

EPA Issues New Test Methods for Fuel Economy Window Stickers

The U.S. Environmental Protection Agency (EPA) is finalizing new test methods for calculating the fuel economy estimates, which are posted on window stickers of new cars and trucks. These estimates help consumers compare the fuel economy of different vehicles for both city and highway driving. This new rule makes three important changes.

First, EPA's new methods will bring the miles per gallon (mpg) estimates closer to consumers' actual fuel economy by including factors such as high speeds, quicker accelerations, air conditioning use, and driving in cold temperatures. The new estimates will take effect with model year 2008 vehicles (available in dealer showrooms in 2007).

Second, for the first time, EPA will require fuel economy labels on certain heavier vehicles up to 10,000 pounds (lb) gross vehicle weight, such as larger SUVs and vans. These vehicles had been exempt because they exceeded the previous weight limit of 8,500 lb. Manufacturers will be required to post fuel economy labels on these vehicles beginning with the 2011 model year.

Third, to convey fuel economy information to the public more effectively, EPA is changing the design and content of the window sticker. The new label design will make it easier for consumers to compare fuel economy when shopping for new vehicles. New labels will be required on vehicles manufactured after September 1, 2007.

Background

Existing Tests and Methods

Fuel economy 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 1984, 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 include acceleration rates and driving speeds that EPA believes are generally lower than those used by drivers in the real world. Neither test is run while using 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 emissions certification program has required the use of three additional tests which capture a much broader range of real-world driving conditions, including high-speed, fast-acceleration driving, the use of air conditioning, and colder temperature operation (20 degrees F). These conditions affect not only the amount of air pollutants a vehicle emits, but also a vehicle's fuel economy. However, these tests were not required to measure fuel economy.

The New Methods to Determine Fuel Economy Estimates

For the first time, the EPA fuel economy estimates will use vehicle-specific data from tests designed to replicate three real-world conditions, which 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's new fuel economy estimates will also reflect other conditions that influence fuel economy, like road grade, wind, tire pressure, load, and the effects of different fuel properties. The fuel economy for each vehicle model will continue to be presented to consumers on the label as city and highway MPG estimates.

In 2011, manufacturers will need to perform additional cold temperature, air conditioning, and/or high speed/rapid acceleration driving tests for those vehicles most sensitive to these conditions. However, in order to provide consumers with better fuel economy estimates sooner, EPA will use new calculation methods that capture these driving conditions. These estimates will begin with model year 2008 vehicles. The interim period from model year 2008 to model year 2011 will give manufacturers enough time to plan for this additional testing, while providing consumers with estimates that capture more realistic driving conditions.

How the New Test Methods Will Affect Fuel Economy Estimates

Under EPA's new methods, the new fuel economy estimates for most vehicles will be lower. 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 changes will vary from vehicle to vehicle.

Compared to today's estimates, the city mpg estimates for the manufacturers of most vehicles will drop by about 12 percent on average, and by as much as 30 percent for some vehicles. The highway mpg estimates will drop on average by about 8 percent, and by as much as 25 percent for some vehicles.

In vehicles that achieve generally better fuel economy, such as gasoline-electric hybrid vehicles, new city estimates will be about 20 to 30 percent lower than today's labels, and new highway estimates will be 10 to 20 percent lower. 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.

Since driving behaviors and conditions vary, there is no test that can 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 new test methods will do a better job of bringing the estimates on the window sticker closer to people's real-world fuel economy experience.

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 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.

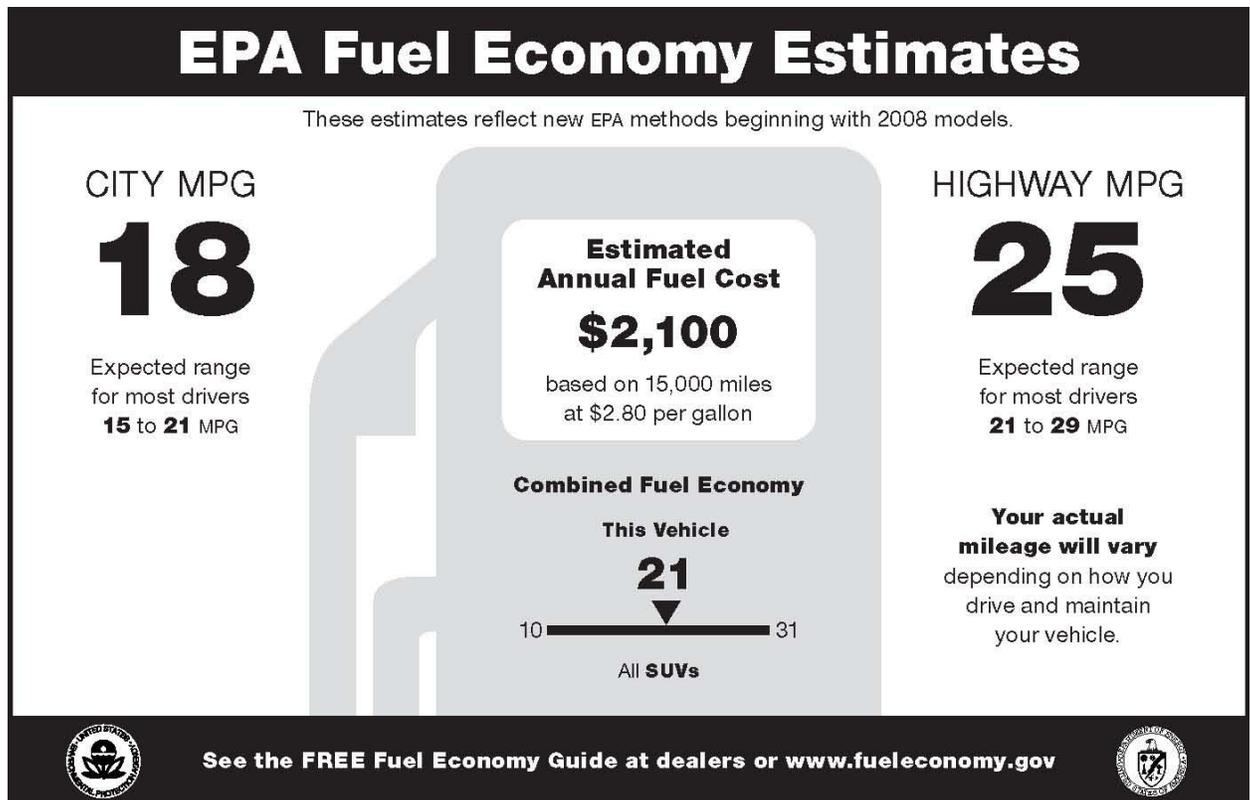
Auto makers will continue to be responsible for performing the fuel economy testing and calculating the label mpg estimates. EPA will continue to confirm the manufacturers' test results by performing audit testing at its National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan.

Larger SUVs and vans required to have fuel economy labels

Because the U.S. Department of Transportation (DOT) has recently ruled to integrate medium-duty passenger vehicles (MDPVs), including large SUVs and vans, into the Corporate Average Fuel Economy (CAFE) program starting in 2011, EPA must now include these vehicles in the fuel economy labeling program. Thus, EPA will be requiring fuel economy labeling of certain passenger vehicles up to 10,000 lb gross vehicle weight rating (GVWR). These vehicles used to be exempt because they weighed more than the previous cut-off of 8,500 lb. Vehicle manufacturers will be required to post fuel economy labels on MDPVs beginning with the 2011 model year.

Fuel Economy Label Design

To more clearly convey fuel economy information to consumers, EPA has revised the design and content of the fuel economy window sticker that appears on new automobiles.



The new label features more prominent fuel cost information, a user-friendly graphic for comparing the fuel economy of different vehicles, clearer text, and a Web site address for more information. Since the new label design will be required on vehicles

manufactured on September 1, 2007, or later, manufacturers will be phasing in the new design during the 2008 model year. For model years 2008 and 2009, the label will also state that estimates reflect new EPA test methods beginning with 2008 models. More information on the revised window sticker is available on EPA's Web site at:

www.epa.gov/fueleconomy/label.htm

No Impact on CAFE

EPA's rule has no impact on the CAFE program, which is administered by DOT's National Highway Traffic and Safety Administration (NHTSA). CAFE is the required average fuel economy for a vehicle manufacturer's entire fleet of passenger cars and light trucks manufactured for sale in the United States for each model year. There are separate regulations concerning the test methods and procedures to determine the fuel economy values under the CAFE program. For more information on CAFE, please visit NHTSA's Web site at:

<http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.d0b5a45b55bfbe582f57529cdba046a0/>

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/regulations.htm

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

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