ZETA | ZERO EMISSION TRANSPORTATION ASSOCIATION

October 26, 2021

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SUBMITTED VIA https:// www.regulations.gov
Docket No. NHTSA-2021-0053-0012
RIN: 2127-AM34
ELECTRONIC MAIL TO: regulations.gov

The Zero Emission Transportation Association (ZETA) is an industry-backed coalition of 60 member companies advocating for 100% electric vehicle (EV) sales by 2030. ZETA is committed to enacting policies that drive EV adoption, create hundreds of thousands of jobs, drastically improve public health, and significantly reduce carbon pollution. We appreciate the opportunity to comment on the Notice of Proposed Rulemaking (NPRM) titled Corporate Average Fuel Economy (CAFE) Standards for Model Years (MY) 2024–2026 Passenger Cars and Light Trucks Docket No. NHTSA-2021-0053. We look forward to working with you to ensure a future where oil dependence, on-road pollution, and greenhouse gas (GHG) emissions are dramatically reduced, American workers are manufacturing and driving EVs, and the United States is a global leader in the auto industry once again.

In consideration of these proposals, ZETA understands that improved fuel economy standards will reduce overall emissions. ZETA strongly urges the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) to adopt Alternative 3 at a minimum and to reduce flexibilities by closing crediting loopholes. Based on the footprint efficiency improvement, Alternative 3 assigns 45.4 miles per gallon (mpg) to MY 2024, 50.4 mpg to MY 2025, and 56.0 mpg to MY 2026. Alternative 3 is the most ambitious and most stringent of the

three alternatives that NHTSA considers in addition to the no-action model, which is based on the Safer Affordable Fuel-Efficiency (SAFE) vehicle rule adopted by NHTSA in 2020. **ZETA and its members believe that Alternative 3 is the bare minimum stringency that NHTSA should pursue, and Alternative 3 is necessary to reach the United States' emissions reductions and EV deployment goals.**

The proposed CAFE rule will substantially improve the United States' ability to reduce oil consumption, achieve net-zero GHG emissions by 2050, and reach at least a 50% EV market share by 2030. These policy goals have all been announced by President Biden and were enumerated in recent executive orders. Specifically, Executive Order 13990 directed NHTSA to conduct this rulemaking to enhance domestic fuel economy standards.[1,2] NHTSA's analysis shows that its preferred option, Alternative 2, will facilitate a 7% EV market penetration by 2029, which will be insufficient to achieve President Biden's ultimate electrification goals. While NHTSA may not be limited in considering EVs when setting the specific level of a fuel economy standard, NHTSA can and should nevertheless aim to facilitate broader EV adoption by implementing the most stringent standards possible. More stringent standards will incentivize all auto manufacturers to produce more EVs—rather than strive to make inherently inefficient internal combustion engine vehicles (ICEVs) marginally more efficient. Expanding EV adoption is a powerful mechanism for reducing emissions from vehicles, which is critical for a transportation sector that represents the largest domestic source of GHG emissions.[3]

**Declining EV Costs Favor More Stringent Standards**

EVs are becoming increasingly popular and affordable, and they present superior technology to the consumer. Despite overall declines in domestic automobile sales over the past two years during the COVID-19 pandemic, EV sales grew: each of the past four quarters has seen record unit sales, creating the highest-ever EV market penetration.[4] This growth is fueled by, among other things, EVs' environmental benefits and lower total cost of ownership (TCO) compared to ICEVs. Among potential EV buyers recently surveyed, the most-often cited reason for considering an electric car was "to protect the environment." The second- and third-highest reasons are "low running costs" and "reduced cost of fuel," respectively.[5]

It is clear that EVs are becoming more affordable, and EV consumer adoption is growing based on both EVs' reduced environmental impact and EVs' cost savings compared to ICEVs. While

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[1]https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/

[2]https://www.whitehouse.gov/briefing-room/statements-releases/2021/08/05/fact-sheet-president-biden-announces-steps-to-drive-american-leadership-forward-on-clean-cars-and-trucks/

[3] https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions

[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.forbes.com/wheels/features/ev-survey/

NHTSA suggests that it cannot assess EV cost reductions while setting its fuel economy standards, it should also recognize that EV sales are rapidly displacing ICEV sales. NHTSA should not worry that pursuing Alternative 3 will limit vehicle options for consumers. Rather, Alternative 3 will accelerate the rate of deployment of an increasingly popular and affordable technology that also delivers important environmental and public health benefits.

NHTSA should be sure to include EV manufacturers in their analysis, such as ZETA members Tesla, Rivian, Lucid, and other light-duty manufacturers. EVs typically cost less over their lifetime than comparable ICEVs, and they retain their value longer. While some EVs do have higher purchase pricesthan ICEVs, their TCO is often lower: most EVs offer $6,000–$10,000 in lifetime savings.[6] The purchase price of EVs is expected to reach parity with new ICEVs by 2023.[7] This decline in EV costs has led to increased adoption, which has grown more than predicted in that time. Even without government support, the Edison Electric Institute projects the number of EVs on U.S. roads will reach 18.7 million in 2030, up from 1 million at the end of 2018.

Moreover, legacy automakers have had sufficient time to prepare for more stringent standards. ZETA supports Alternative 3 because traditional (original equipment manufacturer) OEMs have had more than a decade to produce vehicles with improved fuel economy based on the 2012 CAFE standards. In 2011, the Obama Administration announced that thirteen key automakers—accounting for 90% of vehicles sold in the U.S. at the time—committed to achieving 54.5 mpg for cars and light-duty trucks by MY 2025. The implemented CAFE standards in 2012 gave automakers the opportunity to invest in advanced technologies to improve fuel economy and reduce emissions. Despite this market signal, some instead sought to maintain the status quo of achieving the bare minimum standards, which resulted in a high number of carbon-emitting ICEVs.

**Recommendations for NHTSA's Consideration**

*NHTSA Should Reevaluate Its No Action Alternative*

NHTSA bases its no action alternative on the SAFE rule, which the administration finalized in 2020. NHTSA recognizes that it also acknowledged the California Zero-Emission Vehicle (ZEV) mandate and the Framework Agreements between California and five major automanufactuers, including BMW, Ford, Honda, Volkswagen Group of America, and Volvo. These are incomplete baseline requirements for formulating the No Action Alternative, and they ignore other, more stringent fuel economy standards that affect auto manufacturers, such as the California GHG rules promulgated under its Advanced Clean Car (ACC) waiver from the EPA. These standards

[6] https://advocacy.consumerreports.org/wp-content/uploads/2020/10/EV-Ownership-Cost-Final-Report-1.pdf
[7] https://www.bloomberg.com/hyperdrive

have also been adopted, or are in the process of being adopted, by more than a dozen other "Section 177" states. While the SAFE Act removed California's ACC waiver, its more stringent fuel economy standards—and those of the other Section 177 states—were still enforceable. Thus, despite more relaxed federal fuel economy rules, auto makers have been required to achieve—or, at least, have had the reasonable expectation to prepare for—far more stringent standards. NHTSA's baseline No Action Alternative should factor in these stricter, existing fuel economy standards.

*NHTSA Should Not Expand Off-Cycle Credits*

The off-cycle credit program is designed to provide credits for "new and innovative" technologies that decrease fuel consumption. This credit program was initially designed to make sure the fuel standards would provide real-world reductions in emissions and fuel consumption by incentivizing the innovation and development of new internal combustion engine-related technologies. ZETA and EV manufacturers do not support raising the cap of the off-cycle credits. Any further extension of off-cycle credit loopholes may extend traditional OEM reliance on producing ICEVs. As the ICCT states, "in terms of deploying more advanced technologies, [expanding off-cycle crediting] is the equivalent of delaying implementation of the 2025 standards by several years and lowering consumer label fuel economy from 35 mpg to 31–33 mpg for new 2025 vehicles."[8] Additionally, these off-cycle credits have not been properly validated. Data supporting them may not be reliable based on the uncertainty of real-world operations of advanced technologies and their lack of transparency.

*NHTSA Should Not Renew or Extend Advanced Technology Compliance Incentives for Full-Size Pick-Up Trucks*

Zero-emission passenger vehicles such as full-size pick-ups serve as the best opportunity to decarbonize the transportation sector—the single largest carbon-emitting sector in the country.[9] Pick-up trucks are among the most popular market segments in the United States. NHTSA should not provide advanced technology credits for full-size pick-ups. Companies such as Tesla, Rivian, and Ford are producing EV pick-ups to meet the growing demand within this automotive market. As EV adoption becomes even more widespread, NHTSA should remove multiplier credits or compliance incentives for ICEV pick-up trucks. NHTSA's proposal extends an opportunity to automakers to continue receiving credits and incentives to make ICEV pick-ups.[10] The proposed credits will likely lead to less deployment of electric full-size pick-ups, which are vital for reducing emissions and expanding EV adoption.

[8] https://theicct.org/sites/default/files/publications/Off-Cycle-Credits_ICCT-White-Paper_vF_20180327.pdf
[9] https://www.epa.gov/transportation-air-pollution-and-climate-change/carbon-pollution-transportation.
[10] 86 Fed. Reg. at 49835.

*NHTSA Should Include New Technologies on Their Way to Market*

When considering feasibility, NHTSA should consider technologies that will be released in the model years in question, not just the technologies that are commercially available today. EVs are proving to be popular, as indicated by the diversity of models available now, and we anticipate EV adoption will continue more quickly than anticipated. Vehicle electrification will lead to improved fuel economy throughout the country: EVs are cleaner to operate than ICEVs, regardless of how their electricity is produced. Therefore, EV emissions per mile are reduced relative to ICEVs.[11] A recent Wood Mackenzie study found that a typical mid-size EV generates 67% fewer GHG emissions than an ICEV over the lifetime of the vehicle. Furthermore, the United States' electrical grid system is only getting cleaner and will continue to lower the lifecycle emissions of EVs compared to ICEVs, which have a static, fossil fuel-based carbon footprint.[12] NHTSA asserts that the Energy Policy and Conservation Act (§ 32902) presents constraints for accounting for advanced vehicle technologies when setting stringency, but the administration could nonetheless find ways to expand its standard-setting function within its existing authority. Possibilities for doing so were assessed by the National Academy of Science in a report released earlier this year[13], as well as by NHTSA in documentation supporting this proposal. ZETA encourages the administration to pursue this avenue of inquiry to the fullest extent possible and prepare to update its approach to setting standards in time for the next phase of CAFE standards.

The purchase costs of EVs and ICEVs is rapidly reaching parity, and the total cost of ownership of EVs is often lower than that of comparable ICEVs. For example, the Tesla Model 3—the most popular EV in the world in 2020—retails for less than the average cost of a light-duty vehicle in the United States. An average light-duty vehicle costs more than $42,258, and the average price of popular market segments like full-size pickup trucks and SUVs is $57,267 and $68,173, respectively.[14] The decreasing price of EVs is largely driven by declining battery prices. As EV technology, such as lithium ion batteries, becomes cheaper to produce, the market price of EVs will reach price parity with ICEVs.[15] The UBS investment bank found that leading EV manufacturers are expected to produce batteries that cost as little as $67/kWh between 2022 and

[11] National Academies of Sciences, Engineering, and Medicine 2021. Assessment of Technologies for Improving Light-Duty Vehicle Fuel Economy 2025-2035. Washington, DC: The National Academies Press. https://doi.org/10.17226/26092.

[12] https://www.woodmac.com/press-releases/evs-up-to-67-less-emissions-intensive-than-ice-cars/

[13] https://www.nhtsa.gov/sites/nhtsa.gov/files/2021-08/CAFE-NHTSA-2127-AM34-TSD-Complete-web-tag.pdf

[14]https://mediaroom.kbb.com/2021-07-19-Average-New-Vehicle-Prices-Hit-All-Time-High,-According-to-Kelley-Blue-Book

[15] https://news.mit.edu/2021/lithium-ion-battery-costs-0323

2024.[16] This is a more substantial price decrease than NHTSA previously estimated in its SAFE rule.

*NHTSA Should Implement An Inflation-Adjusted CAFE Civil Penalty Rate*

The CAFE standards implement civil penalties for automakers that fail to meet minimum fuel efficiency standards, which can be purchased from automakers who have overperformed (or EV-only sellers). These penalties were set to increase in 2019 under the Obama Administration, but that increase was suspended under the Trump Administration. In 2015, Congress ordered federal agencies to adjust civil penalties to account for inflation, which would have increased the NHTSA civil penalties from $5.50 to $14 per 0.1 mpg of non-compliance. ZETA urges NHTSA to implement this increase in order to avoid further delaying compliance for new standards.

**Conclusion**

To reach the Biden Administration's clear goals for electrification and emissions reduction, NHTSA must choose to implement the most stringent option as a baseline moving forward. Alternative 3 ensures that automakers will build more fuel efficient vehicles, and EV adoption will continue to accelerate. Following ZETA's recommendations for the proposed CAFE standards will serve as a tool to achieve widespread EV deployment and will push automakers to innovate to improve fuel economy standards.

Sincerely,

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[16] UBS, EVs Shifting into Overdrive: VW ID.3 teardown – How will electric cars re-shape the auto industry? (March 2, 2021) at 60.