

**Testimony of Justin G. Johnson, Deputy Commissioner  
Vermont Department of Environmental Conservation**

**On Behalf of NESCAUM**

**On 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas  
Emissions and Corporate Average Fuel Economy Standards  
[EPA-HQ-OAR-2010-0799; NHTSA-2010-0131]**

**January 19, 2012  
Philadelphia, Pennsylvania**

My name is Justin Johnson and I am Deputy Commissioner of the Vermont Department of Environmental Conservation. I am speaking on behalf of NESCAUM – the eight Northeast states – in regard to the proposed Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards. NESCAUM is an association of the air pollution control agencies in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

The proposed rule is a positive step that builds on the progress made under the current CAFE rules, and will achieve important economic and environmental benefits. These proposed new standards will significantly reduce fuel consumption and greenhouse gas emissions and expand the use of alternative fuels. Consumers will benefit from decreased vulnerability to fuel price volatility and from the long term fuel cost savings that will more than offset the initial added vehicle cost necessary to meet the standards.

In November 2010, NESCAUM submitted comments on the previous *Notice of Upcoming Joint Rulemaking*, encouraging EPA to consider incorporating a requirement for a 6 percent annual rate of improvement in greenhouse gas emissions and fuel consumption. The proposed rule before us today incorporates carbon dioxide emissions reductions at annual average rates in model years 2017 to 2021 of 5 percent for passenger cars and 3.5 percent for light trucks. For model years 2022 to 2025 the rate is set at 5 percent for all light-duty vehicles. The NESCAUM states continue to affirm our previous position that a 6 percent rate is technically feasible and economically practicable and encourage EPA to strongly consider incorporating this more stringent rate of improvement into the rule.

As part of the basis for the proposed rates of improvement, EPA projects that battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs) will account for as little as 1 percent of sales in 2021 and 3 percent of sales in 2025. Yet, nearly every major auto manufacturer will have BEVs or PHEVs in production within the next three years.<sup>1</sup> EPA and the Department of Transportation previously estimated that a fleet-wide 6 percent annual rate of improvement could be achieved with as little as 4 percent combined sales share of BEVs and PHEVs in 2025, provided that sales of conventional hybrids continue to increase.<sup>2</sup> Forecasts of significant reductions in the weight and cost of electric vehicle technologies further support our conclusion that the modest increase in sales of these advanced

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<sup>1</sup> California Air Resources Board. Initial Statement of Reasons: *2012 Proposed Amendments to the California Zero Emission Vehicle Program Regulations*, page 12. December, 2011.

<sup>2</sup> U.S. Environmental Protection Agency and U.S. Department of Transportation. *Notice of Upcoming Joint Rulemaking to Establish 2017 and Later Model Year Light Duty Vehicle greenhouse gas Emissions and CAFE Standards*. October, 2010.

technology vehicles required to achieve a fleet-wide 6 percent annual rate of improvement is viable.<sup>3</sup>

The NESCAUM states support inclusion of flexibility mechanisms in the proposed rule, providing manufacturers with pathways to compliance and a range of technologies sufficient to meet the goals of the program. Allowing credit transfers between a manufacturer's passenger car and light truck fleet will facilitate compliance without reducing the greenhouse gas benefits of the program, as do provisions for carry-forward and carry-back of generated credits. In addition, the inclusion of credits for air conditioning system improvements provides an opportunity for the program to address emissions of the class of high global warming potential refrigerants, the hydrofluorocarbons.

The NESCAUM states support EPA's proposed zero gram per mile incentive for EVs and PHEVs as a reasonable accommodation, recognizing the initial barriers to adoption of these technologies. While our states recognize that the zero emission factor for electricity used to power these advanced vehicles does not take into account the actual upstream emissions from electricity generation, the application of this zero factor for model years 2017-2021 will provide auto manufacturers with a greater incentive for more rapid deployment of these technologies, allowing for greater environmental benefits in the long run. While for this timeframe we support the concept to forego accounting for net upstream electric power generation emissions, we in turn support in principle EPA's proposal for a sales cap above which upstream emissions are included in model years 2022-2025. We urge EPA

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<sup>3</sup> MIT Energy Initiative. *Electrification of the Transportation System*. April, 2010.

to continue to evaluate the greenhouse gas effects of these provisions, and take the necessary steps to ensure preservation of the overall goals of the program.

The NESCAUM states support EPA's proposal to calculate fuel economy for dedicated alternative fuel vehicles using only 15 percent of actual energy consumed, as this provides a strong incentive for increased deployment of compressed natural gas and fuel cell vehicles. In the initial years of the standards, these vehicles will account for a very small fraction of overall sales and therefore only a small percentage of overall greenhouse gas emissions from the light duty vehicle fleet. Continued monitoring of the effects of this approach will ensure that the bulk of the emissions reductions are preserved. Therefore, we support EPA's proposal for a mid-term review to evaluate potential revisions to the program, including greenhouse gas impacts due to the proposed treatment of electricity and alternative fuel energy.

The overall reduction in fuel consumption as a result of this rule is likely to impact fuel tax revenues and by extension, transportation funding that relies on per-gallon fuel taxes. For many reasons, federal and state agencies responsible for transportation infrastructure are now faced with having to consider non-traditional mechanisms for sustained funding into the future. While such revenue losses are a legitimate concern, they should not have a bearing on the final form of this rule. Rather, funding for transportation systems should be addressed in a different context and forum.

In summary, the joint EPA-NHTSA effort to address greenhouse gas emissions and fuel consumption through this rulemaking is a positive step that builds on the progress of the current CAFE rules. Our states encourage EPA to consider the 6 percent annual rate of improvement as suggested in NESCAUM's November 2010 comments. NESCAUM will provide more detailed written comments on this proposed rule before the close of the comment period.

Thank you for this opportunity to testify.