

Cleaner Cars Are Good for Jobs

Latest Analysis Reaffirms Economic Benefits of Vehicle Standards

HIGHLIGHTS

Federal and state clean car standards are delivering more fuel-efficient and lower-polluting vehicles to showrooms across the country, while saving drivers billions of dollars at the pump. A new economic analysis of the clean car standards (for model years 2017 through 2025) demonstrates they will have a positive effect for jobs and the overall economy, thanks to the investments the standards are spurring in the auto industry and to consumer spending made possible by savings at the pump.

These standards, and their many benefits to Americans, are now at risk of being weakened as they undergo federal review. Maintaining the emissions reduction and fuel economy targets in the standards is critical to continuing innovation in the US auto industry and reducing fuel costs for consumers nationwide.

Current fuel economy and global warming emissions standards have driven the efficiency of new vehicles to an all-time high after decades of stagnation. And consumers have been reaping the rewards, including billions of dollars in savings at the pump¹ as well as increased choices in the showroom, from efficient conventional cars to hybrids and plug-in electric vehicles. But clean car standards aren't just good for consumers; they are making our economy stronger as well.

More Efficient Cars Drive Job Creation and Economic Growth

Clean car standards drive investments in more efficient vehicles, supporting innovation and jobs throughout the automotive supply chain (NRDC and BGA 2017). And using less gasoline means consumers have money to spend on other goods and services that are more labor-intensive than the oil industry, driving net economic and job growth.

A new analysis, conducted by Synapse Energy Economics, Inc., of federal and state clean car standards quantifies the impacts that cleaner, more efficient cars have on employment and our overall economy (Synapse 2018). The findings are impressive; for example, the 2017–2025 standards are estimated to:

- Add more than 100,000 jobs in 2025 and more than 250,000 in 2035
- Add more than \$13 billion to gross domestic product (GDP) in 2025 and more than \$16 billion in 2035
- Save consumers nearly \$40 billion in annual fuel costs by 2025 and \$90 billion by 2035²



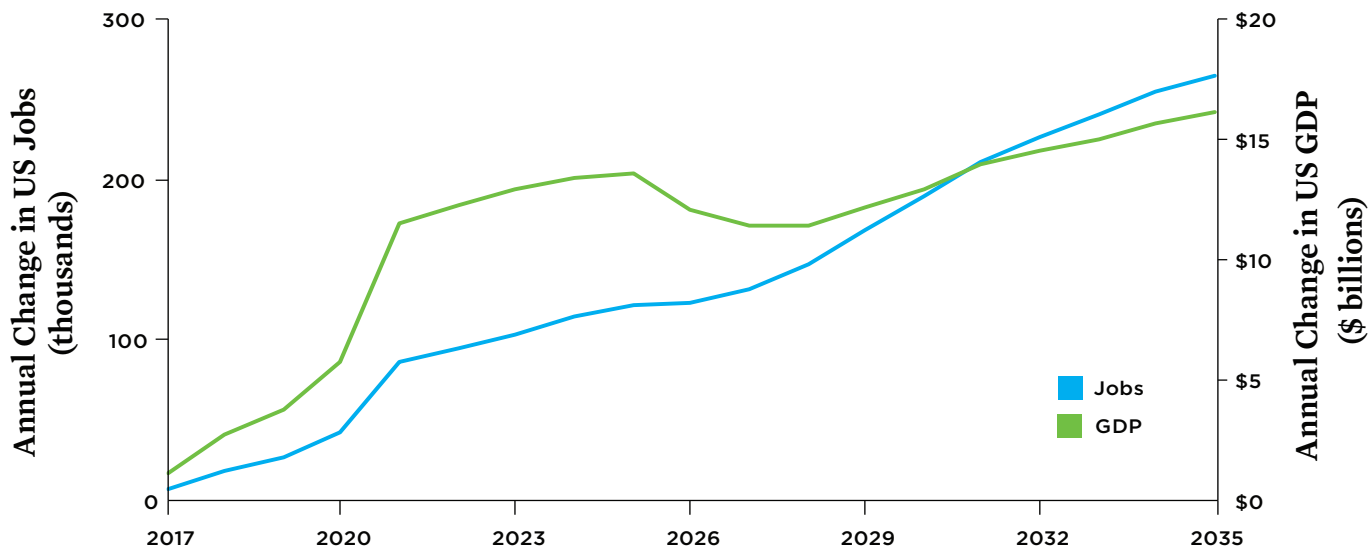
General Motors

Federal and state clean car standards drive the deployment of more fuel-efficient vehicles. Developing and building these vehicles creates thousands of new jobs, while the money consumers save on fuel can be spent on other goods and services, boosting the economy overall.

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Federal and state clean car standards drive investments in fuel-efficient vehicles, while consumer savings at the pump help drive growth in other parts of our economy.

Note: Several scenarios were analyzed by Synapse. The scenario shown is based largely on assumptions consistent with 2016 EPA estimates for technology cost, fuel economy, and Consumers Union findings on fuel saving valuation.

SOURCE: SYNAPSE 2018; CONSUMERS UNION 2017; EPA 2016.

The Synapse analysis examined the economic impact of existing federal and state clean car standards for model years 2017 through 2025. It considered both the costs of new vehicle technology and the resulting consumer savings from reduced fuel consumption.

The inputs to the analysis are based largely on a 2016 Environmental Protection Agency assessment of the fuel efficiency technologies available to comply with federal clean vehicle standards through 2025 (EPA 2016), and their resulting effectiveness in reducing fuel consumption.

These data were used as inputs to a widely used macroeconomic modeling tool, IMPLAN. Electric vehicle deployment motivated by state zero-emission vehicle standards was also

included in the economic modeling scenarios. The results show positive job and GDP impacts throughout—and beyond—the 2017–2025 clean car standard implementation period (see figure).

Correcting the Record

Last year, researchers from Indiana University (IU) carried out an analysis of the economic impacts of federal and state clean car standards funded by the Alliance of Automobile Manufacturers (Carley et al. 2017) and concluded that the standards would bring economic benefits in the long term but would cause some near-term economic losses. Since the IU report was published, several revisions have been made to correct errors. The latest of these corrections (Carley et al. 2018) has resulted in significant changes in estimated cumulative GDP impacts between 2017 and 2035, from the original finding of a \$52 billion net loss to a more than \$130 billion net gain. The corrections also include an increase in net job creation from approximately 100,000 jobs to more than 300,000 jobs in 2035.

However, the corrections do not address several shortcomings of the original IU analysis that lead to the mistaken conclusion that standards cause economic harm in the short term. Importantly, the IU study’s macroeconomic modeling assumes all consumers use cash to purchase their vehicle—in fact, only 30 percent do so—and assumes consumers do not factor fuel economy into their vehicle purchasing decisions, even though

The Synapse analysis shows that clean car standards have positive impacts on jobs and GDP throughout—and beyond—the 2017–2025 implementation period.

evidence shows consumers value fuel economy as well as price when purchasing a vehicle (Consumers Union 2017).

Synapse's new analysis eliminates these methodological inconsistencies and finds positive short-term and long-term economic benefits, including when using similar input assumptions as the IU analysis. This is critical given the ongoing federal midterm review of the standards, underscoring the importance of maintaining the standards to ensure these economic benefits are realized.

ENDNOTES

1. For a running estimate of consumer savings at the pump, visit www.ucsusa.org/clean-vehicles/fuel-economy-ticker.
2. Results presented here are for the "Synapse" modeling scenario; see *Synapse 2018* for details.

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