

**Testimony of
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on behalf of the
National Association of Clean Air Agencies
before the
U.S. Environmental Protection Agency and the
U.S. Department of Transportation's
National Highway Traffic Safety Administration
on the Joint EPA/NHTSA Proposed Rulemaking to Establish
2017 and Later Model Year Light-Duty Vehicle
Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards
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Good morning. My name is Larry Greene and I am the Co-Chair of the Global Warming Committee of NACAA – the National Association of Clean Air Agencies. NACAA is the association of air pollution control agencies in 50 states and territories and over 165 metropolitan areas across the nation.¹ I am also the Executive Director of the Sacramento Metropolitan Air Quality Management District in California. On behalf of NACAA, thank you for this opportunity to testify on EPA's and NHTSA's joint proposal to establish light-duty vehicle greenhouse gas (GHG) and Corporate Average Fuel Economy (CAFE) standards.

NACAA is very pleased to support this proposal. We note also that there is a broad group of stakeholders that supports EPA's and NHTSA's actions to continue, and build upon, the national programs adopted in 2010² to reduce GHG emissions from, and improve the fuel economy of, model year (MY) 2011 through 2016 light-duty vehicles (LDVs). On July 29, 2010, 13 major automakers sent letters to EPA and the U.S. Department of Transportation expressing their support for a next phase of the national vehicle program to further reduce GHG emissions and increase fuel economy. These automakers together manufacture over 90 percent of all vehicles sold in the U.S. In their respective letters, the automakers commit to "working with EPA and NHTSA, the states, and other stakeholders to help our country address the need to reduce dependence on oil, to save consumers money, and to ensure regulatory predictability and certainty by developing this kind of strong, coordinated National Program."³ The California Air Resources Board, the United Auto Workers and numerous environmental and consumer organizations have also offered their support for this program.⁴

¹ The views expressed in these comments do not necessarily represent the positions of every state and local air pollution control agency in the country.

² 75 *Federal Register* 25324.

³ See <http://www.epa.gov/otaq/climate/letters.htm#2010a> for automakers' letters of support.

⁴ 76 *Federal Register* 74863.

This proposal to further the LDV GHG emissions and CAFE standards programs is also consistent with and complementary to the federal GHG and fuel economy standards for MY 2014 through 2018 medium- and heavy-duty vehicles adopted in 2011⁵.

In 2007, 31 percent of all U.S. GHGs were emitted by mobile sources, which, since 1990, have been the fastest-growing source of U.S. GHG emissions. LDVs emit carbon dioxide (CO₂), methane, nitrous oxide and hydrofluorocarbons (HFCs) and are responsible for almost 60 percent of all mobile source GHG emissions. CO₂ emissions in 2007 represented approximately 94 percent of all LDV GHG emissions (including HFCs).⁶

Relative to the national objective of improving energy and national security by reducing dependence on foreign oil, net petroleum imports in 2009 accounted for about 51 percent of U.S. petroleum consumption. In that same year, transportation was responsible for approximately 71 percent of petroleum consumption, with LDVs accounting for about 60 percent of transportation oil use, which equates to about 40 percent of all U.S. oil consumption.⁷

The estimated benefits of this proposal (over the lifetime of the MY 2017 through 2025 vehicles) are a reduction in oil consumption of 4 billion barrels and a reduction in GHG emissions of 2 billion metric tons. The anticipated fuel savings amounts to \$347 billion to \$444 billion (based on a gasoline price of \$3.38 per gallon in 2015 and \$3.64 per gallon in 2020).^{8,9}

The total estimated costs of this program (over the lifetime of the MY 2017 through 2025 vehicles) will be around \$140 billion and the total monetized benefits will be on the order of \$449 billion to \$561 billion, for a net benefit to society in the range of \$311 billion to \$421 billion.¹⁰

Based on EPA's analysis, the fuel cost savings will "far outweigh" higher vehicle costs. For consumers, the new standards would add, on average, about \$2,000 to the cost of a new vehicle in MY 2025. However, a consumer who pays cash when purchasing a MY 2025 vehicle can expect to make up this cost in about three and a half years and, thereafter, continue to accrue savings in fuels costs. A consumer who purchases a MY 2025 vehicle using credit will save more each year in fuel costs than the amount of the increased payments on the car loan.¹¹

The co-benefits to be derived from such a program extend far beyond climate change, fuel savings and energy security, and include the following:

- reduced PM_{2.5} and NO_x emissions due to reduced gasoline distribution emissions associated with tanker trucks;

⁵ 76 *Federal Register* 57106.

⁶ 76 *Federal Register* 74861.

⁷ Id.

⁸ 76 *Federal Register* 74969.

⁹ EPA and NHTSA, "Draft Joint Technical Support Document," November 2011, p. 4-8, available at <http://www.epa.gov/otag/climate/documents/420d11901.pdf>.

¹⁰ 76 *Federal Register* 74969.

¹¹ EPA, "Draft Regulatory Impact Analysis," November 2011, pp. 5-13 – 5-14, available at <http://www.epa.gov/otag/climate/documents/420d11004.pdf>.

- mitigation of some of the disproportionate adverse health impacts (including those associated with toxic air pollutants and criteria pollutants) on environmental justice communities affected by emissions from high traffic and located near gasoline refining and distribution facilities;
- reduced adverse health impacts near roadways due to the increase in cleaner vehicles;
- reduced risk of accidental spills of volatile crude oil due to proportional reduction in oil imports via marine tankers;
- buffering against gasoline price volatility for consumers and a hedge against rising fuel prices due to the increased use of domestic and alternative fuel sources;
- economic growth and the creation of high-quality jobs across the country due to the need for the innovative automotive technologies upon which the standards rely; and
- reduced hydrocarbon emissions due to lower fuel throughput at retail distribution outlets.

NACAA would like to take this opportunity to offer some additional comments on several key issues related to this proposal.

First, NACAA understands that EPA and NHTSA are proposing that passenger cars have an average rate of improvement of 5 percent for MYs 2017 to 2025. However, light-duty trucks will start with an average rate of improvement of 3.5 percent for MYs 2017 through 2021, which increases to 5 percent for MYs 2022 through 2025. These proposed rates of improvement are envisioned to result in an average CO₂ emissions rate of 163 grams per mile (g/mile) with an average fleet performance of 54.5 miles per gallon (mpg) if every manufacturer incorporates enhanced engine technologies. In addition, the proposal provides only a conditional approval of the standards by NHTSA for MY 2022 to 2025 vehicles.

NACAA supports EPA's and NHTSA's goal of a fleetwide performance that will result in 54.5 mpg fuel efficiency. We are concerned, however, that the approach taken in the proposal may undermine achievement of this goal. In fact, in a recently published study, researchers at the University of Michigan consider whether allowing a more lenient 3.5-percent rate of improvement requirement for larger vehicles creates an incentive for the manufacture of larger vehicles to the extent that it could lower the overall fleet performance standard by as much as four miles per gallon, thus undermining the goal of a 54.5-mpg fuel economy standard.¹² Accordingly, NACAA urges EPA and NHTSA to ensure that the full measure of the reductions envisioned by EPA and NHTSA is achieved. In addition, NACAA requests that EPA and NHTSA respond to the issues raised in the University of Michigan study.

Further, once this program is in place, it is critical that EPA and NHTSA closely track progress in meeting the standards. In addition, the mid-term evaluation to be conducted in the 2021-2022 timeframe should evaluate the use of credits by automobile manufacturers and the impact of credit use on average fleet performance. In particular, EPA and NHTSA should evaluate whether credit use is allowing the production of a greater number of vehicles that do not meet the 5-percent rate of improvement requirement.

Second, EPA projects the cost of new technology will add, on average, about \$2,000 to the price of a MY 2025 vehicle. NACAA recognizes that consumers will recoup this cost through fuel savings. However, we believe that the average vehicle cost could be brought down if cleaner vehicles were introduced earlier. If vehicles equipped with the technologies needed to meet MY 2025 emissions and fuel

¹² Kate S. Whitefoot and Steven J. Skerlos, "Design Incentives to Increase Vehicle Size Created from the U.S. Footprint-based Fuel Economy Standards," January 2012, available at http://designscience.umich.edu/alumni/katie/Whitefoot_Skerlos_Footprint.pdf.

economy requirements are introduced earlier, then by 2025 the projected additional cost should be lower than \$2,000. In addition, early introduction of cleaner vehicles will provide added assurance that the projected fleet performance is achieved by 2025. Measures that lead to greater penetration of cleaner vehicles earlier in the program could bring down vehicle costs in later years of the program. Further, zero-emission vehicles and alternative-fuel vehicles would help to further reduce criteria pollutant emissions as well as GHGs.

Third, we recognize that this program, proposed by EPA under section 202(a) of the Clean Air Act, is a vehicle tailpipe emissions control program. As such, it is appropriate to assign a tailpipe emissions level of 0 g/mile CO₂ for all electric vehicles (EVs), plug-in hybrid electric vehicles (PHEVs) and fuel cell vehicles (FCVs), as EPA does for MYs 2017 through 2021 with a per-company cumulative sales cap for 0 g/mile for MYs 2022 through 2025.

We are pleased that, as EPA states, this program's focus on vehicle tailpipe emissions does not raise issues relative to criteria pollutants because "upstream emissions [of criteria pollutants] associated with production and distribution of the fuel are addressed by comprehensive regulatory programs focused on the upstream sources of those emissions."¹³ In addition, we appreciate the agency's statement that because "upstream GHG emissions values are generally higher than the upstream GHG emissions values associated with gasoline vehicles, and because there is currently no national program in place to reduce GHG emissions from electric power plants, EPA believes it is appropriate to consider the incremental upstream GHG emissions associated with electricity production and distribution."¹⁴ But, we also believe it is an appropriate position to encourage the initial commercialization of EVs, PHEVs and FCVs while monitoring the status of upstream emissions.

Fourth, NACAA is aware that state and local governments are struggling to maintain current road infrastructure and to fund enhancements. NACAA believes that the issue of how to provide long-term transportation infrastructure funding is a critical national need that should be addressed. However, the debate over long-term transportation funding should not affect the level or delay adoption of the proposed fuel economy standards.

Finally, NACAA urges that EPA and NHTSA ensure that this final rule is promulgated by July 2012, as planned. Further, NACAA encourages EPA, upon promulgation of this rule, to begin assessing the efficacy of another phase of standards to apply to post-2025 MY vehicles.

Once again, NACAA wishes to express its support for this important proposal and appreciates the opportunity to offer comments.

¹³ Id.

¹⁴ 76 *Federal Register* 75011.