

October 16, 2023

The Honorable Ann Carlson Acting Administrator National Highway Traffic Safety Administration 1200 New Jersey Avenue SE Washington, DC 20590

Docket ID No. NHTSA-2023-0022

Submitted via Federal eRulemaking Portal: https://www.regulations.gov

RE: Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks for Model Years 2027–2032 and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans for Model Years 2030–2035

Dear Acting Administrator Carlson:

On behalf of the members of the American Coalition for Ethanol (ACE), I appreciate the opportunity to comment on the notice of proposed rulemaking for Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks for Model Years 2027–2032 and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans for Model Years 2030–2035 (herein referred to as the "Proposal" or "Proposed Rule").

ACE is a grassroots advocacy organization, powered by rural Americans from all walks of life who have built an innovative industry that delivers homegrown biofuel and food for a growing world. Our nearly 300 members include U.S. ethanol biorefineries, investors in biofuel facilities, farmers and companies that supply goods and services to the U.S. ethanol industry.

While ACE members share the goal of the National Highway Traffic Safety Administration (NHTSA) to improve the fuel economy of U.S. passenger vehicles, NHTSA's proposal is legally-questionable, economically impractical, and overlooks the meaningful role low-carbon, high-octane fuels can play in achieving fuel economy standards.

In contrast to NHTSA's proposed rule and the Environmental Protection Agency (EPA) so-called "multipollutant proposal" for model years 2027 through 2032, we support technology-neutral policies which provide market participants with a host of options for compliance, because the tasks of decarbonizing the transportation sector and maximizing fuel economy are too important and complex for a one-size-fits-all solution.

Our comments will discuss 1) legal problems associated with the proposal including vehicles that operate only on electricity, 2) the economic feasibility of NHTSA's proposed rule, 3) energy security and environmental concerns about the proposal, and 4) how high-octane fuels such as higher ethanol blends should be part of the solution to achieve fuel economy standards and reduce carbon pollution from transportation emissions.



Legal Problems Associated with Including Vehicles Operating Only on Electricity

NHTSA's authority to prescribe corporate average fuel economy standards is specific and limited. With respect to model years 2021 through 2030, this authority stems from the Energy Independence and Security Act (EISA) of 2007. In summary, in determining "the maximum feasible" standard for each fleet for each model year, EISA indicates NHTSA "shall consider" technological feasibility, economic practicability, and the effect of other motor vehicle standards on fuel economy, but may not consider the fuel economy of vehicles operating only on electricity.

NHTSA's proposal attempts to circumnavigate this prohibition (against considering electric only dedicated vehicles when determining maximum feasible fuel economy) by misreading the statute to claim counting electric vehicles due to state-level requirements is permissible, such as requirements in California.

Congress was clear. The controlling statute says NHTSA may not consider the fuel economy of electric only vehicles. There are no exceptions. Based on this reality, we strongly urge NHTSA to revisit the proposal and develop a more technology-neutral approach providing a role for high-octane, low-carbon fuels such as ethanol blends to help meet fuel economy standards.

Even NHTSA Concedes its Proposal is Not "Economically Practicable"

The Alliance for Automotive Innovation has indicated NHTSA's proposal "...will increase costs to the American consumer with absolutely no environmental or fuel savings benefits."

Remarkably, even NHTSA concedes the fuel economy standard for passenger vehicles imposes net increased costs, noting that fuel economy improvements are "increasingly no longer offset by the value of fuel saved..." NHTSA does "not believe this is a trend that is in the best interest of American customers, particularly those who are seeking affordable new cars." 88 Federal Register at 56,259.

This admission reinforces the complexity, size and scope of the U.S. light-duty passenger fleet of vehicles overlayed by the various fuels and technologies utilized to power the fleet. Indeed, the one-size-fits-all solution, as proposed by NHTSA and EPA, with respect to decarbonizing and improving the efficiency of the U.S. light duty vehicle transportation sector, is destined to fail because it is not economically feasible.

Once again, based on this reality, we strongly urge NHTSA to revisit the proposal and develop a more technology-neutral approach providing a role for low-cost, high-octane fuels such as ethanol blends to help meet fuel economy standards.

Energy Security and Environmental Concerns

It is clear NHTSA and EPA are eager to swiftly electrify the entire U.S. light-duty vehicle fleet, but many of the consequences and costs of such a rushed transition have not been fully examined, such as the energy security and environmental dangers of relying on foreign nations to supply the U.S. with the critical minerals and batteries needed for electric vehicles.

Many of the minerals necessary to produce the batteries for electric vehicles, not to mention the batteries themselves, are not available in the U.S. Less than 4 percent of global lithium supplies are in the U.S, but China is among the top producers of lithium globally. The U.S. has virtually no graphite reserves, while China and Russia control more than 80 percent of all graphite reserves.



While the U.S. has nearly 1 percent of the world's cobalt reserves, the leading sources of cobalt include the Congo and Russia. Clearly these countries pose very serious geopolitical and energy security threats if we rely upon them for battery materials. What's more, the environmental damage from mining and processing some of these critical minerals into batteries is considerable and must be included in any fair accounting of the overall costs of the proposal.

This stands in contrast to what the U.S. ethanol industry offers. The U.S. is the world's leading producer of corn feedstock for making fuel ethanol and the top supplier of ethanol as well. Thanks in part to a significant domestic supply of fuel ethanol (capacity of nearly 17 billion gallons annually), our dependence on foreign sources of oil is not as grave as it was prior to enactment of the Renewable Fuel Standard (RFS) by Congress. Furthermore, ethanol is the lowest-cost source of fuel octane on the market, and higher blends are commercially available to help automakers comply with fuel economy standards. This domestic and low-cost supply of ethanol is renewably produced and significantly reduces lifecycle greenhouse gas (GHG) emissions compared to gasoline from petroleum.

Electrifying the vehicle fleet will sacrifice the energy security and environmental benefits of ethanol. Even NHTSA's proposal admits "...the most commonly used vehicle battery chemistries include materials that are either scarce or expensive, are sourced from potentially insecure or unstable overseas sites, and can pose environmental challenges during extraction and conversion to usable material. Known supplies of some of these critical minerals are also highly concentrated in a few countries and therefore face the same market power concerns as petroleum products."

For NHTSA not to include costs related to these emerging energy security and environmental concerns relative to minerals and electric vehicle batteries is a disservice to the American people. We strongly urge NHTSA to include such a cost analysis in its final rule.

High-Octane, Low-Carbon Fuels such as Ethanol should be Part of the Solution

We recognize NHTSA does not have authority over fuel quality, but to the degree NHTSA and EPA work together to strive for compatibility between the fuel economy standards and EPA's tailpipe standards, we encourage you to give more consideration to the important role high-octane fuels have to play. Ethanol delivers the highest octane at the lowest cost, allowing automakers to benefit by continuing to develop high-compression engines to achieve efficiency improvements and reduced emissions.

Millions of vehicles with internal combustion engines will continue to be sold well beyond 2032 and millions more of these vehicles will remain on U.S. roads for decades to come. President Biden himself has said we "simply cannot get to net-zero [emissions] by 2050 without biofuels." Moreover, there are approximately 25 million flexible fuel vehicles (FFVs) in the U.S. today. The ideal way to transition from today's legacy fleet of internal combustion engines to new vehicles with advanced engine technologies designed to run optimally on a high-octane fuel is to utilize FFVs as bridge vehicles that can provide immediate demand for midlevel ethanol blends.

¹ U.S. President Joe Biden during an April 12, 2022 visit to lowa announcing a temporary national emergency waiver for E15. https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/04/12/remarks-by-president-biden-on-lowering-energy-costs-for-working-families/



The Department of Energy Oak Ridge National Lab has investigated the use of high-octane ethanol blends such as E25 and E30 in FFVs that are designed and compatible with ethanol blend levels from 0 to 85 percent and can therefore seamlessly, and with OEM approval, utilize midlevel ethanol blends.²

Key findings from Oak Ridge include: "Experiments were performed with four FFVs using an E10 (92 RON) and E30 (100 RON) fuel. The two direct-injection FFVs demonstrated performance improvements for E30 compared to E10 of 2.5 to 3 percent, based on the 15-80 wide-open throttle acceleration time. Three of the four FFVs showed performance improvement with high-octane E30 compared to regular E10. (...) Marketing E25 or E30 to FFV owners as a performance fuel may enable greater utilization of ethanol in the near term and could help establish the refueling infrastructure to enable manufacturers to build dedicated vehicles designed for a high-octane midlevel ethanol blend."

If the overarching goal for the Biden Administration is net-zero emissions by mid-century, let's start making progress *right now* by taking full advantage of the 15 billion gallons of domestically produced ethanol available today as an affordable way to boost octane and meaningfully reduce GHG emissions from gasoline powered engines.

In conclusion, NHTSA should reconsider its proposal and develop a technology-neutral approach to achieve fuel economy standards and decarbonize transportation fuel. Thank you for your time and consideration of our comments.

Sincerely.

Brian Jennings, CEO

American Coalition for Ethanol

 $^{^2}$ Effects of High-Octane Ethanol Blends on Four Legacy FFVs and a Turbocharged GDI Vehicle." Thomas, J, West, and Huff, S, U.S. DoE ORNL. March 2015.