives, 70% of measures focused on the transport sector.

The briefing can be read in full at eea.europa.eu/publications/managing-air-quality-in-europe/managing-air-quality-in-europe.

New Particulate Measurement Method for Swiss PTI

On 28 February 2022, the Swiss Department of Environment, transport, energy and communication (DETEC) announced that a new particulate measurement method will be introduced to periodic technical inspection (PTI) testing from 1 January 2023.

DETEC says that current measurement procedures, based on opacity and filtration, are not precise enough to uncover all particulate filter failures. In future, therefore, an optimised method will have to be used for diesel vehicles with the prescribed particulate filter, in order to ensure the fast and reliable detection of inefficient emission control devices. DETEC has accordingly adapted its ordinance on the maintenance and subsequent inspection of motor vehicles with regard to exhaust gas and smoke emissions.

As the change will enter into force on 1 January 2023, DETEC says the motor services will have enough time for the necessary preparations for the new procedure.

The announcement is at astra.admin.ch/astra/fr/home/documentation/communiqués-de-presse/annonce-meldungen.msg-id-87385.html.

NORTH AMERICA

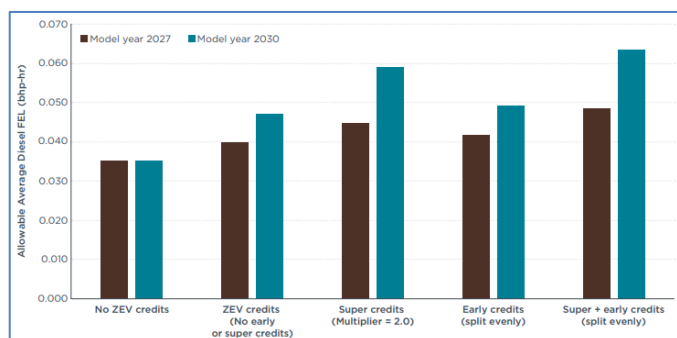
Impacts of ZEV Crediting Schemes on Federal Heavy-Duty NOx Emissions

On 3 February 2022, the International Council for Clean Transportation (ICCT) published a working paper which considers

possible impacts of five different potential crediting schemes for zero emission vehicles on ICE NOx emission improvements that could be included in the upcoming EPA HD Emissions Proposal.

ICCT argues that incentivising heavy-duty (HD) zero emission vehicles (ZEVs) is a priority for EPA, but overly generous crediting schemes may act to undermine requirements for conventional vehicles by allowing manufacturers to produce ICEs with higher NOx emissions.

The working paper examines the potential impacts on the NOx Federal Emissions Limit (FEL) applicable to ICE HD engines of five Averaging, Banking and Trading (ABT) options EPA could employ, which include: i) excluding ZEVs from ABT (no ZEV credits), ii) adopting the CARB MY2022-26 ZEV crediting scheme (ZEV credits), iii) multiplier supercredits, iv) early credits for vehicles prior to 2027, and v) multiplier supercredits plus early credits. The paper presents the FEL results for a theoretical engine manufacturer using sample calculations and a range of values under the five options, providing a comparative summary of the averages of these five options.



The ICCT recommends that EPA not include ZEVs in NOx crediting schemes and instead find other avenues to incentivise their production. ICCT highlights that including ZEVs in NOx crediting may incentivise transitions to ZEVs but will most likely increase ICE NOx emissions in the process. As a result, ICCT recommends that the EPA find other methods to catalyse ZEV production, preferably through direct regulation or as part of the Phase 3 greenhouse gas and fuel efficiency rulemaking.

The full working paper can be found at theicct.org/publication/us-ze-hdvs-pollutant-credits-feb22.

CASAC Recommendation for US EPA Tightening of Air Quality Standards

On 4 February 2022, the EPA's Clean Air Scientific Advisory Committee (CASAC) recommended that the agency tighten its air quality standards for soot pollution.

The new draft from the CASAC is said to bolster the EPA's plans, and it is expected to propose a rule that re-evaluates the current standards this summer and finalises the rule next year. The document says that the majority of CASAC members said the standard should be lowered significantly, from allowing concentrations of 12 micrograms of soot per cubic metre of air to

allowing between 8 and 10 micrograms. A minority of the members preferred a less stringent standard of between 10 and 11 micrograms per cubic metre. They all agreed that the current standards put people at risk from soot, or particulate matter.

The EPA's CASAC report can be found at casac.epa.gov/ords/sab/f?p=105:18:10792850355838:::RP,18:P18 ID:2607.

GENERAL

T&E Letter to European Commission on Euro 7/VII

On 2 February 2022, Transport & Environment (T&E) wrote to the European Commission expressing concern at the postponement of the Commission proposal on the proposal for new Euro 7/VII vehicle pollution emission standards for cars, vans and heavy-duty vehicles.

T&E says that, given that the preparatory work is complete, T&E sees no justification for such a delay beyond the pressure from the car industry. Delaying the publication of new emissions standards for vehicles unacceptably hinders EU efforts to clean up toxic air pollution caused by road transport in line with the EU's Green Deal Zero Pollution Action Plan and unnecessarily puts EU citizens' health and lives at risk.

The NGO goes on to say that for Europe to retain its regulatory credibility, Euro 7/VII must be implemented as soon as possible. It adds that the technology to significantly reduce pollutant emissions is available and calls on the Commission to publish the Euro 7 proposal as soon as possible and under no circumstances later than the previously announced date of 5 April 2022. This will increase the chances of the new Euro 7/VII rules coming into force by 2025 thus ensuring that the new rules apply to at least a decade of internal combustion engines and at least one vehicle production cycle thereby reducing the burden of new regulation on carmakers.

The letter can be read in full at transportenvironment.org/wp-content/2022/02/2022_02_TE_letter_EC_Euro7_delay.pdf.

ICCT Commentary on Achievement of EU New Car CO₂ Standards

On 10 February 2022, the International Council on Clean Transportation (ICCT) published a blog looking at car manufacturers' achievement of the EU new car CO₂ standards.

ICCT says that official data from the European Environmental Agency (EEA) will not be available before mid-2022, but ICCT's data indicates that all major car manufacturers met their respective new car CO₂ targets for 2021. On average, in terms of the New European Driving Cycle (NEDC), the 2021 market was at about 95 g/km of CO₂. Converted to the new Worldwide Harmonized Light Vehicles Test Procedure (WLTP), the market average was around 114 g/km compared to an average target of around 118 g/km. Throughout the years 2020 and 2021, manufacturers, on average,

decreased their new car CO₂ levels by more than 1 g/km per month.

Pooling turned out to be a particularly important instrument for compliance, and electrification was key for meeting the 2021 fleet CO₂ targets. The average sales share of battery-electric passenger cars reached 10% in 2021, up from 2% in 2019 and 6% in 2020. In addition, plug-in hybrid cars accounted for 9% in 2021, up from 1% in 2019 and 5% in 2020.

ICCT goes on to say that in order to be in line with EU climate protection targets for 2050, new combustion engine cars need to be phased out by 2030 or at the latest by 2035. Vehicle manufacturers themselves are already heading in this direction, with public phase-out announcements adding up to a new car market share of about 50% purely battery-electric vehicles by 2030 at this point.

The ICCT blog is available to read at theicct.org/eu-co2-standards-nothing-to-fear-feb22.

RESEARCH SUMMARY

Effects of Emissions and Pollution

Lung function and self-rated symptoms in healthy volunteers after exposure to hydrotreated vegetable oil (HVO) exhaust with and without particles, Louise Gren, et al.; *Particle and Fibre Toxicology* (2022), Vol. 19, 9, [doi: 10.1186/s12989-021-00446-7](https://doi.org/10.1186/s12989-021-00446-7).

Outdoor particulate matter exposure and upper respiratory tract infections in children and adolescents: A systematic review and meta-analysis, Myriam Ziou, et al.; *Environmental Research* (July 2022), Vol. 210, 112969, [doi: 10.1016/j.envres.2022.112969](https://doi.org/10.1016/j.envres.2022.112969).

Controlled human exposure to diesel exhaust: results illuminate health effects of traffic-related air pollution and inform future directions, Erin Long and Christopher Carlsen; *Part Fibre Toxicol* (2022), Vol. 19, 11, [doi: 10.1186/s12989-022-00450-5](https://doi.org/10.1186/s12989-022-00450-5).

Chapter 42 - Traffic-related air pollution and the developing brain, Lucio Costa, et al.; *Reproductive and Developmental Toxicology* (Third Edition, 2022), pp. 833-843, [doi: 10.1016/B978-0-323-89773-0.00042-4](https://doi.org/10.1016/B978-0-323-89773-0.00042-4).

Air Quality, Sources and Exposure

Exposed to NO₂ in the center, NO_x pollutants in the periphery: Evidence from the Paris region, Alexis Poulhès and Laurent Proulhac; *Science of The Total Environment* (May 2022), Vol. 821, 153476, [doi: 10.1016/j.scitotenv.2022.153476](https://doi.org/10.1016/j.scitotenv.2022.153476).

Accurate prediction of air quality response to emissions for effective control policy design, Min Cao, et al.; *Journal of Environmental Sciences* (in press), [doi: 10.1016/j.jes.2022.02.009](https://doi.org/10.1016/j.jes.2022.02.009).

Estimating changes in air pollutant levels due to COVID-19 lockdown measures based on a business-as-usual prediction scenario using data mining models: A

case-study for urban traffic sites in Spain, Jaime González-Pardo, et al.; *Science of The Total Environment* (June 2022), Vol. 823, 153786, [doi: 10.1016/j.scitotenv.2022.153786](https://doi.org/10.1016/j.scitotenv.2022.153786).

Emissions Measurements and Modelling

Exhaust emissions from a prototype non-road natural gas engine, Petteri Marjanen, et al.; *Fuel* (May 2022), Vol. 316, 123387, [doi: 10.1016/j.fuel.2022.123387](https://doi.org/10.1016/j.fuel.2022.123387).

Elevated emissions of volatile and nonvolatile nanoparticles from heavy-duty diesel engine running on diesel-gas co-fuels, Li-Hao Young, et al.; *Science of The Total Environment* (May 2022), Vol. 821, 153459, [doi: 10.1016/j.scitotenv.2022.153459](https://doi.org/10.1016/j.scitotenv.2022.153459).

Investigation by modelling of a plug-in hybrid electric commercial vehicle with diesel engine on WLTC, Roberta De Robbio, et al.; *Fuel* (June 2022), Vol. 317, 123519, [doi: 10.1016/j.fuel.2022.123519](https://doi.org/10.1016/j.fuel.2022.123519).

The impact of hydrogenated vegetable oil (HVO) on the formation of secondary organic aerosol (SOA) from in-use heavy-duty diesel vehicles, Sahar Ghadimi, et al.; *Science of The Total Environment* (May 2022), Vol. 822, 153583, [doi: 10.1016/j.scitotenv.2022.153583](https://doi.org/10.1016/j.scitotenv.2022.153583).

Study on pollutant emission characteristics of different types of diesel vehicles during actual road cold start, Gangzhi Tang, et al.; *Science of The Total Environment* (June 2022), Vol. 823, 153598, [doi: 10.1016/j.scitotenv.2022.153598](https://doi.org/10.1016/j.scitotenv.2022.153598).

Well-to-wheel nitrogen oxide emissions from internal combustion engine vehicles and alternative fuel vehicles reflect real driving emissions and various fuel production pathways, Eunsu Seol, et al.; *Journal of Cleaner Production* (2022), Vol. 342, 130983, [doi: 10.1016/j.jclepro.2022.130983](https://doi.org/10.1016/j.jclepro.2022.130983).

Emissions Control, Catalysis, Filtration

Investigation on gas and particle emission characterization of carbon black oxidation process promoted by catalyst/ash, Junfeng Huang, et al.; *Chemical Engineering Journal* (in press), [doi: 10.1016/j.cej.2022.135015](https://doi.org/10.1016/j.cej.2022.135015).

Experimental and Numerical Analysis of an Innovative Mixer Geometry for Urea Injection in SCR Applications, Federico Mollo, et al.; *Emiss. Control Sci. Technol.* (2022), [doi: 10.1007/s40825-022-00207-8](https://doi.org/10.1007/s40825-022-00207-8).

Environmental regulations as industrial policy: Vehicle emission standards and automotive industry performance, Xin Li, et al.; *Environmental Science & Policy* (May 2022), Vol. 131, pp. 68-83, [doi: 10.1016/j.envsci.2022.01.015](https://doi.org/10.1016/j.envsci.2022.01.015).

Palladium nanoparticles as emerging pollutants from motor vehicles: An in-depth review on distribution, uptake and toxicological effects in occupational and living environment, Aarzo, et al.; *Science of The Total Environment* (in press), [doi: 10.1016/j.scitotenv.2022.153787](https://doi.org/10.1016/j.scitotenv.2022.153787).

Dynamic Change of Active Sites of Supported Vanadia Catalysts for Selective Catalytic Reduction of Nitrogen Oxides, Guangyan Xu, et al.; *Environ. Sci. Technol.* (in press), [doi: 10.1021/acs.est.1c07739](https://doi.org/10.1021/acs.est.1c07739).

Transport, Climate Change & Emissions

Environmental outcomes of the US Renewable Fuel Standard, Tyler Lark, et al.; *PNAS* (March 2022), 119 (9) e2101084119, [doi: 10.1073/pnas.2101084119](https://doi.org/10.1073/pnas.2101084119).

FORTHCOMING CONFERENCES

12th VERT Forum

24 March 2022, Online

[vert-dpf-eu.zoom.us/meeting/register/tZEsc-ihqzsrGtaPWg0VxUAmH68oepSXkgbg](https://vert-dpf-eu.zoom.us/j/91234567890)

SAE WCX World Congress

5-7 April 2022, Detroit, USA and Online

[sae.org/attend/calls-for-papers](https://www.sae.org/attend/calls-for-papers)

Vienna Motor Symposium

27-29 April 2022, Vienna, Austria

[wiener-motorensymposium.at/en](https://www.wiener-motorensymposium.at/en)

AECC will make a presentation.

CLEPA Materials Regulations Event

3-5 May 2022, Online

clepa.eu/events/materials-regulations-event-2022

CLEPA Aftermarket Conference

1-2 June 2022, Brussels

clepa.eu/events/clepa-2022-aftermarket-conference

CITA International Conference

1-2 June 2022, Amsterdam, Netherlands

citainsp.org/cita-conferences

SIA Powertrain & Electronics

15-16 June 2022, Rouen, France

sia.fr/evenements/263-sia-powertrain-energy-rouen-2022

AECC will make a presentation.

ETH Conference on Combustion-Generated Nanoparticles

21-23 June 2022, Online

nanoparticles.ch

Cambridge Particle Meeting

24 June 2022, Cambridge, UK and online

cambridgeparticlemeeting.org

Catalysis and Automotive Pollution Control (CAPoC12)

29-31 August 2022, Brussels, Belgium

capoc.ulb.ac.be

SAE Powertrains, Fuels and Lubricants

6-8 September 2022, Krakow, Poland

www.sae.org/attend/pfl

3rd SAENA Conference on Sustainable Mobility

25-28 September 2022, Catania, Italy

universitacusano.com/csm2022

31st Aachen Colloquium Sustainable Mobility

10-12 October 2022, Aachen, Germany

aachener-kolloquium.de/en

Transport Research Arena 2022

14-17 November 2022, Lisbon, Portugal

traconference.eu/about-tra

POLIS Annual Conference

30 November – 1 December 2022, Brussels, Belgium

polisnetwork.eu/2022-annual-polis-conference