How stricter fuel-economy standards could backfire

BY BREANA NOBLE AND RILEY BEGGIN
The Detroit News

Federal regulators directed by President Joe Biden to reevaluate national fuel economy rules and encourage the transition to electric vehicles are expected to raise the standards — though it's unclear just how high.

Gas- and diesel-powered vehicles, however, still earn automakers their profits. Many companies say they don't intend to invest more in such engines, instead using the excess cash to invest in electrified vehicles favored by governments seeking carbon neutrality.

But more stringent regulations, especially for pickup trucks and SUVs, potentially could do the opposite of what policymakers want and lead to more investments in products with internal-combustion engines — especially if demand for electric vehicles fails to materialize as predicted.

"A different regulation through 2030 may send that signal to engine engineers — and by that I mean internal combustion engineers — their days are not numbered," said Warren Browne, an auto supplier consultant and former General Motors Co. executive who worked at the automaker for 40 years.

It wouldn't be the first time altered fuel-economy standards resulted in unintended consequences. When regulators first set Corporate Average Fuel Economy standards in 1975, they sought to limit gasoline use in the wake of an oil embargo that limited supply and raised prices. The requirements created a fleet-wide average for how far a vehicle must be able to go on a gallon of gas.

The government, however, set more lenient rules for trucks and SUVs compared to passenger cars. Once demand for V-6 and V-8 engines rose again after fuel prices leveled, automakers responded with more gas-guzzling SUVs and trucks, which became the new family station wagon.

"They realized the loophole," said Sam Fiorani, vice president of global forecasting for AutoForecast Solutions LLC. "Congress thought they could legislate smaller, more fuel-efficient vehicles, not seeing they would shift from cars to trucks."

By 1992, the standard was 27.5 mpg for cars and just 20.2 mpg for trucks, Fiorani said. Trucks and SUVs in the 1970s had been more rugged and utilitarian, but in the '80s and '90s, they more commonly had automatic transmissions, power steering and power windows.

It was the advent of vehicles like the GMC Yukon, Chevrolet Tahoe, Ford Ranger and Explorer, Dodge Durango and Jeep Wrangler series and Grand Cherokee — vehicles that drive profits at Detroit's three automakers today.

Trucks and SUVs "could be sold for a higher price, could have a bigger engine and could make buyers happy," Fiorani said. "They had extra room and didn't count as much as a Crown Vic," referring to Ford's Crown Victoria sedans.

The increased standard ultimately did deliver the desired effect of significantly reducing emissions and gas consumption from what they were in

JIM WATSON/AFP via Getty Images

Then-presidential candidate Joe Biden speaks at the United Auto Workers Union Headquarters in Warren, Michigan, in September. Unintended consequences are possible as Biden directs regulators to look at fuel standards.

1970, notes Sam Abuelsamid, e-mobility analyst for market research firm Guidehouse Inc. But Americans had fallen for the larger vehicles that in many cases pollute more than sedans and bump against calls for more environmentally friendly vehicles.

Case in point: Dodge on Tuesday said it was expanding the number of its 2,000 "sold-out" supercharged V-8-powered Durango SRT Hellcat SUVs. The vehicle is only being offered for the 2021 model year due to evaporative emission regulations on the Durango platform.

Dodge can nix a special-edition vehicle like that from its lineup, but automakers at this point can't afford to lose the truck and SUVs that are staples for their operations and profits. They're starting to roll out more EV options from the Ford Mustang Mach-E SUV to the GMC Hummer EV, but electric vehicle leader Tesla Inc. still relies on selling competitors its emission regulatory compliance credits to make a profit. And EV sales remain a sliver of all U.S. sales.

"They're going to be investing in improved (internal combustion engine) vehicles for the foreseeable future," Fiorani said of traditional automakers. "In the best-case scenario, by 2040, 40% of vehicles built worldwide will be fully electric; 60% will have an internal combustion engine in them."

GM is targeting no longer to sell gas- and diesel-powered light-duty vehicles by 2035. Ford Motor Co. has refrained from disclosing such a date, and so has Stellantis NV, whose CEO, Carlos Tavares, says the company is "trying to leverage everything we can and use the existing capacity as much as we can with the existing" combustion engines.

An automaker's fleet as a whole must meet fuel-economy standards, not each model sold. That means automakers can offset larger, less fuel-efficient vehicles with smaller or electrified ones.

If there is a larger increase in fuel-efficiency targets for trucks than cars, that could encourage automakers to invest more in internal combustion engines to keep those profitable, in-demand products competitive, Browne said.

Under the assumption that auto companies would have time to adjust, former President Barack Obama implemented stricter CAFE standards beginning in 2012 that phased-in mileage increases for trucks through 2020. It did result in innovations like start-stop technology that shuts down an engine at red lights and advancements in air-conditioning systems. Former President Donald Trump, however, dramatically scaled back those goals.

"Higher standards, especially for trucks, as it has in the past, will lead to improvements to those vehicles to keep the profitability going," Browne said. "Regulations don't increase demand. They're not going to get out of the SUVs and pickups. They're going to say, 'Give me another 2 miles per gallon.'"

Of course, after increasing internal combustion engine efficiencies to 35% to 40%, every incremental increase from there becomes much more expensive, Abuelsamid said.

"Your margins start to go away and any extra margins that you had over a comparable electric vehicle, you no longer have as an incentive to invest in those at all," he said. "Rather than to tweak, it might be better to give up and go to electrification entirely."

Today, some companies, such as Ford, are closer to meeting the Obama-era standard than other companies, such as GM or Stellantis, said Brett Smith, director of technology at the Center for Automotive Research in Ann Arbor.

"We're at a point when those pickup trucks curves are getting potentially much more challenging, but those are the things people want, and you can sell lots of them," he said. "But if you sell lots of them, that means you're going to miss their standards."

If the Biden administration returns to the Obama-era standards, that's bad news for automakers, Smith added. If there is not an economically feasible way to improve their trucks, they might have to raise the price of trucks to push buyers to EVs.

Still, automakers may be hesitant to advocate against raising the standards, Smith said, because they don't want to be seen as part of the problem or to jeopardize a relationship with the White House.

The messy history of unintended consequences underscores the importance of having the auto industry represented in the decision-making, said Daniel Ives, an analyst at investment firm Wedbush Securities Inc.

Despite the campaign promise of stricter standards, however, Biden's focus as of late is not on the supply side of the industry, but the demand side. His $2 billion infrastructure and jobs proposal would include $174 billion to "win" the global electric vehicle race against China and Europe.