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Proposed Rulemaking for Revisions and Additions to Motor Vehicle Fuel Economy Label

Joint Public Hearing
Environmental Protection Agency and National Highway Traffic Safety Administration
Chicago, October 14, 2010

Thank you for the opportunity to testify today on the joint proposed rule. My name is Luke Tonachel. I am a senior analyst with Natural Resources Defense Council’s Transportation Program. I represent NRDC and its 1.3 million members and activists in support of efforts to improve the fuel economy label for new cars and light trucks beginning in model year 2012.

NRDC supports changes to the label that provide consumers with easy-to-understand information on the environmental and petroleum consumption impacts of different vehicle choices. Armed with this information, car and truck buyers can make informed buying decisions based on knowing which vehicles are the best for the environment and save the most money at the pump while meeting their personal transportation needs.

NRDC believes there are five principles that should be followed to make the label most useful for consumers and to help pave the way for broader adoption of clean advanced vehicle technologies. First, the label should include a prominent and simple letter grade system. Second, the letter grade system must be based on a single scale that encompasses the performance of all light duty vehicles. Third, the vehicle greenhouse gas emissions should serve as the primary vehicle performance indicator. Fourth, operational cost metrics should be included. Fifth, the label should include fuel consumption metrics. I will describe each of these principles in greater detail.

1. Letter Grade System Simplifies Comprehension of Multiple Performance Factors

Letter grades boil down global warming pollution and fuel consumption into a simple metric that everyone understands. Experts tell us to keep it simple. The government agencies commissioned a panel of impartial consumer experts to help design the label. Many versions were tested and discarded. Business experts involved in the launch of successful products and services like the iPod, Dove soap and craigslist.org tell us that consumers act on impulse, not details. The grading system is what they overwhelming recommended.

The simplicity of the letter grade means that the pollution and fuel consumption information can be used early in the buying process. Buyers often start their new vehicle search by considering a range of vehicle types and models. By having a metric as simple as a letter grade, it is easy for buyers to use the information to quickly compare the performance of a wide variety of vehicle types early in the buying process.
The letter grade is also good for automakers that choose to compete to produce the cleanest, most efficient vehicles. The grade clearly differentiates advanced technology vehicles with low emissions, which enables automakers to better market these relatively unfamiliar vehicles.

We know that the auto companies are gearing up to supply more advanced technology vehicles to the market. According to a recent analysis by auto market expert Alan Baum, the number of hybrid, plug-in hybrid, electric and fuel cell models are forecast to more than quadruple over the next 5 years.¹ The letter grade will clearly show how these clean technologies rank among other vehicles, which can help drive consumers to purchases them, ultimately helping to reduce the risks that automakers take in introducing them.

2. Single Scale Allows Comparison across All Vehicle Types

The letter grades system should be based on a single rating scale for all light-duty vehicles so consumers have clear information about the environmental and energy performance of the full range of vehicles available to them. According to a survey of vehicle shoppers by the EPA and DOT, "More than half (53.6%) compared two to three vehicles before making their final decision..." and "...when it came to the types of vehicles seriously considered, more than three-fifths (62.8%) considered more than one vehicle type, with a third (32.9%) considering two vehicle types and another fifth (19.7%) considering three vehicle types."

Consumers are likely to consider multiple vehicle models and types— including both cars and trucks— because there are several models that meet their size requirements. However, within the same size, or footprint, there is also a wide range of efficiency and greenhouse gas emission levels, as shown in Figure 1 below. According to the EPA and DOT survey work, size was the most highly rated attribute that attracted buyers to a particular vehicle. Essentially buyers are looking for a vehicle that will hold a certain number of people and amount of cargo. I looked at vehicles of the same footprint and compared their fuel economy and found that fuel economy can vary dramatically. [Examples provided in Tables 1 and 2 below.] I found that cars and trucks with the same footprint can vary by four grade levels or more. Having the letter grade system makes it very clear which vehicles of varying types are most efficient within the same footprint size.

3. Greenhouse Gas Emissions Should be the Basis of the Primary Environmental Performance Rating

A primary advantage of relying on greenhouse gas emissions to rate vehicles is that it is independent of fueling technology and therefore enables a fair comparison across vehicles operating on different fuels.

To be consistent across vehicles, the greenhouse gas labels should include at least the bulk of emissions that a vehicle is responsible for emitting. The proposal to label plug-in electric vehicles with zero gCO2/mi is confusing and the agencies should strongly consider a different approach. In the NPRM, the

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agencies noted that focus group participants specifically pointed out that electric vehicles do cause emissions at the power plant and that those emissions should be represented on the label. By including the tailpipe emissions for combustion vehicles and the electricity production emissions for electric drive, the label would cover at least 75% of the total emissions that vehicles of all types contribute to the atmosphere.

4. Including Five-Year Operational Cost Eases Vehicle Comparisons
NRDC supports the inclusion of the five-year operational cost comparison to the average vehicle of the full car and light truck fleet. Similar to the letter grade, the colored ‘spend’ and ‘save’ designations, along with the actual monetary value, are easy to understand and relieve the consumer from the complex task of doing cost calculations. It also allows consumers to see how their fuel savings can offset any incremental cost from purchasing a more advanced, cleaner vehicle like a hybrid. Because the five-year operational cost is presented simply, it can also be effective early in the vehicle purchase process when buyers are considering the largest varieties of vehicles.

5. Fuel Consumption Should be Emphasized in the Label
The label should emphasize fuel consumption to avoid complications of what the agencies have called the “MPG illusion,” especially for petroleum-powered vehicles. Petroleum consumption continues to be at the forefront of public concern due to its impact on U.S. economic and military security and should continue to be a part of vehicle labels. NRDC believes that a shift toward emphasizing the fuel consumption metric (in gallons/mi or gallons/100mi for petroleum fuels) would give consumers a clearer indication of fuel demand when comparing vehicles of different efficiencies.

Conclusion
A letter grade system that spans all vehicles on a single scale is an excellent step forward. It represents a new generation of labels for a new generation of clean, fuel-efficient vehicles. The grade system design clearly and simply differentiates the cleanest vehicles across the whole spectrum of choices whether consumers start their new vehicle search across multiple vehicle types or classes or just focus on a specific class. NRDC looks forward to expanding on the views expressed today in our written comments and to continuing to engage with EPA and DOT as the process for finalizing the labels moves forward.
Figure 1: Consumers Have Many Choices of Vehicle Class and Fuel Economy at the Same Footprint

Table 1: Efficiency Varies Widely Within a Footprint, Example 1

<table>
<thead>
<tr>
<th>Models</th>
<th>Footprint: ~43.5 ft²</th>
<th>MPG (Adj. Combined)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toyota Prius (car)</td>
<td></td>
<td>49.4</td>
</tr>
<tr>
<td>Ford Escape Hybrid (truck)</td>
<td></td>
<td>32.0</td>
</tr>
<tr>
<td>Mazda3 (car)</td>
<td></td>
<td>24.6 – 28.9</td>
</tr>
<tr>
<td>Ford Escape (truck)</td>
<td></td>
<td>25.0 – 20.4</td>
</tr>
<tr>
<td>Mitsubishi Eclipse (car)</td>
<td></td>
<td>19.8 – 23.7</td>
</tr>
</tbody>
</table>

Table 2: Efficiency Varies Widely Within a Footprint, Example 2

<table>
<thead>
<tr>
<th>Models</th>
<th>Footprint: ~48.0 ft²</th>
<th>MPG (Adj. Combined)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexus RX 450h (truck)</td>
<td></td>
<td>28.7 – 29.4</td>
</tr>
<tr>
<td>Mazda6 (car)</td>
<td></td>
<td>21.0 – 25.4</td>
</tr>
<tr>
<td>Volvo XC 60 (car)</td>
<td></td>
<td>18.5 – 21.3</td>
</tr>
<tr>
<td>Mitsubishi Endeavor (truck)</td>
<td></td>
<td>17.2 – 18.4</td>
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