



American Council for an Energy-Efficient Economy

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**Testimony of Shruti Vaidyanathan
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**U.S. Environmental Protection Agency (EPA)
National Highway Traffic Safety Administration (NHTSA)**

**Proposed Rulemaking to Establish Light-Duty Vehicle Greenhouse
Gas Emission Standards and Corporate Average Fuel Economy
Standards;
Docket No. EPA-HQ-OAR-2009-0472/NHTSA-2009-0059**

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My name is Shruti Vaidyanathan and I am part of the transportation research staff at the American Council for an Energy-Efficient Economy (ACEEE) in Washington, D.C. ACEEE is an independent, nonprofit organization dedicated to advancing efficiency as a means of promoting economic prosperity, energy security, and environmental protection. Thank you for giving us the opportunity to provide feedback on this historic joint rulemaking.

ACEEE applauds the EPA and NHTSA for taking the enormous step towards energy security and environmental protection that this joint rulemaking represents. The proposed rule offers very substantial increases in fuel economy and reductions in vehicles' greenhouse gas (GHG) emissions. It also reflects important analytical improvements over previous rulemakings, especially a more thorough and transparent analysis of technical potential. Ending reliance on confidential manufacturer product plans in setting standards not only allows the public to understand in detail the basis for the standards but also can lead to a program that promotes manufacturer innovation.

Ensuring the 2012–2016 rule delivers reductions

To ensure that the rule will deliver the promised reductions in gasoline consumption and GHG emissions, ACEEE recommends strengthening the proposal in several ways: First is the addition of a provision to ensure that savings are not substantially undermined by deviations from the vehicle market projected by the agencies. If, for example, instead of reaching 67% of the market in 2016, cars remain at the 58% share projected for 2011, savings attributable to the 2016 standards would be over 10% less than the agencies have claimed. ACEEE recommends the addition of a mechanism that automatically increases the stringency of standards across the board, should emissions reductions fall below a predetermined percentage of projected reductions.

Second, the Temporary Lead Time Allowance Alternative Standards (TLAAS) Program should be more carefully tailored to meet the needs of low-volume manufacturers. The suggested sales cutoff of 400,000 is too high and allows certain manufacturers that fall just below that cutoff to shirk their fuel economy and GHG reduction responsibilities and discriminates against U.S. manufacturers by providing luxury European manufacturers with more lead time to adapt to new fuel economy and GHG standards. ACEEE recommends that the agencies reevaluate the criteria used to award the TLAAS credit as well as ensure that no extension of the program occurs in future rulemaking rounds.

Third, the proposed advanced technology incentives should be eliminated or strictly limited. ACEEE actively supports government programs to accelerate the development and deployment of advanced technology, high-efficiency vehicles, including existing tax credits for hybrids and plug-in hybrids as well as the \$2.4 billion allocated by the 2009 American Recovery and Reinvestment Act for battery manufacturing, electric drive programs, and the deployment of electric vehicles (EVs). A regulatory program is not, however, well-suited to serve that purpose. Extra credit for advanced technology vehicles can undermine efficiency improvement in the remainder of the fleet and invites unintended consequences. Should EPA include the advanced technology credits in the final rule, we recommend that they be limited to a factor of 1.2 and that no consideration be given to an extension beyond 2016. By contrast, provisions intended to give credit for actual reductions that otherwise would go unrecognized under the rule, such as off-cycle technology credits, deserve consideration to the extent that those reductions can be plausibly demonstrated.

Finally, our concerns about the treatment of advanced technology apply all the more to the proposal to assign zero emissions to electric vehicles. An electric vehicle may in some circumstances have higher emissions than a gasoline vehicle meeting the 2016 standards, and failure to take this into account could severely undermine the greenhouse gas rule in both the near term and the longer term, as well as jeopardize support for moving the transportation sector toward electricity as a fuel.

Emissions levels assigned to electric vehicles should reflect both vehicle efficiency and the greenhouse gas emissions associated with production and transmission of electricity used for battery charging. While the inherent uncertainties in the grams per kilowatt-hour factor present a challenge to the correct attribution of emissions, the underlying principle of accounting based on actual emissions is crucial and should be established from the outset. Average electricity generation factors could be applied on an interim basis and refined as appropriate over time.

Even in the near term, when electric vehicle volumes will be small, assigning them zero emissions would be counterproductive. It would reduce the incentive to maximize EV efficiency and could allow some manufacturers to fall behind on improving the fuel efficiency of their conventional vehicles. Each electric vehicle produced could allow 3 to 5 conventional vehicles to remain at current fuel economy levels while offering no real reduction in greenhouse gas emissions.

Should EPA decide to include in the final rule an incentive for EV production, it should take the form of a factor applied, in the short term only, to these vehicles' actual, full fuel cycle emissions. Moreover, EPA should establish in the final rule the principle that the emissions attributed to EVs, and all other vehicles, will reflect their total greenhouse gas emissions in any future rule.

Setting precedents for future rules

EPA and NHTSA should make sure that, in the process of putting in place these historic vehicle standards, they establish sound precedents and principles for any future rulemakings under the same authorities. The treatment of electric vehicles and other advanced technologies and alternative fuels as discussed above is one area in which precedent is an important consideration. Two others are i) the agencies' justification for the levels they have proposed for the standards, and ii) valuation of consumer benefits.

Explanation of level of standards

The stringency of the proposed rule is well below the maximum cost-effective level, as demonstrated in detail by EPA and NHTSA in the proposal. The agencies offer reasons for this, including the perilous condition of the domestic auto industry. We understand and support the discretion granted the agencies under the governing statutes, and we do not support the application of a rigid economic test to determine the appropriate levels of the standards. However, it is important to set out principles by which levels will be determined in future rulemakings in order to ensure that standards will continue to support expeditious reduction of fuel use and greenhouse emissions. The ability of the standards to promote the development and deployment of new efficiency technologies is central to their role in national climate and energy security policy, so EPA and NHTSA should make clear how this aspect of the program will be preserved and strengthened over time.

Consumer welfare

From this perspective, the discussion of consumer welfare impacts of the proposed rule is troubling. The agencies' finding that raising fuel economy will increase consumer welfare despite the modest share of vehicles purchased today that are highly efficient is not a "conundrum," but rather a manifestation of extensively-studied failures in the market for energy efficiency. The vehicles that will enable manufacturers to meet the new standards by and large are not available today. The standards have been designed to allow vehicles in each market segment to attain the required fuel economy and emissions levels without changes to other vehicle properties.

The use of consumer choice models calibrated to historical sales data, as discussed in the proposal, is a sure recipe for the creation of a backward-looking policy, and one that threatens the viability of the auto companies. This approach ignores important factors such as: past correlation between low fuel economy and desirable design features; the role of manufacturer advertising in consumer vehicle selection; and evidence of recent shifts in consumer preferences, as shown for example in the course of the "cash for clunkers" program. The discussion of consumer welfare in the agencies' proposal appears to raise the possibility that future progress regarding fuel economy could be jeopardized by improperly formulated economic concerns. Indeed, rapid progress toward a sustainable transportation sector is an economic imperative. This is a time for creative thinking about how federal standards can best contribute to achieving the crucial and very challenging goals of major reductions in greenhouse gas emissions and in reliance on unsustainable sources of energy.

Conclusion

In conclusion, ACEEE congratulates NHTSA and EPA, as well as the ARB, auto manufacturers, and the environmental community on the historic agreement to move forward on harmonized vehicle and greenhouse gas standards and the proposal to implement that agreement. We urge the agencies to strengthen the proposal in the final rule by addressing features that could cause the standards to fall short of the benefits they are meant to provide in the next seven years and by establishing principles in the rule to ensure that any subsequent rules will make maximum contribution to meeting national energy, environmental, and economic goals.