September 15, 2022

VIA REGULATIONS.GOV

National Highway Traffic Safety Admin.
United States Dept. of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590
Dkt. ID No. NHTSA-2022-0075

RE: Notice of Intent to Prepare an Environmental Impact Statement for Model Years 2027 and Beyond Corporate Average Fuel Economy Standards and Model Years 2029 and Beyond Heavy-Duty Pickup Trucks and Vans Vehicle Fuel Efficiency Improvement Program Standards: Comments of Sierra Club and Earthjustice

The Sierra Club and Earthjustice respectfully submit these comments regarding the National Highway Traffic Safety Administration's (NHTSA's) Notice of Intent to Prepare an Environmental Impact Statement for Model Years 2027 and Beyond Corporate Average Fuel Economy Standards and Model Years 2029 and Beyond Heavy-Duty Pickup Trucks and Vans Vehicle Fuel Efficiency Improvement Program Standards. President Biden has committed the United States to "lead[ing] the world on clean and efficient cars and trucks."[1] Consistent with applicable laws, President Biden directed NHTSA to establish new fuel economy standards for passenger cars and light-duty trucks beginning with model year 2027 and extending through and including at least model year 2030 and new fuel efficiency standards for heavy-duty pickup trucks and vans beginning with model year 2028 and extending through and including at least model year 2030.[2] Commenters appreciate NHTSA commencing this important process and offer the following comments regarding NHTSA's Environmental Impact Statement (EIS) notice:

(1) NHTSA's purpose and need statement for its forthcoming fuel economy standards must focus on energy conservation;
(2) Consistent with its obligation to establish "maximum feasible" standards, NHTSA must model an adequately ambitious upper bound alternative consistent with the numerical recommendations below;
(3) NHTSA cannot backload increases in stringency to the later years of the rule;
(4) NHTSA must incorporate into its modeling any updates to the Petroleum Equivalency Factor; should it complete its modeling prior to the Department of Energy finalizing

[1] Executive Order 14037 (Aug. 5, 2021), 86 Fed. Reg. 43,583 (Aug. 10, 2021).
[2] *Id.*

an updated Petroleum Equivalency Factor, NHTSA must model sensitivities that address a range of realistic updates to the factor;
(5) It is appropriate for NHTSA to retain a footprint-based approach to setting fuel economy standards, but it must include a mix shift backstop;
(6) NHTSA must limit flexibilities in the forthcoming rule, including elimination of additional incentives for hybrid full-size pickups and further constraints or elimination of off-cycle credits;
(7) NHTSA must include the most current information on the greening of the electric grid in its evaluation of greenhouse gas emissions impacts of battery electric vehicles;
(8) NHTSA's modeling must account for the impacts of the Inflation Reduction Act on future electric vehicle sales;
(9) NHTSA's analysis of the adverse environmental impacts of internal combustion vehicles should consider the full impacts of oil production and transportation;
(10) For its cumulative impacts analysis, NHTSA must provide meaningful, comparative data; present cumulative impacts in a manner that shows their significance; and present its alternatives within the planet's remaining carbon budget; and
(11) NHTSA must present a thorough analysis of environmental justice impacts.

I. NHTSA's Purpose and Need Must Focus on Energy Conservation

NHTSA must draft the purpose and need statement in light of "the views of Congress," based on "the agency's statutory authorization to act, as well as … other congressional directives." *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991). Because the fundamental purpose of EPCA is energy conservation, the purpose and need must emphasize that key purpose above all else.

EPCA provides that the Secretary of Transportation "shall" prescribe average fuel economy standards at "the *maximum feasible* average fuel economy level that … manufacturers can achieve in that model year." 49 U.S.C. § 32902(a) (emphasis added). In determining how to set maximum feasible standards, NHTSA is to consider four factors: "technological feasibility, economic practicability, the effect of other motor vehicle standards of the Government on fuel economy, and the need of the United States to conserve energy." 40 U.S.C. § 32902(f). While NHTSA has some discretion in deciding how to weigh these factors, none of them may override the need to conserve energy. *Ctr. for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1195 (9th Cir. 2008) ("The EPCA ... gives NHTSA discretion to decide how to balance the statutory factors—as long as NHTSA's balancing does not undermine the fundamental purpose of the EPCA: energy conservation"); *see also Ctr. for Auto Safety v. NHTSA*, 793 F.2d 1322, 1340 (D.C. Cir. 1986) ("Congress intended energy conservation to be a long term effort that would continue through temporary improvements in energy availability. Thus, it would clearly be impermissible for NHTSA to rely on consumer demand to such an extent that it ignored the overarching goal of fuel conservation") (footnote omitted). In considering this overriding need for energy conservation, NHTSA must take into account the harmful effects of failing to do so,

including "the consumer cost, national balance of payments, environmental, and foreign policy implications of our need for large quantities of petroleum, especially imported petroleum." *See* 77 Fed. Reg. at 62,669.

The need for energy conservation and "maximum feasible" fuel efficiency standards is not only mandated legally, but remains a fact on the ground today. The United States consumes more energy from petroleum than from any other energy source. In 2021, total petroleum consumption was about 19.78 million barrels per day, 67% of which was consumed by the transportation sector.[3] The U.S. Energy Information Administration projects that petroleum will continue to contribute the largest share of total U.S. energy consumption through 2050. U.S. crude oil production has reached record highs, yet the country is projected to remain a net oil importer.[4]

In balancing the four statutory factors, NHTSA must focus on the statute's primary goal to conserve energy, and cannot weigh the other factors to undermine that purpose.

As for the other statutory factors, NHTSA should recognize that the "technologically feasible factor" is meant to be technology-forcing. Congress recognized that "market forces ... may not be strong enough to bring about the necessary fuel conservation which a national energy policy demands." *Ctr. for Auto Safety*, 793 F.2d at 1339 (citing S. Rep. No. 179, 94th Cong., 1st Sess. 2 (1975)). NHTSA itself has previously recognized that the agency is "not limited in determining the level of new standards to technology that is already being commercially applied at the time of the rulemaking." 77 Fed. Reg. at 62,668.

As far as "economic practicability," NHTSA should recognize that regulations may impose substantial costs to achieve their protective mandates as long as those costs are not "excessive," "exorbitant," or "more than the industry could bear and survive." *See, e.g., Lignite Energy Council v. EPA*, 198 F.3d 930, 933 (D.C. Cir. 1999); *Sierra Club v. Costle*, 657 F.2d at 383; *Portland Cement Ass'n v. Train*, 513 F.2d 506, 508 (D.C. Cir. 1975). In 1975 Congress was clear that ''a determination of maximum feasible average fuel economy should not be keyed to the single manufacturer which might have the most difficulty achieving a given level of average fuel economy.'' *Ctr. for Auto Safety v. NHTSA*, 793 F.2d 1322, 1339 (D.C. Cir. 1986) (citation omitted). In past rulemakings, NHTSA has recognized that EPCA does not preclude a CAFE standard that poses considerable challenges to individual auto manufacturers, and that EPCA allows it to set standards that exceed the capability of particular manufacturers as long as the standard is economically practicable for the industry as a whole. 77 Fed. Reg. at 62,668.

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[3] U.S. Energy Information Administration, *Oil: Crude and Petroleum Products Explained. Use of Oil* (Sept. 7, 2022), *available at* https://www.eia.gov/energyexplained/index.php?page=oil_use

[4] U.S. Energy Information Administration, Annual Energy Outlook 2018 (Sept. 9, 2022) at 2, 19, available at https://www.eia.gov/outlooks/aeo/pdf/AEO2022_ReleasePresentation.pdf

NHTSA should explicitly recognize, as it has in previous rulemakings, that "other motor vehicle standards of the Government" includes EPA's greenhouse gas standards, *see* 83 Fed. Reg. at 43,209, and California's vehicle standards. *See, e.g*., 77 Fed. Reg. at 62,668; 75 Fed. Reg. at 25,556; 70 Fed. Reg. 51,414, 51,454 (2005); 68 Fed. Reg. 16,868, 16,896 (2003). Indeed, Congress has expressly directed NHTSA to consider EPA's standards, Pub. L. No. 94-163, § 502(e), 89 Stat. 871. The phrase "other motor vehicle standards of the Government" naturally includes California's standards that other states have adopted. *See Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie*, 508 F. Supp. 2d 295, 347 (D. Vt. 2007) ("It seems beyond serious dispute therefore that once EPA issues a waiver for a California emissions standard, it becomes a motor vehicle standard of the government, with the same stature as a federal regulation with regard to determining maximum feasible average fuel economy under EPCA."). NHTSA correctly recognizes in its scoping notice that California standards must be considered as the baseline in the no action alternative.

II. NHTSA Must Consider An Adequate Upper Bound Alternative

NEPA requires agencies to evaluate the environmental impacts of a proposed action and alternative actions that would avoid or mitigate those impacts. 42 U.S.C. § 4332; 40 C.F.R. §§1502.1, 14 & 16.

We strongly endorse NHTSA's proposed approach to the no action alternative. The baseline for CAFE standards must consider that California's Advanced Clean Cars II standards will apply in California and all the existing 177 states. And the heavy-duty fuel efficiency standards must take into account that California's Advanced Clean Trucks (ACT) standards will apply in California and many 177 states that have or plan to adopt it.[5]

We also endorse NHTSA's intention for the upper bound alternative, which will place greater weight on energy conservation and environmental considerations than economic practicability concerns. *Id.* at 50389. As for the less stringent alternative where NHTSA plans to do the opposite, we emphasize again that even the lower bound alternative must focus on the statute's primary goal to conserve energy, and NHTSA cannot weigh the other factors to undermine that purpose. *Id*. We disagree with NHTSA's statement that it can select from any stringency within the range that it has articulated, *see id*. at 50391, since EPCA requires NHTSA to conserve energy above all else. We urge NHTSA to reconsider its approach in the DEIS.

In the 2012 Final EIS, NHTSA analyzed a range of alternatives with an upper bound of 7 percent annual increase in fuel economy.[6] In the 2022 Final rule, NHTSA determined that standards that increased at 8 percent a year and a 10 percent increase in the final year is the

[5] https://www.electrictrucksnow.com/states
[6] 2012 Final EIS, at 2-10.

maximum feasible.[7] At a minimum, NHTSA must analyze an annual increase of at least 7 percent–and preferably 8 or 10 percent–as an upper bound alternative.

III. NHTSA Cannot Backload Increases in Stringency

NHTSA claims that it may set more stringent standards in either the earlier years or later years of the rule, depending on determination of what is "maximum feasible."[8] NHTSA also suggests that it may select fuel efficiency standards that decrease or remain the same compared to immediate prior years. *Id*. Given that the later an emission reduction occurs the more costly it is as compared to an earlier reduction,[9] and that NHTSA could not make a record for technical infeasibility, commenters disagree that NHTSA can take the intended approach. NHTSA cannot support pushing higher degrees of stringencies into the outer years in light of current market trends and the high cost of delay. NHTSA must evaluate and disclose the costs of delay as it did in its 2012 EIS.[10]

IV. In Developing Its Range of Scenarios to Model, NHTSA Should Incorporate Any Updates to the Petroleum Equivalency Factor that the Department of Energy Has Made or Model Sensitivities Regarding Potential Changes to the Petroleum Equivalency Factor

When calculating compliance with the CAFE standards, NHTSA is required to account for electric vehicles. 49 U.S.C. § 32904(a)(2). Since electric vehicles do not directly consume petroleum, NHTSA must impute a petroleum equivalency for these vehicles. The statute directs NHTSA to accomplish this calculation using a Petroleum Equivalency Factor (PEF) determined by the Department of Energy (DOE),[11] that is required to be reviewed and—as necessary—updated annually.[12] Despite DOE's annual review obligations, the PEF has not been reviewed or updated since 2000. On October 22, 2021, Natural Resources Defense Council and Sierra Club submitted a petition for rulemaking to DOE ("Petition") requesting that DOE review and update the PEF consistent with DOE's statutory obligations. The petition also raises significant concerns regarding the appropriateness of DOE's current inclusion of a fuel content factor in the PEF, which artificially inflates the imputed fuel economy of EVs by a factor of nearly 7. Given the pendency of this long-overdue review, and the potential for changes that would significantly alter

[7] 84 Fed. Reg. 25720, 25722.
[8] 87 Fed. Reg. 50,390.
[9] *E.g.,* Drew T. Shindell et al., Quantified, Localized Health Benefits of Accelerated Carbon Dioxide Emissions Reductions, 8 Nature Climate Change 291 (2018) (Early reductions in fossil fuel consumption have significantly greater monetized health benefits than delayed action).
[10] 2012 FEIS at 5-159 ("Several recent studies have shown that delaying mitigation of GHG emissions results in greater accumulation of CO2 in the atmosphere, thereby increasing the risk of crossing tipping points and triggering abrupt changes.") (citations omitted).
[11] 49 U.S.C. § 32904(a)(2)(B) ("If a manufacturer manufactures an electric vehicle, the Administrator shall include in the calculation of average fuel economy under paragraph (1) of this subsection equivalent petroleum based fuel economy values determined by the Secretary of Energy for various classes of electric vehicles.").
[12] *Id.* ("The Secretary shall review those values each year and determine any proposed necessary revisions . . . .").

the PEF, commenters urge NHTSA to incorporate any updates to the PEF, which may materially impact NHTSA's assessment of maximum feasible CAFE standards. If the modeling is conducted prior to the resolution of the pending petition, NHTSA should model sensitivities regarding potential changes to the PEF, including modeling the removal of the fuel content multiplier.

DOE is required to establish the PEF based on four statutory factors:

(1) the approximate electrical energy efficiency of the vehicles considering the vehicle type, mission, and weight;
(2) the national average electricity generation and transmission efficiencies;
(3) the need of the Nation to conserve all forms of energy, and the relative scarcity and value to the Nation of all fuel used to generate electricity; and
(4) the specific driving patterns of electric vehicles as compared with those of petroleum fueled vehicles.[13]

Inputs to the calculation—including the electrical energy efficiency of vehicles and the national average electricity generation and transmission efficiencies—are significantly out of date and in need of updating due to changes that have occurred in both vehicles and the national electric generation and transmission facilities during the past 22 years.[14]

Moreover, when DOE established the PEF in 2000, it introduced a "fuel content factor" of 1/0.15 (i.e., 6.67), into the formula, though that factor was developed for an entirely different purpose: to mimic the incentives provided for manufacturing liquid alternative fuel vehicles.[15] For these liquid alternative fuels, the statute provides that "[a] gallon of a liquid alternative fuel used to operate a dedicated automobile is deemed to contain .15 gallon of fuel."[16] As DOE explained, this requirement derived from the fact that "[t]wo of the most common liquid alternative fuels," M85 and E85, contained 85% alternative fuel and "15 percent unleaded gasoline by volume," so Section 32905(a) incentivizes these liquid alternative fuel vehicles by basing their imputed fuel economy solely on the 15% gasoline portion of the fuel.[17] Despite the absence of any statutory basis, DOE reasoned that an analogous approach was appropriate for

[13] *Id.* § 32904(a)(2)(B)(i)-(iv).
[14] For example, when DOE last updated regulations in 2000, the "U.S. average fossil-fuel electricity generation efficiency" (Tg) was 0.328; the actual current efficiency is closer to 0.389. Compare 65 Fed. Reg. at 36,987 with, e.g., U.S. Energy Information Administration (EIA), Electric Power Annual, Data Tables, https://www.eia.gov/electricity/annual/; EPA, eGRID: Download Data, https://www.epa.gov/egrid/download-data.
[15] 49 U.S.C. § 32905(a).
[16] *Id.*
[17] Electric and Hybrid Vehicle Research, Development, and Demonstration Program; Petroleum-Equivalent Fuel Economy Calculations, Proposed Rule, 64 Fed. Reg. 37,905, 37,907 (July 14, 1999).

EVs to "help to accelerate the early commercialization of electric vehicles,"[18] and included the fuel content factor in the calculation of the PEF.

The Department of Energy responded to NRDC and Sierra Club's Petition by publishing a notification in the Federal Register requesting comment on the merits of the Petition. 86 Fed. Reg. 73,992 (Dec. 29, 2021). Comments were received on or before February 28, 2022. While the ultimate resolution of the Petition remains uncertain at the time of this comment filing, a potential update to the PEF could be consequential for NHTSA's scenario modeling.

In particular, elimination or reduction of the current, non-statutory fuel content multiplier would greatly affect the degree to which EVs' fuel equivalence is overstated in NHTSA's CAFE compliance calculations. The value of the PEF currently attributable to the Section 32904 EV factors is only 12,307 Wh/gal.[19] But with the addition of the Section 32905 multiplier, the PEF becomes 82,049 Wh/gal.[20] To illustrate what this means concretely, a 2022 Tesla Model 3 (Standard Range RWD), with an efficiency of 0.255 kWh/mile[21] would have an imputed fuel economy of 48 mpg without the fuel content multiplier, but for CAFE compliance purposes has an imputed fuel economy of 322 mpg (far in excess of the 132 mpg fuel equivalency EPA attributes to the vehicle).[22]

The degree to which the imputed fuel economy of EVs is inflated by the PEF will impact the ease with which different future standards can be achieved as the share of EVs continues to grow among new vehicle sales. Consequently, NHTSA's assessment of the range of standards that would be "maximum feasible" will be impacted by the action DOE ultimately takes regarding the pending Petition. While the Department of Energy has not indicated whether it will grant the Petition, because of the significance of the impact that an update to the PEF could have on the feasibility of achieving different fuel economy standards, it is critical that NHTSA conduct sensitivity analyses around possible changes to the PEF. In the absence of certainty regarding the degree to which the Department of Energy may modify the PEF, commenters urge NHTSA to, at minimum, conduct modeling of a PEF that alternatively includes and excludes the fuel content factor.

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[18] 64 Fed. Reg. at 37,905.
[19] Electric and Hybrid Vehicle Research, Development, and Demonstration Program; Petroleum-Equivalent Fuel Economy Calculation, 65 Fed. Reg. 36,986, 36,987 (June 12, 2000).
[20] 65 Fed. Reg. at 36,987.
[21] U.S. Dept. of Energy, 2022 Tesla Model 3, https://www.fueleconomy.gov/feg/PowerSearch.do?action=noform&path=1&year1=2022&year2=2022&make=Tesla&baseModel=Model%203&srchtyp=ymm&pageno=1&rowLimit=50.
[22] *Id.*

V. NHTSA's Approach Regarding Attributes and Form

A. Continuing Use of Vehicle Footprint and Curves and Mix Shift Backstop

Commenters do not object to the continuing use of vehicle footprint as the basis for NHTSA's fuel economy curves. While footprint-based curves have the downside of incentivizing the over-sizing of vehicles in order to obtain less demanding fuel economy standards, alternatives (e.g., feature-based standards) create other inefficiencies (viz., adding unnecessary features to obtain less demanding fuel economy standards). However, the use of separate curves for passenger cars and light trucks creates additional and highly significant perverse incentives for reclassification of vehicles that must be addressed in the forthcoming rulemaking. Specifically, so long as vehicles classified as light trucks are subject to less demanding fuel economy standards for a given vehicle footprint, automakers will have strong incentives to classify vehicles as trucks rather than cars, an unintended consequence that has already flipped the passenger vehicle/light truck fleet mix in favor of less efficient light trucks. And the retention of separate footprint curves for passenger cars and light trucks will further incentivize manufacturers to sell more trucks to reduce their effective regulatory obligation.

As commenters recommended with regard to NHTSA's proposed MY 2024-26 CAFE standards,[23] and in prior comments, NHTSA should establish a "backstop" or minimum standard below which actual fleetwide performance may not fall to prevent further erosion of the existing vehicle classifications. Commenters attach their October 26, 2021 comments as Exhibit 1.

In the final MY 2024-26 standards, NHTSA declined to adopt a fleetwide backstop. While acknowledging the dramatic shift in fleet composition from passenger cars to light trucks that had occurred, NHTSA expressed concerns that establishing a backstop would be outside the scope of its proposal[24] and pointed to improvements in fuel economy between MY 2015 and 2020 as evidence that a backstop was not needed.[25] NHTSA observed that, "to the extent that 'backsliding' is occurring, it appears to be the result of trucks and SUVs increasing their share of the market, and sedans and station wagons decreasing theirs," and speculated that establishing a backstop "would not meaningfully change this market trend."[26]

Commenters disagree with NHTSA's contention that a mix shift backstop would not meaningfully affect the proportion of cars and light trucks sold. Such a backstop would remove automakers' current incentive to increase sales of vehicles classified as light trucks by ensuring

[23] Appendix to Joint Summary Comments of Environmental, Advocacy, and Science Organizations on NHTSA's Notice of Proposed Rulemaking: Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks, 86 Fed. Reg. 49,602 (Sept. 3, 2021), Docket No. NHTSA-2021-0053 (Oct. 26, 2021), at 64-65 (CAFE MY 2024-26 Comments).
[24] 2022 Rule, 87 Fed. Reg. at 25,966.
[25] *Id.* at 25,967.
[26] *Id.*

that further shifts in fleet mix (from passenger cars to light trucks) are not accompanied by less demanding fleet fuel economy standards. If customer demand for light trucks exceeded manufacturer expectations, manufacturers could still comply with a fleetwide backstop through further improvements to the fuel economy of their vehicles, particularly their trucks. At a minimum, commenters urge NHTSA to model the effect of a mix shift backstop, which as NHTSA itself noted, may become increasingly relevant if manufacturers shift heavily toward battery electric vehicles.[27]

B. NHTSA Modeling of Other Programmatic Considerations

In its scoping notice, NHTSA requests comment on programmatic aspects of the CAFE standards other than stringency including flexibilities.[28] Commenters recently provided detailed feedback on flexibilities in response to NHTSA's proposed fuel economy standards for MY 2024-2026.[29] Commenters briefly summarize the key points from their prior comments, which are attached as Exhibit 1.

Commenters oppose recently-reinstated[30] incentives for hybrid full-size pickup trucks. Such credits are provided on top of the real world fuel economy benefits offered by mild and strong hybrid technologies and have no correspondence to a real world fuel economy benefit. Indeed, even in the absence of these credits, some manufacturers are pursuing this technology—casting doubt on the necessity or appropriateness of the credits—and many more manufacturers are moving directly to manufacturing full electric pickup trucks, further obviating the need for the credit. NHTSA should model scenarios that eliminate incentives for hybrid full-size pickups.

Commenters also oppose NHTSA's recent increase in the cap on off-cycle credits from 10 g/mile to 15 g/mile.[31] As commenters explained, insufficient data underpins many of the menu credits, which are based on general assessments of off-cycle performance rather than testing on individual vehicle models. Moreover, there is considerable uncertainty associated with the emissions impact of combining menu technologies, and the aggregate emission benefit is highly unlikely to equal the sum of the individual menu technologies. Due to these substantive flaws, and the widespread, significant substantive and procedural deficiencies around the implementation of the off-cycle credit program NHTSA has acknowledged to date, commenters urged NHTSA to restructure off-cycle credits to require manufacturers to provide comprehensive data proving the real-world benefits of any credit request (menu credit or otherwise), as well as necessary procedural guardrails. In its modeling for post-MY 2026 CAFE standards, NHTSA

[27] *Id.* ("If evidence surfaces that manufacturers are, in fact, letting ICE vehicle fuel economy languish while complying solely (or heavily) with BEV technology, NHTSA would consider this an equity issue and would reevaluate our position on additional minimum standards.").
[28] 87 Fed. Reg. at 50,390.
[29] CAFE MY 2024-26 Comments at 48-53.
[30] 87 Fed. Reg. at 26,025.
[31] CAFE MY 2024-26 Comments at 50-53.

should include scenarios that reduce the annual caps on off-cycle credits back to 10 g/mile and additional model the elimination of the off-cycle credit program altogether.

VI. NHTSA Must Fully Consider Expected Impacts

As NHTSA appropriately recognizes in its notice, an agency must discuss the direct, indirect, and cumulative effects "and their significance" 40 C.F.R. §§ 1502.16(a),(b), 1508.7. Direct effects are those "which are caused by the action and occur at the same time and place" and indirect effects are those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." 40 C.F.R. §§ 1508.8(a), (b). Cumulative effects are those "which result[] from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency . . . or person undertakes such other actions" and "can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7. To elucidate their "significance", an agency's evaluation must be in terms that meaningfully inform the public and decision-makers of the magnitude and consequences of these effects. *Balt. Gas & Elec. Co. v. Nat. Res. Def. Council*, 462 U.S. 87, 97 (1983).

NHTSA indicates it plans to follow past practice in analyzing environmental impacts of fuel and energy use, emissions and their effects on climate change and the environment, air quality, natural resources, and the human environment and is considering examining life-cycle impacts. NHTSA can make substantial improvements to past approaches to ensure full consideration of all relevant impacts.

NHTSA should improve its quantification of all impacts, including life-cycle impacts, and resort to qualitative analysis only where necessary. This should include quantification of health and climate benefits, including presenting monetized benefits directly in the EIS, not only the RIA. While some incorporation by reference may be appropriate, the agency should strive to quantify all impacts in order to present a full assessment. The tables and data included in the EIS should be *at least* as informative as those included in the final EIS for the MY 2012-2016 and MY 2024-2026 rules, and should not relegate crucial data to appendices. NHTSA says it intends to incorporate prior analyses by reference in an effort to "cut down on bulk." However, it must not do so at the expense of using the most up-to-date information. NHTSA should incorporate the most recent modeling and data into its analysis. The agency has many more tools at its disposal to quantify climate impacts than it did in prior rulemakings. We encourage the agency to take full advantage of the advances in climate attribution science in its quantification of impacts.

A. NHTSA Should Include the Latest Information on the Greening of the Electric Grid in its Evaluation of GHG Emissions Impacts of Battery Electric Vehicles

NHTSA must use the most current emissions data available for the electric grid when analyzing the GHG emissions impacts of battery electric vehicles. In past rulemakings, NHTSA has relied on studies using decades old data that presented an incorrect picture of the emissions impacts of EVs. Sierra Club, Environmental Defense Fund, and Center for Biological Diversity noted this in our 2021 comments on the Supplemental Environmental Impact Statement for MYs 2024-2026. NHTSA should not repeat that mistake. In addition to updating data to reflect the current emissions profile of the electric grid, NHTSA should consider projected improvements in grid emissions, particularly in light of recent legislation such as the Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA). The U.S. Energy Information Administration's Annual Energy Outlook 2022 projects that CO_2 emissions from the electric sector will fall steadily over the next 15 years (without taking into account recent legislation). Recent legislation will result in further market share gains by clean renewable power production. For example, the Office of Management and Budget has estimated that the Inflation Reduction Act will have cumulative climate-related benefits ranging between $0.7 and $1.9 trillion through 2050.[32] This analysis considered the significant GHG emissions reductions estimated to come from the power sector. The Department of Energy projects that together this new law and the earlier IIJA will result in net economy-wide GHG emissions reductions of 40% below 2005 emissions.[33] An analysis by the Rhodium Group estimates electric power CO_2 emissions could be 69-80% below 2005 levels in 2030 as a result of the IRA.[34]

B. NHTSA's Modeling Must Account for the Impacts of the Inflation Reduction Act on Future EV Sales

The Inflation Reduction Act (IRA), signed on August 16, 2022, contains a number of provisions that are likely to affect the relative cost of electric and internal combustion engine vehicles and impact the composition of the vehicle fleet in the coming years. Building on the Infrastructure Investment and Jobs Act ("IIJA"; also known as the Bipartisan Infrastructure Law), the effects of these provisions must be incorporated into NHTSA's modeling and accounted for in NHTSA's assessment of "maximum feasible" standards.

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[32] OMB Analysis: The Social Benefits of the Inflation Reduction Act's Greenhouse Gas Emission Reductions (Aug. 23, 2022), https://www.whitehouse.gov/omb/briefing-room/2022/08/23/new-omb-analysis-the-inflation-reduction-act-will-significantly-cut-the-social-costs-of-climate-change/.

[33] DOE Analysis: The Inflation Reduction Act Drives Significant Emissions Reductions and Positions America to Reach Our Climate Goals (Aug. 18, 2022), https://www.energy.gov/articles/doe-projects-monumental-emissions-reduction-inflation-reduction-act.

[34] Rhodium Group Report, A Turning Point for US Climate Progress: Assessing the Climate and Clean Energy Provisions in the Inflation Reduction Act (Aug. 12, 2022), https://rhg.com/research/climate-clean-energy-inflation-reduction-act/.

The IRA will unleash an unprecedented scale of federal investment in EVs. Between the IRA and the IIJA, the federal government will be increasing 30-fold its funding for EVs.[35] Key provisions of the IRA include:

- Clean Vehicle Credit for Light-duty EVs[36]: This replaces the prior $7,500 tax credit, which had phased out for leading EV manufacturers including Tesla and General Motors. While the new credit incorporates additional limitations and conditions not present in the prior credit—including income eligibility requirements, caps on Manufacturer's Suggested Retail Price ("MSRP"), requirements regarding the sourcing of critical minerals used in the batteries, and requirements for North American assembly—the new Clean Vehicle Credit has the potential to significantly increase the availability of tax incentives for purchasing light-duty EVs as automakers adapt their supply chains to increase the number of vehicles that qualify.
- Previously Owned Clean Vehicle Credit[37]: For the first time, the IRA makes a tax credit available to purchasers of used EVs subject to income eligibility requirements. The credit is the lesser of $4,000 or 30% of the vehicle cost and the sales price of the vehicle must be $25,000 or less. This tax credit has the potential to accelerate the rate of EV uptake by lower-income households.
- Commercial Clean Vehicle Credit[38]: Beginning January 1, 2023, this new credit applies to commercial vehicles ranging from Class 1 to 8, with a $7,500 credit for the Class 1 to 3 vehicles that will be the subject of NHTSA's forthcoming rules.
- Alternative Fuel Refueling Property Credit[39]: The IRA extends the tax credit available for EV charging equipment to cover equipment placed into service before 2033 while increasing the credit to 30% of the cost of the EV charging equipment up to $100,000.

The IRA contains a number of sources of funding that can be used to support manufacture of EVs and other advanced vehicle technologies. The Act appropriates $3 billion for advanced technology vehicle manufacturing,[40] to be used to offset the costs of providing direct loans for reequipping, expanding, or establishing a manufacturing facility in the United States to produce, or for engineering integration performed in the United States of, advanced technology vehicles. It also appropriates $2 billion for domestic manufacturing conversion grants[41] to retool existing auto manufacturing facilities to promote domestic production of clean vehicles, including hybrids, plug-in hybrids, EVs and hydrogen fuel cell vehicles.

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[35] Spencer Burget, EV eligible funding in IIJA and IRA represents nearly 30 times the total EV funding awarded by U.S. government to date (Sept. 2, 2022), at https://www.atlasevhub.com/data_story/3-billion-in-federal-funding-for-evs-to-date/?utm_source=EV+Hub&utm_campaign=3f2be48c56-EMAIL_CAMPAIGN_2019_01_07_05_37_COPY_01&utm_medium=email&utm_term=0_173e047b1f-3f2be48c56-246816793.

[36] IRA Section 13401 (Clean Vehicle Credit).

[37] IRA Section 13402 (Credit for Previously-Owned Clean Vehicles).

[38] IRA Section 13403 (Qualified Commercial Clean Vehicles).

[39] IRA Section 13404 (Alternative Fuel Refueling Property Credit).

[40] IRA Section 50142 (Advanced Technology Vehicle Manufacturing).

[41] IRA Section 50143 (Domestic Manufacturing Conversion Grants).

These incentives and funding sources are in addition to the funding that was made available for EV charging through the National Electric Vehicle Infrastructure ("NEVI") formula program in the IIJA. This program makes available $5 billion dollars for states "to strategically deploy electric vehicle (EV) charging infrastructure and to establish an interconnected network to facilitate data collection, access, and reliability."[42]

The provisions of the IRA identified above will appreciably accelerate the transition away from internal combustion engine vehicles. Modeling by Princeton University's Zero Lab found that the IRA drives U.S. consumption of petroleum products (gasoline, diesel fuel, etc.) down 13 percent from modeled 2030 consumption under current policies.[43] The IRA's incentives will accelerate the crossover point of cost parity between EVs and internal combustion engine vehicles. Importantly for NHTSA's CAFE modeling, these incentives and investments will significantly alter the ease with which more ambitious CAFE standards can be met given the inclusion of EVs in evaluating compliance with the standard.

C. NHTSA's Analysis of the Adverse Environmental Impacts of ICE Vehicles Should Include Consideration of the Full Impacts of Oil Production and Transportation

NHTSA should not repeat prior gaps in its life-cycle analysis. For example, the EIS must include the full impacts for the transportation segment when assessing the adverse environmental impacts of ICE vehicles. NHTSA did not incorporate important upstream transportation impacts such as oil spills from pipelines, environmental concerns associated with the transportation of crude oil in railcars, and transport of oil sands crude in the life-cycle analysis in its 2021 draft supplemental EIS. See Section II of the Sierra Club, Environmental Defense Fund, and Center for Biological Diversity comments filed in Docket ID No. NHTSA-2021-0054. NHTSA did include additional discussion of oil sands extraction, production, and transport and other unconventional oil and gas extraction and transport in its final EIS, but should strive to improve this evaluation. NHTSA should also incorporate more recent studies on methane releases and leaks from oil and gas extraction and transportation that show significantly higher emissions than previously accounted for in government reporting. Recent studies indicate upstream methane emissions rate estimates used by the federal government vastly undercount actual levels of emissions.[44]

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[42] U.S. Dept. of Transportation, Fed'l Highway Admin., Fact Sheets: The National Electric Vehicle Infrastructure Formula Program, https://www.fhwa.dot.gov/bipartisan-infrastructure-law/nevi_formula_program.cfm.

[43] Princeton University Zero Lab, Preliminary Report: The Climate and Energy Impacts of the Inflation Reduction Act of 2022 (Aug. 2022), at Slide 12, available at https://repeatproject.org/docs/REPEAT_IRA_Prelminary_Report_2022-08-04.pdf.

[44] *E.g.*, Rutherford et al., *Closing the methane gap in US oil and natural gas production emissions inventories*, 12 Nature Comms. 4715 (2021), https://www.nature.com/articles/s41467-021-25017-4; Ramón A. Alvarez et al., *Assessment of Methane Emissions from the U.S. Oil and Gas Supply Chain*, 361 SCIENCE 186, 186 (2018); Benjamin Hmiel et al., *Preindustrial 14CH4 Indicates Greater Anthropogenic Fossil CH4 Emissions*, 578 NATURE 409, 409 (2020); Stefan Schwietzke et al., *Upward Revision of Global Fossil Fuel Methane Emissions Based on*

D. Cumulative Impacts

1. NHTSA must provide meaningful, comparative data

NHTSA has in the past disclosed direct, indirect and cumulative effects of its chosen alternatives in helpful tables. For example, it has quantified the emission differences (in $MMTCO_2$) among alternatives for the period from the rule's effective date through its end date, as well as other meaningful time increments, among them the same period for which it has modeled criteria pollutant emissions and health impacts, and through 2050 and 2100. The tables have also quantified emission increases compared to the No Action Alternative for each alternative and time period, expressed in total emissions and in percentages. *See, e.g.,* 2012 Final EIS, 5-41-5-44; 2022 Final SEIS at 5-38–5-40. We ask that NHTSA again provide all of the important tables it presented in 2012 and 2022 EIS in the upcoming EIS.

Importantly, NHTSA should monetize the damage prevented by each alternative as compared to the No Action Alternative, as measured by the current iteration of the IWG's assessment of the social costs of carbon over the time periods examined. It should calculate the social cost of carbon at the highest, lowest and central discount rates as supported by the most recent academic work on the subject, and disclose global as well as domestic values. Monetizing as many of the direct, indirect and cumulative effects of each alternative as possible – as opposed to discussing them only quantitatively – is essential to allow meaningful comparisons.

NHTSA's task in describing the damage caused by climate change is now aided by significant advances in climate attribution science.[45] Assessments of the monetary damages caused by extreme weather events in the United States and worldwide are readily available,[46] and attribution science can provide estimates of how much more likely some extreme events have become because of climate change, allowing a reasonable approximation of the damages attributable to global warming. NHTSA should disclose these effects in its EIS.

Isotope Database, 538 NATURE 88 (2016); Howarth, R. W., *A bridge to nowhere: methane emissions and the greenhouse gas footprint of natural gas*, 2 Energy Sci. Eng. 47–60 (2014); Zavala-Araiza et al., *Reconciling divergent estimates of oil and gas methane emissions*, 51 Proc. Natl. Acad. Sci. 15597 (2015), https://www.pnas.org/content/112/51/15597; Vaughn, et al., *Temporal variability largely explains top-down/bottom-up difference in methane emission estimates from a natural gas production region*. 46 Proc. Natl. Acad. Sci. 11712 (2018), https://doi.org/10.1073/pnas.1805687115.

[45] *See, e.g.*, Renee Cho, *Attribution Science: Linking Climate Change to Extreme Weather*, Columbia Climate School (Oct. 4, 2021), https://news.climate.columbia.edu/2021/10/04/attribution-science-linking-climate-change-to-extreme-weather/.

[46] *E.g.*, National Oceanic and Atmospheric Administration, National Centers for Environmental Information, Billion-Dollar Weather and Climate Disasters (Oct. 11, 2022), https://www.ncei.noaa.gov/access/billions.

2. NHTSA must present cumulative impacts in a manner that shows their significance

The cumulative impact discussion of NHTSA's action on climate change requires particular care and attention. "The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct. Any given rule setting a CAFE standard might have an 'individually minor' effect on the environment, but these rules are 'collectively significant actions taking place over a period of time.'" *Ctr. for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1217 (9th Cir. 2008) (quoting 40 C.F.R. § 1508.7). NHTSA's description of the cumulative climate change impact of its action should counteract any inference that they are too small to matter.

As early as 2009, EPA cautioned in its greenhouse gas endangerment finding for motor vehicles that "no single greenhouse gas source category dominates on the global scale, and many (if not all) individual greenhouse gas source categories could appear small in comparison to the total, when, in fact, they could be very important contributors in terms of both absolute emissions or in comparison to other source categories, globally or within the United States. If the United States and the rest of the world are to combat the risks associated with global climate change, contributors must do their part even if their contributions to the global problem, measured in terms of percentage, are smaller than typically encountered when tackling solely regional or local environmental issues. The commenters' approach, if used globally, would effectively lead to a tragedy of the commons, whereby no country or source category would be accountable for contributing to the global problem of climate change, and nobody would take action as the problem persists and worsens."[47]

For example, NHTSA has previously calculated comparisons among alternatives in certain years in terms of global changes such as increases in emitted ppm, temperature increases, changes in precipitation, sea level rise and changes in ocean pH. We encourage NHTSA to continue to do so. However, changes in these values, traced to decreases from a single regulation for just one emission source in one country over the few years covered by the rulemaking compared to the global emissions from all sources, through up to 2100 may appear to be insignificant, amounting to only small fractions of the relevant measurements and conveying a sense of futility. But it must be understood that at CO_2 concentrations above 600 ppm, climate change would have already advanced to such an extent that overall worldwide emission increases would overwhelm what by themselves are highly significant differences among the action alternatives chosen now. NHTSA should therefore also present scenarios that do not assume massive worldwide failure to act but are based on aggressive global action holding increases in ppm to 450 ppm (or returning to that level once emissions have peaked), as such a scenario is

[47] *Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act, Final Rule,* 74 Fed. Reg. at 66,543 (Dec. 15, 2009).

among the reasonably foreseeable actions by third parties. Indeed, preliminary modeling of the impacts of the recently-passed Inflation Reduction Act suggests that it will enable the United States–the world's second largest greenhouse gas emitter–to drive down net GHG emissions 32-42 percent below 2005 levels by 2030 according to one analysis,[48] and 37-43 percent below 2005 levels by 2030 according to another analysis.[49] To prevent inaccurate and misleading conclusions, NHTSA should put its presentation into the context of a range of reasonable outcomes.

We also note that in prior rulemakings, NHTSA has modeled the cumulative responses to climate change in light of its own action, the actions of other agencies, other state actors and international responses. However, the inputs into the models it used were out of date and incomplete (as was the case with GCAM 6.0). NHTSA should update its input information and include the current administration's overall regulatory agenda; Congressional actions, including the Inflation Reduction Act (*see supra at* 11); the actions of other regulatory actors in the United States, particularly California and other states adopting California vehicle emission rulemakings; and updated international responses, such as those to the Paris Agreement.[50]

NHTSA should also provide context by discussing the most recent reports of the International Panel on Climate Change, the results of its working groups, and its last full assessment.[51] The IPCC reports lay out in stark terms that a mere one-half of a degree Celsius of additional global warming makes a vast difference in on-the-ground outcomes in terms of loss of food and water security, loss of coastal land and properties, loss of biodiversity, more and more extreme heat waves, droughts and flooding, population migrations, poverty, devastating health

[48] Rhodium Group, A Turning Point for US Climate Progress: Assessing the Climate and Clean Energy Provisions in the Inflation Reduction Act (Aug. 12, 2022), available at https://rhg.com/research/climate-clean-energy-inflation-reduction-act/.

[49] Energy Innovation, Updated Inflation Reduction Act Modeling Using the Energy Policy Simulator (Aug. 2022), available at https://energyinnovation.org/publication/updated-inflation-reduction-act-modeling-using-the-energy-policy-simulator/.

[50] Paris Agreement, https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf.

[51] *E.g.,* IPCC, *Working Group III Sixth Assessment Report: Climate Change 2022*: *Mitigation of Climate Change* (April 2022), *https://www.ipcc.ch/report/ar6/wg3/;* IPCC, *Working Group II Sixth Assessment Report: Climate Change 2022: Impacts, Adaptation and Vulnerability (February 2022)*, https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/*;* IPCC, *Working Group I Sixth Assessment Report: Climate Change 2022: The Physical Science Basis* (August 2021), https://www.ipcc.ch/report/ar6/wg1/; IPCC, *Fifth Assessment Report https://www.ipcc.ch/assessment-report/ar5/;* IPCC, *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (October 2014), https://www.ipcc.ch/assessment-report/ar5/.

outcomes and innumerable lives lost.[52] And the reports leave no doubt that emission reductions within *just the next decade* will make an enormous and crucial difference.[53]

3. NHTSA should present its alternatives within the planet's remaining carbon budget

NHTSA should show its alternatives' effects on the planet's remaining carbon budget. According to the IPCC, the total cumulative anthropogenic emissions of CO_2 from 2011 onward must remain below about 1,000 gigatonnes of carbon ($GtCO_2$) for a 66 percent probability of limiting warming to 2°C above pre-industrial levels, and to 400 $GtCO_2$ from 2011 onward for a 66 percent probability of limiting warming to 1.5°C.[54] The U.S. carbon budget for limiting temperature rise to well below 2°C has been estimated at 25 $GtCO_2$eq to 57 $GtCO_2$eq on average,[55] depending on the sharing principles used to apportion the global budget across countries,[56] while the U.S. budget for limiting temperature rise to 2°C ranges from 34 $GtCO_2$ to 123 $GtCO_2$.[57] Although the cited studies differ in terms of certain assumptions and normative emphases, they all tell the same fundamental story: under any conceivable scenario, the remaining U.S. carbon budget for limiting global average temperature rise to 1.5°C or 2°C is extremely small and is rapidly being consumed. NHTSA should explain how much of the remaining carbon budget its alternatives would consume, both in total $GtCO_2$eq and in percentages, by showing the amount of emissions that remain to be reduced within a proportionate U.S. share of the total transportation budget. Studies have concluded that, when

[52] IPCC, *Global Warming of 1.5°C, An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty* (Oct. 6, 2018) ("IPCC Special Report"), http://www.ipcc.ch/report/sr15/*Id.* at Summary for Policymakers, SPM-8 – SPM-12.

[53] *Id.* at Summary for Policymakers, SPM-10 - SPM-12.

[54] IPCC Fifth Assessment Report at 63-64 & tbl. 2.2.

[55] Yann Robiou du Pont et al., *Equitable Mitigation to Achieve the Paris Agreement Goals*, 7 Nature Climate Change 38 (2017). Quantities measured in GtCO2eq include the mass emissions from CO2 as well as the other well-mixed greenhouse gases (CO2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and SF6) converted into CO2-equivalent values, while quantities measured in GtCO2 refer to mass emissions of just CO2 itself.

[56] Robiou du Pont et al. (2017) averaged across IPCC equity sharing principles to estimate the U.S. carbon budget from 2010 to 2100 for a 50 percent chance of returning global average temperature rise to 1.5°C by 2100, consistent with the Paris Agreement's "well below 2°C" target, and based on a cost-optimal model. The study estimated the U.S. carbon budget consistent with a 1.5°C target at 25 GtCO2eq by averaging across four equity principles: capability, equal emissions per capita, greenhouse development rights, and equal cumulative emissions per capita. The study estimated the U.S. budget at 57 GtCO2eq when averaging across five sharing principles, adding the constant emissions ratio to the four above-mentioned principles. However, the constant emissions ratio, which maintains current emissions ratios, is not considered to be an equitable sharing principle because it is a grandfathering approach that "privileges today's high-emitting countries when allocating future emission entitlements." Sivan Kartha et al., *Cascading Biases Against Poorer Countries*, 8 Nature Climate Change 348 (2018) (discussion of sharing principles).

[57] Yann Robiou du Pont et al., *Equitable Mitigation to Achieve the Paris Agreement Goals*, 7 Nature Climate Change 38 (2017); Glen P. Peters et al., *Measuring a Fair and Ambitious Climate Agreement Using Cumulative Emissions*, 10 Envtl. Res. Lett. 105004 (2015); Renaud Gignac & H. Damon Matthews, *Allocating a 2C Cumulative Carbon Budget to Countries*, 10 Envtl. Res. Lett. 075004 (2015).

analyzing the transportation sector as one of seven "stabilization wedges" (or activity bundles) from which carbon emission reductions can be achieved to hold global CO_2 concentrations to certain levels of ppm, the average fuel economy the world's passenger cars and light truck fleet would have to achieve can be determined.[58] A similar analysis can estimate what stringency increases are required from the U.S. light duty vehicle fleet to contribute proportionally to the goal of keeping within the remaining U.S. carbon budget, or to keep temperature increases at or below 2°C.

VII. NHTSA Must Present a Thorough Analysis of Environmental Justice Impacts

NHTSA must present a thorough analysis of the environmental justice implications of its proposal in accordance with Executive Orders Nos. 12898, 13563, & 14008 and DOT Order 5610.2(c)(2021). Reducing tailpipe emissions, upstream emissions from refineries, and greenhouse gas emissions will benefit environmental justice communities. More stringent standards will bring greater benefits to disproportionately impacted communities. In its Model Year 2024-2026 SEIS, NHTSA properly recognized the following:

- climate change disproportionately affects low-income communities and communities of color;
- minority and low-income communities are more likely to experience refinery emissions exceeding EPA standards;
- minority and low-income populations disproportionately reside and attend school near mobile sources of pollutants and are therefore exposed to higher levels of mobile source pollution;
- air pollution exposure has a disproportionate health impact on minorities, lower income and lower educational attainment individuals.[59]

NHTSA should update its analysis by adding more recent authorities on these issue areas.

NHTSA should also consider the EPA's environmental justice analysis in its Model Year 23-26 rulemaking to ensure that NHTSA considers the same studies as well as EPA's conclusions.[60] For example, NHTSA notes in its recent FSEIS that it "did not locate any studies that specifically assessed disproportionate impacts on communities located near power

[58] S. Pacala & R. Socolow, *Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies*, 305 Science 968, 969-70 (2004); s*ee also* R. Socolow, *Wedges Reaffirmed*, Bull. of the Atomic Scientists (2011).
[59] NHTSA, FSEIS for CAFE 2024-2026 (Mar. 2022) at 7-10 – 7-18, *at* https://www.nhtsa.gov/sites/nhtsa.gov/files/2022-04/Final-SEIS-Complete_CAFE-MY-2024-2026.pdf.
[60] 86 Fed. Reg. at 74514- (Dec. 30, 2021); *see also* Environmental Coalition's comments on EPA's proposal at p. 64-71, *at* https://www.regulations.gov/comment/EPA-HQ-OAR-2021-0208-0651.

generation, distribution facilities, or mining sites for vehicle materials."[61] EPA's proposed rule, however, states that "analyses of communities in close proximity to upstream sources, such as EGUs, have found that a higher percentage of communities of color and low-income communities live near these sources when compared to national averages."[62] NHTSA should also consider a recent study that concluded that "in states that participate in RGGI [the regional greenhouse gas initiative in the Northeastern states], a larger cumulative share of environmental justice populations live in proximity to electric power plants compared to non-EJ populations at similar distances."[63]

NHTSA must also consider studies that show many potential mining areas for vehicle metals are located near areas culturally important to Native Americans. One study found "97% of nickel, 89% of copper, 79% of lithium and 68% of cobalt reserves and resources in the U.S. are located within 35 miles of Native American reservations."[64]

Thank you for your consideration.

Respectfully submitted,

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[61] 2022 FSEIS at 7-11.
[62] *Id*.(citing 80 Fed. Reg. 64662, 64915–64916 (October 23, 2015)).
[63] Declet-Barreto J, Rosenberg AA. Environmental justice and power plant emissions in the Regional Greenhouse Gas Initiative states. PLoS One. 2022 Jul 20;17(7):e0271026. doi: 10.1371/journal.pone.0271026).
[64] Samuel Block,Mining Energy-Transition Metals: National Aims, Local Conflicts (Jun. 3, 2021), *at* https://www.msci.com/www/blog-posts/mining-energy-transition-metals/02531033947.