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TRUMP'S FUEL ECONOMY STANDARD ROLLBACK WILL COST \$450 BILLION, CAUSE 13,000 U.S. DEATHS THROUGH 2050

BY JEFFREY RISSMAN, ROBBIE ORVIS ● JULY 2018

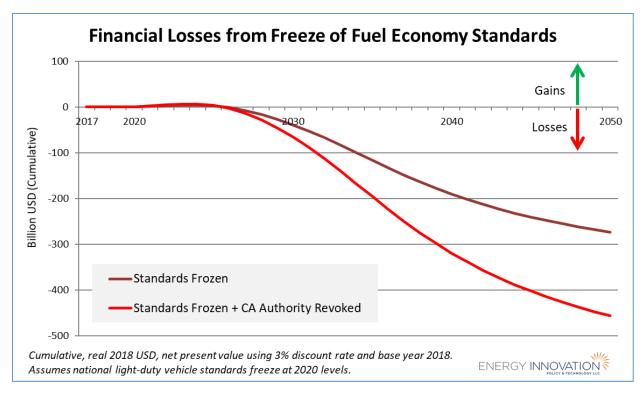
Media reports indicate the Trump Administration will propose freezing existing federal fuel economy standards for cars and SUVs at 2020 levels, thereby undoing fuel economy increases for model years 2022 to 2025 set by the Obama Administration. Energy Innovation's modeling predicts that freezing these standards would damage the U.S. economy, costing a total of \$450 billion (real 2018 U.S. dollars, discounted at three percent annually) through 2050. It would also cause the deaths of over 13,000 Americans due to increased particulate pollution through 2050.

Under the Clean Air Act, California has the ability to set more stringent vehicle emissions standards than the federal government. California's standards have been adopted by 13 states plus D.C., totaling 35 percent of the automobile market. The Trump Administration has threatened to revoke California's right to set its own standards, a move that California has vowed to fight in court. Should California prevail, the fuel economy freeze would only affect 65 percent of the market, lowering the economic and human costs of the proposal to \$274 billion and 8,200 U.S. deaths through 2050.

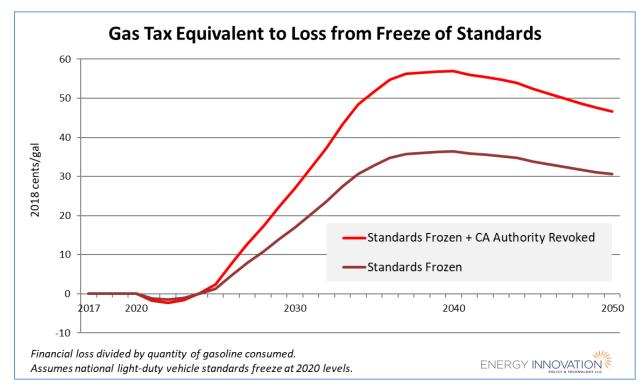
To predict the impacts of freezing fuel economy standards, Energy Innovation utilized the <u>Energy</u> <u>Policy Simulator</u> (EPS). This open-source and peer reviewed computer model uses non-partisan, public data from respected government sources such as the U.S. Energy Information Administration to predict the effects of policy changes on pollution, financial costs and savings, premature deaths, vehicle deployment and fleet turnover, and more. The EPS is <u>freely available for public use</u>.

FINANCIAL LOSSES FROM ROLLING BACK FUEL ECONOMY STANDARDS

In the first few years after freezing fuel economy standards, the rollback would create small financial gains, because it is less expensive to build cheaper, less efficient cars. However, these gains are quickly outweighed by increased fuel expenses that grow each year, as more and more years of fuel savings are relinquished, reaching \$457 billion by 2050 (in real 2018 USD, discounted at three percent annually). If California retains its ability to set stringent vehicle emissions standards, U.S. economic losses would be limited to \$274 billion through 2050.



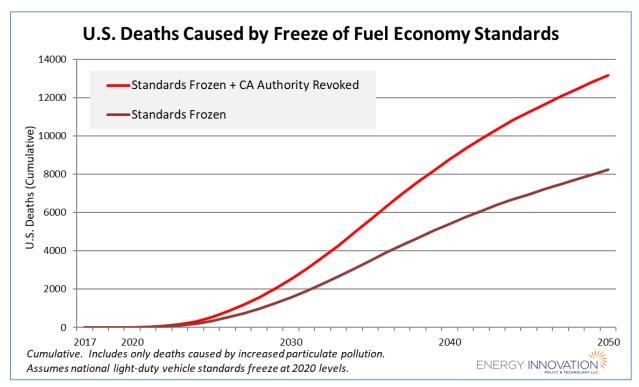
If this loss were represented as a tax on gasoline (the increase in amount spent on gasoline divided by the quantity of gasoline consumed), it would add 57 cents per gallon in the year of maximum impact (2040), and added costs would be more than 45 cents per gallon in every modeled year after 2033.



A HIGH HUMAN TOLL: U.S. DEATHS CAUSED BY INCREASED POLLUTION

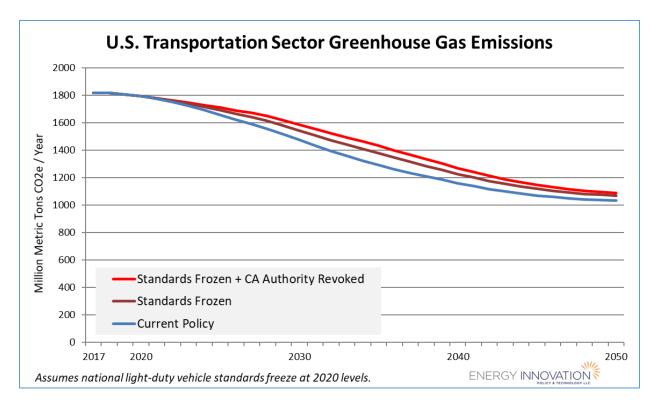
Petroleum-burning vehicles emit pollution, including particulates and gases (such as nitrous oxide) that form particulates in the atmosphere. When breathed in, this pollution can lodge inside people's lungs and contribute to heart attacks, strokes, and respiratory diseases. More fuel-efficient vehicles burn less gasoline, adding fewer pollutants to the atmosphere and causing fewer deaths.

The death toll of Trump's fuel efficiency standard rollback would climb slowly at first, then accelerate in the 2030s, reaching more than 13,000 deaths by 2050 (or more than 8,200, if California maintains its standard-setting authority.)



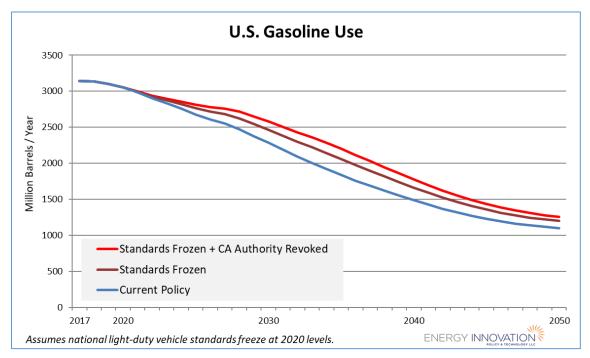
Rolling back fuel economy standards would also increase transportation sector greenhouse gas emissions, worsening global warming. The greatest emissions increases occur in the 2030s, because the <u>growing market share of electric vehicles</u> (EVs) reduces the importance of gasoline-powered vehicles' fuel economy in the 2040s relative to the 2030s.

In 2035, under current policy, transportation sector emissions are projected to be 1,293 million metric tons (MMT) of carbon dioxide equivalent (CO_2e). With the fuel economy standards frozen, that year's emissions would total 1,432 MMT, an 11 percent increase. Without revoking California's authority, 2035 emissions would total 1,378 MMT, an increase of seven percent.



INCREASED FUEL CONSUMPTION

Rolling back fuel economy standards increases fuel consumption. As in the case of greenhouse gas emissions, the greatest effects come in the 2030s due to growing EV use. In 2035, with standards frozen, gasoline use would increase from 1,837 to 2,200 million barrels per year, a 20 percent increase. Without California, gasoline use would increase to 2,057 million barrels per year, a 12 percent increase.



(These percentages are higher than the percentage increases in transportation sector emissions because the transportation sector includes many vehicle types, such as trucks and aircraft, which are not affected by the proposed freeze in fuel economy standards.) Cumulatively, from 2021-2050, the freeze would increase gasoline consumption by 6.9 billion barrels (4.3 billion without California).

FREEZING FUEL ECONOMY STANDARDS ONLY BENEFITS OIL COMPANIES

Freezing federal fuel economy standards will harm U.S. consumers, who will pay more money to drive their cars the same distance, and who will suffer from additional death and disease caused by pollution. It will harm businesses that rely on light-duty vehicles, such as taxi, food delivery, and ride-sharing services. It will worsen global warming and <u>reduce U.S. energy security</u>. It may lead to a court battle with California and fragment the U.S. automobile market, increasing costs to automakers. It will <u>reduce the competitiveness</u> of U.S. automakers, who <u>oppose freezing the standards</u>. The only winners are the oil companies, who stand to sell more gasoline.