



DESIGNING A STRONG NATIONAL CLEAN VEHICLES PROGRAM

NEW PROGRAM MUST ENSURE AUTOMAKERS ACHIEVE THE PRESIDENT'S GOAL

In May, President Obama announced a historic agreement to increase fuel economy and set the nation's first greenhouse gas standard for new passenger cars and light trucks. This National Clean Vehicles Program is set to achieve a fleetwide average of 250 grams per mile (g/mi) in model year 2016 – a level equivalent to 35.5 miles per gallon (mpg). Achieving these standards will dramatically cut U.S. oil consumption, save money at the gas pump, and curb greenhouse gas emissions. However, these projected benefits are based on key assumptions regarding future fleet mix, product plans, and compliance strategies. If automakers alter their product plans or abuse compliance flexibility mechanisms, the new vehicle fleet in model year 2016 would fall below project levels, increasing oil consumption and tailpipe pollution.

In order to avoid any erosion of these benefits, it is critical that the Environmental Protection Agency (EPA) and Department of Transportation (DOT) finalize strong regulations that ensure performance and guard against any abuse. Specifically, the EPA-DOT Notice of Proposed Rulemaking (NPRM) highlights key issues that must be addressed in order to ensure the National Program fulfills the President's commitment.

Passenger Car-Light Truck Fleet Mix

The NPRM projects that in model year 2016, the fleet mix will be comprised of about 67% passenger cars and 33% light trucks. Since the proposed standards establish separate attribute standards for cars and light trucks, if light trucks continue to be a larger percentage of the new vehicle fleet in 2016, the proposed standards will not achieve the 250 g/mi fleetwide average. Since light trucks currently account for 49% of the current new vehicle fleet mix, this is a very real possibility.

There are two factors that could result in a higher percentage of light trucks in model year 2016. First, it is possible that the market does not experience the sizable shift in sales mix projected by the EPA and DOT. According to the rulemaking analysis, passenger cars (according to the 2008 definition) are forecasted to increase from 51% of new vehicle sales in 2008, up to 58% in 2016. While there has been a recent market trend away from light trucks towards passenger cars, it is questionable whether market pressure alone will achieve such a notable shift by 2016.

Second, the rulemaking assumes that approximately 1.4 million light trucks will be reclassified each year as passenger cars due to new regulations governing the definition of light trucks. It is appropriate to project some reclassification since the agencies are required by law to tighten the light truck definition beginning in model year 2011, making it harder for some 2-wheel drive compact SUVs to be classified as trucks. However, it does not appear that the agencies considered the possibility that manufacturers will redesign these vehicles to maintain their light truck classifications. Historically, automakers have aggressively reclassified passenger vehicles as light trucks in order to lower their fuel economy obligations. Since these vehicles could be redesigned with 4-wheel drive transmissions or other light truck attributes, it is possible that the fleet conversion will not be as great as the agencies predict.

Given the possibility that light trucks may continue to be a large percentage of the new vehicle fleet – either by renewed interest in light trucks or by industry gaming of light truck classifications – it is foreseeable that the projected fleet mix will not be achieved in 2016, resulting in lower oil savings and emissions reductions. For instance, if the fleet mix in model year 2016 were 58%/42% (passenger car/light truck), rather than 67%/33%, the fleetwide average would be elevated to 257 g/mi – nearly 1 mpg-equivalent lower than the project fleet average. Under an even more troubling scenario in which the industry evaded its obligations, and passenger car sales did not climb as forecast by the agencies (staying at 2008 levels), the fleetwide average would grow to 263 g/mi – roughly 1.7 mpg-equivalent below the administration's targeted level. As a result, it is critical that the agencies add a regulatory backstop in order to guarantee the President's emissions reductions and energy savings goals are met.

Flex-Fuel Vehicle (FFV) Credits

Currently, the EPA standards allow automakers to use flex-fuel vehicle (FFV) credits to achieve compliance in the early years of the program. However, beginning in model year 2016, EPA proposes that any FFV credits accrued under its program be based on actual E-85 use as opposed to vehicle capability. This is an important improvement to the program since automakers have traditionally used FFV credits to lower their fuel economy obligations despite the fact that very few of the vehicles were ever run on E-85. The loophole created by these credits has eroded oil savings and pollution reductions for decades. It is critical that EPA follow through with its modification of the FFV credits in 2016. If the FFV program were to continue in its current state, it would erode the 2016 fleet standard between roughly 0.5 and 0.8 mpg-equivalent, depending on the extent of its use.

Advanced Vehicle Credits & Upstream Emissions

In the proposed rulemaking, EPA states its desire to encourage the early development of advanced vehicles, such as electric vehicles (EVs), plug-in hybrid vehicles (PHEVs), and fuel cell vehicles (FCV). Specifically, the agency has proposed an advanced technology vehicle credit where a multiplier (in the range of 1.2-2.0) is applied to the number of vehicles sold, allowing these advanced vehicles to count as more than one vehicle in a manufacturer's fleet average.

In addition to the advanced vehicle credits, EPA has proposed using an emissions factor of 0 g/mi for electric vehicles and the electric portion of PHEVs. In other words, the agency is not accounting for the upstream emissions associated with generating electricity for the vehicle. Even though the agency acknowledges that these vehicles do create upstream greenhouse gas emissions, it has proposed the 0 g/mi as another incentive for advanced vehicles.

While it is important to promote advanced vehicle technology, both the credits and the emissions factor could present a major windfall to companies that have already announced advanced vehicle production, possibly eroding the overall benefits of the program. For instance, Nissan has already announced plans to produce up to 150,000 Leaf electric vehicles annually as soon as 2012. If Nissan received advanced vehicle credits (assuming a modest credit multiplier of 1.2) and the Leaf was rated at 0 g/mi, it would weaken the stringency for Nissan's remaining passenger car fleet from 263 g/mi to 321 g/mi. This represents an erosion of approximately 6 mpg from Nissan's passenger car fleet, without providing any additional emissions reductions.

Given the other policies and incentives for advanced vehicles and the potential for these credits to undermine the overall benefits of the program, the final rule should require that (1) no credits be offered before model year 2012 or after model year 2016; (2) the use of a 0 g/mi emission factor be abandoned and an emission factor reflective of actual in-use emissions, consistent with current research, be adopted; (3) a multiplier no higher than 1.2 be used, with a decline of 0.05 per year (i.e. 1.20 in 2012; 1.15 in 2013; declining to 1.0 in 2016); and (4) the credits should expire once a manufacturer surpasses a specific volume threshold, such as 200,000 advanced vehicles sold.

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