

# NEWSLETTER

International Regulatory Developments

## TABLE OF CONTENTS

|  |   |
|--|---|
| <b>EUROPE</b> .....  | 2 |
| Commission Recommendation for 2040 Emissions Reduction Target .....                | 2 |
| COREPER Meeting on Heavy-Duty CO <sub>2</sub> Emissions Agreement .....            | 2 |
| ENVI Vote on Heavy-Duty CO <sub>2</sub> Emissions Agreement .....                  | 3 |
| Provisional Trilogue Agreement on Review of Air Quality Directive .....            | 3 |
| Provisional Trilogue Agreement on On-Road Circulation of NRMM .....                | 4 |
| Commission Report on Transition Pathway for EU Mobility .....                      | 4 |
| Share of Renewables in Transport .....   | 4 |
| EEA Briefing on Just Transition .....  | 5 |
| <b>NORTH AMERICA</b> .....   | 5 |
| New US EPA Standards for PM <sub>2.5</sub> .....                                   | 5 |
| <b>ASIA-PACIFIC</b> .....  | 5 |
| Australian Proposed CO <sub>2</sub> Regulation for Light-Commercial Vehicles ..... | 5 |
| <b>UNITED NATIONS</b> .....  | 6 |
| UNEP Report on Used Heavy-duty Vehicles and the Environment .....                  | 6 |
| <b>GENERAL</b> .....   | 6 |
| ICCT Report on CO <sub>2</sub> Emissions from New Passenger Cars in Europe .....   | 6 |
| Zemo Report on Role of Renewable Fuels in meeting Net Zero .....                   | 7 |
| IEA Report on Indian Biofuel Use .....   | 7 |
| <b>RESEARCH SUMMARY</b> .....  | 8 |
| <b>FORTHCOMING CONFERENCES</b> .....   | 9 |

## EUROPE

### Commission Recommendation for 2040 Emissions Reduction Target

On 6 February 2024, the European Commission published a detailed impact assessment on possible pathways to reach the agreed goal of making the European Union climate neutral by 2050. Based on this impact assessment, the Commission recommends a 90% net greenhouse gas emissions reduction by 2040 compared to 1990 levels, launching a discussion with all stakeholders; a legislative proposal will be made by the next Commission, after the European elections, and agreed with the European Parliament and Member States as required under the EU Climate Law. This recommendation is in line with the advice of the European Scientific Advisory Board on Climate Change (ESABCC) and the EU's commitments under the Paris Agreement.

This communication also sets out a number of enabling policy conditions which are necessary to achieve the 90% target, including the full implementation of the agreed 2030 framework.

The Commission says that setting a 2040 climate target will help European industry, investors, citizens and governments to make decisions in this decade that will keep the EU on track to meet its climate neutrality objective in 2050.

Going into more detail, the Commission states that the starting point is the full implementation of the existing legislation to reduce emissions by at least 55% by 2030. The ongoing update of the draft National Energy and Climate Plans (NECPs) is a key element in monitoring progress and the Commission is engaging with Member States, industry and social partners to facilitate the necessary action.

It goes on to say that the Green Deal now needs to become an industrial decarbonisation deal that builds on existing industrial strengths, like wind power, hydropower, and electrolyzers, and continues to increase domestic manufacturing capacity in growth sectors like batteries, electric vehicles, heat pumps, solar PV, CCU/CCS, biogas and biomethane, and the circular economy.

The statement also says open dialogue with all stakeholders is a crucial precondition to delivering the clean transition. The Commission has already established formal dialogues with industry and agricultural stakeholders, and it sees the coming months of political debate in Europe as an important opportunity to secure public engagement on the next steps and policy choices.

According to the Commission, the energy sector is projected to achieve full decarbonisation shortly after 2040, based on all zero and low carbon energy solutions, including renewables, nuclear, energy efficiency, storage, CCS, CCU, carbon removals, geothermal and hydro. The transport sector

is expected to decarbonise through a combination of technological solutions and carbon pricing.

It says that reductions of CO<sub>2</sub> emissions from road transport will accelerate over time and will come with significantly improved air quality in cities through the deployment of zero emission vehicles driven by the CO<sub>2</sub> standards, more than quadrupling the electrification of the sector over 2031-2040.

The Commission adds that addressing barriers to the deployment of alternative low- and zero-emissions fuels (including e-fuels and advanced biofuels) in aviation and maritime and giving them priority access to these fuels over sectors that have access to other decarbonisation solutions, such as direct electrification, will enable these sectors to contribute to the EU's climate objectives and to the global climate agenda.

The Commission statement can be read in full at [ec.europa.eu/commission/presscorner/detail/en/ip\\_24\\_588](https://ec.europa.eu/commission/presscorner/detail/en/ip_24_588).

### COREPER Meeting on Heavy-Duty CO<sub>2</sub> Emissions Agreement

On 9 February 2024, EU Member States voted to adopt the provisional agreement on heavy-duty CO<sub>2</sub> emissions standards (see AECC News of 26 January 2024).

As regards CO<sub>2</sub> emission reduction targets for heavy trucks over 7.5t and coaches, the text backs the targets proposed by the Commission, namely a 45% reduction by 2030, 65% by 2035 and 90% by 2040.

Moreover, the target will be set at 7.5% for trailers and 10% for semi-trailers, with provisions introduced for 'e-trailers'. In addition, the agreement sets a 100% reduction target for new urban buses by 2035, with an interim target of 90% by 2030, while intercity buses will be placed under the general HDV targets for coaches and therefore exempt from this particular target.

The agreement instructs the Commission to review the amended Regulation in 2027. The review will assess the expansion of the scope to small lorries (under 5t), the role of a methodology for registering heavy-duty vehicles (HDVs) exclusively running on CO<sub>2</sub>-neutral fuels, the role of a carbon correction factor in the transition towards zero-emission HDVs as well as to evaluate the possibility of developing a common methodology for the assessment and reporting of the full lifecycle CO<sub>2</sub> emissions of new HDVs.

A non-binding recital, 13b, has been added for the Commission to assess within a year from entry into force 'the role of a methodology for registering HDVs exclusively running on CO<sub>2</sub> neutral fuels', following pressure from the German Transport Minister Wissing that Germany would abstain, similarly to the outcome for the light-duty vehicle standards.

German Environment Minister Ms Steffi Lemke described the outcome as "good news for climate protection and for

the transport transition.” She went on to call it a “sensible result that confirms the core of the well-balanced trilogue compromise.” In the German Environment Ministry (BMUV) statement, Ms Lemke went on to say that vehicle manufacturers are getting clarity with this decision, and that the new regulation was intended to be open to all suitable technologies.

A press release from BMUV (in German) is at [bmu.de/pressemitteilung/eu-mitgliedstaaten-machen-weg-frei-fuer-emissionsarme-lastwagen-und-busse](https://bmu.de/pressemitteilung/eu-mitgliedstaaten-machen-weg-frei-fuer-emissionsarme-lastwagen-und-busse).

The text of the provisional agreement is at [consilium.europa.eu/media/70136/hdvs\\_provisional-agreement.pdf](https://consilium.europa.eu/media/70136/hdvs_provisional-agreement.pdf).

## ENVI Vote on Heavy-Duty CO<sub>2</sub> Emissions Agreement

On 14 February, the ENVI Committee of the European Parliament voted on the provisional agreement on heavy-duty CO<sub>2</sub> emissions standards following the endorsement in COREPER (see above).

Members of the European Parliament in the ENVI Committee approved the provisional agreement with 43 votes in favour, 30 against and 1 abstention. The agreement should now be adopted by the European Parliament in plenary, which is provisionally foreseen in April.

Once the European Parliament has adopted its position at first reading, the Council is expected to adopt the Parliament's position without debate and the Regulation would be formally adopted. The Regulation would enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

The vote (starting at 12:05) can be replayed at [europarl.europa.eu/en/webstreaming/envi-committee-meeting\\_20240214-0900](https://europarl.europa.eu/en/webstreaming/envi-committee-meeting_20240214-0900).

The results of the vote are on page 3 at [europarl.europa.eu/cmsdata/280911/2024-02-14.pdf](https://europarl.europa.eu/cmsdata/280911/2024-02-14.pdf).

## Provisional Trilogue Agreement on Review of Air Quality Directive

On 20 February 2024, the European Council and European Parliament reached a provisional trilogue agreement on the review of the Air Quality Directive.

With the new rules, the co-legislators agreed to set out enhanced EU air quality standards for 2030 in the form of limit and target values that are closer to the WHO guidelines and that will be regularly reviewed. The revised directive covers a host of air-polluting substances. For instance, the annual limit values for the pollutants with the highest documented impact on human health, PM<sub>2.5</sub> and NO<sub>2</sub>, would be reduced from 25 µg/m<sup>3</sup> to 10 µg/m<sup>3</sup> and from 40 µg/m<sup>3</sup> to 20 µg/m<sup>3</sup> respectively.

The provisional agreement provides member states with the possibility to request, by 31 January 2029 and for specific

reasons and under strict conditions, a postponement of the deadline for attaining the air quality limit values: 1) until no later than 1 January 2040 for areas where compliance with the directive by the deadline would prove unachievable due to specific climatic and orographic conditions or where the necessary reductions can only be achieved with significant impact on existing domestic heating systems, or 2) until no later than 1 January 2035 (with possibility to extend it by two more years) if projections show that the limit values cannot be achieved by the attainment deadline. To request these postponements, member states will have to include air quality projections in their air quality roadmaps (to be established by 2028) demonstrating that the exceedance will be kept as short as possible and that the limit value will be met by the end of the postponement period at the latest.

In cases where a limit or target value is exceeded or there is a concrete risk of exceeding the alert or information thresholds for certain pollutants, the text requires member states to establish: 1) an air quality roadmap ahead of the deadline if between 2026 and 2029 the level of pollutants exceeds the limit or target value to be attained by 2030, 2) air quality plans for areas where the levels of pollutants exceed the limit and target values set out in the directive after the deadline, 3) short-term action plans setting out emergency measures (e.g. restricting the circulation of vehicles, suspending construction works, etc.) to reduce the immediate risk to human health in areas where the alert thresholds will be exceeded.

The provisionally agreed text calls on the European Commission to review the air quality standards by 2030 and every five years thereafter, in order to assess options for alignment with the recent WHO guidelines and the latest scientific evidence. Based on its review, the Commission should then put forward proposals to revise air quality standards, include other pollutants and/or propose further action to be taken at EU level.

The proposed directive sets out provisions to ensure access to justice for those who have a sufficient interest and want to challenge its implementation, including public health and environmental NGOs. Any administrative or judicial review procedure should be fair, timely and not prohibitively expensive, and practical information on this procedure should be made publicly available.

The European Council and Parliament will need to formally adopt the provisional trilogue agreement before it can be published in the Official Journal of the EU and enter into force.

The press release of the European Parliament is at [europarl.europa.eu/news/en/press-room/20240219IPR17816/air-pollution-deal-with-council-to-improve-air-quality](https://europarl.europa.eu/news/en/press-room/20240219IPR17816/air-pollution-deal-with-council-to-improve-air-quality).

The press release of the European Council is at [consilium.europa.eu/en/press/press-releases/2024/02/20/air-quality-council-and-parliament-strike-deal-to-strengthen-standards-in-the-eu](https://consilium.europa.eu/en/press/press-releases/2024/02/20/air-quality-council-and-parliament-strike-deal-to-strengthen-standards-in-the-eu).



## Provisional Trilogue Agreement on On-Road Circulation of NRMM

On 21 February 2024, 2024, the European Council and European Parliament reached a provisional trilogue agreement on the regulation on the approval and market surveillance of non-road mobile machinery (NRMM) circulating on public roads. The amended legislation creates harmonised road safety requirements for the circulation of self-propelled machinery (e.g. lawn mowers, harvesters or bulldozers) that needs to circulate on public roads and which, up to now, has been regulated by the member states. The regulation will replace the existing national regulatory regimes and will reduce costs, administrative burdens and delays for businesses.

The agreement reached creates a new category of vehicles (category U) for non-road mobile machinery, which will be added to the existing categories of vehicles (i.e., L for mopeds and motorbikes, M for passenger cars, and N for vans). The text also clarifies the different variants and types that will come under this new category, depending on criteria such as essential construction and design characteristics.

The provisional agreement reached needs to be endorsed and formally adopted by both institutions before it can be published and enter into force.

The press release of the Council is at [consilium.europa.eu/en/press/press-releases/2024/02/21/safer-roads-safer-workers-council-and-ep-provisional-deal-on-nrmm-regulation](https://consilium.europa.eu/en/press/press-releases/2024/02/21/safer-roads-safer-workers-council-and-ep-provisional-deal-on-nrmm-regulation).

## Commission Report on Transition Pathway for EU Mobility

On 29 January 2024, the Directorate-General on Internal Market, Industry, Entrepreneurship and SMEs (DG-GROW) of the European Commission published a report titled "Transition pathway for a green, digital, and resilient EU mobility industrial ecosystem".

DG-GROW says the EU mobility transition pathway is an actionable plan co-created by the Commission with national and regional authorities, industry stakeholders, NGOs and other interested parties. It identifies, based on a bottom-up approach, the challenges, opportunities, conditions and actions needed by all parties to lead the green and digital transition and improve the ecosystem's resilience, in line with the updated EU industrial strategy.

The mobility ecosystem covers the complete automotive, rail, waterborne and cycling value chains, including the related services, and is closely linked with other industrial ecosystems. It employs 17.6 million people and generates approximately €1.2 trillion contribution to the EU GDP (7.6% of EU total GDP).

The report defines several actions for each of the following building blocks: sustainable competitiveness, regulation/public governance, social dimension, skills,

R&I/technological solutions, infrastructure and investment/funding. See table below for the actions on the sustainable competitiveness of the automotive industry and regulatory framework.

| Topic 2: Sustainable competitiveness of the automotive industry   |                  |           |
|---|------------------|-----------|
| Actions   | Actors           | Timeframe |
| Accelerate diversification of value chain beyond manufacturing of internal combustion engine (ICE)-related components and related services                                      | Industry         | S         |
| Accelerate the development of software-defined vehicle technologies (e.g. automated driving, in-vehicle digital services)   | Industry         | S         |
| Accelerate the deployment of connected and automated vehicles   | Industry, MS, EU | M         |
| Monitor closely the EU-China competition (and EU-US in the light of Inflation Reduction Act) in partnership between EU, MS and stakeholders                                     | Industry/MS/EU   | S         |
| In the context of the #Route 35 platform, set milestones (incl. key performance indicators) for the transformation of the automotive industry and take further action as needed | Industry/MS/EU   | S         |
| Stimulate the demand for zero emission vehicles with incentives conditioned by sustainability and resilience criteria   | MS               | S/M       |

| Topic 6: Regulation   |        |           |
|---|--------|-----------|
| Actions   | Actors | Timeframe |
| <b>6.1. Legislative framework</b>   |        |           |
| Conduct comprehensive reviews of relevant legislation, with a view of ensuring the mobility ecosystem's green transition while protecting its competitiveness | EU/MS  | S/M       |

The publication of the report marks the start of the co-implementation process with stakeholders expected to make pledges in line with the actions identified. The European Commission will set up a Transition Pathway Stakeholder Support Platform to facilitate and monitor this process.

The report can be downloaded at [ec.europa.eu/docsroom/documents/57674](https://ec.europa.eu/docsroom/documents/57674).

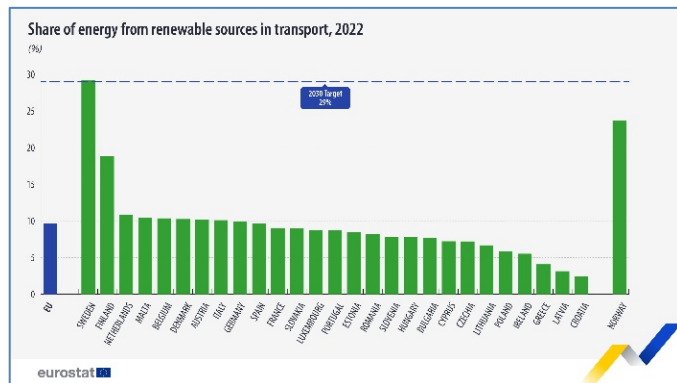
## Share of Renewables in Transport

On 5 February, Eurostat published data on the share of renewables in transport. Renewable energy sources consumed in transport include liquid biofuels (e.g. biodiesel complying with certain sustainability and greenhouse gas saving criteria), biomethane (i.e. gas from renewable origin) and the part of renewable electricity consumed in road and rail transport.

Eurostat says that, in 2022, the share of renewable energy sources in transport reached 9.6% at EU level, a 0.5 percentage points (pp) increase compared with 2021 (9.1%), but still 0.7 pp below the highest level ever reached in 2020 (10.3%). This means that a major push is required to meet the 29% target set for 2030 by the EU directive 2023/2413 (or the alternative target of 14.5% greenhouse gas intensity reduction).

Sweden (29.2%) is by far the EU country with the highest share of renewables in transport and has already achieved the 2030 target. Finland (18.8%) also shows a very high share. The two Nordic countries are followed by The

Netherlands, Malta, Belgium, Denmark, Austria, Italy, Germany and Spain, all of them with a share of around 10%. On the other hand, the lowest shares were registered in Croatia (2.4%), Latvia (3.1%), and Greece (4.1%). The largest increases from 2021 to 2022 were recorded in Germany (+1.9 pp), the Netherlands (+1.8 pp), and Hungary (+1.6 pp), but even if sustained until 2030 those rates are insufficient to reach the target.



The information is available to read at [ec.europa.eu/eurostat/en/web/products-eurostat-news/w/DDN-20240205-1](https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/DDN-20240205-1).

## EEA Briefing on Just Transition

On 28 February 2024, the European Environment Agency (EEA) published a briefing note on what is meant with a just transition to a sustainable future. It looks into how a shift to a greener, climate-neutral, circular economy will impact our society and describes how policies must be informed by concepts of justice and fairness if they are to succeed.

The briefing puts forward a framework to support the development of just and equitable sustainability transition policies that are informed by several types of justice. This includes, for example 'distributional' justice, which considers how costs and benefits are shared across our society as well as 'procedural' justice, which focuses on how 'fair' processes of decision making are.

The briefing notes that while EU policies such as the European Green Deal already set the direction for a more just and equitable transition, understanding of how this can be delivered together with environmental sustainability goals is still lacking. The study says better explanations and recommendations on how to design, put in place and evaluate policies to achieve just sustainability transitions for both society and the environment are needed. It also recommends a broad mix of tools and processes such as public participation, financial support, and job retraining to support change.

The briefing can be read at [eea.europa.eu/en/newsroom/news/what-does-a-just-transition](https://eea.europa.eu/en/newsroom/news/what-does-a-just-transition).

## NORTH AMERICA

### New US EPA Standards for PM2.5

On 7 February 2024, the US Environmental Protection Agency (EPA) finalised the annual health-based national ambient air quality standard for fine particulate matter (PM2.5), reducing it from a level of 12 micrograms per cubic metre to 9 micrograms per cubic metre.

The EPA says this is based on the best available science, as required by the Clean Air Act, and sets an air quality level that EPA will help states and Tribal Nations achieve over the coming years — including through complementary EPA standards to reduce pollution from power plants, vehicles, and industrial facilities. It states that since 2000, PM2.5 concentrations in the outdoor air have decreased by 42% while the U.S. Gross Domestic Product increased by 52% during that time.

Along with strengthening the primary annual PM2.5 standard, EPA is modifying the PM2.5 monitoring network design criteria to include a factor that accounts for proximity of populations at increased risk of PM2.5-related health effects to sources of air pollution.

The EPA's press release is available to read at [epa.gov/newsreleases/epa-finalizes-stronger-standards-harmful-soot-pollution-significantly-increasing](https://epa.gov/newsreleases/epa-finalizes-stronger-standards-harmful-soot-pollution-significantly-increasing).

## ASIA-PACIFIC

### Australian Proposed CO<sub>2</sub> Regulation for Light-Commercial Vehicles

On 4 February 2024, the Australian government, Department of Infrastructure and Transport, proposed to introduce a CO<sub>2</sub>/fuel efficient regulation for cars together with an impact assessment for three ambition level options.

The impact assessment says 'the Government's preferred settings for a new vehicle efficiency standard is to put in place arrangements by 2025 that mean we catch up to the US average vehicle emissions intensity by around 2028. This is an ambitious approach – but one that is required to give Australians more choice to use less petrol. This will deliver abatement of 369 million tonnes of CO<sub>2</sub> by 2050, and close to 100 million tonnes of CO<sub>2</sub> abatement by 2035.'

A public consultation is open until 4 March 2024.

More info is available at [infrastructure.gov.au/have-your-say/new-vehicle-efficiency-standard-cleaner-cheaper-run-cars-australia](https://infrastructure.gov.au/have-your-say/new-vehicle-efficiency-standard-cleaner-cheaper-run-cars-australia).

## UNITED NATIONS

### UNEP Report on Used Heavy-duty Vehicles and the Environment

On 22 February 2024, the United Nations Environment Programme (UNEP) published a report titled 'Used Heavy-Duty Vehicles and the Environment: A Global Overview of Used Heavy-Duty Vehicles: Flow, Scale and Regulation'.

The report analyses the flow and scale of used heavy-duty vehicles (HDVs) from three major used HDV exporters – Japan, the European Union (EU) and Republic of Korea (ROK). It also reviews the regulatory environment for used HDV import in 146 countries, 122 of which are low- and middle-income countries.

The report mentions China's share of used HDV exports was only 8% in 2020, while China manufactures 67% of global HDVs. This is changing rapidly as the policy to expand used vehicle exports is being implemented and from 2022 more than 30 cities in China have been approved to export used vehicles globally. The EU on the other hand exported about 46% of used HDVs (2020) while contributing to about 6% of global HDV manufacturing. Thus, while the worldwide HDV manufacturing market shifted from Western Europe and North America to emerging economies in the last two decades, used HDV exporters are primarily high-income economies.

The report is available at [unep.org/resources/report/used-heavy-duty-vehicles-and-environment-global-overview-used-heavy-duty-vehicles](https://unep.org/resources/report/used-heavy-duty-vehicles-and-environment-global-overview-used-heavy-duty-vehicles).

## GENERAL

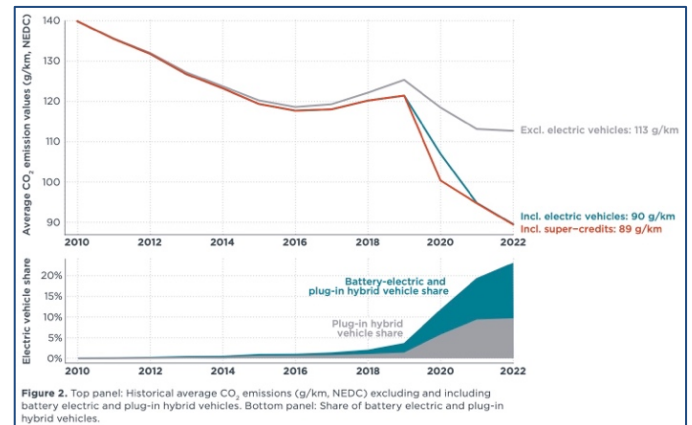
### ICCT Report on CO<sub>2</sub> Emissions from New Passenger Cars in Europe

On 6 February 2024, the International Council on Clean Transportation (ICCT) published a briefing on CO<sub>2</sub> emissions from new passenger cars in Europe in 2022. This is based on a preliminary dataset released by the European Environment Agency (EEA).

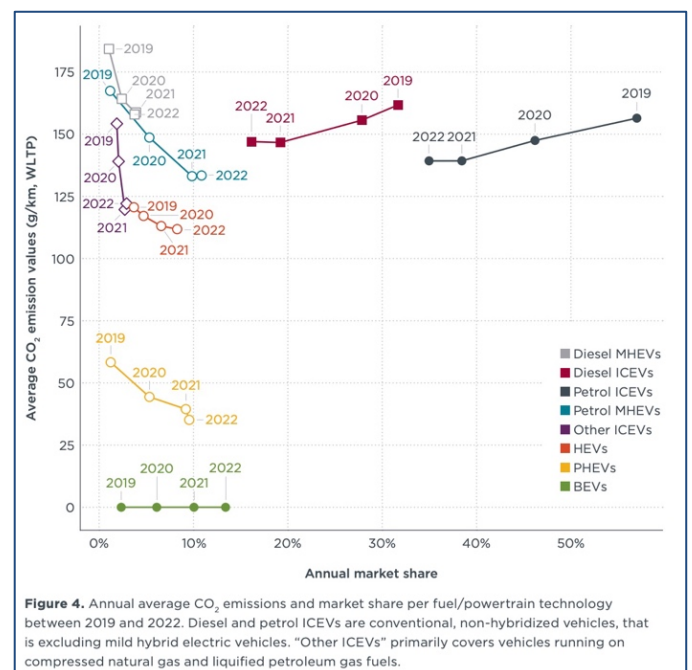
The dataset shows that the 9.48 million new passenger cars sold in the European Economic Area in 2022 had average CO<sub>2</sub> emissions of 108 g/km determined following the Worldwide Harmonized Light Vehicles Test Procedure (WLTP), which is approximately 6 g/km lower than average emissions in 2021.

In the report, ICCT shows the historical fleet average, NEDC-equivalent CO<sub>2</sub> emission performance when excluding battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs) in comparison with the emissions when including all vehicles and when including the effect of super-credits. The data shows that the CO<sub>2</sub> emissions of combustion engine vehicles, including hybrid vehicles, have not declined since 2021 and remain at about 113 g/km. Fleet average CO<sub>2</sub> reductions from 2021 to 2022 are almost

entirely due to the growing share of BEVs and PHEVs, which lowered the fleet average type-approval CO<sub>2</sub> emissions by 23 g/km to 90 g/km in 2022.



ICCT also shows the development of the market shares and average NEDC-equivalent CO<sub>2</sub> emissions of different fuel and powertrain technologies. Vehicles of all powertrains and fuel combinations saw declining CO<sub>2</sub> emissions in the years 2019–2021. For ICEVs and HEVs, the CO<sub>2</sub> emissions stabilised in 2022 at the 2021 level or saw a slight increase compared to 2021. The market shares of diesel and petrol ICEVs have reduced substantially since 2019. Growth of the diesel mild hybrid electric vehicle (MHEV) share stalled in 2022, and the petrol MHEV share grew at a much lower rate between 2021 and 2022 compared to previous years. The PHEV share growth also slowed substantially in the last year, whereas the BEV share continued its rapid increase.



ICCT concludes by saying that while the focus of the EU CO<sub>2</sub> emission standards is on official type-approval emissions, it

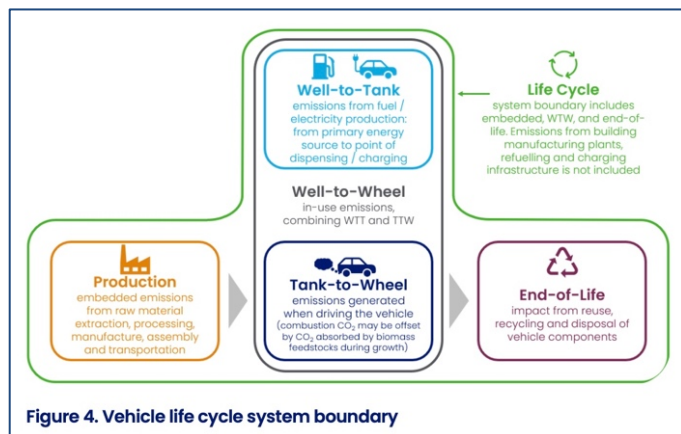


is important to ensure that real-world emissions decrease over time at least at the same rate. It also states that real-world emissions are substantially higher than the official values presented in this briefing.

The ICCT briefing is available to read at [theicct.org/wp-content/uploads/2024/02/ID-102-%E2%80%93-EEA-OEM-briefing\\_final.pdf](https://theicct.org/wp-content/uploads/2024/02/ID-102-%E2%80%93-EEA-OEM-briefing_final.pdf).

## Zemo Report on Role of Renewable Fuels in meeting Net Zero

On 17 January 2024, the Zemo Partnership published a vehicle life cycle greenhouse gas (GHG) emissions study to show the role of renewable fuels in meeting net zero.



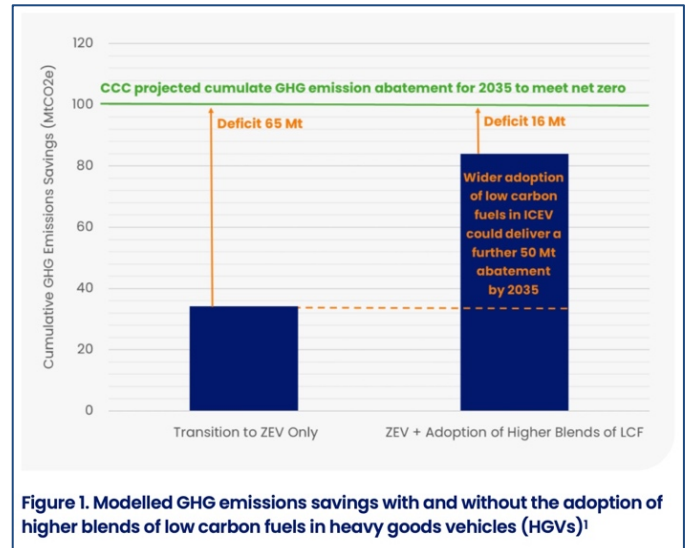
Zemo's analysis shows that in all vehicle segments modelled, renewable fuels offer significant GHG emissions savings when compared with conventional, predominantly fossil-content fuels. According to the report, some renewable fuels applications show greater life cycle GHG emissions savings than current battery electric vehicles using grid electricity, though 'rapid decarbonisation of UK power supplies will continue to shift the balance in favour of electrification over time.'

The study authors recommend that transport policy and legislation should be more directly informed by vehicle life cycle GHG emissions data, and not focused solely on mitigating tailpipe emissions. They add that a one-size-fits-all approach to road vehicle applications is unlikely to be the optimal solution to road transport decarbonisation, at least in the short to medium term.

Zemo also says that organisations developing their fleet decarbonisation strategies should also consider vehicle life cycle GHG emissions, as 'In some circumstances, 'renewable fuels can achieve greater GHG emissions savings for the available budget than battery electric vehicles.'

The report's message to operators of electric vehicles is that they should also consider the size and capacity of the batteries used in their vehicles and optimise these depending on the use case. It concludes that larger, heavier batteries offer improved vehicle range, but emit more GHG emissions

during production, increase vehicle consumption and may also reduce payload capacity.



The report, and a link to an upcoming webinar, are at [zemo.org.uk/news-events/news,new-study-shows-significant-greenhouse-gas-savings-can-be-made-by-switching\\_4603.htm](https://zemo.org.uk/news-events/news,new-study-shows-significant-greenhouse-gas-savings-can-be-made-by-switching_4603.htm).

## IEA Report on Indian Biofuel Use

On 7 February 2024, the International Energy Agency (IEA) published a report on India's production and consumption of biofuels.

IEA says India has quickly joined the ranks of major biofuel producer and consumer thanks to a set of coordinated policies, high-level political support, and an abundance of feedstocks. Over the next five years it has the potential to nearly triple consumption and production by removing roadblocks to higher ethanol blends and diversifying biofuel use to replace diesel and jet fuel. However, it will need to keep an eye on costs, feedstock sustainability and deploy supportive policies to other biofuels beyond ethanol.

The report adds that India has another opportunity to boost global biofuel deployment as well through the Global Biofuels Alliance, which it launched in 2023 with leaders from eight other countries. Last year the IEA released "Biofuel Policy in Brazil, India and the United States: Insights for the Global Biofuel Alliance" to support the GBA's development. In it the IEA recommends the GBA focus on developing new and existing markets since over 80% of production is concentrated in four regions: the United States, Brazil, Europe and Indonesia, which account for only half of global transport fuel demand. IEA also recommends accelerating technology deployment and commercialisation and seeking consensus on performance-based sustainability assessments.

The IEA report can be found at [iea.org/commentaries/india-could-triple-its-biofuel-use-and-accelerate-global-deployment](https://iea.org/commentaries/india-could-triple-its-biofuel-use-and-accelerate-global-deployment).

## RESEARCH SUMMARY

### Effects of Emissions and Pollution

Exploring the triple burden of social disadvantage, mobility poverty, and exposure to traffic-related air pollution, Junshi Xu, et al.; *Science of The Total Environment* (April 2024), Vol. 920, 170947, [doi: 10.1016/j.scitotenv.2024.170947](https://doi.org/10.1016/j.scitotenv.2024.170947).

Differential pulmonary toxicity and autoantibody formation in genetically distinct mouse strains following combined exposure to silica and diesel exhaust particles, Lisa Janssen, et al.; *Particle and Fibre Toxicology* (2024), Vol. 21, Article number: 8, [doi: 10.1186/s12989-024-00569-7](https://doi.org/10.1186/s12989-024-00569-7).

### Air Quality, Sources and Exposure

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### Emissions Control, Catalysis, Filtration

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## FORTHCOMING CONFERENCES

### On-Board Diagnostics Symposium - Europe

12-14 March 2024, Amsterdam, Netherlands

[sae.org/attend/obd-europe/registration](https://sae.org/attend/obd-europe/registration)

### VERT Forum

22 March 2024, Dübendorf, Switzerland

[vert-dpf.eu/j3/index.php/start-page/events](https://vert-dpf.eu/j3/index.php/start-page/events)

### 10<sup>th</sup> AVL High Power Systems Conference

17-18 April 2024, Graz, Austria

[avl.com/en/events/avls-10th-high-power-systems-conference?sfmc\\_id=120623423](https://avl.com/en/events/avls-10th-high-power-systems-conference?sfmc_id=120623423)

### 45<sup>th</sup> International Vienna Motor Symposium

24-26 April 2024, Vienna, Austria

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

### SIA High Performance Hydrogen Internal Combustion Engine

16 May 2024, Orléans, France

[sia.fr/evenements/346-high-performance-hydrogen-internal-combustion-engine](https://sia.fr/evenements/346-high-performance-hydrogen-internal-combustion-engine)

### 27<sup>th</sup> ETH Nanoparticles Conference

10-14 June 2024, Zürich, Switzerland

[npc24.scg.ch/?idU=4](https://npc24.scg.ch/?idU=4)

### Fuel Science: From Production to Propulsion

11-13 June 2024, Aachen, Germany

[tme.rwth-aachen.de/cms/TME/Der-Lehrstuhl/Aktuelle-Veranstaltungen/~pmdn/12-FSC-Konferenz-2024/?lidx=1](https://tme.rwth-aachen.de/cms/TME/Der-Lehrstuhl/Aktuelle-Veranstaltungen/~pmdn/12-FSC-Konferenz-2024/?lidx=1)

### Cambridge Particle Meeting

17 June 2024, Cambridge, UK

[cambridgeparticlemeeting.org](https://cambridgeparticlemeeting.org)

### SIA Powertrain International Conference

19-20 June 2024, Lille, France

[event.fourwaves.com/79651605-96c9-454f-9129-fe5986450f40/pages](https://event.fourwaves.com/79651605-96c9-454f-9129-fe5986450f40/pages)

### CLEPA Materials Regulations and Sustainability Event

27-28 June 2024, Frankfurt, Germany

[clepa.eu/events/clepa-materials-regulations-and-sustainability-event-2024](https://clepa.eu/events/clepa-materials-regulations-and-sustainability-event-2024)

### Stuttgart International Symposium on Automotive and Engine Technology

2-3 July 2024, Stuttgart, Germany

[fkfs-veranstaltungen.de/index.php?id=100](https://fkfs-veranstaltungen.de/index.php?id=100)

### New Materials for future Mobility (NeMMo)

3-4 July 2024, Nantes, France

[sia.fr/evenements/?year=2024](https://sia.fr/evenements/?year=2024)

### International Congress on Catalysis

14-19 July 2024, Lyon, France

<https://www.icc-lyon2024.fr>

### Thermo- and Fluid Dynamics Processes for Clean Propulsion Powerplants

10-13 September 2024, Valencia, Spain

[cmt.upv.es/#/thiesel2024](https://cmt.upv.es/#/thiesel2024)

### Rostock Large Engine Symposium

12-13 September 2024

[rgmt.de](https://rgmt.de)

## Emissions Analytics Non-Road Powertrains and Fuels

18-19 September 2024, Munich, Germany

[conferences.emissionsanalytics.com/nonroad-eu](https://conferences.emissionsanalytics.com/nonroad-eu)

**Deadline for abstracts 5 April 2024**

## SAE Conference on Sustainable Mobility

18-20 September 2024, Catania, Italy

[universitacusano.com/csm2024](https://universitacusano.com/csm2024)

## Aachen Colloquium Sustainable Mobility

7-9 October 2024, Aachen, Germany

[aachener-kolloquium.de/en](https://aachener-kolloquium.de/en)

## POLIS Conference 2024

27-28 November 2024, Karlsruhe, Germany

[polisnetwork.eu/2024-annual-polis-conference](https://polisnetwork.eu/2024-annual-polis-conference)