



June 16, 2023

Via Electronic Filing—www.regulations.gov

The Honorable Michael Regan
Administrator
Environmental Protection Agency
Mail Code 28221T
1200 Pennsylvania Avenue NW
Washington, DC 20460

**RE: Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles—Phase 3
[EPA-HQ-OAR-2022-0985]**

Dear Administrator Regan:

The National Association of Convenience Stores (“NACS”), NATSO, Representing America’s Travel Plazas and Truckstops (“NATSO”), and SIGMA: America’s Leading Fuel Marketers (“SIGMA”) (collectively, the “Associations”) respectfully submit these comments in response to the Environmental Protection Agency’s (“EPA’s” or the “Agency’s”) proposed rule for revised greenhouse gas (“GHG”) standards for model year (“MY”) 2027 heavy-duty (“HD”) highway vehicles and new GHG standards for MY 2028 through MY 2032 and later HD highway vehicles (“Proposed Rule” or the “Proposal”).¹ While we support the development of electric vehicle (“EV”) technologies² and the associated refueling network, we are opposed to the approach taken by EPA in the Proposed Rule. Broadly, our commercial experience and communications with others in the value chain—including electric utilities, trucking fleets, and truck manufacturers—lead us to believe that (1) the current state of HD EV charging technology renders the electrification timeline proposed under this rulemaking unachievable; and (2) EPA is exacerbating the adverse emissions impact of this reality by stacking the deck in favor of one technology rather than harnessing the near-term decarbonization potential of other low-carbon options like renewable liquid fuels, *in addition to* incentivizing more aspirational longer-term technologies.

The Associations believe that a technology-neutral approach to transportation decarbonization will help to mitigate costs, promote innovation, and address the practical challenges associated with heavy-duty electrification. With the right alignment of policy incentives, our industry is best equipped to facilitate a faster, more widespread, cost-effective

¹ Environmental Protection Agency, “Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles—Phase 3,” 88 FR 25926 (April 27, 2023) available at <https://www.govinfo.gov/content/pkg/FR-2023-04-27/pdf/2023-07955.pdf> [hereinafter the “Proposed Rule”].

² This includes zero emissions vehicles (“ZEV”) as used in the Proposed Rule, such as battery electric vehicles (“BEVs”) and fuel cells (“FCV”). For simplicity, “EV” is used throughout these comments.

transition to petroleum alternatives – including electricity – in the coming years. To shepherd that transition without sacrificing near-to-medium-term emissions, EPA should revise the Proposal to lower carbon emissions in a market-oriented, technology-neutral, and consumer-focused manner.

All fuels and technologies should be treated equally within the context of emissions standards. The Proposed Rule’s focus solely on tailpipe emissions, however—rather than lifecycle emissions—artificially tilts the scale towards EVs. This means that rather than measuring overall emissions reductions, the Proposal will account only for emissions in one segment of the value chain: vehicle tailpipes. This approach ignores—and thus threatens to exacerbate—technological and market challenges. It also exceeds EPA’s statutory authority.

The enormous practical and logistical challenges associated with electrifying trucks necessitate that the Agency not rely entirely on a prodigious pace of HD electrification to decarbonize the trucking sector. Instead of depending on one technology to act as a silver bullet, the Agency should adopt an agnostic approach to low-carbon technologies that can deliver substantial emissions savings in the HD sector without compromising the market’s ability to gravitate toward electrification as it becomes commercially viable and practical at scale. The best way to address practical impediments to electrification is to inject flexibility into the Proposed Rule while simultaneously promoting near-term emissions reductions.

EPA should continue its collaborative efforts with the National Highway Traffic Safety Administration (“NHTSA”) to incrementally decrease GHG emissions.³ This approach will allow vehicle manufacturers to decrease GHG emissions in new HD vehicles (including electric vehicles) while also reducing emissions in the current fleet. A flexible, workable timeline will allow the market to reduce both tailpipe emissions and lifecycle emissions in the most cost-effective and efficient way, ultimately benefiting consumers.

The Agency’s stated goal of reducing GHG emissions is best achieved by allowing the market to gravitate towards EVs as technology allows. Sound policy is grounded in science and recognizes that the state of technology can change rapidly. That is why incentives for alternative fuel technologies should be tied to those technologies’ lifecycle environmental attributes rather than the underlying technology itself – which is the result of an exclusive focus on tailpipe emissions. No one solution will decarbonize transportation energy. The best solution today may be surpassed by subsequent ingenuity and innovation. Mandating a specific technology will ultimately only stifle innovation and progress. It also undermines energy security.

The Associations provide these comments on behalf of our diverse and forward-thinking industry and urge EPA to reconsider the Proposed Rule and instead put forth standards that let the market—guided by consumers—meet the Agency’s climate goals.

³ The Associations note that nothing in these comments takes a position regarding the legality of EPA’s approach in previous HD vehicle emissions rules.

I. The Associations Represent America’s Retail Fuel Economy.

a. Our Members

NACS is an international trade association representing the convenience store industry with more than 1,300 retail and 1,600 supplier companies as members, the majority of whom are based in the United States. NATSO currently represents more than 4,000 travel centers and truck stops nationwide, comprised of both national chains and small, independent locations. SIGMA represents a diverse membership of approximately 260 independent chain retailers and marketers of motor fuel. Together, the Associations’ members are responsible for approximately 90% of the motor fuel sold in the United States.

To be successful, our members must be attuned and responsive to their customers’ demands. Our members’ sole objective is to sell products, in a lawful way, to customers who want to buy them. This means our members are agnostic as to what types of fuel they sell to satisfy consumer demand, but they do have a bias: they believe it is best for the American consumer and America’s industrial position in the world marketplace to have reasonably low and stable energy prices. Regulations should set performance goals and let the market, guided by consumers, innovate to find the best way to meet those goals. Our industry’s experience is invaluable in this respect because we bring a technology-neutral perspective with an underlying attention and loyalty to consumer preferences and low prices.

Our industry has made significant investments in EV charging to serve the motoring public who are operating EVs.⁴ And we recognize this is a key part of the industry’s future. We believe more of our consumers will demand electricity as a fuel over the coming years, and we want to be able to sell consumers whatever fuel they want to purchase. We also recognize the need for policies that take a clear-eyed look at all emissions related to the transportation sector and emissions reductions from *all* vehicle technologies. Only by allowing different technologies to compete on emissions reductions—as well as on their appeal to consumers—will we get the best possible environmental and economic outcomes.

⁴ See Liz Dominguez, RIS NEWS, “Circle K expands fast EV charging footprint” (May 5, 2023), *available at* <https://risnews.com/circle-k-expands-fast-ev-charging-footprint>; Peter Johnson, ELECTREK, “7Charge is the 7-Eleven of the future: Ambitious EV fast-charging network and new app” (March 16, 2023), *available at* <https://electrek.co/2023/03/16/7-eleven-reveals-7charge-ev-fast-charging-network-and-app/>; Dana Hull, BLOOMBERG, “How Sheetz partnered with Tesla and brought EV charging to rural America” (July 14, 2022), *available at* <https://www.bloomberg.com/features/2022-tesla-electric-car-charging-stations-road-trip-sheetz/#xj4y7vzkg>; David Shepardson, REUTERS, “GM, travel operator Pilot to develop EV charging network,” (July 14, 2022), *available at* <https://www.reuters.com/business/autos-transportation/gm-travel-operator-pilot-develop-ev-charging-network-2022-07-14/>; CONVENIENCE STORE NEWS, “Wawa partners with EVgo to expand electric vehicle charging network” (March 10, 2022), *available at* <https://csnews.com/wawa-partners-evgo-expand-electric-vehicle-charging-network>; Stephen Edelstein, GREEN CAR REPORTS, “Love’s Travel Stops and Electrify America add road-trip charging waypoints” (Aug. 19, 2020), *available at* https://www.greencarreports.com/news/1129297_love-s-travel-stops-and-electrify-america-add-road-trip-charging-waypoints.

b. *Our Policy Principles to Reduce Transportation Emissions*

We urge EPA to consider the policy principles that guide our view of these important issues. These principles, as detailed below, will create new jobs, accelerate the deployment of advanced alternative fuel infrastructure and vehicles, benefit consumers through a competitive marketplace, and drive massive economic investment and improvements in air quality:

- Make science the foundation for transportation climate policies.
- Establish performance goals without mandating specific technologies to allow for the benefits of innovation and technology development.
- Develop competitive market incentives to ensure a level playing field and provide long-term consumer benefits.
- Harness existing infrastructure to help commercialize new technology, maximize diverse investments, and achieve near-term and long-term emission reduction goals.
- Set a consistent, uniform national policy so that (i) the market has certainty to help it invest, and (ii) state policies do not create inconsistent or counterproductive measures.
- Ensure fair treatment so that all households are not forced to subsidize alternative energy users.

II. *Electrification Timelines Proposed Under the Rule are Unworkable.*

a. *Robust Charging Infrastructure is Necessary to Support Heavy-Duty Electrification*

The Proposed Rule would result in electrifying 50% of new vocational trucks, 35% of new short-haul tractors, and 25% of new long-haul tractors by 2032.⁵ These estimates are divorced from the reality of the current ZEV market: for MY21, only 0.2% of all HD vehicles certified by the Agency were electric.⁶ The extraordinary pace of HD electrification that is effectively mandated under this rulemaking is incompatible with the reality of long-haul trucking in the United States.

These comments focus primarily on long-haul HD trucks, which are the vehicles typically serviced by our members. The challenges to electrifying the HD sector cannot be overstated and will require a gradual and unprecedented effort irrespective of regulatory mandates. One major challenge is a lack of HD charging infrastructure. Currently, there is no U.S. network where over-the-road trucks can stop for rest breaks and recharging at the same time. In fact, recent estimates indicate there are fewer than 3,000 HD truck chargers across the entire United States.⁷ Such

⁵ Proposed Rule at 25,932 (Table ES-3).

⁶ *Id.* at 25,940.

⁷ Vivian Lebbon, et al., WOOD MACKENZIE, “US electric truck sales set to increase exponentially by 2025” (Aug. 10, 2020) available at <https://www.woodmac.com/press-releases/us-electric-truck-sales-set-to-increase-exponentially-by-2025/>.

chargers are expensive and specialized, as long-haul trucks require two 8,000-pound batteries to operate.⁸ Given the size of their batteries, HD trucks cannot use light-duty charging infrastructure. It could take up to ten hours to charge those trucks and that would only provide them with a few hundred miles of range.⁹ By contrast, a diesel truck can refuel in about 15 minutes and get 1,200 miles of range. Dwell times will increase significantly as a result of recharging needs, which will impact scheduling and have implications for Hours-of-Service limits. Prolonged recharging periods will also further exacerbate challenges related to truck parking availability and capacity.

Another substantial challenge is the generation and supply of electricity to charging stations. Every market participant that our membership communicates with is extraordinarily skeptical that electricity providers will be able to increase generation and transmission activity to service the kind of load necessary to provide charging infrastructure for this volume of HD trucks at scale within ten years. A recent analysis of grid upgrades necessary for HD electrification found that a single highway fast-charging site will require the same amount of electricity as a sports stadium or a small town.¹⁰ This will require the development of dedicated substations and significant energy resources behind the meter. EPA's Proposed Rule largely assumes that, with an increase in EV production, there will be a sufficient increase in electricity generation and transmission to meet those EV needs. Even when HD charging sites are financed, more than 50% of fleet operators already operating HD EVs report that building a charging site takes over a year on average.¹¹

On top of these challenges, the overarching structure of wholesale and retail electricity markets is not designed for—and is currently incompatible with—the retail diesel market. Currently, electric utilities monopolize both generation and access, and they experience shifts in supply and demand with little to no risk as they are able to pass on costs to ratepayers. These electric utilities routinely impose demand charges on commercial users of electricity added to a monthly utility bill. These charges are not based on the amount of electricity used by that business, but on the highest rate of usage the business has during the two fifteen-minute periods in a month in which the business draws electricity from the grid at the highest pace. EV fast chargers—a must-have for on-the-go charging such as those found at a truck stop or convenience store—draw extensive electricity from the grid to charge an EV quickly. To power HD diesel trucks, this would result in inordinate charges to a refueling location's monthly utility bill that it likely could not

⁸ See AMERICAN TRANSPORTATION RESEARCH INSTITUTE, “Understanding the CO2 Impacts of Zero-Emission Trucks” (May 3, 2022) available at <https://truckingresearch.org/2022/05/understanding-the-co2-impacts-of-zero-emission-trucks/>.

⁹ Jasmin Melvin, S&P GLOBAL, “Trucking industry worries US EPA put ‘cart before the horse’ with emissions proposal,” (April 19, 2023); available at <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/oil/041923-trucking-industry-worries-us-epa-put-cart-before-the-horse-with-emissions-proposal>.

¹⁰ Gideon Katsh, et al., CALSTART et al., “Electric Highways: Accelerating and Optimizing Fast-Charging Deployment for Carbon-Free Transportation” (November 11, 2022) available at <https://calstart.org/electric-highways-study/>.

¹¹ Saral Chauhan, et al., McKinsey & Co., “Fleet decarbonization: Operationalizing the transition” (Dec. 20, 2022) available at <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/fleet-decarbonization-operationalizing-the-transition?stcr=5E41D3E4A0E44A8AB1251119CEF46775&cid=other-eml-alt-mip-mck&hlkid=cf69cd78c86a42938ccdc7806b06c93d&hctky=14495856&hdpid=4eb1e872-7192-48d7-b6cb-0642d205d4c5>.

recover. There is simply no business case for electric truck charging in the United States. The Associations are actively working with state and federal policymakers to enhance this business case, but until there is a clearer light at the end of that tunnel, it makes little sense to put all of our heavy-duty decarbonization eggs in one basket.

b. *Additional Impediments to Electrifying Trucks*

There is little indication that HD electric trucks will make economic sense for commercial trucking companies in ten years' time, even if refueling concerns are mitigated. Nearly 80% of long-haul truck drivers say they would “never add an electric vehicle to their fleet.”¹² If electric trucks do not provide a return on investment to the vehicle owner, it will result in the transfer of costs to the consumers and communities these vehicles service. Further, if new vehicle costs result in a reduction in the rate of vehicle replacement, legacy vehicles will remain in operation for a prolonged period of time, slowing progress on reducing emissions with newer vehicles.

Beyond cost, a wide variety of barriers to heavy-duty truck electrification are not sufficiently addressed in the Proposal. Battery weight is likely to significantly curtail the long-haul capabilities of heavy-duty electric trucks. As noted above, the battery can add an additional 16,000 pounds to an HD truck. This reduces the amount that trucks can carry and will result in a need for substantially more vehicles on the road to transport the same amount of cargo. Truck carriers near the maximum allowable weight will likely have to modify their operations in order to comply with the Proposal. Further, ambient temperatures can influence the battery performance of electric vehicles. In northern states, fleets that operate in cold weather conditions will have to account for slowed chemical and physical reactions in truck batteries, leading to significantly longer charging times and a temporary reduction in range.¹³

HD trucks currently are responsible for moving 72% of the U.S. economy's freight.¹⁴ The implications for the cost and efficiency of moving goods by electric truck will create large cost increases for virtually all goods sold in the United States and challenge the supply chains needed to get those goods to market. EPA must account for these consequences in the Proposed Rule.

¹² Tyson Fisher, LAND LINE, “Most truckers have no interest in electric trucks, survey reveals” (Apr. 11, 2023), available at <https://landline.media/most-truckers-have-no-interest-in-electric-trucks-survey-reveals/#:~:text=Truckers%20do%20not%20appear%20to,they%20will%20within%20five%20years>.

¹³ See AMERICAN TRANSPORTATION RESEARCH INSTITUTE, “Understanding the CO2 Impacts of Zero-Emission Trucks,” (May 3, 2022) available at <https://truckingresearch.org/2022/05/understanding-the-co2-impacts-of-zero-emission-trucks/>. EVs lose significant range in cold weather and Consumer Reports has found that driving short trips with frequent stops in cold weather can reduce EV range by as much as 50 percent. *See also* Jeff S. Bartlett and Gabe Shenhar, Consumer Reports, “How Temperature Affects Electric Vehicle Range” (Aug. 22, 2022) available at <https://www.consumerreports.org/cars/hybrids-evs/how-temperature-affects-electric-vehicle-range-a4873569949/>.

¹⁴ Bob Costello, American Trucking Associations, “Economics and Industry Data” available at <https://www.trucking.org/economics-and-industry-data>.

III. The Proposed Rule Fails to Account for the Lifecycle Emissions of Electric Trucks.

Under the Proposal, electric trucks effectively serve as the only means of compliance with the standards in part because the Agency focuses solely on tailpipe emissions rather than the full lifecycle emissions of heavy-duty vehicles. This is a flawed approach. EPA should incorporate lifecycle GHG emissions into its analysis to fairly consider multiple technologies and ensure an accurate accounting of the lifecycle carbon intensity associated with particular fuels and technologies. This will facilitate continued investment in non-electric decarbonization technologies *alongside* investments in EV HD trucks, while simultaneously anticipating and addressing regional differences applicable to such emissions.

This analysis should include everything from the acquisition of critical minerals, the use of natural resources for refining and processing, engine and battery manufacturing, tailpipe emissions, and other confounding variables like prolonged internal combustion engine (“ICE”) turnover rates and vehicle end-of-life consequences. Importantly, a lifecycle analysis of EVs will better equip EPA to understand the varying costs and emissions reductions associated with all technologies and best inform manufacturers and consumers of their options.

Though HD EVs do not directly have tailpipe emissions, other segments along the lifecycle of the EV do. The fuel source of an EV—a battery composed of carbon intensive minerals and the electricity generated to power the battery—produces meaningful emissions to which the Proposal turns a blind eye. Addressing the impact of climate change, however, requires mitigating emissions irrespective of whether they originate from a tailpipe, a mining operation, a power plant, or a battery plant. Consequently, emissions standards should account for the entire lifecycle emissions.

EPA makes flawed assumptions regarding the total emissions impacts of the Proposal. While it claims that the overall analysis for combined downstream and upstream emissions “likely underestimates the net emissions reductions that may result” from the Proposed Rule, EPA fails to substantiate this claim with sufficient data or detailed analysis. The Proposed Rule did not quantify emissions changes associated with producing or extracting crude or manufacturing refined fuels.¹⁵

While diesel-powered trucks generally emit more carbon dioxide during operation, the emissions associated with the manufacturing of diesel-powered trucks are significantly lower than those emitted from both battery-electric and fuel-cell electric trucks.¹⁶ A recent examination

¹⁵ Proposed Rule at 26,044.

¹⁶ See AMERICAN TRANSPORTATION RESEARCH INSTITUTE, “Understanding the CO2 Impacts of Zero-Emission Trucks,” (May 3, 2022) available at <https://truckingresearch.org/2022/05/understanding-the-co2-impacts-of-zero-emission-trucks/> (“The marginal environmental benefits of electric trucks are due, in large part, to lithium-ion battery production – which generates more than six times the carbon of diesel truck production.”); see also David Biello, SCIENTIFIC AMERICAN, “Electric Cars Are Not Necessarily Clean,” (May 11, 2016) available at <https://www.scientificamerican.com/article/electric-cars-are-not-necessarily-clean/> (“Your battery-powered vehicle is only as green as your electricity supplier”); see also Nina Lakhani, THE GUARDIAN, “Revealed: How US Transition to Electric Cars Threatens Environmental Havoc,” the Guardian, (January 24, 2023) available at <https://www.theguardian.com/us-news/2023/jan/24/us-electric-vehicles-lithium-consequences-research>. (“The US’s transition to electric vehicles could require three times as much lithium as is currently produced for the entire global market, causing needless water shortages, Indigenous land grabs, and ecosystem destruction.”).

conducted by Volvo provides an analogous case study of emissions resulting from light-duty vehicle manufacturing. The impacts are exaggerated for HD trucks. Volvo concluded that the “accumulated emissions from the [m]aterials production and refining, [Lithium-ion] battery modules and Volvo Cars manufacturing phases of C40 Recharge are nearly 70 percent higher than for XC40 ICE.”¹⁷ Volvo explains, “[e]lectrification of cars causes a shift of focus from the use phase to the materials production and refining phase.”¹⁸ HD electric trucks, which require substantially more manufacturing components, have an even greater emissions impact.

The Proposed Rule similarly fails to adequately evaluate local ambient air quality impacts from increased power generation. Though EPA modeled changes to power generation anticipated by the Proposed Rule as part of its upstream analysis, the Agency does not consider the potential degradation of air quality in areas in the direct vicinity of existing or new power plants.¹⁹ This is further complicated by the fact that emissions associated with electricity generation are not consistent across the U.S. In contrast to EPA’s generalized emissions benefits, the emissions advantages of EVs are much lower in states with relatively high carbon profiles for electricity generation than those states with relatively low carbon profiles. Indeed, the Fuels Institute analyzed these differences and concluded that in states with high-carbon intensity electric generation, such as West Virginia, ICE vehicles produced decidedly fewer carbon emissions relative to EVs over the entire 200,000 mile life of the vehicles.²⁰ Of course, the Report recognizes emissions advantages to EVs in those low-carbon states as well, but these differences further illustrate the importance of considering a more heterogenous approach to the HD freight industry.

The Proposed Rule also overlooks the emissions impacts from the substantial expansion of the electrical grid. While EPA credits emissions reductions from assuming the power sector will become cleaner over time using renewable generation and electricity storage (i.e., batteries), it ignores the impacts of building out that infrastructure. New power generation, renewable power generation, and energy storage require the same critical minerals necessary for EV batteries. Increased electricity demand compounds the stress on critical minerals. Indeed, copper and aluminum—both needed for HD electric trucks—are also the two main materials in wires and cables. Battery storage equipment for solar and other renewable energy sources rely on similar battery chemistries as HD electric trucks.²¹ The simultaneous spike in demand for materials such as copper and aluminum for both the grid and EV manufacturing will increase extraction and refining efforts globally, potentially exacerbating consequences on a regional level.²² By failing to consider geographic electricity generation differences and the potential benefits of a non-

¹⁷ Elisabeth Evrard, et al., VOLVO, “Carbon footprint report – Volvo C40 Recharge,” (2021), pg. 24, available at <https://www.volvocars.com/images/v/-/media/Market-Assets/INTL/Applications/DotCom/PDF/C40/Volvo-C40-Recharge-LCA-report.pdf>.

¹⁸ *Id.* at pg. 5.

¹⁹ Proposed Rule at 25,983.

²⁰ Ricardo Inc., TRANSPORTATION ENERGY INSTITUTE, “Lifecycle Analysis Comparison” (Jan. 2022) available https://transportationenergy.org/wp-content/uploads/2022/10/FI_Report_Lifecycle_FINAL.pdf.

²¹ And, as described above, higher prices on these materials could have a major impact on future grid investments. International Energy Agency, *The Role of Critical Minerals in Clean Energy Transitions* (March 2022), 77–80, available at <https://iea.blob.core.windows.net/assets/ffd2a83b-8c30-4e9d-980a-52b6d9a86fdc/TheRoleofCriticalMineralsinCleanEnergyTransitions.pdf>.

²² The U.S. is almost entirely dependent on other countries, especially China, for materials essential to manufacturing heavy-duty electric trucks, meaning the Proposal may potentially raise national security concerns.

homogenized truck population, the Proposal misses the opportunity to most effectively respond to emissions concerns and, more importantly, could indirectly lead to *increased* emissions in certain regions. A full accounting of the relative advantages and disadvantages of the different vehicle technologies is necessary to ensure the Proposal harnesses the benefits of competition among different current and potential future vehicle technologies.

IV. The Proposed Rule Blunts Innovation and Competition.

EPA’s effort to mandate a shift to EV technologies directly disincentivizes new technology that could maximize diverse investments and achieve near-term and long-term emission reduction goals. Indeed, EPA’s proposal risks zeroing out new innovations in emissions reductions for ICE vehicles. Because there is no way for manufacturers to comply based on ICE vehicles alone, they would not achieve a return on new investments for and in developing that technology. Finalizing regulations that push people to that conclusion will cause truck manufacturers to miss an opportunity for innovative emissions reductions. Climate research has consistently emphasized the importance of near-term emissions reductions relative to future reductions.²³ More efficient diesel engines coupled with low-carbon, biomass-based diesel can reduce emissions immediately.

As just one example, there have been increasingly innovative technologies surrounding expanded natural gas vehicle (“NGV”) production in recent years. But the Proposed Rule fails to provide the automotive sector with any meaningful incentive to continue developing such technology or similar vehicles that can effectively rely on renewable natural gas (“RNG”). The latest data available from the California Low Carbon Fuel Standard Program indicates that the average carbon intensity of bio-CNG (compressed natural gas) sold in 2020 was $-5.85\text{gC}/2\text{e}/\text{MJ}$.²⁴ In the coming years, the carbon intensity of RNG is expected to be even lower as greater amounts of low-carbon dairy gas is produced and used in NGVs. This is especially important in light of market considerations for HD vehicles in particular.

Further, existing alternative fuel incentives—such as the Renewable Fuel Standard (“RFS”) and biofuel blending and alternative fuel infrastructure tax credits—have allowed truckstops and other fuel retailers to offer less expensive, lower carbon fuels to our customers, while also supporting investments in renewable fuel production.²⁵ The incentives Congress established over the past few decades have caused the displacement of significant volumes of petroleum-based fuel with renewable fuels.

²³ See G. Cornelis van Kooten, Patrick Withey, and Craig M.T. Johnston, BIOMASS AND BIOENERGY 151 “Climate Urgency and the Timing of Carbon Fluxes,” (August 2021) available at <https://doi.org/10.1016/j.biombioe.2021.106162>. (“The current climate emergency dictates that **immediate action is required to mitigate climate change**, which implies that carbon fluxes occurring **20 or more years from now are too late to have any mitigative effect.**”)

²⁴ California Air Resources Board, Low Carbon Fuel Standard Program, LCFS Pathway Certified Carbon Intensities (2023) available at <https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities>.

²⁵ Importantly, renewable fuels significantly reduce carbon dioxide emissions through the lifecycle of heavy-duty vehicles without requiring truck drivers to cover the upfront costs of a battery-electric truck, which costs roughly twice as much as a comparable diesel-powered truck. See Todd Dills, OVERDRIVE, “Cutting through Heavy-Duty E-Trucks Hype: 7 in 10 Owner-Ops Show ‘Zero’ Interest in Electric Powertrain Techs,” (Dec. 15, 2021) available at <https://www.overdriveonline.com/equipment/article/15286428/cutting-through-the-heavyduty-etrucks-hype>.

Recent estimates indicate that renewable diesel reduces carbon intensity by 65% compared to petroleum-based diesel.²⁶ Increased utilization of renewable fuels could lead to significant emissions reductions by improving the emissions profiles not only of new vehicles but existing vehicles as well. The Proposed Rule surrenders the market’s ability to deliver near-term emissions savings by imposing a top-down, hurried transition to one technology.

V. EPA’s Proposed Rule Is a “Major Question” Reserved for Congress.

EPA’s GHG standards should not favor one technology over another. The Proposed Rule, however, goes beyond favoritism and signals the agency’s intention to phase out non-EV technologies, such as ICE vehicles. Despite EPA’s assertions to the contrary, the Proposed Rule mandates non-ICE technologies because OEMs cannot comply with the standards through the sale of ICE vehicles alone. And EPA explicitly anticipates EV adoption rates high and above current market rates to achieve these standards. By MY 2032, EPA predicts an EV adoption rate between 15–57% across all regulatory subcategories of vehicles.²⁷ At minimum (e.g. a 15% adoption rate), this is a 7,400% increase over the number of HD electric vehicles certified by EPA in 2021.²⁸ The Proposed Rule will therefore introduce a transformational shift in the automotive industry—including the fuel retail industry—far beyond that which EPA has authority to mandate as delegated by Congress. Whether this shift is necessary and how best to achieve such a shift are “major questions” reserved for Congress and Congress alone.

Consistent with the “major questions doctrine,” Congress must “speak clearly” to authorize an agency to exercise powers of “vast economic and political significance.”²⁹ Overreaching environmental regulatory programs like the Proposed Rule fit precisely into this doctrine. In *West Virginia v. EPA*, the Supreme Court invoked the doctrine when it held that EPA had exceeded its statutory authority in adopting the Clean Power Plan.³⁰ Through the Clean Power Plan, EPA sought to reduce emissions by requiring utilities and other power generators to transition from coal-fired power to natural gas and, ultimately, renewable energy sources rather than by imposing source-specific requirements reflective of the best available emission reduction technologies, as it had done in the past.³¹ Through the Clean Power Plan, EPA announced “what the market share of coal, natural gas, wind, and solar must be, and then require[d] plants to reduce operations or subsidize their competitors to get there.”³² The Supreme Court struck down the proposed program, concluding that EPA’s relied upon “vague statutory grant” within the Clean Air Act was far from the “clear authorization required” for a regulatory program that would have major economic and

²⁶ U.S. Dep’t of Energy, “Renewable Diesel” (2023) available at https://afdc.energy.gov/fuels/renewable_diesel.html.

²⁷ U.S. Environmental Protection Agency, “Greenhouse Gas Emissions Standards for Heavy Duty Vehicles: Phase 3, Draft Regulatory Impact Analysis,” 245, available at <https://www.epa.gov/system/files/documents/2023-05/420d23004.pdf> [hereinafter, “DRIA”].

²⁸ Proposed Rule, 88 Fed. Reg. at 25,940.

²⁹ *Nat’l Fed. Of Indep. Bus. v. Dep’t of Labor*, 595 U.S. ___, slip op. at 6 (Jan 13, 2022); see also *Ala. Assoc. of Realtors v. Dep’t of Health & Human Servs.*, 141 S. Ct. 2485, 2489 (2021); *Utility Air Regulatory Group v. EPA*, 573 U.S. 302, 324 (2014); *U.S. Telecom Assoc. v. FCC*, 855 F.3d 381, 419-21 (D.C. Cir. 2017) (Kavanaugh, J., dissenting from denial of rehearing en banc) (explaining provenance of “major rules doctrine”).

³⁰ *West Virginia v. EPA*, 597 U.S. __ (2022).

³¹ *Id.*

³² *Id.*, slip op. at 33, n. 4.

political significance, impacting vast swaths of American life, and substantially restructuring the American energy market.³³

EPA’s Proposed Rule presents an analogous situation. Mandating a rapid shift from ICE to EV technology will reshape the American automotive market with profound and far-reaching collateral effects, thus encroaching on an issue of “vast economic and political significance.” These standards are contrary to natural market forces and would vastly alter what consumers are able to purchase by indirectly requiring the production of a product different from that currently being purchased (e.g., ICE HD vehicles). The Proposed Rule forces both the manufacturer’s and consumer’s hand in requiring rapid scaling to meet production lead times and adoption rate requirements that would not exist but for EPA’s electrification mandate.

Beyond the obvious impacts to consumer automotive markets, the Proposed Rule will also greatly affect fuel retailers across the country. It will require utilities to rapidly increase generation, transmission, and distribution capacities to meet needs not fully assessed by EPA. Forcing the American automotive industry to shift reliance from domestically abundant and secure oil and gas to foreign-supplied critical minerals will have profound impacts on national security. These are only a few of the critical effects of the Proposed Rule that go well beyond EPA’s expertise. The Agency is not situated to fully analyze the consequences resulting from such a rapid shift to EVs, if feasible at all—and the Agency has not done so.

Similar to the Supreme Court’s finding in *West Virginia*, EPA lacks congressional authorization in the Clean Air Act to impose a shifting manufacturing standard to a preferred powertrain and effectively require regulated manufacturers to phase out combustion engine technology. EPA’s authority to impose emissions standards is limited to that provided in Section 202(a) of the Clean Air Act. EPA’s authority is limited to setting “standards” for “emission[s]” from “any class or classes of new motor vehicles or new motor vehicles engines, which ... cause or contribute to,” potentially harmful air pollution. ZEVs do not have tailpipe emissions of GHGs, though. Thus, operating such vehicles alone cannot “cause, or contribute to,” air pollution. In stark contrast to “clear congressional authorization,” Section 202(a) of the Clean Air Act provides EPA no authority to set standards beyond that which could be achieved by improvement to ICE vehicles and eventually phase out the only technology contemplated when the Act itself was adopted and amended.

Further evidencing EPA’s lack of authority, the Proposal attempts to sidestep regulatory requirements established by the Energy Policy and Conservation Act of 1975 (“EPCA”)³⁴ and the Energy Independence and Security Act (“EISA”). Pursuant to these authorities, the National Highway Transportation Safety Authority (“NHTSA”) has the authority to issue fuel efficiency standards for medium- and heavy-duty vehicles. Because fuel economy and GHG emissions are two sides of the same coin, EPA issued joint standards with NHTSA in prior Phase 1 and Phase 2 heavy-duty GHG emission standard proposals. But EPA did not do the same for the proposed Phase 3 standards here. If it did, the joint standards would have to comply with the EISA requirement that all new fuel efficiency standards “shall provide not less than 4 full model years

³³ *Id.*, slip op. at 24.

³⁴ Pub. L. 94-163, 89 Stat. 871 (Dec. 22, 1975).

of regulatory lead-time,” so that new GHG standards are tethered to achievable vehicle technology.³⁵ That means a fuel efficiency standard promulgated in calendar year 2023 cannot be implemented until MY 2028. The Proposed Rule does not meet this standard and, because it effectively promulgates equivalent fuel efficiency standards in the form of GHG emissions standards, is undercutting Congress’ intent in EISA and regulating in a way that is inconsistent with NHTSA’s authority as well as its own.³⁶

Moreover, EPA has never before claimed authority to mandate even partial electrification—similar to EPA’s reliance on Section 111(d) of the Clean Air Act for the promulgation of the Clean Power Plan. Congress has made clear that it, not EPA, must make policy decisions—or, rather, answer the “major question”—regarding if, when, and how the American automotive industry will transition from ICE vehicles to EVs. In the 116th Congress (2019–21), Congress introduced 44 bills seeking to reduce petroleum-based fuel consumption and GHG emissions from the transportation sector through customer rebates, vehicle and fuel producer incentives, local funding, development of standards, and research and development.³⁷ But none went so far as to propose the mass adoption of heavy-duty ZEVs through the phase-out of ICE vehicles.³⁸ In fact, Congress rejected one bill that would have banned the sale of new light-duty ICE vehicles by 2040,³⁹ and it has continuously disapproved of EPA’s efforts to hamstring the automotive sector with more stringent air pollution standards than are feasible.⁴⁰

Congress intended to direct these policy decisions, as evidenced by the passage of the bipartisan infrastructure law⁴¹ and the Inflation Reduction Act (“IRA”)⁴² whereby Congress identified the policy levers it deemed appropriate. Congress could have, but did not, direct EPA to establish a fleet-wide credit trading regime to further drive EV development and rapid adoption. Instead, the Proposed Rule stands in direct contrast to other legislation, such as the Renewable Fuel Standard Program, whereby Congress mandated that “gasoline sold or introduced into commerce in the United States” must contain a year-over-year increasing share of renewable fuels⁴³ and, in 2022, must include tens of billions of gallons of renewable fuel.⁴⁴ An EPA-mandated shift in transportation technology from vehicles that can operate on increasing volumes of

³⁵ 49 U.S.C. 32902(k). In contrast, under the Clean Air Act, new heavy-duty emission standards can begin “no earlier than the model year commencing 4 years after such revised standard is promulgated.” 42 U.S.C.

§ 7521(a)(3)(C).

³⁶ See *Massachusetts v. EPA*, 549 U.S. 497, 532 (2007) (“The [EPA and NHTSA] obligations may overlap, but there is no reason to think the two agencies cannot both administer their obligations and yet avoid inconsistency.”).

³⁷ CONGRESSIONAL RESEARCH SERVICE, “Alternative Fuel and Vehicles: Legislative Proposals” (July 28, 2021).

³⁸ *Id.*

³⁹ See Zero-Emission Vehicles Act of 2019, H.R. 2764, 116th Cong. (2019); Zero-Emission Vehicles Act of 2018, S. 3664, 115th Cong. (2018); see also 116 Cong. Rec. 19238-40 (1970) (proposed amendment to Title II that would have banned ICE vehicles by 1978).

⁴⁰ See, e.g., S. J. Res. 11, 118th Cong. (2023). (Although passed only by the Senate thus far, the joint resolution calls for disapproval of the rule submitted by the Administrator of the Environmental Protection Agency relating to “Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards,” 88 Fed. Reg. 4296 (January 24, 2023).)

⁴¹ Public Law 117–58, November 15, 2021.

⁴² Public Law 117–169, August 16, 2022.

⁴³ 42 U.S.C. § 7545(o)(2)(A)(i).

⁴⁴ *Id.*, § 7545(o)(2)(B); 87 Fed. Reg. 39,600 (July 1, 2022).

renewable fuel to ZEVs does not square with such requirements. Consequently, Congress, not EPA, should determine how to regulate electrification of transportation and the many industries affected thereby.

VI. The Proposed Rule Is Contrary To The Small Business Regulatory Enforcement Fairness Act of 1996.

Finally, EPA’s certification that the Proposed Rule will not have a significant economic impact on a substantial number of small entities is unsupported by the record.⁴⁵ Our industry is one of small businesses. More than 60% of convenience stores are single-store operators. Less than 0.2 % of convenience stores that sell gas are owned by a major oil company and about 4% are owned by a refining company, meaning that independent businesses comprise more than 95% of the industry. Though small, our members in the industry process more than 165 million transactions every day. And while EPA considered effects on manufacturers it considered small businesses, EPA did not fairly assess the potential impacts of the Proposed Rule on non-manufacturer small businesses like our members—contrary to Congressional intent.

The Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act (“SBREFA”), requires agencies like EPA to determine, to the extent feasible, the rule’s economic impact on small entities, explore regulatory options for reducing any significant economic impacts on a substantial number of such entities, and explain their ultimate choice of regulatory approach. But the Proposed Rule is accompanied by little to no information on potential impacts on these small businesses. There is no formal or informal analysis of the adverse economic impacts to small businesses, no SBREFA screening analysis, no analysis, advice, and no recommendation from a Small Business Advocacy Review (“SBAR”) Panel. As reiterated throughout these comments, the impacts to our members are far from inconsequential. Thus, we urge EPA in any future rulemaking to further engage in a thorough review of adverse effects to small businesses like our members consistent with their charge under the SBREFA.

⁴⁵ Proposed Rule at 26,097.

NACS NATSO SIGMA Comments

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June 16, 2023

VII. Conclusion

NACS, NATSO, and SIGMA, representing fuel retailers, travel centers, and marketers across the country, look forward to working with EPA to improve automotive GHG standards in a manner that is legal and practicable. Thank you for the opportunity to provide these comments.

Sincerely,

National Association of Convenience Stores (NACS)

NATSO, Representing America's Travel Plazas and Truckstops

SIGMA: America's Leading Fuel Marketers