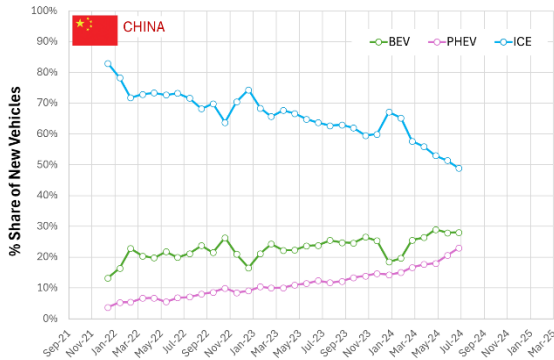


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Market Update



Plug-in electric vehicles exceed 50% share in China

The combined share of new battery electric and plug-in hybrid vehicles sold in China exceeded that of pure ICE vehicles for the first time. Nearly 879,000 electric (BEV + PHEV) vehicles were sold in July, compared to 841,000 ICE vehicles.

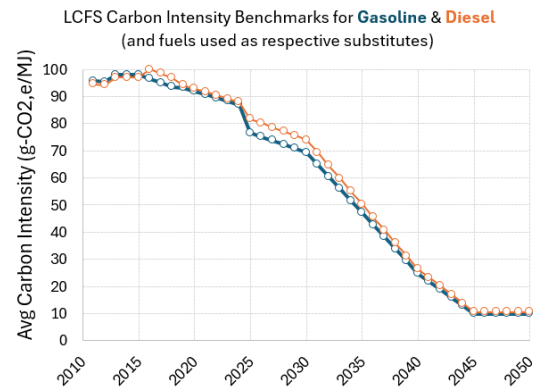
*Starting this month, MobilityNotes members will receive a monthly summary of the powertrain market share by region updated monthly.

Regulations / Reports

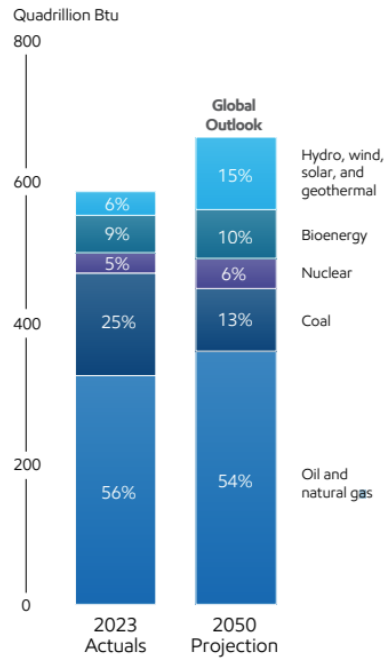
CARB proposed modifications to the Low Carbon Fuel Standard (LCFS)

The California Air Resources Board (CARB) has posted the latest proposed amendments to the LCFS. The LCFS now targets a 30% reduction in carbon intensity by 2030 (vs. 20% previously), compared to a 2010 baseline. Several important changes are summarized [here](#). (An executive summary will be sent to MobilityNotes members.) Notably, diesel produced from soybean oil and canola oil is eligible for LCFS credits only up to 20% combined of total biomass-based diesel annual production reporting, by company. Fuel derived from palm oil or palm derivatives is ineligible for LCFS credit generation.

On a related note, the EPA is [investigating](#) renewable fuel producers amid concerns that they may be using palm oil as feedstock. The incentives for biofuel production have also led to the U.S. becoming a net importer of used cooking oil, mostly coming from [China](#), raising concerns about the source and effective carbon reductions.



Global energy mix



2024 ExxonMobil Global Outlook

ExxonMobil has [published](#) their outlook on energy demand and supply out to 2050. The report projects a net increase in energy demand of 15% by 2050, a result of increased demand in developing countries. Still, CO₂ emissions are projected to fall by 25% by 2050, mostly through improved energy efficiency, and a shift to renewables, hydrogen, biofuels and the use of carbon capture.

Electricity use is projected to increase by 80%, and coal will be displaced by renewables. Still, oil and natural gas use is seen to increase in absolute terms, and cater to over half of the overall energy demand.

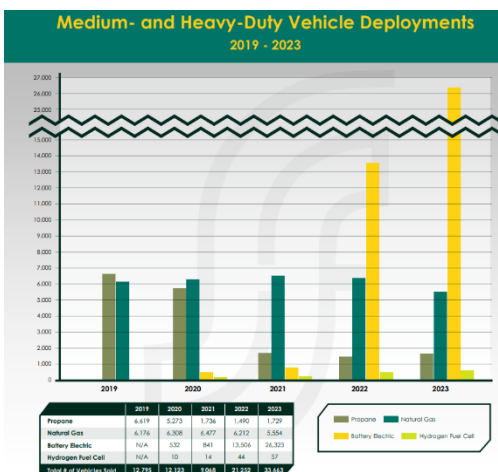
For transportation, the report states that even if every new car sold globally were electric by 2035, the oil demand in 2050 would be at the same level as in 2010 at 85 million barrels per day.

EU Commission has published the CO₂ emissions of trucks in 2021

European standards for heavy-duty vehicles require a 15% reduction in CO₂ emissions starting 2025, compared to a 2019 baseline. Failure to meet these standards carries a heavy penalty.

To track the progress, the EU Commission is required to publish the average CO₂ emissions every year. The latest data for 2021 for each manufacturer has been [published](#). The average specific CO₂ emissions of all new heavy-duty vehicles in 2021 was 52.3 g/t-km, with Scania, MAN and Renault below the average.

Manufacturer	CO ₂ (g/t-km)
Daimler Truck	53.23
DAF	54.26
IVECO Magirus	54.42
IVECO S.p.A	32
Ford	56.32
MAN Truck & Bus	49.74
Renault Trucks	50.85
Scania	49.23
Volvo Truck	52.94

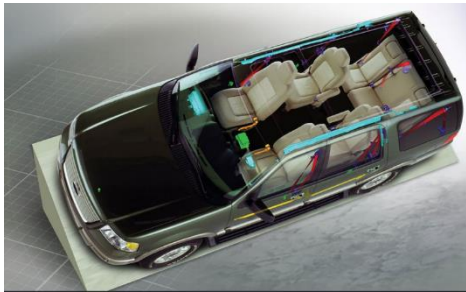


State of Sustainable Fleets 2024 Market Brief

The State of Sustainable Fleets report is [published](#), and provides an in-depth review of the regulatory landscape for heavy-duty vehicles in the U.S., and the outlook for various fuels and powertrains, many of these based on fleet surveys. The report points that 76% of all commercial vehicles (Class 3-8) and 97% of Class 8 trucks in the U.S. are powered by diesel engines. Alternative fuels are gaining share, driven by the need to lower GHG and NO_x emissions, but infrastructure and incremental costs continue to be the main barriers for conversion.

**MobilityNotes will be sending an executive summary of this lengthy report to its members.*

Electrification



Ford cancels 3-row electric SUV, shifts focus on hybrids

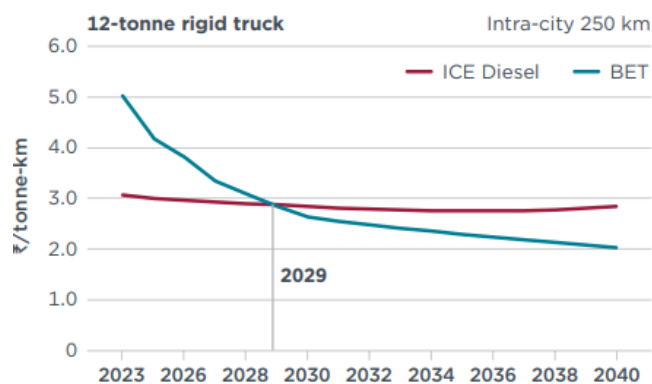
[Ford](#) is delaying plans to introduce a next-generation all-electric pickup truck, and canceling plans for producing a three-row electric SUV, originally slated to begin next year. This change in plan could potentially cost the company up to \$1.5 billion. The company will reduce its spending on all-electric vehicles from 40% to 30%. The company is going to prioritize the development of hybrids instead, launch a new electric commercial van

in 2026, and two new pickup trucks in 2027. These changes reflect the headwinds electric vehicle sales have seen in recent months and help align with Ford's goal of turning every model profitable in 12 months. (Picture: Motortrend.com)

ICCT estimates battery electric trucks to reach TCO parity with diesels in India within this decade

The International Council on Clean Transportation (ICCT) has [published](#) its analysis of the total cost of ownership of heavy-duty electric trucks in India. The study concludes that electric trucks will reach TCO parity with diesels within the next 5 years, driven by battery price reductions and energy density improvements.

Today, the upfront cost of electric 12- to 42-ton rigid trucks are 4 – 6X that of diesel trucks today, resulting in a TCO increase of ~ 50% compared to diesels over a 7-year period. The study assumes that battery pack cost reduces from ~ Rs. 20,000 / kWh in 2022 to < Rs. 7,000 in 2040, and that the battery pack energy density increases two-fold, from 115 Wh/kg in 2023 to 236 Wh/kg in 2040. This translates to the payload capacity loss for BETs reducing from 15 – 20% today to 3 – 6% in 2040.



Conferences

Here are some upcoming conferences to consider attending –

SAE COMVEC, September 10 – 12, Schaumburg, Illinois

[COMVEC™ \(sae.org\)](https://www.comvec.org)

IAA TRANSPORTATION 2024, September 17 – 22, Hanover

<https://www.iaa-transportation.com/en>

THIESEL 2024, September 10 – 13, Valencia, Spain

[THIESEL 2024, 10 – 13 September 2024 – EARPA](https://www.thiesel2024.com)

Non-Road Powertrain & Fuels Europe 2024, Sept 18 – 19, 2024, Munich

[Future powertrain mix for non-road machinery](https://www.non-road-powertrain.com)

North American International Propulsion Conference (NAIPC), Sept 25 - 27, Chicago

[2024 NAIPC \(sae.org\)](https://www.sae.org/naipc)

ASME ICE Forward 2024, October 20 – 23, 2024, San Antonio

[2024 ICEF - The ICE Forward Conference \(asme.org\)](https://www.asme.org/ice-forward)

Emissions Analytics Tyre Emissions & Sustainability Europe 2025, February 11 – 12, Prague

[Tyre Emissions and Sustainability Europe 2025](https://www.ea.com/tyre-emissions)

Emissions Analytics Tyre Emissions & Sustainability USA 2025, April 30 – May 1, 2025, Irvine CA

[Tyre Emissions and Sustainability USA 2025](https://www.ea.com/tyre-emissions-usa)

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