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TRUMP'S FUEL ECONOMY STANDARD ROLLBACK WILL COST \$450 BILLION THROUGH 2050, INCREASE EMISSIONS 11% THROUGH 2035

BY JEFFREY RISSMAN, ROBBIE ORVIS ● JULY 2018

Note: This research note was updated on July 26th, 2018 to remove premature mortality estimates due to uncertainty regarding criteria pollutant emissions.¹

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 previous administrations. 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.

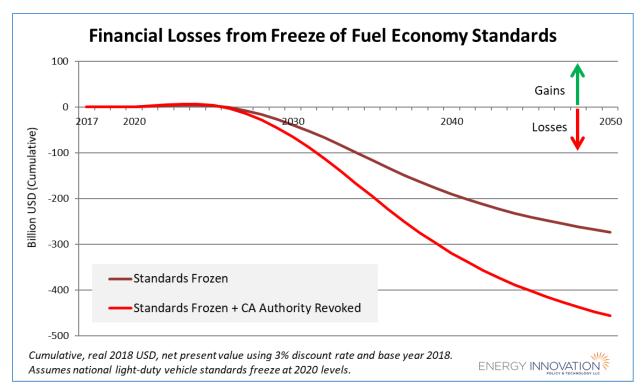
Under the Clean Air Act, California has the ability to set more stringent vehicle emissions standards than the federal government. California's standards have been adopted by 13 states plus D.C., totaling 35 percent of the automobile market. The Trump Administration has threatened to revoke California's 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 costs of the proposal to \$274 billion 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>.

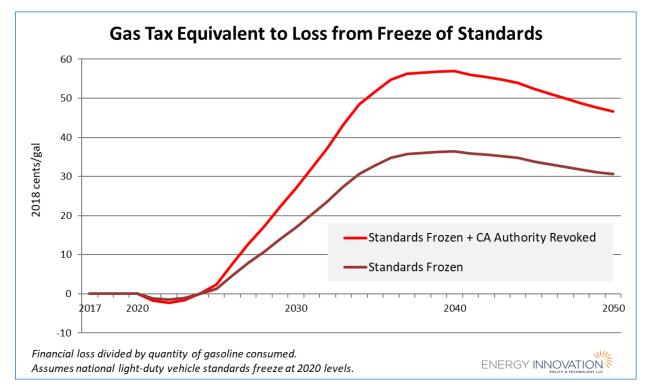
FINANCIAL LOSSES FROM ROLLING BACK FUEL ECONOMY STANDARDS

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.

¹ <u>http://energyinnovation.org/wp-content/uploads/2018/07/Trump-Fuel-Efficiency-Standard-Rollback-Research-Note-7.25.18.pdf</u>



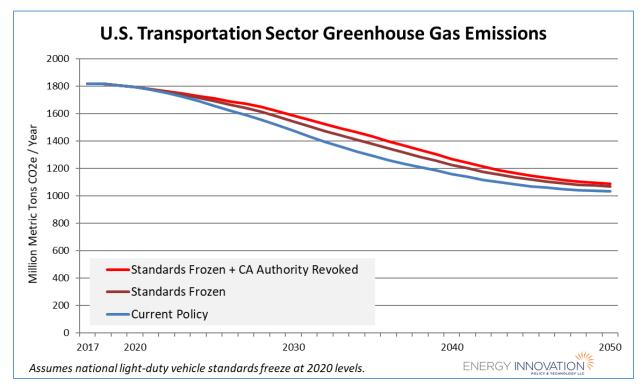
If this loss were represented as a tax on gasoline (the increase in amount spent on gasoline divided by the quantity of gasoline consumed), it would add 57 cents per gallon in the year of maximum impact (2040), and added costs would be more than 45 cents per gallon in every modeled year after 2033.



A HIGH CLIMATE TOLL: INCREASED EMISSIONS

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.

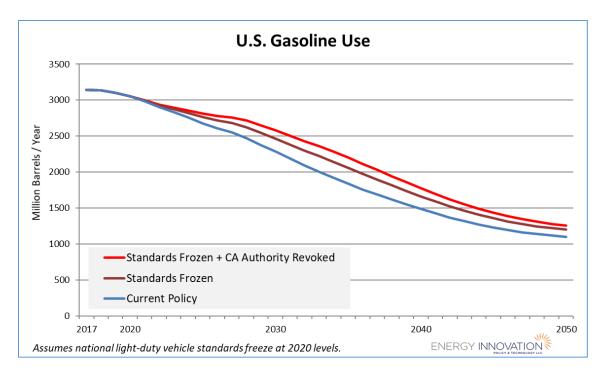
In 2035, under current policy, transportation sector emissions are projected to be 1,293 million metric tons (MMT) of carbon dioxide equivalent (CO_2e). With the fuel economy standards frozen, that year's emissions would total 1,432 MMT, an 11 percent increase. Without revoking California's authority,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