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EPA proposes grading system for car fuel economy

by Martin LaMonica

The Environmental Protection Agency and Department of Transportation on Monday proposed a fuel economy label overhaul to reflect how electric and alternative fuel vehicles stack up against gasoline passenger vehicles.

The federal agencies released two new labels that officials expect to be finalized early next year and used in 2012 model year cars. The published labels will be available for public comment for 60 days.

The changed label, mandated by the 2007 energy law, includes the same information on city and highway miles per gallon and estimated driving costs based on 15,000 miles a year now available.

But the new labels add more comparative information, rating cars on mileage, greenhouse gas contribution, and other air pollutants from tailpipe emissions. That means that consumers can look at a label to see how one vehicle compares to all available vehicles, rather than only cars in a specific class.

One label proposes grades, ranging from and A plus to a D. There are no failing grades, since vehicles need to comply with the Clean Air Act.

"The idea of the grade is to give a single metric that combines greenhouse gases and fuel economy into one metric," said EPA assistant administrator Gina McCarthy. "We will have information underlying those grades available to consumers when the labels are in place."

The proposed labels address one of the outstanding problems of rating the fuel efficiency with vehicles that don't use gasoline as a fuel source.

General Motors brought the issue into the public spotlight last year, when it said it expected to get a fuel economy rating of 230 miles per gallon for the electric Chevy Volt. As of now, however, the mileage rating for the Volt and the all-electric Nissan Leaf still are not yet certified.

EPA and DOT officials did say plug-in vehicles will have different labels than gasoline-only cars, which will include a miles-per-gallon equivalent number. The electric-car label also includes the



anticipated driving range and efficiency expressed in kilowatt-hours per 100 miles.

Making the grade

During a media briefing on Monday, McCarthy said the median grade for passenger cars will be a B-minus which equates to mileage between 20 and 23 miles per gallon.

Electric vehicles that run entirely off of batteries, such as the Leaf, will have a rating of A-plus. Plug-in hybrid vehicles will have a grade of A, which a miles per gallon equivalent of between 59 and 116.

The EPA has modeled where existing cars will fall along the grading bell curve. Hybrids such as the Ford Fusion, Honda Civic, and Toyota Prius will get an A-minus, which a MPG rating between 40 and 58. Fuel-efficient cars such as the Nissan Altima, Toyota Corolla, and Volkswagen Golf will be given a B-plus for mileage between 30 and 30 miles per gallon. (Click PDF to see the full list of mileage and grades.)

Grades for midsize sedans will range from A-minus to D, and those for SUVs will range from B-plus to D, McCarthy said. High-performance sports and luxury cars, such as Ferraris will get a D rating, where mileage is 12 miles per gallon or lower.

The fuel economy ratings address only tailpipe emissions, and not the "upstream" energy use and pollution related to generation of electricity or oil refining, officials said.

There are also ratings for compressed natural gas vehicles, diesels, and different types of plug-in hybrids, including both the extended-range electric vehicle of the Chevy Volt and Fisker Karma, and plug-in versions of conventional hybrids. (Click PDF of all labels.)

EPA Fuel Economy and DOT Environmental Comparisons

Dual Fuel Vehicle: Plug-in Hybrid Electric

Blended Electric+Gas (when fully charged) **65 MPGequivalent**
Charge takes **4 hours** Range **50 miles** before switching to Gas Mode
Electric only: first **11 miles**

Gas Only (when battery is empty) **38 MPG**
2.7 gallons per 100 mi.

Environment Rating (among all vehicles) **137** CO₂ grams/mile (tailpipe only)
Other Air Pollutants **4 out of 5 (5 is best)**

Annual Fuel Cost **\$855** Blended and Gas Only combined

Fuel Economy & Greenhouse Gas Rating (among all vehicles) **9**
Worst 1 2 3 4 5 6 7 8 9 10 Best
midsize station wagons
Fuel economy for all midsize station wagons ranges from 18 to 75 MPGequivalent. This vehicle gets 53 MPGequivalent.

Visit www.fueleconomy.gov
• Calculate personalized driving estimates
• Download the Fuel Economy Guide (also available at dealers)

Smartphone Interactive
Scan code for more information about this vehicle or to compare it with others.

Your actual mileage and costs will vary with fuel cost, temperature, driving conditions, and how you drive and maintain your vehicle. Cost estimates are based on 15,000 miles per year at \$2.80 per gallon and 12 cents per kW-hr. MPGequivalent: 33.7 kW-hrs = 1 gallon gasoline energy.

By the time the labels are finalized, the EPA and DOT hope to have a Web site available where consumers could get more information at the point of sale on a smart phone. For example, a person could get an accurate idea of the car's environmental impact, or the cost associated from using electricity to fuel it.

The agencies are seeking consumer feedback through the e-mail newlabels@epa.gov.

In reaction to the announcement, both General Motors and Ford said they are evaluating the label designs and will continue to work with the EPA and Department of Transportation to provide meaningful labels for consumers.

"Because the Volt under most circumstances does not use gasoline, the challenge at hand for consumers, automakers and government agencies will be to think beyond the conventional 'miles per gallon' standard," GM said in a statement.

(Credit: EPA)

Updated at 12:22 p.m. PT with reaction from GM and Ford and second label design. Updated at 1:15 p.m. PT with details on mileage for different grades.



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