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R SHEET ON
CAFE STANDARDS

June 2018

BACKGROUND

Corporate Average Fuel Economy (CAFE) standards have been the most important U.S. law regarding motor vehicles since the mid-1970s, when the first Arab oil embargo hit the United States' inefficient passenger vehicle fleet. Congress intended for the legislation to reduce the amount of fuel used in the nation's passenger automobiles, but the legislation never worked as planned.

While the rules did improve the efficiency of the U.S. car fleet, roughly doubling them from 13.5 miles per gallon (mpg) to 27 mpg from 1975 to 1985, it did not succeed in cutting fuel use, which continued to rise almost every year until 2007. This was caused largely by the "rebound effect," in which fuel demand is not permanently displaced because over time more fuel efficient cars allowed drivers to use more fuel and travel longer distances for the same price.

In 2009, after two decades of unchanged standards, Congress and the Obama administration established a new program to double U.S. vehicle fuel efficiency again to over 54 mpg by 2025. Concurrently, the plan marked the first-ever global warming pollution standards for U.S. transportation by lowering the average carbon emissions to 163 grams per mile (g/mile) by model year 2025.

While auto fleet efficiency has increased by roughly one-third in the ten years up until 2018, fuel use continues to rise, with demand rebounding as energy prices dramatically fell between 2014 and 2016.

Additionally, U.S.-based vehicle companies, which depend predominately on lower mileage pickup trucks and sport utility vehicles (SUVs) for most of their profits, are now arguing that they cannot make standards beyond 2020 using current technologies without losing money and perhaps sacrificing the safety of the vehicles being produced.

CURRENT DEBATE

The Environmental Protection Agency (EPA) announced this past April that future model year standards are "too high" and is considering plateauing fuel economy standards for the passenger fleet after 2020.[1]

SUMMARY

- CAFE standards created during 1970s energy crisis are now an outmoded and ineffective regulatory philosophy that undermines the auto industry.
- Too many regulators makes efficient regulation near impossible. Simplifying regulating authority under EPA is an obvious answer.
- Little-used car emissions credit market is a possible bridge to post-CAFE era after 2025.
- Additional rulemaking could create a simplified emissions credit market structure and streamlined authority under the EPA
- Improved transparency could improve the credit marketplace

Among the reasons for this change was that automakers reported struggling to find technical answers to rising emissions targets, while "banked" credits – awarded through an emissions market to carmakers who "over-comply" with CAFE standards for a given model year – were running out after 2020. The situation threatens to cost U.S. automakers tens of millions of dollars in additional compliance costs.

The Trump administration's decision to plateau emissions will boost the likelihood that California and other states will contest the decision in court, setting in motion a major legal battle between the federal government and more than a dozen states.

ACTION ITEMS

In 2007, the U.S. Supreme Court ruled 5-4 that the EPA must regulate greenhouse gas emissions, such as carbon dioxide, if the agency found that they endanger human health and welfare. Given the link between carbon emissions and fuel economy, efforts to adjust one unavoidably influences the other.[2]

R Street has long advocated replacing federal authority to regulate greenhouse gases with a revenue neutral carbon tax. In the absence of landmark legislation in this direction, it makes sense for the Trump administration to first combine, and then expand the existing emissions trading system.

Such a system could demonstrate a properly operating emission market that would both allow emissions standards for transportation to tighten, while heading off the threat of litigation over the government's legal responsibility to combat climate change.

1. Simplify emissions credit market structure, give authority to the EPA

Any improvement to a U.S. emissions credit market must first come to terms with the current state of affairs that has shared jurisdiction under both the EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA).

Doing so would ease the transaction costs of operating on the credit exchanges. In 2016, less than one percent of available credits were traded on either the Department of Transportation credit market, which is measured in miles per gallon, or the EPA-managed exchange, which is measured in grams per mile.

Giving sole permission to the EPA to run the emissions market would allow carmakers to more easily "bank" credits during over-compliance periods that can then be sold to under-compliant firms or used during a later model year. It could also likely be done through a rulemaking, rather than through legislation.

2. Improved transparency will improve the credit marketplace

Currently, the practice for carmakers who participate in the credit market is to publish the total amount of credits bought or sold but not the transactions prices. This is an unnecessary impediment to price discovery and is the logical cause of the lack of liquidity in the credit marketplace. Simply publishing the price of each transaction between automakers will improve the market's functionality as well as give a strong proxy carbon price for other industries.

An enlarged credit system could ultimately replace the CAFE National Program that expires in 2025, giving the U.S. auto industry an opportunity to move away from the heavy hand created by the CAFE regime.

CONTACT US

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ENDNOTES

1. [1] EPA, "Mid-Term Evaluation of Greenhouse Gas Emissions Standards," April 2018. https://bit.ly/2lCzfTC.

2. See Ian Adams, "Replacing Fuel Economy Rules with Clean Tax Cuts," March 2017. https://bit.ly/2lyZDh3.

For more information, see U.S. Department of Transportation, "Corporate Average Fuel Economy (CAFE) Standards," August 27, 2014. http://bit.ly/2lziZTf.