International Regulatory Developments

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Announcement of Broader AECC Remit and Focus on Climate and Air Quality

On 12 November 2024, AECC announced that it is broadening its remit to reduce emissions from stationary applications besides mobile sources and adding climate as a key focus alongside its core commitment to cleaner air.

The announcement also confirmed that the AECC name now stands for the Association for Emissions Control and Climate.



AECC becomes the Association for Emissions Control and Climate

AECC continues and expands its active engagement with legislators to shape policies and regulations, in Europe and beyond. As a reflection of our changing mission, our technical and advocacy work now focuses on five policy and regulatory areas.

1. Light-duty and heavy-duty vehicles: achieve a truly technology-open approach in the review of the CO, standards.

2. Non-Road Mobile Machinery: address the shortcomings of the Stage V regulation.

3. Industrial emissions: make all installations compatible with both air quality and climate requirements, adopting BREFs in line with emission control technology capability.

4. Set proper legislative requirements for the performance of **hydrogen technologies**.

5. Apply Life-Cycle Assessment and circular economy principles when shaping policy.

EU rules should create a regulatory framework where all technologies comply with future air quality and climate requirements to resolve uncertainty, retaining ambition and industry competitiveness.

The AECC briefing document on our new priorities is at aecc.eu/wp-content/uploads/2024/11/241112-AECC-Briefing-2024-2029-final.pdf.

EUROPE

Publication of 7 EU Member States' Joint Proposal for Automotive Policy

On 26 November 2024, the European Council published a joint proposal for a renewed European automotive policy, promoted by Austria, Bulgaria, Czechia, Italy, Poland, Romania and Slovakia. This is intended to balance competitiveness and climate ambition.

The document says the automotive sector plays a crucial role in innovation, industrial strength, and economic growth, producing 14.8 million motor vehicles annually and accounting for one third of the EU's total R&D spending. However, the industry is now at a critical juncture, facing significant challenges related to production, employment, and global competition, which require urgent and coordinated action at the EU level.

It goes on to say the EU must seize this moment to launch a "New Industrial Strategy" centred on competitiveness, growth, and environmental sustainability and that this strategy must include a Clean Industrial Deal to channel investment into infrastructure and industry, with sectoral policies, particularly in automotive, playing a key role.

The seven Member States call for the adoption of the principle of technological neutrality, which they say would recognise a broader array of clean vehicle solutions beyond battery-electric vehicles and hydrogen, including sustainably powered internal combustion engines that should be put into consideration through the correct utilisation of alternative fuels. In order to ensure a quick and tangible contribution to the decarbonisation process, the proposal states an alternative calculation approach could also be implemented, paving the way for other technologies to contribute to reaching CO_2 emission targets. The Member States say the system must not discriminate against the various vehicle types & weights and take into account all individual efforts of a manufacturer (OEM) to reduce CO_2 emissions.

The European Commission is expected to publish a progress report by 2025 on the deployment of zero- and low-emission passenger cars and light commercial vehicles, the impact on employment, and the status of recharging and refuelling infrastructure. The MSs urge the Commission to bring this report forward as soon as possible to reflect the realities of the market and provide industry with the necessary time to adapt. They say the report should include an open and detailed assessment of the contributions of alternative fuels and technologies to decarbonisation.

The document states an assessment of the CO_2 emission standards for new passenger cars and new light commercial vehicles Regulation is therefore urgently needed to maintain the competitiveness of the European automotive industry and to prevent the outflow of investment from green technology research and development. Therefore, a progress report and comprehensive assessment need to be brought



forward as soon as possible with a revision being proposed by the Commission still in 2025.

The MSs also recommend keeping the same approach to accelerating the review of the heavy-duty vehicle CO_2 emission standards, currently planned for 2027, to ensure that the entire automotive sector benefits from a 'more open-minded and flexible' regulatory environment. In both cases, they say the European Commission should adopt a 'realistic timeline that allows for a balanced, just, competitive and sustainable' transition.

The document concludes by saying that to achieve the EU's ambitious climate goals, the automotive industry must be empowered to innovate and adapt. It adds that this requires a supportive regulatory framework, targeted investments, and a pragmatic timeline for implementation. The future of Europe's automotive industry depends on a balanced approach that ensures environmental sustainability without sacrificing economic growth or social equity.

The joint proposal can be read in full at data.consilium.europa.eu/doc/document/ST-15960-2024-INIT/en/pdf.

Commissioners-designate Hearings

From 4 to 12 November 2024, the European Parliament committees questioned Commissioners-designate on their respective portfolios.

On 4 November, the Transport and Tourism Committee questioned Apostolos Tzitzikostas, Greek candidate for the sustainable transport and tourism portfolio. In his introductory speech, Mr Tzitzikostas stressed that if confirmed as Commissioner for sustainable transport and tourism he will focus on enhancing the competitiveness of the EU's transport sector, sticking to the agreed timetable for its green and digital transitions, completing the Trans-European Transport (TEN-T) network by the established deadlines, enhancing transport safety, and ensuring the enforcement of current EU rules. To push for transport decarbonisation solutions, such as the production of sustainable fuels and the development of charging infrastructure, he committed to presenting a sustainable transport investment plan in 2025, while on competitiveness he pledged to develop an EU industrial action plan for automotive sector. Several MEPs asked the Commissionerdesignate to support the EU's transport and tourism sectors and look for solutions at the EU level. Cutting red tape, less reporting requirements and a pause on new proposals without undertaking an impact assessment were some of the demands presented by MEPs to Mr Tzitzikostas. Mr Tzitzikostas was also guizzed on specific measures to rescue the EU's automotive industry.

On 6 November, the Environment, Public Health and Food Safety Committee questioned Jessika Roswall, candidate for the Environment, Water Resilience and a Competitive Circular Economy portfolio. In her opening remarks, Ms Roswall, from Sweden outlined her action plan as Commissioner-designate, including her commitment to "stay

the course" on EU environmental legislation, prioritising the implementation and enforcement of the European Green Deal. She committed to launching a circular economy package, which will include measures to stimulate the single market for waste and recycled materials, and at the same time ensure clean sustainable production in the EU. MEPs questioned the Swedish candidate about her approach to sustainable resource use, the implementation of EU packaging rules, as well as the REACH revision and its link to human health. They also quizzed her on the zero-pollution plan, the forestry sector, and what climate adaptation measures she would support to mitigate the increase of extreme weather events.

The following day, the same committee, together with the Committee on Economic and Monetary Affairs (ECON) and the Committee on Industry, Research and Energy (ITRE), questioned Wopke Hoekstra from the Netherlands, Commissioner-designate for Climate, Net-Zero and Clean Growth. In his introductory speech, the Commissionerdesignate underlined his strong commitment to achieving climate neutrality by 2050 and confirmed he would present a European Climate Adaptation Plan and assess the need for future legislation in this area based on the 2024 European Climate Risk Assessment. Replying to questions from MEPs, Mr. Hoekstra underscored the need to implement all current climate related legislation, while also acknowledging the legitimate concerns of firms and citizens about the cost of achieving climate goals, highlighting that the transition must be just. He also committed to enshrining a 90% net greenhouse gas emission-reduction target for 2040 in the European Climate Law for the EU to become climate neutral in 2050. He also committed to work towards phasing out all fossil fuel subsidies financed by the EU budget. Members questioned Mr Hoekstra on how he would ensure that the EU remains competitive during the green transition. Mr. Hoekstra committed to presenting an EU Clean Industrial Deal within 100 days to support EU companies to reach the climate goals. Many MEPs asked how the Commissionerdesignate intends to support the European car industry, and whether the 2035 ban on combustion engines should be revisited. Mr Hoekstra advocated for sticking to the agreed timetable to ensure predictability for industry. At the same time, he pledged to fight "ferociously" to provide a fair economic environment for the EU's car, battery and green industries. Mr Hoekstra pledged to boost the deployment of car recharging infrastructure and investment in the electricity grid. He also urged against revisiting the biofuels framework, instead focusing on electrification.

On 12 November, the final day of hearings, the ENVI, ECON and ITRE committees questioned Executive Vice-Presidentsdesignate for a Clean, Just and Competitive Transition, Teresa Ribera of Spain, and for Prosperity and Industrial Strategy, Stéphane Séjourné of France.

In his introductory statement to the Industry, Research and Energy, Internal Market and Consumers, Economic Affairs and Environment Public Health and Food Safety committees,



Mr Séjourné announced a future pact on clean industry to lay the foundations "for an industrial policy suited to our time", stressing that the EU will need to decarbonise and reindustrialise simultaneously. He advocated focusing on the strategic sectors with the highest potential and socioeconomic impact, promoting lowering energy prices, and developing thriving markets for products such as electric vehicles and heat pumps.

Mr. Séjourné promised to reduce bureaucracy for companies and pledged to introduce an SME passport to avoid firms having to constantly prove their legal status. He emphasised that huge investments are needed to prevent the most innovative companies from leaving the EU. To win the global investment battle, the Commissioner-designate plans to set up an EU Competitiveness Fund and use InvestEU to increase public funding and create synergies between public and private investment.

MEPs questioned the Executive-Vice-President designate on his plans to support the European steel industry, and asked whether the Commission would stick to agreed decarbonisation targets in the automotive sector. Mr Séjourné replied that the steel industry may receive additional support from the European Investment Bank. He stressed that the automotive industry requires predictability and pledged to act on the demand side to help carmakers meet their targets.

In her opening remarks, Ms. Ribera paid tribute to the victims of the recent floods in Valencia, Spain. She committed to maintain the course of the European Green Deal to meet climate targets and set-up a new approach to competition policy that is supportive of European companies to achieve a global level playing field.

Ms Ribera also committed to work towards implementing EU climate and energy targets for 2030 as well as set an EU 2040 target to reduce net greenhouse gas emissions by 90% compared to 1990 levels to enable the EU to become carbon neutral by mid-century. MEPs also questioned Ms Ribera on issues related to the environment and the clean circular economy including on global negotiations on climate and biodiversity.

Ms. Ribera said support was needed for industrial decarbonisation, promoting a just transition, including housing and quality jobs, and capitalising on the benefits of the green and digital transitions. When asked about Europe's automotive industry and the sector's decarbonisation goals, Ms. Ribera expressed her willingness to work with various industry stakeholders to "ensure that the transition is achieved." She also committed to addressing the issue of support for automotive industry subcontractors.

Further Information on all of the EP hearings is at <u>europarl.europa.eu/news/en</u>.

European Parliament and Council Approval of New Commission

On 27 November 2024, MEPs elected the College of Commissioners as a whole by roll-call vote following a debate with Commission President Ursula von der Leyen on her new team and programme. 370 MEPs voted in favour, 282 against, and 36 abstained.

Ahead of the vote, Commission President elect Ms Ursula von der Leyen presented her team and programme (see below), wherein she confirmed the portfolio changes requested by MEPs in the course of Parliament's evaluation process.

In the subsequent debate, some MEPs stressed the need for the new Commission to begin addressing the challenges Europe is facing quickly. They called on the Commission to improve European competitiveness in the light of intensifying global competition, to implement the European Green Deal, to ensure energy independence, and to build a defence union in response to the ongoing war in Ukraine. Others signalled their disapproval of the new College of Commissioners.

The new Commission will now take up its duties on 1 December 2024.

The European Parliament press release is at <u>europarl.europa.eu/news/en/pressroom/20241121IPR25546/parliament-approves-the-von-der-leyen-ii-commission</u>..

Following the vote, President von der Leyen expressed her gratitude to the Parliament, saying that because the ongoing challenges are intertwined, a new structure of the elected College will enable efficient teamwork and cross-cutting solutions.

Speaking at a press conference with Parliament President Ms Roberta Metsola, Ms von der Leyen stated that unity will be of "absolute critical importance", and the "tightest cooperation" is needed between the European Parliament and the Council.

The EC President's press conference statement is at <u>ec.europa.eu/commission/presscorner/detail/en/statement_24_6086</u>.

The following day, the European Council appointed by written procedure the European Commission for the period from 1 December 2024 to 31 October 2029.

Confirmation of the Coucil's decision is at consilium.europa.eu/en/press/press-releases/2024/11/28/the-european-council-appoints-the-european-commission.

President von der Leyen Speech on New Commissioners and Programme

On 27 November 2024, EC President Ms Ursula von der Leyen gave a speech to the European Parliament Plenary on the new College of Commissioners and its programme.

Ms von der Leyen announced that the first major initiative of the new Commission will be a Competitiveness Compass



that will frame its work for the rest of the term. The Compass will be built on the three pillars of the Draghi report. The first is closing the innovation gap with the US and China. The second is a joint plan for decarbonisation and competitiveness. And the third pillar is increasing security and reducing dependencies.

For the second pillar, the joint plan for decarbonisation and competitiveness, the EC President committed to stay the course on the goals of the European Green Deal but said if the EU wants to be successful in this transition, it must be more agile and better accompany people and business along the way. She focused on the need to play to the EU's traditional strengths – its industries and SMEs, innovators and workers. This is why she will put forward the Clean Industrial Deal within the first 100 days of the mandate, which will involve the entire College.



The EC President went on to say that each industry has different needs, and each sector will have its own individual path to be clean and competitive. Ms von der Leyen said she has decided to convene a Strategic Dialogue on the Future of the Car Industry in Europe, with the dialogue and its followup under her leadership. The Strategic Dialogue will bring together all stakeholders around the table, to listen to each other and to design solutions together as the industry goes through a deep and disruptive transition. She added that Europe's car industry is a European pride, with millions of jobs depending on it. She concluded that "together we have to make sure that the future of cars will continue to be made in Europe."

Ms von der Leyen's speech can be read in full at ec.europa.eu/commission/presscorner/detail/en/speech_24_6084.

Appointment of Advisor to the President of European Commission

On 25 November 2024, the European Commission announced the appointment of Mr Philippe Lamberts as advisor to EC President von der Leyen.

The main task of the former Co-leader of the Greens/EFA group in the European Parliament and business executive, is to help to support the transition to a climate-neutral

economy. Mr Lamberts will play an advisory role in delivering on the 2030 climate targets, with a view to reaching climate neutrality by 2050.

He will contribute to reaching the 2030 target by investing into outreach to different stakeholders, building bridges between business and civil society, political actors, administrations as well as vulnerable groups. The press release says he will bring trends and innovations from society and business into policy making. Especially in the current context it is of utmost important to better explain the transition, implement existing legislation in a simplified way, and make sure no one is left behind.

Mr Lamberts will work closely with the Commission President and her cabinet and collaborate with the relevant College members and Directorates-General. He will be supported by a small experts' team.

The Commission press release is at ec.europa.eu/commission/presscorner/detail/en/ip_24_6063.

EU Statement Ahead of COP29 Conference

On 8 November 2024, the European Commission issued a statement ahead of the COP29 UN Climate Change Conference in Baku, Azerbaijan.

It states that the European Union will work with international partners to deliver on the goals of the Paris Agreement of limiting global average temperature rise to as close as possible to 1.5°C. The Commission adds that at COP29, the Parties to the Paris Agreement must ensure that global financial flows are increasingly aligned with the Paris Agreement, unlocking investments, through the adoption of a New Collective Quantified Goal (NCQG) on Climate Finance.

Another important element of this year's talks will be to reconfirm the global energy goals agreed last year in Dubai to transition away from fossil fuels, triple renewable energy investments, and double energy efficiency measures by 2030. EU negotiators will work to set ambitious expectations for the Nationally Determined Contributions (NDCs) to be submitted by all Parties next year. The EU has begun preparations for its new NDC with the publication of the Commission's Communication on Europe's 2040 climate target earlier this year. The Commission intends to present a legislative proposal to enshrine a 90% emission reduction target for 2040 in the European Climate Law. This target will subsequently inform the submission of the new EU NDC.

Commissioner for Climate Action Wopke Hoekstra will again lead the EU negotiating team at COP29, working closely with the Council Presidency and Member States to deliver on the negotiating mandate adopted last month. Commissioner for Energy Kadri Simson will attend on 14-15 November, focusing on the implementation of the commitment to transition away from fossil fuels, our work to reduce methane emissions, and the development of clean technologies. Commissioner for Innovation, Research, Culture, Education



and Youth Iliana Ivanova will also be in Baku on 12 November to attend a high-level event on 'The Future of Net Zero Competitiveness'.

The Commission press release is at <u>ec.europa.eu/commission/presscorner/detail/en/ip_24_5721</u>.

Conclusion of COP29 Conference

On 24 November 2024, the COP29 UN Climate Change Conference held in Baku, Azerbaijan concluded.

The European Commission says that it and EU Member States took the lead in brokering a deal to align global financial flows with the objectives of the Paris Agreement. Through the adoption of a New Collective Quantified Goal (NCQG) for Climate Finance, the EU successfully broadened the global contributor base for climate finance. Parties agreed that the combined funding from all sources should reach at least \$1.3 trillion per year by 2035.

Within this broader target is a commitment by developed countries to take the lead on mobilising \$300 billion per year by 2035 for developing countries' climate action. There is no assigned share of this contribution for the EU or Member States, and decisions about how to meet these targets will lie with Member State Governments and the EU.

The EU Commission goes on to say that the EU negotiating team also successfully finalised the rules that will bring greater environmental integrity, transparency and accountability to international carbon markets under Article 6 of the Paris Agreement. These are intended to enable a costeffective reduction and removal of emissions.

During COP29 the EU joined a group of other ambitious countries in announcing its intention to present a 1.5°C-aligned NDC next year, setting the bar for other countries. To drive forward the clean energy transition, the Commission and the Beyond Oil and Gas Alliance announced a partnership on the transition away from fossil fuels.

The European Commission statement is at <u>ec.europa.eu/commission/presscorner/detail/en/ip_24_6043</u>.

Budapest Declaration on New European Competitiveness Deal

On 8 November 2024, the European Council published a press release following the Budapest Declaration on the New European Competitiveness Deal. This states that 'the Leaders of the European Union are determined to ensure our common economic prosperity, boost our competitiveness, making the EU the first climate-neutral continent in the world and ensuring the EU's sovereignty, security, resilience and global influence.'

The statement welcomes the reports 'Much more than a market' by Enrico Letta and 'The future of European competitiveness' by Mario Draghi that identify critical challenges and make future-oriented recommendations,

saying that they provide a solid foundation on which the EU will ambitiously advance its work.

The Council stresses the need for decisive action, including ensuring industrial renewal and decarbonisation, and allowing the EU to remain an industrial and technological powerhouse. It also calls for Europe to be at the forefront of research and innovation globally, especially in disruptive technologies, and delivering on the objective of meeting the 3% GDP expenditure target on R&D by 2030. The dual objective of strategic energy sovereignty and climate neutrality by 2050 is another priority, as is building a more circular and resource-efficient economy and developing an integrated market for secondary materials, especially for critical raw materials.

The European Council press release can be found at <u>consilium.europa.eu/en/press/press-releases/2024/11/08/the-budapest-declaration</u>.

Publication of Directive on Ambient Air Quality and Cleaner Air for Europe

On 20 November 2024, the Directive on ambient air quality and cleaner air for Europe (recast) was published in the Official Journal of the European Union.

The key points of the AAQ Directive were set out upon its adoption by the European Council (see AECC News of 18 October 2024).

The Directive enters into force on the twentieth day following that of its publication in the Official Journal.

It can be found at <u>eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202402881</u>.

President von der Leyen Speech at Renewable Hydrogen Summit

On 7 November 2024, European Commission President Ursula von der Leyen spoke at the fourth Renewable Hydrogen Summit.

Ms von der Leyen started by pointing out that in the last year in the EU, 11 large-scale projects have moved from concept to construction, compared with two in the United States in the same period. She says this illustrates European leadership in renewable hydrogen, with investment in European hydrogen set to grow by 140% in 2024, with Europe contributing nearly a third of global investments in electrolysers.

The President goes on to say that Europe is leading in renewable hydrogen because it sets clear targets. Under the Renewable Energy Directive, at least 42% of hydrogen used in industry, and 29% in transport, must be renewable by 2030. If done right, she says this will be a game-changer, unlocking demand across the entire value chain, and encouraging hydrogen production to scale up across Europe.

Ms von der Leyen also points out that challenges remain, including to accelerate the creation of clean lead markets,



from steel and chemical producers to transport and energy storage providers. This will be a key part of the Clean Industrial Deal that the new European Commission will present in its first 100 days. This aims to prioritise the infrastructure needed to connect large-scale hydrogen projects with end users, tapping into Europe's renewables potential to bring it to industries to help them decarbonise. The President says this would significantly lower prices, not only for clean steel, cement, fuel and plastics, but also for fertilisers, glass, and a range of other hard-to-decarbonise sectors.

The President's speech can be read in full at ec.europa.eu/commission/presscorner/detail/en/speech245725.

Council Adoption of CoA Conclusions on EU Renewable Hydrogen Policy

On 5 November 2024, the European Council adopted conclusions on the special report of the Court of Auditors on the EU's industrial policy on renewable hydrogen. The conclusions welcome the report, call for swift implementation of the EU's regulatory framework, encourage development of an interconnected transportation network and call on the Commission to take measures that support both the competitiveness of EU industry and security of investment.

The report evaluates the Commission's effectiveness in creating the right conditions for the emerging renewable and low-carbon hydrogen markets. The report assesses EU's policy communications and legislative proposals (i.e. the Hydrogen Strategy of the EU, the REPowerEU Plan, the Renewable Energy Directive (RED III), the ReFuelEU Aviation Regulation, the FuelEU Maritime Regulation, the Net-Zero Industry Act and the Gas Package), as well as funding programmes aimed at developing the hydrogen value chain.

The conclusions urge the Commission to consider the recommendations of the European Court of Auditors' report and to follow up with coherent actions, while striking the right balance between ensuring a competitive edge for European industry on the one hand and investor security on the other.

The Council press release is at consilium.europa.eu/en/press/pressreleases/2024/11/05/hydrogen-council-calls-for-swift-implementation-of-eu-law.

Publication of European Commission Climate Action Progress Report

On 31 October 2024, the European Commission published its 2024 Climate Action Progress Report, showing that net EU greenhouse gas (GHG) emissions fell by 8.3% in 2023 compared to the previous year.

This is the largest annual drop in decades, with the exception of 2020 when COVID-19 led to emission cuts of 9.8%. Net GHG emissions are now 37% below 1990 levels, while GDP grew by 68% over the same period, showing the continued

decoupling of emissions and economic growth. The Commission says the EU remains on track to reach its commitment to reduce emissions by at least 55% by 2030.

Emissions from power and industrial installations covered by the EU Emissions Trading System saw a record 16.5% decrease in 2023. ETS sector emissions are now around 47.6% below 2005 levels and well on track to reach the 2030 target of -62%.

Buildings, agriculture, domestic transport, small industry and waste emissions (covered by the Effort Sharing Regulation) fell by around 2% in 2023. Reductions were driven by the buildings sector, decreasing by around 5.5%. Agricultural emissions fell by 2% while transport emissions fell by less than 1%.

The report says that continued action is necessary to ensure that the EU meets its 2030 targets and sets itself on the right path to achieve its future 2040 target, and the 2050 goal of net zero emissions.

The Commission states that the past year has seen productive engagement by the EU with its international partners to enhance climate action, most notably at COP28 in Dubai. At COP28, the Parties concluded the first Global Stocktake under the Paris Agreement, with decisions on accelerating action by 2030 and beyond, including the transition away from fossil fuels, tripling renewable energy capacity globally and doubling the global average annual rate of energy efficiency improvements by 2030. It says that the EU must also continue its international engagement, starting with COP29 next month, to ensure that its international partners are also taking the necessary action.

The report can be downloaded from ec.europa.eu/commission/presscorner/detail/en/ip_24_5605.

EEA Trends and Projections Report

On 31 October 2024, the European Environment Agency (EEA) published its Trends and Projections report.

This says that in 2023, EU total net greenhouse gas emissions decreased to 37% below 1990 levels according to preliminary figures. After two years of slower progress against the backdrop of recovery from the COVID crisis and impact of the energy crisis, EEA says the EU is resuming its strong downward trajectory in emissions, moving towards climate neutrality. At the same time, sustained progress will be needed towards 2030 and beyond.

Based on reported existing climate measures alone, Member State projections forecast a reduction in net emissions by 2030 to a level 43% below 1990 levels. However, 22 Member States have submitted additional projections that include planned but not yet launched measures. Together, these would reduce net emissions in the EU by 49% below 1990 levels in 2030, in the target scope of the EU Climate Law. Updates to national energy and climate plans — where several Member States have yet to submit their revised plans — offer an opportunity to implement additional measures to



bridge the gap towards the target. An initial European Commission estimate of the plans submitted so far confirm an increased collective ambition level and a reduction of the gap.



The report says the accelerating decarbonisation of the European economy has only been possible due to the rapid expansion of renewable energy, paired with the reduced use of fossil fuels. According to EEA estimates, the share of renewable energy has grown from 10% in 2005 to an estimated 24% of the EU's gross final energy consumption by 2023. Further, the EU has managed to continue reducing its energy consumption: primary energy use has fallen by 19% since 2005, while final energy consumption saw a 11% reduction during the same timeframe, according to early estimates for 2023.



Europe's emission reductions vary across its economic sectors. In the energy supply sector, emissions have halved compared to 2005 levels. The industrial sector has also seen significant reductions of more than a third over the last two

decades thanks to process improvements and efficiency gains.

However, the situation is different for the sectors covered by the Effort Sharing Regulation (ESR) which has national reduction targets. These mainly include emissions from buildings, transport, waste and agriculture. While the buildings sector has achieved an important reduction in emissions — with a drop of over 30% since 2005 — the transport and agriculture sectors have shown slower progress. EEA says this indicates the need for a shift to sustainable transport modes, and to implement further measures to unlock the emission reduction and carbon removal potential of the agriculture sector.

The EEA report is available to download from eea.europa.eu/en/newsroom/news/eea-trends-and-projections.

EEA Report on Chronic Respiratory Disease

On 7 November 2024, the European Environment Agency (EEA) published a report titled 'Beating chronic respiratory disease: the role of Europe's environment'.

The report points out that environmental risk factors are estimated to cause almost 80 000 early chronic respiratory disease-related deaths in Europe each year. Key environmental risk factors include air pollution (14% of chronic respiratory disease-related deaths), cold and heat (11%), occupational exposure, such as exposure to extreme temperatures, dust or chemicals (8%), and second-hand smoke (3%).

The EEA report notes that these environmental factors are generally inherently preventable, but it is difficult for individuals to fully protect themselves. This highlights the importance of ensuring robust policies, their full implementation and effective financing across European, national and regional scales.

Key interventions to reduce the burden of chronic respiratory disease in Europe include improving air quality, addressing energy poverty, and adapting to climate change, the EEA report states. Combined with fully enforcing tobacco regulations and reducing occupational exposures, these interventions could largely prevent a major share of premature deaths from chronic respiratory disease arising from environmental factors in Europe.

Looking specifically at air pollution, the report says emissions of all key air pollutants in the EU-27 declined between 2000 and 2022. Though less emissions do not translate automatically into reduced air pollution, this decline has led to a decrease in concentrations of all major air pollutants, except for ozone (O_3) . Lower levels of exposure have translated into a decrease in health impacts from air pollution, including respiratory disease.

However, despite progress, there remains a significant shortfall in achieving safe air quality levels across Europe. Air pollution remains a major health concern for European residents. In 2021, EU Member States saw 253 000 deaths



from exposure to PM2.5; 52 000 from exposure to nitrogen dioxide (NO₂); as well as 22 000 from short-term exposure O₃. The report says these deaths could have been avoided by meeting WHO recommendations on air pollution.

It goes on to summarise what the EU is doing about air pollution, basing its clean air policy on three main pillars: the National Emission reduction Commitments (NEC) Directive; legislation for key sources of air pollution; and the ambient air quality directives, which set air quality standards. Under the European Green Deal's zero pollution action plan, the European Commission set the interim 2030 goal of reducing the number of premature deaths caused by PM2.5 by at least 55%, compared with 2005 levels. The ultimate objective is for air pollution to have no significant impact on health by 2050.

To this end, the Commission published a proposal to review the ambient air quality directives in 2022. The revised directive was adopted in October 2024. It sets new air quality standards for pollutants to be reached by 2030 which are more closely aligned with the WHO air quality guideline levels. In the international context, EU Member States work closely with other UN Economic Commission for Europe (UNECE) member countries to control international air pollution the Convention on under Long-Range Transboundary Air Pollution. Moreover, under the European Climate Law, EU countries must cut greenhouse gas emissions by at least 55% by 2030. Since most CO₂ comes from the same sources as other air pollutants, efforts to reduce CO₂ will contribute to improving air quality.

The EEA report can be found at <u>eea.europa.eu/en/analysis/publications/beating-chronic-respiratory-disease</u>.

Confirmation of UK ICE Phase-out

On 31 October 2024, the UK Government confirmed its commitment to phasing out new cars that rely solely on internal combustion engines by 2030 and that from

2035 all new cars and vans sold in the UK will be zero emission.

The government says it is building on this by investing over £200 million in 2025-26 to accelerate EV chargepoint rollout, providing £120 million in 2025-26 to support the purchase of new electric vans, and maintaining tax incentives to purchase electric cars through Vehicle Excise Duty First Year Rates and the Company Car Tax regimes.

The announcement is in its budget document (p78) at assets.publishing.service.gov.uk/media/672b9695fbd69e1861921c63/A utumn_Budget_2024_Accessible.pdf.

NORTH AMERICA

US EPA Automotive Trends Report

On 25 November 2024, the US Environmental Protection Agency (EPA) published its annual Automotive Trends

Report, summarising information about new light-duty vehicle greenhouse gas emissions, fuel economy, technology data, and auto manufacturers' performance in meeting the agency's greenhouse gas (GHG) emissions standards.

The report shows that the downward trend for the average new vehicle real-world CO_2 emission rate continued in model year 2023. The average model year 2023 vehicle produced 319 grams per mile (g/mi) of CO_2 , which is 18 g/mi less than the previous model year, and the lowest emission rate on record. Real-world fuel economy increased by 1.1 mpg to a record high 27.1mpg.

Figure ES-1. Estimated Real-World Fuel Economy



Many factors are responsible for decreasing new vehicle CO_2 emissions, including increased production of a wide range of technologies. This includes increased production of battery electric vehicles (BEVs) and plug-in hybrids (PHEVs) which have noticeably influenced the overall trends. Without BEVs and PHEVs, the average new vehicle real-world CO_2 emission rate was 38 g/mi higher, and the year over year improvement in model year 2023 was only 1.4 g/mi.

In model year 2023, compared to model year 2022, the four largest vehicle types continued their trends of reduced CO_2 emissions and increased fuel economy. Minivan/vans, which accounted for less than 3% of new vehicle production in model year 2023, had CO_2 emissions that were unchanged.



Most notable is the 60 g/mi, or 24%, reduction in the average new vehicle real-world CO_2 emissions within car SUVs. This improvement in CO_2 emissions stems from the influx of BEVs within car SUVs, with BEVs now accounting for 36% of all MY 2023 car SUVs. The car SUV vehicle type now has the lowest average new vehicle CO_2 emissions.



The report also analyses emissions and fuel economy by manufacturer, taking int consideration how they achieve compliance, whether by technology improvements, credit strategies or a combination of both.

The EPA report can be downloaded from epa.gov/automotive-trends/download-automotive-trends-report#Summary.

CARB Low Carbon Fuel Standards

On 8 November 2024, the California Air Resources Board (CARB) approved updates to the Low Carbon Fuel Standard (LCFS) that channel global, national and local private sector investment towards increasing cleaner fuel and transportation options for consumers, accelerating the deployment of zero-emission infrastructure, and keeping the state on track to meet legislatively mandated air quality and climate targets.

The LCFS reduces air pollution and greenhouse gas emissions by setting a declining carbon intensity target for transportation fuels used in California; producers that do not meet established benchmarks buy credits from those that do. CARB says this system has generated \$4 (€3.79) billion in annual private sector investment toward a cleaner transportation sector. These investments are said to provide multiple economic benefits to Californian consumers, including increased choice, attracting investments that support jobs, reducing dependence on fossil fuels, making electric vehicles more affordable, expanding access to electric vehicle charging and hydrogen refuelling infrastructure, and reducing the health impacts and health care costs associated with air pollution from fossil fuels.

The updates set targets to reduce the carbon intensity of California's transportation fuel pool by 30% by 2030 and by 90% by 2045. The amendments also increase support for zero-emissions infrastructure, including for medium- and

heavy-duty vehicles, and make more transit agencies eligible to generate credits.



CARB claims the LCFS has been very effective to date, reducing the carbon intensity of California's fuel mix by almost 13% and displacing 70% of the diesel used in the state with cleaner alternatives.

California Fuel Mix Is Evolving



The CARB press release is at

arb.ca.gov/news/carb-updates-low-carbon-fuel-standard-increaseaccess-cleaner-fuels-and-zero-emission.

CARB's presentation of proposed amendments is at arb.ca.gov/sites/default/files/barcu/board/books/2024/11070824/24-6-2pres.pdf.

GENERAL

Global Carbon Budget Report

On 13 November 2024, the Global Carbon Project published its annual Global Carbon Budget report showing changes in CO_2 emissions.

The 2024 Global Carbon Budget projects fossil CO_2 emissions of 37.4 billion tonnes, up 0.8% from 2023. Despite the need to cut emissions to slow climate change, the researchers say there is still "no sign" that the world has reached a peak in fossil CO_2 emissions. With projected emissions from land-use change (such as deforestation) of 4.2 billion tonnes, total CO_2 emissions are projected to be 41.6 billion tonnes in 2024, up from 40.6 billion tonnes last year.Over the last 10 years, fossil CO_2 emissions have risen while land-use change CO_2 emissions have declined on average – leaving overall emissions roughly level over that period.



This year, both fossil and land-use change CO₂ emissions are set to rise, with drought conditions exacerbating emissions from deforestation and forest degradation fires during the El Niño climate event of 2023-2024.

Globally, emissions from different fossil fuels in 2024 are projected to increase: coal (0.2%), oil (0.9%), gas (2.4%). These contribute 41%, 32% and 21% of global fossil CO2 emissions respectively. Given the uncertainty in the projections, it remains possible that coal emissions could decline in 2024.

This study estimates the remaining 'carbon budget before the 1.5°C target is breached consistently over multiple years, not just for a single year. At the current rate of emissions, the Global Carbon Budget team estimates a 50% chance global warming will exceed 1.5°C consistently in about six years. This estimate is subject to large uncertainties, primarily due to the uncertainty of the additional warming coming from non-CO₂ agents (e.g., CH₄, N₂O, aerosols).

The report is available to read at <u>globalcarbonbudget.org/fossil-fuel-co2-emissions-increase-again-in-2024</u>.

RESEARCH SUMMARY

Effects of Emissions and Pollution

Ambient air pollution, urban green space and childhood overweight and obesity: A health impact assessment for Barcelona, Spain, Huyen Nguyen Thi Khanh, et al.; *Environmental Research* (January 2025), Vol. 264, Part 1, 120306, <u>doi: 10.1016/j.envres.2024.120306</u>.

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Impact assessment of local traffic interventions on disease burden: A case study on paediatric asthma incidence in two European cities, Bram Vandeninden, et al.; *Journal of Transport & Health* (February 2025), Vol. 40, 101953, <u>doi: 10.1016/j.jth.2024.101953</u>.

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High time resolution quantification of PM2.5 oxidative potential at a Central London roadside supersite, Steven Campbell, et al.; *Environment International* (November 2024), Vol. 193, 109102, <u>doi:</u> 10.1016/j.envint.2024.109102.

NOx reduction scenarios under real-world driving conditions for lightduty diesel vehicles, Jisu Park, et al.; *Transportation Research Part D: Transport and Environment* (November 2024), Vol. 136, 104467, <u>doi:</u> <u>10.1016/j.trd.2024.104467</u>.

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Particle emission and thermal efficiency analysis of a diesel vehicle using biodiesel and a platinum metallic partial-flow particulate filter, Huy Quang Dang, et al.; *Alexandria Engineering Journal* (January 2025), Vol. 112, pp 538-550, <u>doi: 10.1016/j.aej.2024.10.091</u>.

Research on Particle Emissions of Light-duty Hybrid Electric Vehicles in Real Driving, Yangyu Yao, et al.; *Atmospheric Pollution Research* (in press), doi: 10.1016/j.apr.2024.102332.

Light-duty gasoline vehicle emission deterioration insights from largescale inspection/maintenance data: The synergistic impact of usage characteristics, Xiangrui Meng, et al.; *Environment International* (November 2024), Vol. 193, 109119, doi: 10.1016/j.envint.2024.109119.

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On-road measurement of post-catalyst ammonia emissions from gasoline and hybrid vehicles using quantum cascade laser detector, Ruonan Li, et al.; *Environmental Pollution* (January 2025), Vol. 364, 125319, doi: 10.1016/j.envpol.2024.125319.

Hazardous gas emissions from drop-in biofuels: mutagenicity, cytotoxicity, and unregulated pollutants, Carolina Mendoza, et al.; *Journal of Hazardous Materials* (in press), <u>doi:</u> 10.1016/j.jhazmat.2024.136696.

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NOVEMBER 2024

FORTHCOMING CONFERENCES

8th European Conference on Results from Road Transport Research Projects (RTR) 11-13 February, Brussels, Belgium <u>rtrconference.eu</u>

International Automotive Recycling Congress 19-21 March 2025, Antwerp, Belgium events.icm.ch/event/IARC2025

SAE WCX World Congress 8-10 April 2025, Detroit, USA wcx.sae.org

CITA General Assembly and International Conference <u>6-8 May 2025, Istanbul, Turkey</u> <u>cita2025.citainsp.org</u>

Heavy-Duty Sustainable Transport Symposium 7-8 May 2025, Gothenburg, Sweden sae.org/attend/heavy-duty-sustainable-transport-symposium

Vienna Motor Symposium 14-16 May 2025, Vienna, Austria oevk.eventsair.com/motorensymposium2025abstracts/en/Site/Register

Shanghai-Stuttgart Symposium 'Automotive and Powertrain Technology 22-23 May 2025, Shanghai, China <u>fkfs-veranstaltungen.de/veranstaltungen/shanghai-stuttgart-symposium</u>

SIA Powertrain 2025 11-12 June 2025, Port Marly, France sia.fr/evenements/376-powertrain-SIAPowertrain2025

ETH Nanoparticles Conference 16-19 June 2025, Zurich, Switzerland npc25.scg.ch/?idU=2

Stuttgart Internaitonal Symposium 2-3 July 2025, Stuttgart, Germany fkfs-veranstaltungen.de/en/events/stuttgart-symposium

International Conference on Electrolysis 25-29 August 2025, Freiburg, Germany ice2025.eu/?utm_source=newsletter

Aachen Colloquium Sustainable Mobility 6-8 October 2025, Aachen, Germany aachener-kolloquium.de/en