

# 5-Min Monthly Read September 2025

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## Collaboration and Strategy Drive the Conversation at SAE COMVEC 2025

SAE COMVEC, the U.S.'s premier commercial vehicle event, brings together experts across trucking, agriculture, construction, rail, and marine sectors to discuss the future of heavy-duty transport. Amid unprecedented industry shifts and emerging deregulatory pressures, leaders are rethinking product strategies while advancing technologies like hybridization, AI/ML, connectivity, and low-carbon fuels—driving innovation through smart collaboration. [Read More](#)



## Europe's Truck Makers Near 2025 CO<sub>2</sub> Targets

ICCT's new analysis shows that five of Europe's seven largest truck makers are on track to meet the EU's CO<sub>2</sub> standard for heavy-duty vehicles: a 15% cut from 2019 levels by 2025. Scania and Volvo reached compliance as early as 2023, while others like Renault and DAF will lean on credits and flexibilities. Daimler and Iveco face steeper challenges, requiring greater efficiency gains or zero-emission truck sales.

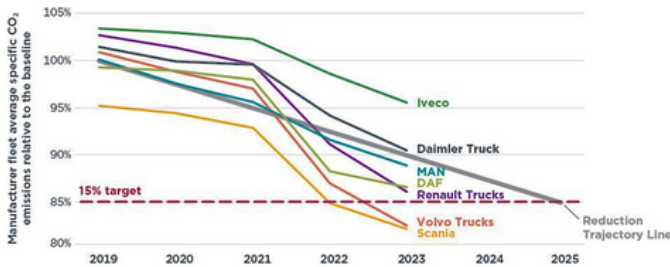


Figure. Fleet-average specific CO<sub>2</sub> emissions for HDV manufacturers, 2019–2023

So far, reductions have come mainly from improved diesel efficiency rather than large-scale electrification, with ZE trucks still below 2% of new sales. Meeting tougher 2030–2040 targets (up to a 90% cut) will demand a rapid pivot to zero-emission technologies or massive fines for non-compliance. Read the full report [here](#).

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## CARB Acts to Protect Vehicle Emissions Standards



The California Air Resources Board (CARB) has adopted an emergency rule to address legal uncertainty stemming from recent federal actions that challenge California's authority to implement its latest vehicle emissions standards. The rule reinstates earlier requirements as a safeguard, providing automakers with regulatory clarity while keeping the option to enforce stricter standards if upheld in court. CARB notes that the measure introduces no new compliance costs but is vital to maintaining air quality protections and market stability. Read the Official Notice Here



The EPA is not happy - it has submitted a letter stating that the "EPA is deeply troubled by recent statements from CARB, including in the proposed rule materials", and reminding CARB to submit any final regulation from this emergency rule to the Agency for approval.

## Air Pollution Linked to Dementia Risk

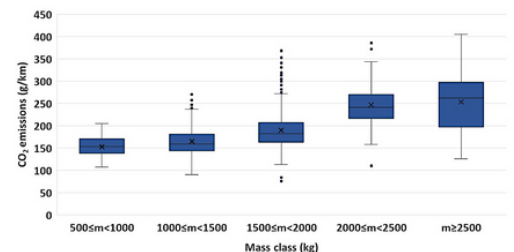
A new Johns Hopkins-led study of 56.5 million U.S. Medicare patients finds that long-term exposure to fine particulate matter (PM<sub>2.5</sub>) significantly increases the risk of Lewy body dementia, a severe neurodegenerative disease. Supporting lab research shows PM<sub>2.5</sub> triggers toxic protein clumps in the brain, offering a biological explanation for the link.



The findings highlight air pollution as not just a respiratory and cardiovascular hazard but also a public health and brain health issue. Researchers stress that stronger clean air policies could help lower dementia risk nationwide.

## Vehicle Weight and Emissions: Oxford Study

A new Oxford study on over 1,000 vehicles shows that heavier cars emit more CO<sub>2</sub>, making weight a useful metric for carbon regulation. However, mass is a poor predictor of pollutants like NO<sub>x</sub>, PM, and non-regulated emissions, which require targeted controls.



Co<sub>2</sub> emissions from different IC engine vehicle mass classes for 1,190 vehicles

Mass-based rules can help cut CO<sub>2</sub> emissions by encouraging lighter vehicles, but stronger standards for aftertreatment, fuel quality, and oversight are essential to curb other pollutants.

## India Drafts 2027 Fuel Efficiency Norms for Passenger Cars



As if taking cues from the above study, India has issued a revised draft of the CAFE norms for 2027–2032, introducing a separate classification for small cars, along with concessions such as a 3g-CO<sub>2</sub>/km deduction.

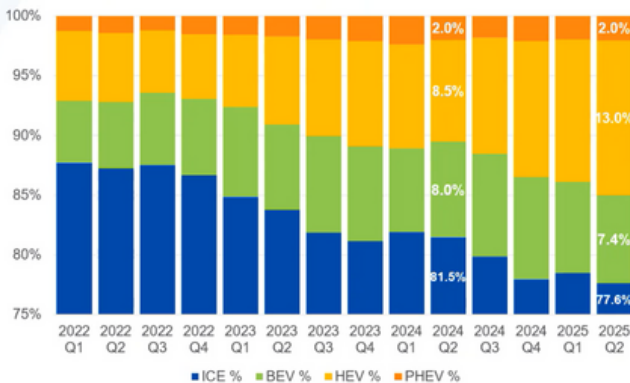
The draft also broadens incentives for flex-fuel and strong hybrid vehicles, and outlines detailed rules on compliance, testing procedures, and exemptions. The draft is now open for 21 days of public consultation.

In a related move, the recent reduction in tax (GST) on small cars from 28% to 18% is being hailed as a landmark move to revive India's entry-level vehicle segment. Maruti Suzuki Chairman R.C. Bhargava predicts the reform could drive 10% annual growth, easing affordability concerns for first-time buyers.

## Hybrids dominating the electrification shift for now

### Electrification Drives Market Shift

HEVs lead the charge, up 55% in volume year over year



COX AUTOMOTIVE

In a recent industry insights [webinar](#), Cox Automotive highlighted the significant growth in market share for hybrids in the U.S. Market share of full EVs has been stagnant at ~ 7.5 – 8% the past few months, while hybrids have reached 15% share (including plug-ins). The average transaction price of EVs is still ~ \$9,000 higher than ICEs.

In contrast, China seems to be moving rapidly towards electrification. A [report](#) from EY projects BEVs to cross 50% of China’s light vehicle sales by 2033 and for BEVs + PHEVs to cross 90% by 2034. PHEVs are still expected to hold 30%+ share till 2036.

## Volkswagen Faces €5.1B Hit as Porsche Restructures EV Strategy

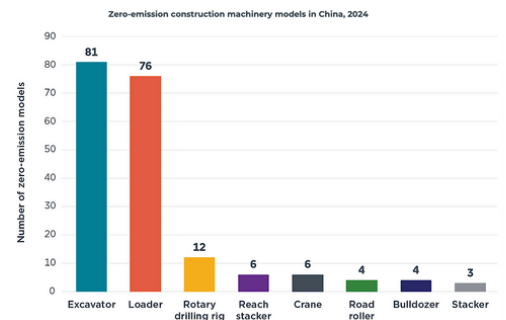


Volkswagen will absorb a [€5.1B loss](#) in 2025 after Porsche scaled back its EV ambitions, delaying launches and pivoting toward hybrids and combustion models amid weak demand in China and high U.S. tariffs. Porsche expects profits to fall by up to €1.8B, with margins trimmed to 10.5–12.5%, while Volkswagen cut its sales return forecast to 2–3%.

The move includes [shifting Cellforce](#) from large-scale cell manufacturing to R&D, with PowerCo likely absorbing staff. For policymakers, Porsche’s reset highlights the challenges of scaling EV supply chains and the need for regulatory flexibility as automakers balance electrification with hybrid and combustion offerings.

## China’s Zero-Emission Trucks – and Construction Machinery – Gain Ground

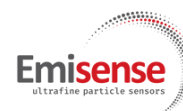
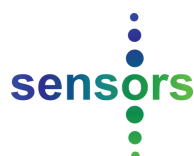
An [ICCT study](#) shows China’s zero-emission construction machinery market is expanding rapidly, with nearly 200 models available—mostly excavators and loaders. Battery electric leads (~65%), with loaders reaching 17% of sales by early 2025, though heavy-duty and specialized equipment trail. Strong policy support and procurement will be key to scaling adoption, with leading manufacturers (73% of models) driving the transition.



Rystad Energy estimates that rapid adoption of electric heavy-duty trucks in China may [cut diesel demand](#) by 153,000 barrels a day. In June 2025, new electric heavy truck sales in China overtook those of LNG trucks, challenging assumptions about EV efficiency.

China’s refined oil consumption peaked in 2023. Oil majors like Sinopec are pivoting by investing in charging, battery swapping, and EV infrastructure – underscoring how quickly the freight sector’s electrification is reshaping China’s energy landscape.

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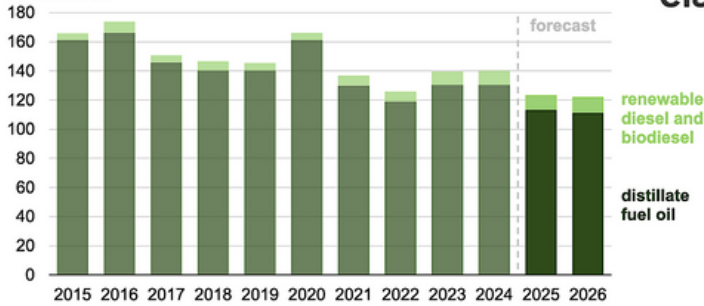


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## U.S. Distillate Inventories Poised to Hit Multi-Year Lows

U.S. total distillate inventories, end of year (Dec 2015–Dec 2026)  
million barrels



The U.S. Energy Information Administration (EIA) projects U.S. distillate stocks (diesel, renewable diesel, biodiesel) will stay at multi-year lows through 2026 after a 17% drop in first half of 2025, driven by weaker biofuel output, refinery closures, and strong exports. With renewable fuel use down, reliance on petroleum distillates has grown, raising risks of price spikes during harvest and winter.

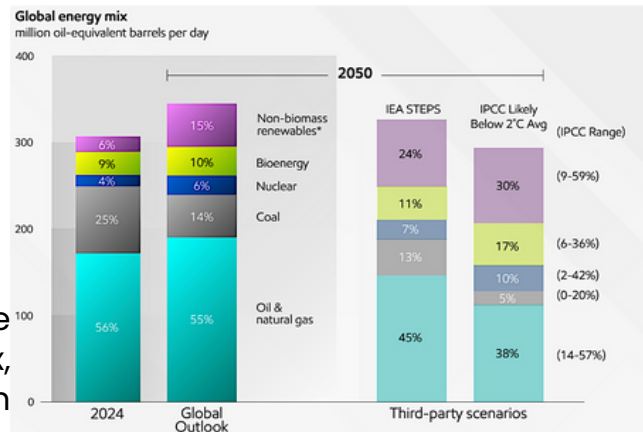
### Policy Watch

Sustaining resilient distillate supply will require boosting biofuel production, supporting refinery flexibility or conversions, rethinking export priorities, and deploying demand-side and efficiency measures to ease pressure on limited fuel inventories.

## ExxonMobil Sees Balanced Energy Future to 2050

In its 2025 Global Outlook, ExxonMobil lays out projections through 2050 that balance energy demand growth with emissions reduction. The report underscores that developing economies will drive a ~25% rise in energy use, while global CO<sub>2</sub> emissions may fall by roughly 25% through cleaner technologies and efficiency gains.

ExxonMobil expects oil and natural gas to continue comprising over half of the global energy mix, reinforcing its view that sustained investment in hydrocarbons remains pivotal.



## UPCOMING EVENTS

The Aachen Colloquium Sustainable Mobility, October 6 – 8, Aachen  
<https://www.aachener-kolloquium.de/en/>

SAE Brazil 2025 Congress, October 6 – 8, Sao Paulo, Brazil  
<https://saebrasil.org.br/eventos/congresso-sae-brasil-2024-258/>

16th ECMA International Conference ECT 2025, New Delhi  
<https://ecmaindia.in/event/16th-ecma-international-conference/31>

Non-Road Powertrain & Fuels Europe 2025, October 7 – 8, Munich  
<https://conferences.emissionsanalytics.com/nonroad-eu25/index.html>

2025 Energy & Propulsion Conference & Exhibition, October 14 – 16, Ypsilanti, Michigan  
<https://www.sae.org/attend/energy-propulsion-conference>

Powertrain Systems for a Sustainable Futures Conference 2025, November 6 – 7, Warwick, UK  
[Event Website](#)

Sustainable Energy & Powertrains, November 25 – 26, Stuttgart, Germany  
<https://www.fkfs-veranstaltungen.de/en/veranstaltungen/sustainable-energy-powertrains>