THE NEW ERA OF EXECUTIVE ACTION

REDUCING CARBON EMISSIONS BY IMPROVING FUEL ECONOMY STANDARDS

May 5, 2015

Background

The OPEC oil embargo of 1973 hit the U.S. economy and consumers' pocketbooks particularly hard. In response, Congress enacted in 1975 the first Corporate Average Fuel Economy (CAFE) standards for passenger vehicles as one step in the nation's journey to reduce dependence on what was then mostly imported oil. Deemed successful in both improving fuel efficiency and reducing greenhouse gases by the National Research Council's exhaustive study, the standards were updated in 2007.

With the transportation sector currently producing about a third of U.S. carbon dioxide emissions, and American households still spending an average of $2,000 per year on gasoline, improving fuel efficiency is of utmost importance.

Action

On May 19, 2009, in order to lower emissions in the automobile sector, President Barack Obama announced the creation of a National Fuel Efficiency Policy, and directed the Environmental Protection Agency (EPA) and Department of Transportation to work with stakeholders from the states and private industry to develop a rule that would set more stringent national standards for emissions from the U.S. passenger automobile fleet.

In response, the EPA and the Department of Transportation issued on May 7, 2010, a final rule: Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards.

What It Does

Both the EPA and the Department of Transportation executed separate parts of the rule, depending on their individual statutory authority. The EPA used the Clean Air Act to justify its actions in setting

This brief is part of The Century Foundation initiative, The New Era of Executive Action, which is available online at https://tcfdotorg.atavist.com/executive-action.

carbon emission standards for light-duty vehicles; the Department of Transportation's National Highway Traffic Safety Administration adopted its standards for passenger cars and light trucks under 42 U.S.C. 6201 (The Energy Policy and Conservation Act) and 49 U.S.C. 32902 (Average Fuel Economy Standards).

Taken together, the actions by the EPA and Department of Transportation set emissions standards for manufacturers of passenger cars, light-duty trucks, and medium-duty passenger vehicles in the United States for years 2012 to 2016. The rule requires that an average fuel economy standard of 35.5 miles per gallon (mpg) be reached by 2016, and, for the first time, explicitly targets carbon emissions, as well as other airborne pollutants.

This new rule is meant to streamline the process by having both the EPA and Department of Transportation work together, along with states such as California, which, due to size of population and number of vehicles on the road has an outsized impact on the vehicle fleet. This is intended as an efficient move for manufacturers, since they would only have to comply with one set of standards to sell their vehicle fleet nationwide. Additionally, while the EPA and Department of Transportation gauge their measurements by the emissions footprint of individual vehicles, the rule indicates they will fix the average so that the overall entire car fleet needs to be more efficient, but not necessarily each and every model by the same proportion.

The rule relies on automotive companies expanding their use of already existing technologies in the manufacture of their vehicle fleet, including:

> engine, transmission, and tire improvements;
>
> increased use of stop-start technology; and
>
> increased use of hybrid and electrical vehicle technologies, including increasing commercial sales of hybrid and plug-in electric vehicles.

Manufacturers can be penalized for noncompliance. According to the text of the final rule:

> The penalty, as adjusted for inflation by law, is $5.50 for each tenth of a mpg that a manufacturer's average fuel economy falls short of the standard for a given model year multiplied by the total volume of those vehicles in the affected fleet (i.e., import or domestic passenger car, or light truck), manufactured for that model year.

Status

The rule was finalized on May 7, 2010, officially going into effect on July 6, 2010. In 2011, the Obama administration worked with large automakers to agree to another step-up in efficiency standards (54.5 mpg by 2025 model year).

Impact

Many auto manufacturers have expanded their offerings of hybrid and electric vehicles, responding not only to the mandates of the fuel standards, but also consumer choice about driving environmentally friendly cars.

The auto industry has been broadly cooperative in their compliance with the fuel standards. According to the Department of Transportation, total fleet fuel economy in 2014 was 31.6 mpg, up from 27.1 mpg in 2008, meaning the industry is broadly on pace to meeting the 35.5 mpg goal for 2016.

In its Manufacturer Performance Report for the 2012 model year, the EPA demonstrated that automakers were, for the most part, able to actually beat the standards. Automakers recorded the second largest year-on-year increase in overall fuel economy, and overall greenhouse gas performance was "9.8 grams of GHG/mile better than what the 2012 standards required." Automakers have also responded in their designs: according to the EPA, there were seven times as many cars that got 40 mpg as there were in 2009.

Response

Car manufacturers worked with the Obama administration on the rules and were publicly supportive of them, citing the fact that one cohesive national standard would make the rules less onerous than having to deal with standards set by multiple states.

> GM CEO Fritz Henderson was quoted in the *Christian Science Monitor,* saying "Energy security and climate change are national priorities that require federal leadership, and the president's direction makes sense for the country and the industry. GM and the auto industry benefit by having more consistency and certainty to guide our product plans."
>
> *Grist*'s Michael Livermore lauded the new rules, calling the standards "bold" and saying they would save oil and reduce carbon emissions from American cars. He also predicted the standards would put pressure on Congress to act further on climate change priorities, including the ultimately unsuccessful Waxman-Markey cap-and-trade bill.
>
> An article in the British-based magazine *The Economist* said the new CAFE standards would work to shift consumer preference away from the least-fuel efficient models, the rule lets light trucks off the hook, and is less efficient than raising the gas tax or instituting an economy-wide carbon tax.

The CATO Institute's Randall O'Toole was mildly critical of the standards, saying that if the government feels the need to introduce more fuel-efficient cars, this is the least-worst method of doing so, since it does not bar anyone from buying a gas-guzzling SUV—it merely raises the cost of doing so.