

## Reforming and Strengthening Fuel Economy Standards

In its 2006 report, *Recommendations to the Nation on Reducing U.S. Oil Dependence*, SAFE and the Energy Security Leadership Council (ESLC) proposed reforming and increasing fuel economy standards. Working with Senators Byron Dorgan (D-ND) and Larry Craig (R-ID), the White House and others, those efforts culminated in the passage of the Energy Independence and Security Act of 2007, which among other things required that beginning in MY 2011, fuel economy standards be reformed and increased to reach an average of 35 mpg by 2020. These rules were updated in 2012 and projected to reach a level equivalent to 54.5 mpg by MY 2025. Another important aspect of these rules was the commitment between EPA, NHTSA, and California to work together to establish a national program.

SAFE continues to support the National Program and sees clear opportunities for improvement. Last year, SAFE encouraged EPA to consider several issues as part of the Midterm Evaluation (MTE). These included extending the incentive multiplier for advanced fuel vehicles, examining the future role of autonomous and connected vehicle technologies, exploring the role of carsharing, ridesharing and other new mobility models on vehicle usage and fuel savings, and adjusting the energy security analysis.

SAFE urges the administration to examine opportunities to account for the greater efficiencies and reduced oil consumption resulting from actual vehicle usage, focusing on the modern transit system as a whole rather than continuing to regulate individual vehicles. The administration may also be interested in pilot efforts and coordinating with industry to test autonomous vehicle fleets. SAFE encourages regulators to do the following:

- Incentivize development of more efficient autonomous vehicles: Just as fuel efficiency standards have led to more efficient engines, regulators must develop ways to measure fuel efficiency implications of advanced driver assist features and autonomous vehicles, which will incentivize software developers to create self-driving algorithms that improve fuel efficiency.
- Account for the “off-cycle” benefits of autonomy: Once quantifiable, gains from autonomy—such as reduced congestion due to better traffic routing and reduced accident frequency resulting from improved safety—should also be accounted for.
- Recognize the different use profiles of shared and privately-owned vehicles: A shared vehicle, autonomous or otherwise, may drive 10 times as many miles in a year than a privately-owned vehicle. Fuel efficiency standards should recognize the increased impact of shared vehicles and increase their representation in calculating fleet-wide average fuel economies. This could be accomplished by including a credit multiplier for vehicle sales to a fleet operator.

## Current Political and Regulatory Landscape

In its final weeks, the Obama administration expedited its approval following technical review of the standards—the MTE—and found them to be appropriate for the regulatory period through 2025. Reports have surfaced that the Trump administration plans to officially reopen the MTE. Moreover, the New York Times reports that Trump has instructed EPA to begin legal proceedings to revoke an eight-

year-old waiver for California that was allowing the state to enforce tougher tailpipe standards for its drivers.

SAFE welcomes the opportunity to reform and modernize existing fuel economy standards. SAFE urges federal and state regulators to do the following:

1. Recommit to one national program, as it was negotiated for the current standard, and avoid competing regulations at the federal and state level.
2. If necessary, provide modest relief to the auto industry in the final years of the standards and extend the national program through 2030 and 2035. This approach provides stringency to meet environmental and energy security goals while providing longer-term regulatory certainty that benefits the automotive industry.
3. Modernize standards to incorporate new technologies (such as autonomous and semi-autonomous vehicles) and business models (such as ridesharing). Moving towards regulating the entire mobility system over individual vehicles could increase reductions in oil demand while reducing regulatory burdens on companies. SAFE recommends incentives that will encourage more efficient vehicles to be used in high-utilization deployments, as one example.
4. Institute five-year reviews into the new program to ensure that regulations keep pace with current technologies, fuel prices, and market dynamics.
5. Rather than provide minor adjustments to the current framework, leverage the restored timeline to create rules that are smart, effective, and fully integrate modern technologies and business models.

## The Importance of Fuel Economy

Almost 40 percent of U.S. energy demand is met by oil, giving it a significance unmatched by any other fuel. The transportation sector accounts for more than 70 percent of total U.S. oil consumption, of approximately 19 mbd. This sector relies on oil for 92 percent of its total energy consumption and has no readily available substitutes. There are roughly 240 million registered light-duty vehicles (LDVs) in the United States accounting for more than 60 percent of transportation sector oil consumption.

Oil is a globally traded commodity, meaning that prices are affected by events in oil-producing and oil-consuming countries and regions around the world. The key consequence is that changes in oil supply or demand anywhere tend to affect prices everywhere. Because there are no readily available substitutes to oil in the U.S. transportation sector, the primary and near-term impact of changes in prices on the U.S. economy is through the amount of oil consumed, not the amount produced or imported. The global oil market is also frequently subject to unpredictable—and sometimes anti-competitive—behavior from oil-producing countries that supply it, most notably members of OPEC. Moreover, approximately three-quarters of the world's proved oil reserves are held by government-owned national oil companies whose investment and production decisions are far removed from the free market ideal.

Improved LDV fuel efficiency has been critically important to enhancing U.S. economic and national security since the early 1970s. Most importantly, observed vehicle fuel economy has improved by more than 86 percent, from 13.6 mpg in 1974 to 25.3 mpg in 2016 (though much of that progress was made between 1975 and 1986). While the United States has faced serious challenges as a nation over the past several decades as a result of its dependence on oil, these would have been more serious without the progress made in improving the fuel efficiency of LDVs.

## Conclusion: Energy Security is More Important than Politics

It is critical to focus on winning the larger war to reduce U.S. oil dependence than getting bogged down in counterproductive legal and rhetorical battles. The approach outlined above will provide additional certainty to the benefit of all stakeholders—offering automakers greater flexibility to achieve the standards, while reducing oil demand at a faster pace by integrating new technology and providing greater consumer choice. The consequences of failure for the nation’s energy security are severe and the benefits of reaching a compromise are significant. Every American president since Richard Nixon has sought to break U.S. oil dependence and achieve true energy security. Today, we have the opportunity to implement a strategy that protects the nation, creates jobs, protects human health and keeps America on the forefront of new technology.