Union of Concerned Scientists

National Clean Vehicle Program: Model Year 2012-2016 Standards

NEW STANDARDS MARK HISTORIC POLLUTION CONTROL & OIL SAVINGS ACHIEVEMENT

On April 1st, 2010, the U.S. Environmental Protection Agency and Department of Transportation finalized important greenhouse gas and fuel economy standards for new light duty vehicles. Covering model year 2012-2016 vehicles, these standards mark the first-ever national regulation of greenhouse gas emissions and represent the largest improvement in vehicle fuel economy in over thirty years. This truly historic achievement owes much of its success to the Clean Air Act's unique ability to reduce harmful emissions by promoting advanced, fuel-saving and pollution control technologies.

The Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) predict the new standards will lead to a nearly 30 percent increase in new vehicle fuel economy. Compared to today's fleet efficiency of 26.4 miles per gallon (mpg), the new standards are expected to boost the combined average fuel economy of new passenger cars and light trucks to 34.1 mpg. The standards also mark the first national greenhouse gas tailpipe emissions standard for vehicles at 250 grams per mile, approximately 25 percent less than the emissions produced by today's average new vehicle.

The new set of national standards arose from a White House-brokered compromise between automobile manufacturers and fourteen states that sought to implement California's more stringent car and light truck emission standards. Under the Clean Air Act, California has – and continues to retain – the authority to set its own motor vehicle emissions standards. Other states have the choice of adopting California's vehicle requirements in lieu of federal standards. The White House-brokered compromise set a national program equivalent to the emissions stringency called for by California and thirteen other states, while offering automakers a single, national program under which to comply.

Consumer Savings, Energy Security, Pollution Reductions

The new standards will deliver substantial private and societal benefits, including saving consumers money at the gas pump, creating new jobs, cutting our nation's oil dependence, and curbing tailpipe pollution that causes global warming. According to UCS analysis, the standards will:

- **Save consumers $34 billion in 2020 based on a gas price of $2.75 per gallon, even after they pay the cost of vehicle technology improvements. (If gas prices rise again to $4 a gallon, the new standards would save consumers $58 billion in 2020.)**
- **Reduce U.S. oil consumption by approximately 1.2 million barrels per day by 2020, more petroleum than the U.S. presently imports from Saudi Arabia and Kuwait combined.**
- **Cut global warming emissions by 209 million metric tons in 2020, the equivalent of taking approximately 31 million of today's cars and light trucks off the road in that year.**
- **Create up to 20,000 new jobs in the auto industry and up to 200,000 nationwide by 2020.[1]**

How Greenhouse Gas and Fuel Economy Standards Mesh

Under the new national program, EPA will regulate greenhouse gas emissions under the Clean Air Act, while NHTSA will regulate fuel economy standards under the Energy Policy and Conservation Act of 1975 (as amended by the Energy Independence and Security Act of 2007). Because vehicle greenhouse gas emissions are partially related to fuel consumption,

Notes

[1] Estimates of job growth under a similar plan point to this potential.

overlapping technical issues necessitated that the two agencies work in close concert in setting their respective standards. While each agency is responsible for overseeing its own set of standards, the stringencies of both standards were carefully selected to offer manufacturers a "harmonized approach" to implementing the two statutes.

Summary of Standards

Base greenhouse gas and fuel economy standards (in grams per mile and miles per gallon, respectively) are set for cars and light trucks in each model year between 2012 and 2016. While manufacturers have the option of simply complying with the standards, the industry has been afforded numerous flexibility mechanisms to ease compliance, including use of air conditioning improvements; flexible fuel vehicle credits; temporary lead time allowances; and the trading, transferring, banking, and borrowing of credits. Below is a summary of EPA's fleet average greenhouse gas levels, based upon agency car and light truck sales projections.[2] EPA's prediction of expected values when accounting for manufacturers' use of compliance flexibilities is also shown.

As indicated below, the standards are predicted to yield a 250 g/mi fleet-wide average in 2016. If those standards are met solely through fuel economy improvements, the fleet would average 35.5 mpg in that year. EPA predicts that use of compliance flexibilities, however, will allow the industry to meet the standard with a fleet average of 34.1 miles per gallon while obtaining 1.4 mpg-equivalent through greenhouse gas-reducing measures and other compliance flexibilities.

COMBINED CARS & LIGHT TRUCKS	Fleet Average GHG (grams/mile)	MPG-equiv (miles per gallon)	Expected Value (grams/mile)	MPG-equiv (miles per gallon)
2012	295	30.1	307	28.9
2013	286	31.1	298	29.8
2014	276	32.2	290	30.6
2015	263	33.8	277	32.1
2016	250	35.5	261	34.1

Monitoring Progress

The new standards mark a level of achievement not seen in more than three decades, though certain aspects of the standards will require vigilant attention to ensure the agencies' environmental and energy-saving objectives are met. The regulations include numerous compliance flexibilities to allow manufacturers greater ease in meeting the standards; while these can be useful tools, they can also erode the efficacy of the regulations. In order to ensure that statutory objectives are being met, it is critical that both manufacturer and fleet-wide performance be closely monitored to track the success of the program during the 2012-2016 timeframe. The resulting information will be a valuable resource as policymakers and the public discuss and debate how greenhouse gas and fuel economy standards will be implemented and modified in the future.

Notes

[2] NHTSA standards reflect slightly different stringencies due to separate regulatory criteria. For more information, see final rule.

A fully referenced version of this fact sheet is available online at *www.ucsusa.org.*

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