United States Environmental Protection Agency

Office of Transportation and Air Quality

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Regulatory Announcement

EPA Proposes New Test Methods for Fuel Economy Window Stickers

The U.S. Environmental Protection Agency (EPA) is proposing new test methods for calculating the fuel economy estimates that are posted on the window stickers of new cars and trucks. The city and highway miles per gallon (MPG) estimates help consumers compare the fuel economy of different vehicles.

Although no single test can ever account for the wide variety of driving conditions and styles, EPA's proposal will bring the MPG estimates closer to the fuel economy consumers actually achieve on the road. The new MPG estimates will take effect with model year 2008 vehicles, which will be available in dealer showrooms in the fall of 2007.

Background / Current Tests and Methods

The city and highway MPG estimates have been provided to consumers since the 1970s as a tool to help shoppers compare the fuel economy of different vehicles. Currently, EPA relies on data from two laboratory tests to determine the city and highway fuel economy estimates. The test methods for calculating these estimates were last revised in 1985, when the fuel economy derived from the two tests were adjusted downward—10 percent for city and 22 percent for highway—to more accurately reflect driving styles and conditions.

The city and highway tests are currently performed under mild climate conditions (75 degrees F) and use acceleration rates and driving speeds that EPA believes are generally lower than those experienced by drivers

in the real world. Neither test is run with the use of accessories, such as air conditioning. The highway test has a top speed of 60 miles per hour, and an average speed of only 48 miles per hour.

Since the mid-1990s, EPA's emission certification compliance regulations have required the use of three additional tests which capture a much broader range of real-world driving conditions; specifically: high-speed, fast-acceleration driving and the use of air conditioning and colder temperature operation (20 degrees F). Not only do these conditions impact the amount of air pollutants a vehicle emits, they also have a significant impact on a vehicle's fuel economy. However, they are not currently required to be used to measure fuel economy.

The Proposed New Methods to Determine Fuel Economy

EPA is proposing to incorporate these tests into the methods used to determine the fuel economy estimates posted on the window stickers of new cars and light trucks. For the first time, the EPA fuel economy estimates will reflect vehicle-specific data from tests designed to replicate three real-world conditions that can significantly affect fuel economy: high speed/rapid acceleration driving, use of air conditioning, and cold temperature operation. Previously, these conditions were accounted for by across-the-board adjustments, rather than by vehicle-specific testing.

EPA is also proposing that the fuel economy estimates reflect other conditions that affect fuel economy, such as road grade, wind, tire pressure, load, and the effects of different fuel properties. The fuel economy for each vehicle model would continue to be presented to consumers as city and highway MPG estimates.

Auto manufacturers would be required to perform the fuel economy testing specified in EPA's proposal. In the 2008 model year, the new methods would be used to determine the estimates. In 2011, a provision would take effect that would require manufacturers to perform additional cold temperature, air conditioning and/or high speed/rapid acceleration driving tests for some vehicles that may be more sensitive to these conditions. The additional testing would ensure that the fuel economy of those vehicles is more precisely captured. EPA is proposing to delay this additional testing until 2011 in order to provide enough time for manufacturers to plan for the added testing responsibilities. Nevertheless, beginning in 2008, the fuel economy for those sensitive vehicles would still reflect enough of the above effects such that consumers can make good comparisons.

How Fuel Economy Estimates Will Change from Today's Labels

Under EPA's proposal, the new fuel economy estimates would be lower for most vehicles. This is not because auto makers have designed the same vehicles to be less fuel efficient—it is because our new test methods take into account factors that have been missing or not fully accounted for in the current tests. Because some vehicles are more sensitive to these factors than others, the impact of the proposed changes will vary from vehicle to vehicle. The city MPG estimates for conventional (non-hybrid) vehicles would drop on average by about 10-20 percent from today's labels, while the highway estimates would drop by about 5-15 percent, depending on the vehicle.

For hybrid vehicles, the city MPG estimates would drop 20-30 percent from today's labels. For highway MPG estimates, the change is about the same as for conventional vehicles. The nature of current hybrid technology–the addition of a battery as a second source of on-board power, sophisticated control systems, and sometimes a smaller engine—makes a hybrid's fuel economy more sensitive to certain factors, such as colder weather and air conditioning use. However, many hybrid models will remain among the most fuel-efficient vehicles on the market.

Laboratory Tests Reflect Real-World Conditions

It is essential that EPA's fuel economy estimates continue to be derived from controlled, repeatable laboratory tests to enable a standardized or "level playing field," comparison between all vehicle models. However, the underlying calculations proposed to determine the estimates are based on data from real-world driving behavior and conditions. Laboratory testing also preserves EPA's ability to confirm the results of manufacturers' testing.

Auto makers will continue to be responsible for performing the fuel economy testing and calculating the label MPG estimates. EPA will continue to confirm the manufacturers' test results by performing audit testing at its National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan.

Since everyone drives differently and under varied conditions, there is no test that could perfectly predict the fuel economy that every driver will get. With any estimate, there will always be times when a driver's actual fuel economy will be higher or lower. However, EPA's proposal will do a better job of bringing the estimates on the window sticker closer to people's real-world fuel economy experience.

Fuel Economy Label Design

EPA is also proposing to revise the format and text of the fuel economy window sticker that appears on new automobiles. This is being done to more clearly convey the fuel economy information to consumers. The proposal includes four label options under consideration. The label options are also available at www.epa.gov/fueleconomy.

No Impact on CAFE

EPA's proposal has no impact on the Corporate Average Fuel Economy (CAFE) program. There are separate regulations concerning the test methods and procedures to determine the fuel economy values under the CAFE program, which is administered by the Department of Transportation.

Public Comment

EPA is providing a 60-day comment period on the entire proposal, including the new fuel economy testing methodology and label redesign. Also, EPA will hold a public hearing after the proposal is published in the *Federal Register*. For more details about how to comment or to attend the public hearing, please see the *Federal Register* notice or go to www.epa.gov/fueleconomy.

For More Information

You can access documents on this rulemaking on EPA's Office of Transportation and Air Quality Web site at:

www.epa.gov/fueleconomy

For further information, please contact the Assessment and Standards Division at:

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