



**ZERO EMISSION
TRANSPORTATION
ASSOCIATION**

October 19, 2022

National Highway Traffic Safety Administration

Docket Management Facility, M-30
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

SUBMITTED VIA [https:// www.regulations.gov](https://www.regulations.gov)

Docket No. NHTSA-2022-0076

ELECTRONIC MAIL TO: [regulations.gov](https://www.regulations.gov)

RE: Notice of Intent To Prepare an Environmental Impact Statement for Model Years 2030 and Beyond New Medium- and Heavy-Duty Fuel Efficiency Improvement Program Standards

The Zero Emission Transportation Association (ZETA) is an industry-backed coalition of member companies spanning the entire electric vehicle (EV) supply chain. Together with our members, we advocate for 100% EV sales by 2030. We are committed to enacting policies that drive EV adoption, create hundreds of thousands of jobs, drastically improve public health, and significantly reduce carbon pollution.

As the National Highway Traffic Safety Administration (NHTSA) prepares and issues a Draft Environmental Impact Statement (DEIS) and the concurrent Notice of Proposed Rulemaking (NRPM), we appreciate the opportunity to provide further analysis on the Model Years (MY) 2030 and Beyond New Medium- and Heavy-Duty Fuel Efficiency (FE) Improvement Program Standards.

The Energy Policy and Conservation Act (EPCA) requires the Secretary of Transportation to “establish average fuel economy standards at least 18 months before the beginning of each model year and to set them at ‘the maximum feasible average fuel economy level that...the manufacturers can achieve in that model year.’”¹ Although NHTSA may be limited in explicitly considering EVs when assessing the maximum feasible level of fuel economy improvement for passenger cars and trucks, NHTSA should nevertheless aim to drive electrification in the market by implementing the most stringent standards possible.

NHTSA should develop maximum feasible standards for the “Preferred Alternative.” NHTSA must consider the improved fuel economy of zero-emission heavy duty (HD) vehicles and rapid technological changes in the HD market as it works to create a program that keeps pace with these transformative changes. These changes are driven in part by state-level action, including the Advanced Clean Trucks rule. More stringent federal standards will incentivize all auto manufacturers to produce more EVs—not strive to make inherently inefficient internal combustion engine vehicles (ICEVs) marginally more

¹<https://www.federalregister.gov/documents/2022/08/16/2022-17558/notice-of-intent-to-prepare-an-environmental-impact-statement-for-model-years-2027-and-beyond>

efficient. The transportation sector accounts for 29%²—the majority—of all economic sectors’ GHG emissions,³ and expanding EV adoption is a powerful tool for reducing the impact of this sector. We look forward to working with the Administration to ensure a future with dramatic reductions of fossil-fuel dependence, on-road pollution, and greenhouse gas (GHG) emissions. These goals are consistent with the President’s Executive Order (EO) 14037, which directs NHTSA and the Environmental Protection Agency (EPA) to take actions under EPCA/EISA and the Clean Air Act to set standards for light-, medium-, and heavy-duty vehicles as appropriate and consistent with applicable law.

Current Medium- and Heavy Duty (MHDV) Market and Landscape

McKinsey’s most-likely scenario anticipates that EVs will make up 53%—just over half—of all U.S. passenger EV sales by 2035.⁴ This trend appears even more likely given investments in EV technology at the federal level due to the passage of the Inflation Reduction Act, the Infrastructure Investment and Jobs Act, growing commitments by incumbent OEMs to transition to all-electric offerings, and state legislative action to phase out new ICEV sales.⁵ In July, seventeen states, D.C., and the province of Quebec formed a coalition committed to electrifying 30% of new trucks and buses. Nevada, in particular, committed to electrifying 100% of all new trucks and buses by 2050.⁶

Environmental and Health Imperative of Decarbonization

Electric vehicles present the strongest pathway to decarbonizing our transportation sector and unlocking tangible environmental and public health benefits. Electrifying this vehicle segment will improve public health, minimize greenhouse gas (GHG) emissions, and reduce the country’s fossil fuel reliance and net energy consumption. Each year, more than 12.2 million MHDVs across the U.S. travel 297 billion miles and consume 46 billion gallons of gasoline and diesel.⁷ HDVs produce 24.4% of all emissions across the transportation sector, making them the single largest contributors to U.S. emissions of particulate matter (PM_{2.5}), NO_x, volatile organic compounds (VOC), and carbon dioxide (CO₂).

With an average lifespan of 33 years, most heavy-duty vehicles (HDVs) spend more time and miles on the road before retirement than light-duty vehicles. As a result, failing to electrify these vehicles means that fossil fuel-powered MHDVs rolling off the assembly line today will remain on the road well beyond 2050, adding hundreds of thousands of vehicle miles and associated deadly emissions over the coming decades. All of these elements are linked to long-term respiratory, cognitive, and autoimmune impairment. Overall, HDV emissions are getting worse: between 1990 and 2019, GHG emissions from heavy-duty trucks and buses grew by 93% and 162%, respectively.⁸

Frontline communities will benefit the most from MHDV electrification. Members of these communities

²<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#:~:text=The%20primary%20sources%20of%20greenhouse,share%20of%20greenhouse%20gas%20emissions.>

³<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#:~:text=The%20primary%20sources%20of%20greenhouse,share%20of%20greenhouse%20gas%20emissions>

⁴<https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/a-turning-point-for-us-auto-dealers-the-unstoppable-electric-car>

⁵<https://www.pbs.org/newshour/show/californias-move-to-ban-sales-of-new-gasoline-fueled-cars-could-spread-to-other-states#:~:text=In%20a%20historic%20vote%20last,nationwide%20shift%20to%20electric%20vehicles.>

⁶ <https://electrek.co/2022/04/01/nevada-pledges-to-electrify-all-new-trucks-and-buses-by-2050/>

⁷<https://drive.google.com/file/d/1N8tQp0v1RPK86Kle08ZQ83rKsY4Ja5Tx/view>

⁸ <https://www.epa.gov/greenvehicles/archives-fast-facts-us-transportation-sector-greenhouse-gas-emissions>

are disproportionately likely to live near highways and suffer from poor air quality, and this proximity to transportation corridors exposes them to unnecessary health risks and higher healthcare costs.⁹

Overall, the reductions in pollution that would come as a result of a widespread transition to zero-emission transportation could save \$72 billion in avoided health harms, approximately 6,300 lives, and prevent over 93,000 asthma attacks and 416,000 lost work days each year.¹⁰

Beyond its negative health impacts, transportation-based pollution damages the environment in a number of ways. Reactions between VOCs and NO_x emitted by diesel vehicles form dangerous ground-level ozone, creating smog that leaves agricultural crops and forests particularly susceptible to stunted growth and a decreased ability to sequester CO₂. Likewise, nitric acid, another tailpipe pollutant, forms acid rain that leaches into the ground and waterways. Perhaps the most dramatic effect of diesel burning is its emission of global warming-causing GHGs. Global warming, in turn, causes extreme weather patterns, reductions in air quality, a rise in sea levels, and leads to widespread species extinction.¹¹

Finally, the economic benefits of electrifying HDVs are significant. The total cost of ownership of HDEVs is lower than that of fossil fuel-powered HDVs (as explained in detail in the following section), especially amidst record-high gasoline and diesel prices. HDV electrification is also precipitating tremendous job creation. A 2019 study found that in California alone, policies designed to electrify MHDVs could generate 1.31 million more job-years than the status-quo policies.¹² The charging infrastructure necessary to accommodate this transition could alone create more than 29,000 jobs across the country.¹³

Cost Savings and Economic Advantages of Electrification

Though some EVs may have higher sticker prices than their gas-powered counterparts, numerous analyses have shown that EVs typically cost less over their lifetime and retain value longer. Most passenger EVs offer \$6,000–\$10,000 in lifetime savings,¹⁴ and **ZETA's monthly report consistently finds that, even as gas prices come down, EVs are vastly cheaper to fuel per mile than gas cars.**¹⁵ Together, these factors have contributed to an unparalleled growth in sales that continues to surpass expectations. Additionally, electrifying the HDV segment provides significant economic benefits. Due to inherently volatile gasoline and diesel prices, a heavy-duty electric vehicle's total cost of ownership is frequently lower than its low-efficiency, gas-powered counterpart.

Overall, the reductions in transportation pollution that would come as a result of a widespread transition to zero-emission transportation could save \$72 billion in avoided health harms, save approximately 6,300 lives, and prevent over 93,000 asthma attacks and 416,000 lost work days each year.¹⁶ Disadvantaged

⁹ <https://www.smithsonianmag.com/history/how-federal-government-intentionally-rationally-segregated-american-cities-180963494>

¹⁰ <https://www.lung.org/getmedia/99cc945c-47f2-4ba9-ba59-14c311ca332a/electric-vehicle-report.pdf>

¹¹ <https://www.epa.gov/dera/learn-aboutimpacts-diesel-exhaust-and-diesel-emissions-reduction-act-dera>

¹² https://calstart.org/wp-content/uploads/2022/02/ZIO-ZETs-Report_Updated-Final-II.pdf

¹³ <https://secureenergy.org/the-commanding-heights-of-global-transportation-quantifying-the-employment-effects/>

¹⁴ <https://advocacy.consumerreports.org/wp-content/uploads/2020/10/EV-Ownership-Cost-Final-Report-1.pdf>

¹⁵ <https://8829857.fs1.hubspotusercontent-na1.net/hubfs/8829857/Zeta%20Report%20August%20v1.pdf>

¹⁶ <https://www.lung.org/getmedia/99cc945c-47f2-4ba9-ba59-14c311ca332a/electric-vehicle-report.pdf>

communities, and communities of color that are historically located near transportation corridors, would benefit most from this improvement.

Conclusion

Accelerating the EV transition by implementing more stringent CAFE and FE standards will streamline decarbonization and act as a key driver of environmental justice. Likewise, transportation electrification across all vehicle segments—light, medium, and heavy-duty—will serve to bring the U.S. transportation sector in line with President Biden’s goals for a cleaner, climate-conscious future and will contribute to the growth of a domestic EV auto sector that can revive manufacturing communities across the nation.

We thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'JB', is positioned below the word 'Sincerely,'.

Joseph Britton

Executive Director
Zero Emission Transportation Association (ZETA)
659 C St. SE
Washington, DC 20003