



November 19, 2010

U.S. Environmental Protection Agency
EPA Docket Center (EPA/DC)
Air and Radiation Docket
Mail Code 2822T
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

RE: EPA & NHTSA Revisions and Additions to Motor Vehicle Fuel Economy Label; Proposed Rule, 75 Fed. Reg. 58078 (September 23, 2010)

Introduction

NGVAmerica is a national organization dedicated to the development of a growing and sustainable market for vehicles powered by natural gas, biomethane and natural gas-derived hydrogen. NGVAmerica represents more than 130 member companies, including: vehicle manufacturers; natural gas vehicle (NGV) component manufacturers; natural gas distribution, transmission, and production companies; natural gas development organizations; environmental and non-profit advocacy organizations; state and local government agencies; and fleet operators.

NGVAmerica appreciates the opportunity to provide comments in response to EPA's and NHTSA's proposed rulemaking concerning labeling requirements for new motor vehicles. This rulemaking impacts our member companies because the labels impose new requirements on vehicle manufacturers and the rules impact information that is presented to consumers of motor vehicles, including customers interested in natural gas vehicles. The agencies have proposed revising the current labels to include new and additional information about fuel costs, potential economic savings, emission performance, driving range, among other things. The information provided will be used by purchasers to draw conclusions about the relative benefits of owning and operating different vehicles and likely will shape purchasing decisions. The information provided on the labels also will likely be used by proponents of different

technologies to tout the relative benefits of their favored technology. For all these reasons, it is important that the new labels “get it right” and not provide misleading or irrelevant information.

Currently, the Honda Civic GX is the only original equipment manufacturer (OEM) passenger vehicle powered by natural gas that is offered in the U.S. However, the market for NGVs is poised to grow in coming years. Recent studies show that the U.S. has an abundant supply of domestic natural gas. One of the most promising ways to use natural gas is to substitute it for gasoline and diesel fuel. Congressional legislation under consideration is expected to expand and extend consumer incentives for NGVs. We expect manufacturers to increase their offerings of NGVs in the coming years in response to these incentives and the favorable economics associated with owning and operating NGVs. Therefore, it is important that the labels contemplated in this rulemaking provide appropriate information regarding NGVs.

EPA and NHTSA have proposed three different label formats. The final rule will select only one label but that label may include a combination of the features proposed for Labels 1, 2 and 3. We support an approach that selects the best features from the three different labels. We do not support Label 1 because the use of a letter-grading system over emphasizes the goal of “keeping it simple” to the detriment of consumer education. We believe that the proposed letter-grade format does not facilitate comparisons of meaningful information. As proposed, Label 2 represents the best option, primarily because it does not combine different criteria into a single rating. We do not support Label 3 because it combines fuel economy and greenhouse gases into a single rating, which we believe is not appropriate. Our preference is that the agencies adopt Label 2 with the changes we have noted below in our comments.

The vehicle labels should provide relevant and complete information. Therefore, the energy consumption and emissions information should be based on a full-fuel cycle assessment and not simply on the vehicles’ emissions or energy consumption. Also, the ratings or comparisons (economics, emission performance or fuel efficiency) should be based on the performance of vehicles that are from the same class.

Comments

A. Support for Full Fuel Cycle Assessments

The new labels should take into account source energy consumption as well as the vehicle energy consumption in order to present a complete picture of energy consumption. This is particularly important when it comes to evaluating the relative

benefits of alternative fuel vehicles. The proposed labels compare emissions performance and fuel economy based on vehicle emissions and efficiency *without* considering upstream emissions or energy inputs. That means electric vehicles will be portrayed as having zero emissions and being very efficient when in fact this is far from true. The notice indicates that the Energy Policy and Conservation Act (EPCA) requires EPA and NHTSA to convert energy usage for different vehicles, including electric vehicles, to a petroleum equivalent value. Since other vehicles currently are rated solely on vehicle efficiency, i.e., miles per gallon of fuel consumed by the vehicle, it is appropriate to similarly provide miles per gallon equivalent (MPGe) for electric vehicles. Relying exclusively on a MPGe rating that is based only on the efficiency of the vehicle, however, ignores the potential to educate consumers on the full impact of their purchasing decisions and ignores the significant energy inputs occurring upstream of the vehicle. Moreover, relying solely on vehicle efficiency is misleading.

EPCA provides ample opportunity to include additional information on the labels. In the case of electric vehicles, the statute actually encourages the agencies to take into account upstream emission and efficiency.¹ In fact, EPA recently determined that it will account for the upstream emissions of electric vehicles as part of the final rule on light duty fuel economy and greenhouse gas emissions.² To consider upstream emissions in that rulemaking and not here is inconsistent and could possibly lead to legal challenge. With respect to environmental comparisons, there does not appear to be any reason why the labels could not be exclusively based on the full fuel cycle assessments. The notice indicates that the statute, in the case of emissions, does not require a vehicle-only focus. However, the agencies conclude that the most practical approach is to provide vehicle-only information on the labels and direct consumers to where they can learn more about upstream emissions. We think that it would be a mistake not to present upstream emissions information on the labels.

One of the guiding principles included in the notice reads as follows:

“The advanced technology vehicle labels must be as equitable as possible across different technologies, both advanced and conventional. For example, the agencies want to avoid picking a label design or label metric that inherently favors a certain advanced

¹ EPCA instructs the agencies to consider the “national average electrical generation and transmission efficiencies” and “the need for the United States to conserve all forms of energy and the relative scarcity and value to the United States of all fuel used to generate electricity.” *See* 49 USC 32904

² 75 *Fed. Reg.* 25,324 (May 7, 2010); <http://edocket.access.gpo.gov/2010/pdf/2010-8159.pdf>.

technology beyond the energy and environmental merits of the individual vehicles.”³

The fact that the proposed labels ignore upstream emissions and energy inputs is obviously inequitable since it provides electric vehicles with a significant and unwarranted advantage over other fuel technologies. The notice also indicates that the labels should “provide objective information and help consumers make good decisions for both themselves and the environment.” Ignoring upstream emission and focusing exclusively on tailpipe only emissions would be inconsistent with these objectives.

The apparent rationale for focusing only on tailpipe emission and vehicle energy inputs is that it is too complicated to use averages given the divergent means of providing electricity to electric vehicles. The notice also indicates that specific information on upstream emissions will be provided on internet websites so consumers who are interested in this information will be able to consider it. The notice, however, acknowledges that “more consumers will look at the label than at the website, and that a “0” figure for GHG emissions might prove confusing to some consumers. While accurate and more complete information will be provided on the website, putting 0 grams CO₂/mile on the label may lead some consumers to perceive that driving their EV does not contribute to GHG emissions.”

We disagree with the conclusion that it is too complicated to present full fuel cycle comparisons on the labels. National averages are suitable for such purposes and can be updated over time as the mix of generation and fuel supplies in the U.S. change.⁴ A number of analytical tools have been developed to provide these types of comparisons. We recommend that manufacturers use the GREET model developed by Argonne National Laboratory.⁵ The labels already rely on national averages for much of the information presented on them. For example, national averages for fuel prices, miles driven, as well as the proportion of miles traveled on-highway and city, are currently used to determine economics and annual emissions of vehicles. Additional comments on the specifics of the mile per gallon equivalent approach and the emissions ratings are provided below.

B. Rating Systems

³ 75 *Fed. Reg.* 58,104

⁴ 49 USC 32904 specifically directs the Secretary with respect to electric vehicles to “review those values each year and determine and propose necessary revisions.” There is no reason this cannot also be done for other fuels.

⁵ *The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model* (<http://greet.es.anl.gov/>)

The statute requires that the new labels incorporate a rating system that allows consumers to compare fuel economy and greenhouse gas and other emissions at the point of purchase and requires a designation of vehicles with the lowest GHG over the useful life and the highest fuel economy. The current labels rate vehicles based on fuel economy performance and depict the range of fuel economy by vehicle class (e.g., SUVs are rated against other SUVs not compacts).

The proposed labels would rate vehicles against all vehicles, not just vehicles within the same class, and would show the worst and best results with respect to fuel economy and GHG emissions. However, Label 2 includes a bar line to show how a vehicle also rates within its particular class (e.g., midsize station wagons) with respect to fuel economy but not with respect to greenhouse gas emissions or other pollutants. Label 3 combines fuel economy and GHGs into a single rating and includes a bar line to show how a vehicle rates within its particular class. The notice explains that including all vehicles within the same rating system is appropriate because focus group participants indicated that they shop across two to three vehicle classes. The notice, however, requests comment on whether it should at least develop separate ratings for passenger cars and light duty trucks since “two-thirds (consumers) shop exclusively among either trucks or cars.”

NGVAmerica supports separate ratings for different factors instead of combining them (e.g., combining GHG and fuel economy). Therefore, we support the label 2 over label 3 in this respect. We also believe that the comparisons, whether they are for fuel economy, greenhouse emissions or other pollutants, should be made with other similar sized vehicles and not against all vehicles. Providing comparisons of similar sized vehicles is more relevant than comparing a vehicle to the average of all motor vehicles. For example, we don't think it is particularly useful or relevant to compare a compact car to an SUV since few consumers are likely to be actually considering vehicles with such different functionality. If the comparative ratings show the best and worst on a scale, the best and worst vehicles should be within the same class.

C. Fuel Economy Measurement – MPG or MPGe

The new labels would continue to display fuel economy information in terms of miles per gallon (MPG) or miles per gasoline gallon equivalent (MPGe). However, the proposed labels, particularly Label 1, would de-emphasize this information. EPA and NHTSA conclude that EPCA requires that they continue to provide fuel economy information in terms of MPG of gasoline or MPGe. Some exceptions for diesel powered vehicles and ethanol powered vehicles, however, have been made. The

notice indicates that revising the label to require that diesel fueled vehicles are labeled using an MPGe rating would likely confuse consumers because they purchase diesel fuel based on a gallon basis not on a gasoline gallon equivalent basis. EPCA stipulates that, for purposes of the fuel economy calculations, 100 cubic feet of natural gas equals 0.823 gasoline gallon equivalent (or 121.5 cubic feet equals one GGE).⁶

We believe that the new labels should provide the MPGe ratings for vehicles. However, we believe that the MPGe ratings also should take into account source energy consumption and losses. We support the comments offered by the Gas Technology Institute (GTI) on this point. GTI's comments go into greater detail on how a MPGe factor can be properly determined, taking into account source energy consumption and losses. If the agencies conclude that the statute requires a MPGe rating based only on vehicle efficiency, the agencies should nevertheless also include a second MPGe rating that accounts for upstream energy inputs. Even if the statute requires a site-based rating, it certainly does not preclude providing additional information such as a MPGe rating based on source energy. Providing consumers with information regarding the total amount of energy they consume is critical to understanding the full energy intensity of using a particular type of vehicle. Therefore, it is imperative to also include this information on the labels.

D. Petroleum Reductions

EPA and NHTSA also should include information on the labels that tells consumers how much petroleum the vehicle they use consumes each year compared to an average vehicle from the same class. In this way, consumers can see how their purchasing decisions impact reliance on petroleum and petroleum imports. *FuelEconomy.Gov* already provides an indication of how much petroleum a vehicle uses. It would be helpful to show how much petroleum a particular vehicle reduces each year. Or, alternatively the label could show how much petroleum is reduced over a five-year period, similar to what is proposed for the fuel cost savings information.

E. Greenhouse Gas Performance

The proposal would base the greenhouse gas emission ratings only on carbon dioxide emissions and only on vehicle emissions (no upstream emission would be taken into account). The labels would indicate that greenhouse gas emissions means g/mi of CO₂ emissions. EPA has requested comments on whether it should include other greenhouse gas emissions. The notice indicates that “[t]his approach is also consistent

⁶This factor is written into the statute and the agencies have not proposed any changes to it.

with the vehicle GHG emissions compliance levels recently adopted by EPA, which treat GHG emissions for electric operation as zero up to a cumulative production cap per manufacturer.” The notice justifies not including upstream emissions by stating that it would be too “challenging” given the range of emissions from power plants operated on different fuels. EPA apparently believes that this information is best provided elsewhere and that the issue could be dealt with by including a statement that the values represent tailpipe-only emissions. As an alternative, EPA has requested comments on whether more direct wording would be clearer.

As stated above, it is inequitable and misleading to ignore upstream emission especially in the case of technologies that are being promoted as good for the environment and which have significant upstream emissions. The approach is not consistent with other rulemakings because even the fuel economy regulations finalized for 2012 – 2016 eventually account for upstream GHG emissions whereas this rulemaking apparently intends to indefinitely ignore such emissions. We believe it is imperative to include an assessment and comparisons of full fuel cycle emissions. If this is done, it is appropriate to also include methane and other greenhouse gas emissions as well.

F. Other Emissions

The notice indicates that, for other pollutants, the focus will be on tailpipe emissions of criteria pollutants (NMOG, NO_x, PM, CO and HCHO). The ratings system for other pollutants will be based on the emission certification standards for vehicles (Bins 1 – 8) with higher ratings assigned to vehicles in the lower bins and less favorable ratings to vehicles in higher bins. This proposal is fraught with a number of problems. The criteria pollutants do not all contribute to a common problem such as smog. Therefore, ratings based only on certification levels do not provide useful information. Certification standards also ignore upstream emissions. As with greenhouse gas emissions and energy consumption, the listing of “other pollutants” should include the full fuel cycle emissions. Given the prevalence of smog as a national problem and general awareness of this issue, the “other pollutants” should be limited to pollutants that contribute to smog formation and the label rating for this should appear under the heading “Smog-Forming Pollutants.”

G. Fuel Costs – Annual Fuel Costs, Five Year Savings

EPCA (42 USC 32908 (b) (1) (B)) requires that the label provide annual estimated fuel costs. As shown above, this figure is computed based on the combined fuel economy of the vehicle and assumes the vehicle travels 15,000 miles per year. Fuel costs are based on the average national prices for fuels (e.g., 2008 price for gasoline was \$2.80).

The notice indicates that the labels will continue to display annual fuel costs because the statute requires this information. However, the agencies are interested in whether more useful cost data could be provided (e.g., cost per month, five-year cost, cost per mile). Only proposed Label 1 includes a new metric for fuel costs, providing the five-year savings compared to an average vehicle. As proposed, Labels 2 and 3 do not include this information but the notice indicates the five-year cost figure could be moved to these other labels in the final rule.

We note that the factors considered above represent national averages and that actual fuel prices, miles driven, as well as the proportion of miles traveled on-highway and city will vary significantly for individual consumers. We raise this here to point out that national averages can be used and already are used in the labels. Therefore, national averages also could be used to develop information about upstream emission and energy consumption.

NGV America supports showing how much a particular vehicle will save or cost in dollars over a five-year period. This information will help consumers better understand the long-term economics of using certain fuels like natural gas. However, we believe that economic comparisons should be made with reference to the performance of other vehicles within the same class. We support including this information on Label 2.

H. Dual-Fueled CNG Vehicles

The notice indicates that since there is only one OEM NGV currently available and that vehicle is a dedicated vehicle (Honda Civic GX), there are no plans to propose a label for dual-fuel CNG vehicles. However, the notice includes an extensive discussion of requirements and proposed changes to the labels for dual-fuel E85 vehicles. Much of the discussion is relevant to CNG dual-fueled vehicles. The current label for dual-fuel vehicles does not require that manufacturers provide any information on the fuel economy of the vehicle when operating on the alternative fuel. This is because EPCA only requires information on the fuel economy of the dual-fuel vehicle when operating on gasoline. Manufacturers, however, may voluntarily include the alternative fuel's fuel economy on the label. EPCA does require that the Fuel Economy Guide (which is published by DOE) include information about the fuel economy, performance and driving range of the vehicle when operating on the alternative fuel.

The notice includes two alternative approaches for dual-fuel vehicles: 1) keep the current label format; 2) require inclusion of additional information, including the fuel economy of the vehicle when operating on the alternative fuel.

In anticipation that additional NGV models, including dual-fuel vehicles, will be made available in the future, we offer the following comments on the dual-fuel labels. We support revising the current labels so that they include fuel economy and emission performance data of the vehicle when operating on the alternative fuel as well as gasoline. The need for such information should be without question. Consumers of such vehicles need to understand how the vehicle will perform on alternative fuel. How else can they make an educated decision regarding the merits of owning and operating such vehicles? The alternative fuel information should be provided in a font size that is at least as large, or perhaps even larger than, the information displayed for gasoline operation. Providing this information should be mandatory not discretionary. As to how the information is depicted and how the ratings are done, we have addressed those issues elsewhere in this document (e.g., show MPGe and show total energy, show tailpipe GHG emissions and upstream emissions or simply show full fuel cycle GHG emissions, rating comparisons should be within class not to average vehicle).

I. Drive Range

We support including driving range information for the alternative fuel vehicles. Driving range is an important consideration for consumers who buy vehicles. However, we do not think that EPA/NHTSA and FTC should provide duplicative information, so FTC should no longer require this information.

J. CNG Labels

Proposed Label 2 includes a picture of a pump in the upper right corner and the words “Compressed Natural Gas” along with a diamond with the letters “CNG” inside the diamond. There also is a larger pump symbol located next to the fuel economy rating for the vehicle. We recommend including the letters CNG inside the pump that appears next to the fuel economy rating as currently called for in the Manual on Uniform Traffic Control Devices (2009), which sets out requirements for highway signs. The current signage for CNG fueling stations shows the pump with CNG spelled out vertically inside the pump.⁷ Other alternative fuels are similarly noted with appropriate lettering inside the pump (e.g., EV, E85).

⁷ <http://mutcd.fhwa.dot.gov/pdfs/2009/mutcd2009edition.pdf> (see p. 301 General Service Signs and Plaques).

Conclusion

NGVAmerica appreciates the opportunity to submit these comments. In concluding, we want to reiterate that the following:

- The final labels should present data that is based on full-fuel cycle assessments of the greenhouse gas emissions, energy consumption, and other pollutants;
- It would be a gross mistake to ignore upstream emissions or source emission or to simply direct consumers to this information on a website;
- Comparisons or ratings should be made within similar classes instead of lumping all vehicles together;
- EPA should not over-simplify its labels by combining different criteria together (e.g., GHG emissions and fuel economy) for the purposes of providing ratings;
- The labels should show fuel-cost savings over a five-year period;
- The labels for alternative fuel vehicles should show driving range;
- The final label should include a rating for “petroleum reductions” similar to the “Energy Impact Score” presented on FuelEconomy.Gov;
- Labels for dual-fuel vehicles must provide comparative information on alternative fuel use, not just information about gasoline use.

For additional information concerning this statement, please contact:

Jeffrey L. Clarke
General Counsel & Director Regulatory Affairs
NGVAmerica
400 N. Capitol St., NW. Suite 400
Washington, DC 20001
(202) 824-7364 (office)