

NEWSLETTER

International Regulatory Developments

TABLE OF CONTENTS

AECC demonstrates its Future-proof Diesel Car in Brussels.....	2
Cécile Favre leaves AECC.....	2
EUROPE	2
Clean Vehicle Directive (Revision) Published in EU Official Journal	2
Regulation 2019/1242 published in the Official Journal.....	2
Election of President of the European Parliament	2
European Council appoints new EU Leaders.....	3
European Parliament elects Committee Chairs and Vice-Chairs.....	3
European Parliament Publishes Summary of 2019 Election Results.....	3
EEA Report shows Member States' Mixed Progress in reducing Emissions	4
Netherlands Draft Order on DPF Functioning and Checks.....	4
UK Environment Bill to include Commitment to WHO PM Limits.....	4
Air Quality Expert Group Report on Non-Exhaust Emissions	4
Irish Government Climate Action Plan.....	5
Madrid Central Low Emissions Scheme reinstated	5
NORTH-AMERICA	5
U.S. Climate Alliance Governors Issue the "Nation's Clean Car Promise"	5
California and Automakers reach Agreement on Emission Standards	5
CENTRAL & SOUTH AMERICA	6
Colombia adopts Euro VI Heavy-Duty and Euro 3 Motorcycle Standards	6
ASIA PACIFIC	6
Health Impacts of Air Pollution from Transportation Sources in Delhi.....	6
India joins Climate & Clean Air Coalition	6
AFRICA	7
Nigeria's National Action Plan to reduce Short-lived Climate Pollutants.....	7
UNITED NATIONS	7
National Academies call for Immediate Action on Air Pollution.....	7
UN urges Governments to act on Climate and Air Pollution	7
GENERAL	7
Carmakers' Electric Car Plans across Europe.....	7
Deutsche Umwelthilfe Releases Results of Truck Emissions Tests	8
Report on Health Effects of PM, Impacts of Technologies and Fleet Composition	8
RESEARCH SUMMARY	8
FORTHCOMING CONFERENCES	9

AECC demonstrates its Future-proof Diesel Car in Brussels

On 3 July 2019, AECC hosted an [event](#) for representatives from the European Commission, Member States, NGOs, academia and others to experience first-hand the ultra-low NOx emissions from the AECC-IPA-IAV demonstrator car. It was held at the Renaissance Hotel, close to the EU Commission where MVWG and TCMV meetings were hosted on 3-4 July.



The car was continuously running on a route selected to give the right balance between the number of people and the time needed for detailed explanations.

While they were at the event but not in the car, guests were able to speak with AECC members and staff about the demonstrator vehicle and view a presentation with videos. This gave them more in-depth understanding of the work that had been carried out and results achieved.

Cécile Favre leaves AECC

AECC's EU Technical Affairs Manager, Cécile Favre, has left us after 12 years 'to start a new life' in her home town of Saint-Malo, France.

Cécile has been a highly valued and trusted member of our team, and the way she has made friends as well as professional colleagues during her time with AECC speaks volumes for the way she has carried out her job. For many years, Cécile was the main driving force behind the public AECC Newsletter.



EUROPE

Clean Vehicle Directive (Revision) Published in EU Official Journal

On 1 August 2019, the Directive setting the binding targets for zero- and low-emission vehicles (ZLEVs) in public procurement in each of the Member States entered into force. It had been published in the EU Official Journal on 12 July 2019.

The Revised Directive sets the minimum procurement targets at national level for clean light-duty vehicles (cars and vans) and heavy-duty vehicles (trucks and buses), with two different reference periods, one ending in 2025 and the other in 2030.

Under the revised Directive, the definition of a clean light-duty vehicle is based on CO₂ emission standards, with a zero CO₂ emission threshold from 2026 onwards, while the definition of clean heavy-duty vehicles is based on the use of alternative fuels. In addition, the Directive introduces sub-targets for zero-emission buses.

The scope of the rules is extended to a wider range of services, including public road transport services, special-purpose passenger services, refuse collection, and postal and parcel delivery services.

Directive (EU) 2019/1161 can be found at eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2019.188.01.0116.01.ENG&toc=OJ:L:2019:188:TOC.

Regulation 2019/1242 published in the Official Journal

On 25 July 2019, Regulation (EU) 2019/1242 setting CO₂ emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC, was published in the Official Journal of the EU. The Regulation entered into force on 20 June 2019.

The Regulation can be found at eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2019.198.01.0202.01.ENG&toc=OJ:L:2019:198:TOC.

Election of President of the European Parliament

On 3 July 2019, David Sassoli (S&D, IT) was elected President of the European Parliament (EP) having won 345 out of 667 valid votes in the second round of voting. He has been an Italian MEP since 2009 and he was re-elected on a Partito Democratico list in Central Italy in May 2019 for a third term. He will lead Parliament until January 2022, after which the Presidency will be taken over by a member of the European People's Party (EPP).

In July 2014 Mr Sassoli was elected as a Vice-President of the EP with responsibility for the Budget and Euro-Mediterranean policy. He was a journalist before moving into politics.

Further details regarding this election are available at www.europarl.europa.eu/news/en/press-room/20190627IPR55410/david-sassoli-elected-president-of-the-european-parliament.

European Council appoints new EU Leaders

On 2 July 2019, the European Council elected Charles Michel as President of the European Council. The President of the European Council is elected for the period from 1 December 2019 until 31 May 2022, which can be renewed once. The European Council also welcomed the decision of the Heads of State or Government of the Member States whose currency is the euro to appoint Charles Michel as President of the Euro Summit, for the same term of office.

The European Council adopted the decision proposing Ursula von der Leyen to the European Parliament as candidate for President of the European Commission. On 16 July 2019, the European Parliament elected her President of the next European Commission in a secret ballot.

She is set to take office on 1 November 2019 for a five-year term. There were 733 votes cast, one of which was not valid. 383 members voted in favour, 327 against, and 22 abstained.

The European Council also considered Josep Borrell Fontelles to be the appropriate candidate for High Representative of the Union for Foreign Affairs and Security Policy. The formal appointment of the High Representative by the European Council requires the agreement of the President-elect of the Commission.

The term of office for the President of the Commission, the High Representative and other members of the Commission will last five years, from the end of the current Commission until 31 October 2024.

The European Council also considered Christine Lagarde to be the appropriate candidate for President of the European Central Bank. On 9 July 2019, the European Council formally adopted this recommendation, after having consulted the European Parliament and the ECB's Governing Council. The mandate for the President of the European Central Bank is for eight years non-renewable.

The press release from the European Council is at www.consilium.europa.eu/en/press/press-releases/2019/07/02/european-council-appoints-new-eu-leaders/.

The outcome of the 9 July 2019 Council meeting can be found at www.consilium.europa.eu/media/40301/st11017-en19.pdf.

A further release from the European Parliament is at www.europarl.europa.eu/news/en/hearings2019/commission-president-2019/20190711IPR56824/parliament-elects-ursula-von-der-leyen-as-first-female-commission-president.

European Parliament elects Committee Chairs and Vice-Chairs

On 10 July 2019, the various committees in the European Parliament (EP) elected their respective chairs and vice-chairs for the next two and a half years.

The Environment, Public Health and Food Safety Committee (ENVI) elected Pascal Canfin (Renew Europe Group REG, FR) as Chair. ENVI is for the first time the largest committee in the EP. In accepting his role, Mr Canfin referred to the fight against

climate change, biodiversity, health and the quality of what we eat. The ENVI Vice-Chairs elected are: Bas Eickhout (Greens/EFA, NL); Seb Dance (S&D, UK); Cristian-Silviu Busoi (EPP, RO); Anja Hazekamp (GUE/NGL, NL).

At their constitutive meeting, Internal Market and Consumer Protection (IMCO) members elected for a two-and-a-half year mandate: Petra De Sutter (Greens/EFA, BE), as Chair; Pierre Karleskind (REG, FR), as first Vice-Chair; Maria Grapini (S&D, RO), as second Vice-Chair; Róża Thun und Hohenstein (EPP, PL), as third Vice-Chair; Maria Manuel Leitão Marques (S&D, PT), as fourth Vice-Chair.

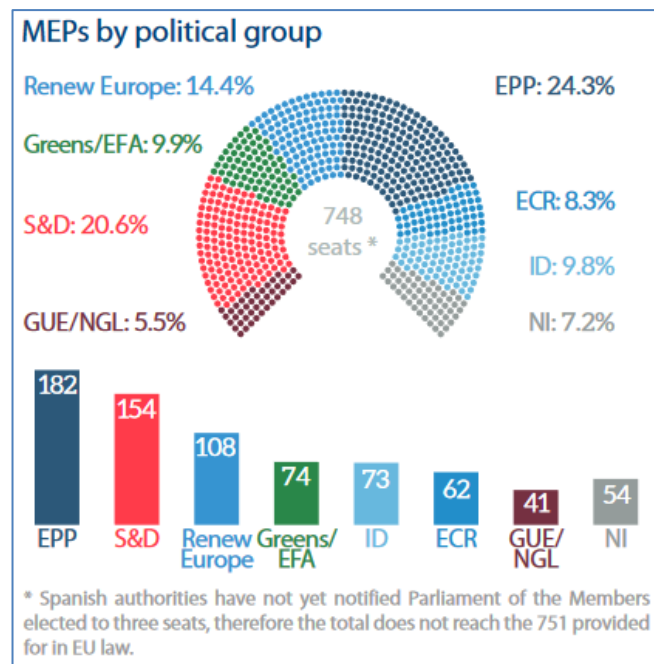
The Transport and Tourism (TRAN) committee elected Karima Delli (Greens, FR) as its new Chair. Vice-Chairs to be elected are: Johan Danielsson (S&D, SE); Sven Schulze (EPP, DE); István Ujhelyi (S&D, HU); Jan-Christoph Oetjen (REG, DE).

Adina-Ioana Vălean (EPP, RO) is the new chair of the Committee on Industry, Research and Energy (ITRE). During its constituent meeting, the Committee has also elected its vice-chairs Zdzisław Krasnodębski (ECR, PL), Morten Petersen (REG, DK), Patrizia Toia (S&D, IT), and Lina Galvez Muñoz (S&D, ES).

Information on all EP committees can be found at www.europarl.europa.eu/committees/en/home.html#.

European Parliament Publishes Summary of 2019 Election Results

On 2 July 2019, the European Parliament published an infographic summarising voter turnout, along with an analysis of MEPs by political group, gender, age, and whether they are new or re-elected.



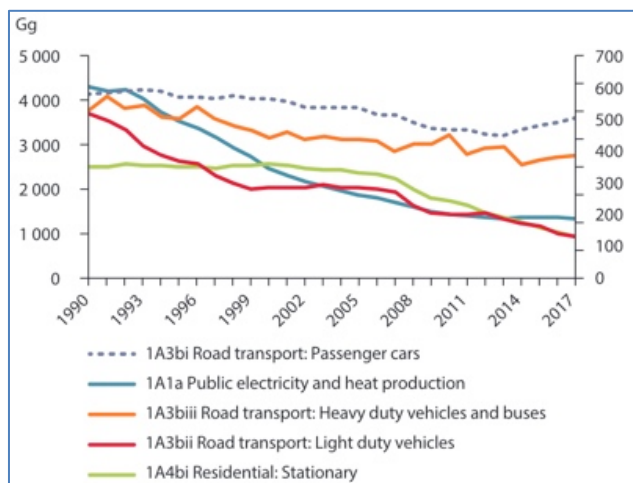
The full infographic is available at [www.europarl.europa.eu/RegData/etudes/ATAG/2019/637976/EPRS_ATAG_2019\)637976_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/ATAG/2019/637976/EPRS_ATAG_2019)637976_EN.pdf).

EEA Report shows Member States' Mixed Progress in reducing Emissions

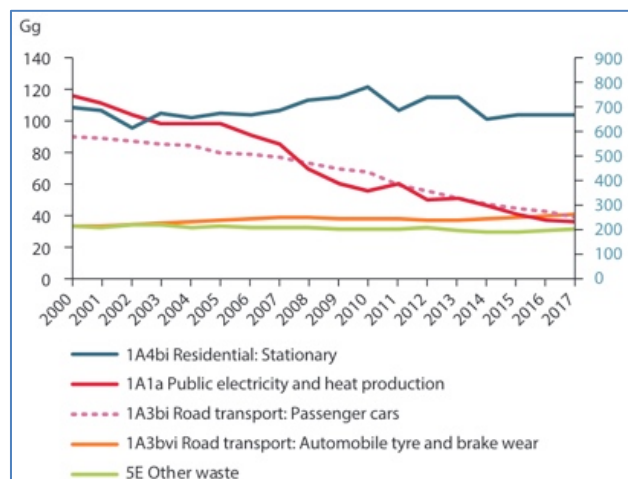
On 22 July 2019, the European Environment Agency (EEA) published its annual EU emission inventory report sent to the UNECE Convention on Long-range Transboundary Air Pollution (LRTAP). This shows that EU Member States have made only mixed progress in reducing emissions of the most harmful air pollutants.

The report notes that between 2016 and 2017, emissions of nitrogen oxides (NOx) and sulphur oxides (SOx) dropped by 1.8% and 1.3% respectively. However, emissions of non-methane volatile organic compounds (NMVOCs) increased by 1.3%, carbon monoxide (CO) emissions by 0.2% and ammonia (NH₃) by 0.4%. Emissions of particulate matter, and several heavy metals and persistent organic pollutants also all increased slightly in 2017 compared to the previous year.

The chart below shows trends in NOx emissions from the most important sectors. Overall emissions of NOx emitted from passenger cars and heavy-duty vehicles have both increased in recent years.



PM_{2.5} emissions from passenger car exhaust on the other hand continue to come down, although particles from tyres and brakes are steadily increasing.



More details and the EEA report can be found at www.eea.europa.eu/highlights/eu-member-states-make-only.

Netherlands Draft Order on DPF Functioning and Checks

On 8 July 2019, the State Secretary for Infrastructure and Public Works put forward a draft Order stating that if a vehicle has a particulate filter, the filter must work properly. An aspirational date of 2021 has been set for tests to be carried out at the general periodic inspection (APK). It is hoped that this will give sufficient time for particle counter technology to be developed for this purpose.

The portion of defective and removed particulate filters in diesel passenger cars subject to the APK with a particulate filter installed by the manufacturer is estimated at 8 to 10%. The current APK does not effectively inspect for particulate filters.

The draft Order only applies to light- and heavy-duty vehicles with a particulate filter fitted by the manufacturer.

Further details can be found at ec.europa.eu/growth/tools-databases/tris/en/index.cfm/search/?trisaction=search.detail&year.

UK Environment Bill to include Commitment to WHO PM Limits

On 16 July 2019, UK Secretary of State for the Environment, Michael Gove, set out his vision for an Environment Bill. Included in this will be a legally binding commitment on particulate matter so that no part of the country exceeds the levels recommended by the World Health Organisation (WHO). The Bill will also ensure that when public bodies draw up their plans to achieve air quality targets, local authorities have an obligation to take additional action to protect children and the elderly.

The speech in full can be read at www.wcl.org.uk/michael-gove-asks-if-not-now-when.asp.

Air Quality Expert Group Report on Non-Exhaust Emissions

On 11 July 2019, the Air Quality Expert Group (AQEG) published a report on Non-Exhaust Emissions from Road Traffic on behalf of the UK government. Non-Exhaust Emissions (NEE) are expected to rise from 7.4% today to 10% of all UK PM_{2.5} emissions by 2030, and the report says the government should legislate to reduce NEE.

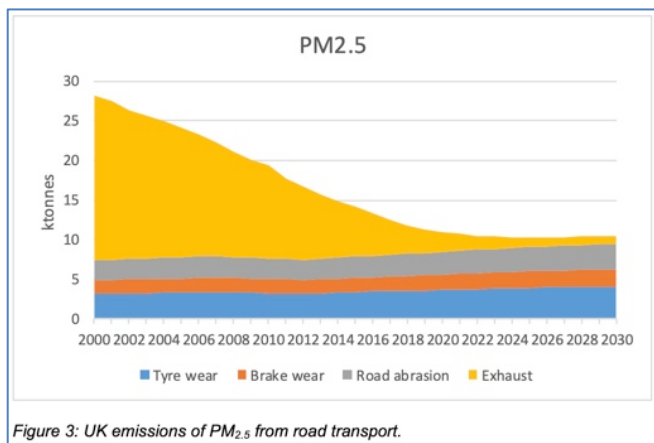


Figure 3: UK emissions of PM_{2.5} from road transport.

AQEG recommends that the government should work towards a consistent approach internationally concerning measurement of non-exhaust emission factors. It should also understand gains from the use of regenerative braking set against potential increased tyre and road wear where vehicles incorporating regenerative braking have increased mass. It suggests that the government conducts further studies to quantify the efficacy of technical solutions and should conduct targeted monitoring near areas of high-speed traffic (e.g. motorways) to investigate predicted emissions/concentration hotspots.

AQEG recommends that policy development with respect to NEE should also recognise that NEE are an important source of ambient concentrations of airborne particles, including for vehicles with zero exhaust emissions of particles. For the purposes of reducing public exposure to airborne particles, metals and PAHs, NEE should be managed as part of traffic emission policies. An effective tool for NEE abatement is traffic management, specifically reducing the volume, speed and braking intensity of traffic, and increasing the distance between traffic and members of the public.

The full AQEG report is available at uk-air.defra.gov.uk/assets/documents/reports/cat09/1907101151_20190709_Non_Exhaust_Emissions_typeset_Final.pdf.

Irish Government Climate Action Plan

On 17 June 2019, the Irish Government launched its Climate Action Plan. It will consider a car scrappage scheme in 2020 to promote the purchase of electric vehicles and will develop a roadmap to drive significant ramp-up in electric passenger cars and electric van sales. The government will also introduce legislation to ban the sale of new fossil fuel cars from 2030 and to stop the granting of NCTs (National Car Test certificates) from 2045.

Further details of the Climate Action Plan can be found at assets.gov.ie/10206/d042e174c1654c6ca14f39242fb07d22.pdf.

Madrid Central Low Emissions Scheme reinstated

On 7 July 2019, fines for entering the Madrid Central low emissions zone were reactivated after a judge overturned a decision by the new city council to suspend the scheme. El Pais reported that the move had caused widespread anger among

residents of the Spanish capital, prompting a street protest, with Madrid becoming the first major European city to actually roll back a measure aimed at improving pollution levels.

On 5 July 2019 a Madrid court had taken the precautionary measure of suspending the mayor's moratorium to, in the words of the judge, avoid pollution from rising "without any kind of controls." The decision came in response to a lawsuit filed by a body known as Platform in Defence of Madrid Central, which is made up of more than 80 organisations, including environmental NGOs Ecologists in Action and Greenpeace.

NORTH-AMERICA

U.S. Climate Alliance Governors Issue the "Nation's Clean Car Promise"

On 9 July 2019, 24 governors signed a pledge to support California in its standoff with the Trump administration over light-duty vehicle GHG standards. The governors, including three Republicans, vowed to uphold the more stringent Obama-era standards, which President Trump is poised to roll back imminently. The governors are calling for one strong, national clean car standard and support preserving state authority to protect residents from vehicle pollution. The governors are all members of the U.S Climate Alliance, a bipartisan coalition committed to upholding the goals of the Paris Agreement.

The governors' statement is available at www.usclimatealliance.org/publications/cleancarsstatement.

California and Automakers reach Agreement on Emission Standards

On 25 July 2019, a consortium of car manufacturers and California agreed a voluntary framework to reduce emissions that can serve as an alternative path forward for clean vehicle standards nationwide. Automakers who agreed to the framework are Ford, Honda, BMW of North America and Volkswagen Group of America.

The framework supports continued annual reductions of vehicle greenhouse gas (GHG) emissions through to 2026, encourages innovation to accelerate the transition to electric vehicles, and provides industry the certainty needed to make investments and create jobs. The car companies party to the voluntary agreement will only sell cars in the United States that meet these standards.

Under the framework, gasoline and diesel cars and light trucks will get cleaner through to 2026 at about the same rate as the current program. Its terms include: extending the current 2025 standard until 2026 and smoothing out the interim years from 2022 through 2025 to provide additional lead time and slightly less aggressive year-on-year reductions; supporting the transition to electric vehicles (EVs) by rewarding companies that sell more EVs with additional credits to meet the GHG standard for their entire fleet, while ensuring that gasoline and diesel vehicles also get progressively cleaner over time; providing an incentive to car companies to install more GHG-reducing technologies (such as making the car more aerodynamic at highway speeds or improving the vehicle's internal temperature

control) by modestly revising limitations on their usage, and streamlining agency review and approval for new technologies; simplifying compliance by removing the requirement to consider upstream GHG emissions associated with the production of the electricity used by electric vehicles when calculating the GHG emissions for a car maker's fleet.

More details of the agreement can be found at ww2.arb.ca.gov/news/california-and-major-automakers-reach-groundbreaking-framework-agreement-clean-emission.

CENTRAL & SOUTH AMERICA

Colombia adopts Euro VI Heavy-Duty and Euro 3 Motorcycle Standards

On 18 July 2019, Colombia's Congress confirmed Euro VI standards for new heavy-duty diesel vehicles beginning in January 2023 and Euro 3 standards for new motorcycles beginning in January 2021. This law requires Colombia's Energy Ministry to set fuel quality standards and ensure the supply of 10-15 ppm (parts per million) sulphur diesel fuel starting in January 2023. The diesel sulphur limit will be reduced to 10 ppm from 1 December 2025. It also requires that all heavy-duty diesel vehicles operating in Colombia must be compliant with Euro VI standards starting from 1 January 2035.

All motorcycles operating in Colombia must be compliant with at least Euro 3 standards by 2030. This law also requires that as of 10 January 2030, all Integrated Mass Transportation Systems (SITM), Public Transport Strategic Systems (SETP), Integrated Public Transportation Systems (SITP) and Regional Integrated Transportation Systems (SITR) must have a minimum of 20% of the new total fleet corresponding to zero emissions technology.

Colombia's Euro VI diesel/Euro 3 motorcycle law is available at www.vert-dpf.eu/i3/images/pdf/press/LEY_1972_DEL_18_DE_JULIO_DE_2019.pdf.

ASIA PACIFIC

Health Impacts of Air Pollution from Transportation Sources in Delhi

On 27 June 2019, the International Council on Clean Transportation (ICCT), George Washington University Milken Institute School of Public Health, and the University of Colorado Boulder, released a study providing a detailed picture of the health impacts in Delhi, India, attributable to emissions from transportation. They studied four subsectors: on-road diesel vehicles, on-road non-diesel vehicles, shipping, and non-road mobile sources such as agricultural and construction equipment. The study links state-of-the-art vehicle emissions, air pollution, and epidemiological models to estimate health impacts at the global, regional, national, and local levels in 2010 and 2015.

In 2015, 1 800 premature deaths in New Delhi were attributable to ambient PM_{2.5} and ozone from transportation tailpipe emissions. Deaths attributable to ambient PM_{2.5} and ozone from all sources were 17 000, meaning that transportation accounted for 11% of all deaths from air pollution that year in the city. Compared with other major urban areas in India, New Delhi had

the highest number of deaths attributable to transportation emissions in 2015 and the highest mortality rate - nine deaths per 100 000 population.

New Delhi accounted for 2.5% of transportation-attributable deaths from PM_{2.5} and ozone pollution in India in 2015. Compared with other countries, India ranked second after China in the number of deaths attributable to transportation emissions in 2015. An estimated 74 000 premature deaths were attributable to transportation emissions in India 2015. This represents a 28% increase in annual transportation-attributable deaths in India compared with 2010. On-road diesel vehicles contributed 60% of the transportation health burden in New Delhi, followed by non-road mobile sources, including agricultural and construction equipment and rail (24%); on-road non-diesel vehicles (13%); and international shipping (1%). The high contribution of on-road diesel vehicles reflects both tailpipe PM_{2.5} and NO_x emissions, the latter of which contribute to secondary PM_{2.5} (in the form of nitrate aerosols) and ozone.

Among 200 major urban areas worldwide that the study evaluated, New Delhi ranked 8th in population and 6th in the number of deaths attributable to transportation emissions in 2015. The top ten by number of deaths attributable to transportation emissions in 2015 were Guangzhou, Tokyo, Shanghai, Mexico City, Cairo, Moscow, New Delhi, Beijing, London, and Los Angeles.

The report is available at theicct.org/publications/health-impacts-air-pollution-transportation-sources-delhi.

India joins Climate & Clean Air Coalition

On 5 July 2019, India formally joined the Climate & Clean Air Coalition (CCAC), becoming the 65th country to join the partnership.

Minister for Environment, Forest and Climate Change Prakash Javadekar said that "India will work with Coalition countries to adopt cleaner energy, sustainable production and consumption patterns and environment-friendly transport, agriculture, industry and waste management to promote clean air."

India plans to work with Climate Clean and Coalition countries on best practices and experiences for the effective implementation of India's National Clean Air Programme (NCAP).

Launched in January 2019, the NCAP is a comprehensive strategy with actions to prevent, control and reduce air pollution and improve air quality monitoring across the country. It aims to reduce fine particulate (PM_{2.5}) and particulate (PM₁₀) air pollution by 20-30% by 2024. India has identified 102 non-attainment cities, with city-specific action plans being formulated.

The announcement is available to read at www.unenvironment.org/news-and-stories/press-release/india-joins-climate-and-clean-air-coalition.

AFRICA

Nigeria's National Action Plan to reduce Short-lived Climate Pollutants

In May 2019, Nigeria's Federal Executive Council of Ministers approved the National Action Plan to reduce short-lived climate pollutants (SLCPs). This plan, developed by the Federal Ministry of Environment of Nigeria, aims to improve air quality and reduce Nigeria's contribution to climate change, through 22 specific mitigation measures in eight source sectors (transportation, cooking and lighting in households, industry, waste, oil and gas, agriculture, power and HFCs).

Full implementation of these measures would be effective in reducing SLCPs, with an 83% reduction in black carbon emissions by 2030 compared to a business-as-usual scenario, and 61% reduction in methane emissions. These measures are also effective in reducing other air pollutants, such as nitrogen oxides and particulate matter, and also reduce CO₂ emissions. This means that the implementation of these measures could reduce exposure to air pollution across Nigeria by 22% in 2030, while reducing Nigeria's contribution to climate change.

Measures included in the plan include: bus fleet renewal; conversion of 25% of all buses to CNG by 2030; introduction of 50ppm sulphur diesel fuel in 2019 and 150ppm petrol in 2021; Euro 4/IV limits to be met by all vehicles by 2030.

The National Action Plan can be found at www.ccacoalition.org/en/resources/nigeria's-national-action-plan-reduce-short-lived-climate-pollutants.

UNITED NATIONS

National Academies call for Immediate Action on Air Pollution

On 19 June 2019, the Academies of Sciences and Medicine from South Africa, Brazil, Germany, and the United States issued a joint statement, which they presented at the United Nations Headquarters in New York. They called for intensified funding and action under a new global compact to tackle air pollution, saying that countries across the world must urgently adopt emissions controls and air monitoring systems for the worst pollutants, if they are to grapple with the growing problem of air pollution.

"If we do not urgently address this global challenge, air pollution will continue to take a startling toll in terms of preventable disease, disability and death, as well as in avoidable costs of care," said Marcia McNutt, president of the US National Academy of Sciences. "We need to act much more decisively. We need more public and private investments to tackle air pollution that match the scale of the problem."

The academies recommend that all countries make air pollution reduction a priority by placing emission controls on industry and embracing clean fuels. Where possible, success stories from individual cities and countries should be shared and used as lessons for those grappling to improve air quality.

More information is available at www.unenvironment.org/news-and-stories/story/national-academies-call-immediate-action-air-pollution.

UN urges Governments to act on Climate and Air Pollution

On 16 July 2019, the UN called on cities, regions and countries to commit to "achieving air quality that is safe for its citizens, and to align its climate change and air pollution policies, by 2030" — and to do so in the name of their citizens' health. This commitment is in line with the Paris climate agreement and supports the necessary transformation to a low carbon society.

The rationale is to reduce the health burden of polluting energy sources so that moving to cleaner and more sustainable choices for energy supply, transport and food systems effectively pays for itself. In the 15 countries that emit the most greenhouse gas emissions, the health impacts of air pollution are estimated to cost more than 4 per cent of their gross domestic product (GDP).

During the UN Climate Summit this coming September, the UN Secretary General, World Health Organisation, UN Environment and Climate and Clean Air Coalition will call on national and subnational governments to commit to achieving air quality improvements by the end of the next decade.

For more information on this call for action, go to www.ccacoalition.org/en/news/un-urges-governments-act-climate-and-air-pollution-health%E2%80%99s-sake-0.

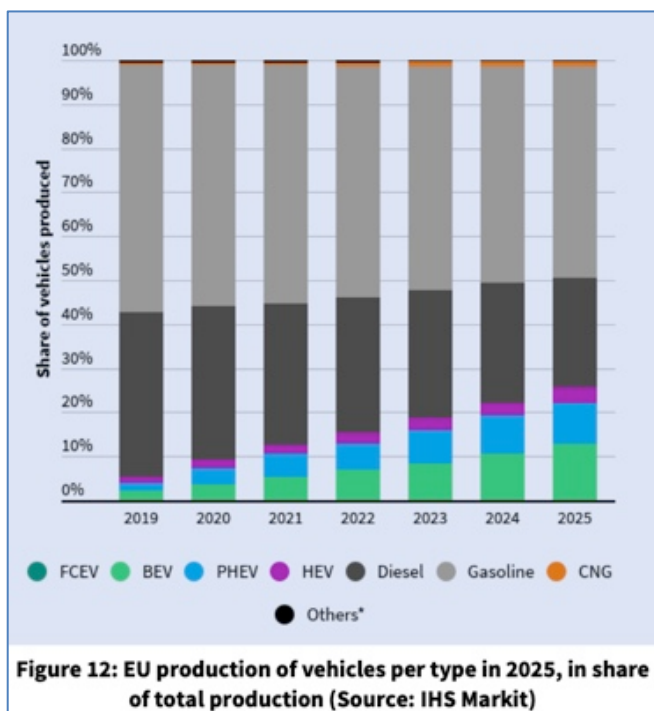
GENERAL

Carmakers' Electric Car Plans across Europe

On 18 July 2019, Transport & Environment (T&E) released a report saying that after several years of 'timid' growth, the number of electric vehicle (EV) models produced across the EU (and available on the market as a result) is about to see significant increases: from about 60 battery electric (BEV), plug-in hybrid (PHEV) and fuel cell (FCEV) models available at the end of 2018, up to a combined total of 176 models in 2020, 214 models in 2021 and 333 expected in 2025.

Based on light vehicle production forecast data acquired by T&E from IHS Markit, and in-house analysis, the production of electric vehicles in Europe is expected to multiply six-fold between 2019 and 2025, reaching more than 4 million cars and vans, or more than a fifth of the EU car production volumes. T&E states that its modelling shows that if carmakers stick to their plans, this will be more than enough to comply with the EU Car CO₂ standards for 2025, or a minimum of 15% in 2025.

Although focusing on electrification, the report also considers how the overall market will evolve until 2025, showing in particular how diesel and gasoline vehicle production will be affected.



T&E estimates that 2.7 million fewer internal combustion engine (ICE) cars will be made in Europe in 2025 than in 2019.

T&E's report is available to download at www.transportenvironment.org/sites/te/files/publications/2019_07_TE_electric_cars_report_final.pdf.

Deutsche Umwelthilfe Releases Results of Truck Emissions Tests

On 24 July 2019, Deutsche Umwelthilfe (DUH) released results of truck emissions tests, claiming that the NO_x emissions of one in five were 'significantly high'.

Testing was carried out over the course of a day by the University of Heidelberg in cooperation with Camion Pro, the association representing the transport sector. DUH claims that 20% of 141 trucks tested either have defective exhaust aftertreatment or have had it manipulated. It was said to be particularly noticeable in trucks from Eastern Europe.

DUH is calling for increased surveillance and punishment from the responsible authorities.

More details (in German) can be found at www.duh.de/presse/pressemitteilungen/pressemitteilung/deutsche-umwelthilfe-praesentiert-ergebnisse-von-emissionsmessungen-an-lkw-im-realbetrieb-abgassyste/.

Report on Health Effects of PM, Impacts of Technologies and Fleet Composition

On 16 July 2019, the French *Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du Travail* (ANSES) published a report on the health effects of outdoor air particles, the impacts of technologies on pollution, and the composition of the vehicle fleet in France.

Based on a systematic review of scientific literature, ANSES confirms the effects on health (respiratory and cardiovascular diseases and anticipated deaths) related to certain components of ambient air ultrafine particles, carbon soot and organic carbon. The Agency therefore recommends that these three particulate indicators be considered as a priority in public policies relating to air.

ANSES also confirms the health effects of exposure to various emission sources, in particular road traffic, the combustion of coal, petroleum products and biomass, and therefore insists on the need to act on these sources of emission. Moreover, given the scarcity of data, ANSES recommends continuing research efforts on the health effects associated with other sources of particles such as agriculture, maritime transport and airport activity.

With regard to the pollutant emissions from road traffic, the Agency concludes that the changes in fleet technologies will allow for a more or less marked reduction in ambient air pollution depending on the scenarios, but that they will be insufficient on their own to improve urban air quality. ANSES therefore recommends encouraging the promotion of alternative technologies and, above all, the reduction of traffic, particularly through the reinforcement of other modes of mobility, as part of the policies to improve air quality.

The full report (in French) can be found at www.anses.fr/fr/system/files/AIR2014SA0156Ra.pdf.

RESEARCH SUMMARY

Emissions Measurements and Modelling

Roadside assessment of a modern city bus fleet: Gaseous and particle emissions, Qianyun Liu, et al.; *Atmospheric Environment: X* (in press), doi: [10.1016/j.aeaqa.2019.100044](https://doi.org/10.1016/j.aeaqa.2019.100044).

On-road emissions of passenger cars beyond the boundary conditions of the real-driving emissions test, Suarez-Bertoa Ricardo, et al.; *Environmental Research* (in press), doi: [10.1016/j.envres.2019.108572](https://doi.org/10.1016/j.envres.2019.108572).

Emissions Control, Catalysis, Filtration

Modulated Excitation Raman Spectroscopy of V₂O₅/TiO₂: Mechanistic Insights into the Selective Catalytic Reduction of NO with NH₃, Rob Nuguid, et al.; *ACS Catal.* (June 2019), Vol. 9, 6814-6820, doi: [10.1021/acscatal.9b01514](https://doi.org/10.1021/acscatal.9b01514).

European Regulatory Framework and Particulate Matter Emissions of Gasoline Light-Duty Vehicles: A Review, Barouch Giechaskiel, et al.; *Catalysts* (2019), Vol. 9(7), 586, doi: [10.3390/catal9070586](https://doi.org/10.3390/catal9070586).

Transport, Climate Change & Emissions

Recycling and substitution of light rare earth elements, cerium, lanthanum, neodymium, and praseodymium from end-of-life applications - A review, Linda Omodara, et al.; *Journal of Cleaner Production* (in press), doi: [10.1016/j.jclepro.2019.07.048](https://doi.org/10.1016/j.jclepro.2019.07.048).

Don't save lemons! The impact of older technology vehicles on environmental expenditure at regional level in Italy, Elina De Simone, et al.; *Ecological Indicators* (November 2019), Vol. 106, 105540, doi: [10.1016/j.ecolind.2019.105540](https://doi.org/10.1016/j.ecolind.2019.105540).

FORTHCOMING CONFERENCES

SAE Powertrains, Fuels and Lubricants

26-29 August 2019, Kyoto, Japan
www.pfl2019.jp

ACEA Summit 2019: 'Leading the mobility transformation: The future of the EU auto industry'

4 September 2019, Brussels, Belgium
www.acea.be/events/event/leading-the-mobility-transformation-the-future-of-the-eu-auto-industry

LCV 2019

4-5 September 2019, Millbrook, UK
www.cenex-lcv.co.uk

Cenex-LCV is the UK's premier low carbon vehicle event incorporating four key features: Technology exhibition; Extensive seminar programme; Facilitated networking with the low carbon community; Ride & drive of the latest research & development and commercially available vehicles.

14th International Conference on Engines & Vehicles

15-19 September 2019, Capri, Italy
www.sae-na.it

Topics of the conference include engine modelling and diagnostics; engine combustion; new engines, components, actuators and sensors; hybrid and electric powertrains and eco-CAV; fuels and lubricants; and exhaust aftertreatment and emissions.

AECC and IAV will present a joint paper on "Diesel Vehicle with ultra-low NOx emissions on the road"

Annual Automotive Exhaust System Summit

19-20 September 2019, Prague, Czech Republic
curtiswyss.com/agenda/exhaust.pdf

IAQM Routes to Clean Air

16-17 September 2019, London, UK
<https://iaqm.co.uk/event/rtca19/>

The Institute of Air Quality Management (IAQM) presents Routes to Clean Air 2019, where air quality, public health and transport professionals share their experiences of improving traffic emissions. Speakers will discuss a range of topical issues offering their insight into the steps required to improve air quality, including best practice examples and practical challenges faced during implementation.

3rd Annual Real Driving Emissions Forum

24-25 September 2019, Berlin, Germany
www.rde-realdrivingemissions.com

The Forum will showcase the forefront practices and approaches towards RDE and Energy Consumption reduction, compliance with recent update of the legislation on RDE, main automotive technology trends based on cost-and-energy-efficient solutions.

28th Aachen Colloquium Automobile and Engine Technology

7-9 October 2019, Aachen, Germany
www.aachener-kolloquium.de

The congress provides a wide range of technical presentations addressing current challenges of the vehicle and engine industry.

European Transport Conference

9-11 October 2019, Dublin, Ireland
www.aetransport.org

The conference attracts transport practitioners and researchers from all over Europe where they can find in-depth presentations on policy issues, best practice and research findings across the broad spectrum of transport.

7th Annual Conference Real-Driving Emissions 2019

15-17 October 2019, Berlin, Germany
www.automotive-ig.com/events-real-driving-emissions

13th Conference on Gaseous Fuel Powered Vehicles

22-23 October 2019, Stuttgart, Germany
fkfs-veranstaltungen.de/3/conference-on-gaseous-fuel-powered-vehicles

3rd International FEV Conference Zero CO₂ Mobility

7-8 November 2019, Aachen, Germany
www.fev.com/coming-up/fev-conferences/fev-conference-zero-co2-mobility/introduction.html

Integer Emissions Summit USA

12-13 November 2019, Indianapolis, USA
www.integer-research.com/conferences/ies-usa-2019/

12th International ECMA Conference & Exhibition 2019 on Cleaner IC Engines for Sustainable Environment with Innovative Emission Control Technologies

14-15 November 2019, Pune, India
www.ecmaindia.in/eventsdetails.aspx?mpgid=41&pgidtrail=42&Eventsid=21
The ECT 2019 conference will address implementation of Bharat Stage VI emission norms and will look beyond, to forthcoming regulations such as RDE and World Harmonized Test procedures which will ensure that vehicles that come on the road in future are emissions-compliant in the true sense.

9th China International Diesel Engine Summit 2019

21-22 November 2019, Beijing China
www.borscon.com/2019de9/cn/index.html
The 9th China International Diesel Engine Summit will provide an opportunity to discuss China's energy-saving and emission-reduction policies and regulations for diesel engine, the latest technology progresses and future trends of new energy and alternative fuels, as well as innovative ideas in business modes.

POLIS Annual Conference

27-28 November 2019, Brussels, Belgium
www.polisnetwork.eu/2019conference
Europe's leading event on sustainable urban mobility in cities and regions

EU Clean Air Forum

28-29 November 2019, Bratislava, Slovakia
https://ec.europa.eu/info/events/eu-clean-air-forum-2019-nov-28_en
The European Commission is organising the 2nd Clean Air Forum in close collaboration with the Ministry of Environment of the Slovak Republic. It will focus on three themes: air quality and energy; air quality and agriculture; and clean air funding mechanisms.

Internal Combustion Engines and Powertrain Systems for Future Transport

11-12 December 2019, West Midlands, UK
events.imeche.org/ViewEvent?code=CON6849
The 2019 conference will provide a forum for IC engine, fuels and powertrain experts to look closely at developments in powertrain technology required to meet the demands of the low carbon economy

SAE World Congress Experience (WCX)

21-23 April 2020, Detroit, USA
www.sae.org/attend/wcx

41st International Vienna Motor Symposium

wiener-motorensymposium.at/en
22-24 April 2020, Vienna, Austria

TRA2020

27-30 April 2020, Helsinki, Finland
traconference.eu

TRA, The Transport Research Arena is the biggest European Research and Technology Conference on transport and mobility. In 2020 TRA is themed "Rethinking transport - towards clean and inclusive mobility" and brings together the experts from around the world to discuss the newest innovations and the future of mobility and transport.

SAE Powertrains, Fuels and Lubricants

22-24 September 2020, Krakow, Poland

www.sae.org/pfl

Call for abstracts opens in August 2019

Deadline for abstract: 18 February 2020

SAE Heavy-Duty Diesel Emissions Control Symposium

13-14 October 2020, Gothenburg, Sweden