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WHAT IS THE STUDY ABOUT?

In 2023, the Environmental Protection Agency (EPA) proposed new emissions standards so restrictive on tailpipe emissions that compliance will require around two-thirds of cars and nearly half of medium-duty trucks sold in the year 2032 to be Electric Vehicles (EVs). The EPA claims this EV rule would yield \$1.6 trillion in "net benefits" for Americans through 2055 by estimating costs over a series of categories including pre-tax fuel savings, vehicle technology costs, maintenance savings, climate benefits, charging stations and grid upgrades, repair savings, energy security benefits, air pollutant benefits, and increased refueling time.

This study provides an analysis grounded in economic fundamentals of each category, and compares those results to the EPA's.

WHY IT WAS NEEDED

Among other inaccuracies in the proposed rule, this study believes that the EPA miscategorizes the \$7,500 federal tax rebate as a benefit rather than a cost, it overestimates gasoline savings, and it underestimates electricity costs. As a result, the authors provide a more realistic analysis of the costs and benefits in order to provide a more informed examination of the proposed standards for policymakers and the public.

WHAT THE AUTHORS CONCLUDED

The authors conclude that a more realistic analysis of the EPA's proposed EV rule results in a net cost of \$1.4 trillion to American taxpayers, a \$3 trillion underestimation by the EPA. It is a serious question for policymakers and the public whether this cost is worthwhile.

TABLE 1: Estimated Effects of EPA's EV Rule (Billions of dollars)

Cost	EPA estimate	Realistic estimate	Difference between EPA and Realistic
Pre-Tax Fuel Savings	\$890	-\$139	EPA underestimated by \$1,029 billion
Vehicle Technology Costs	-\$280	-\$1,228	EPA underestimated by \$948 billion
Maintenance Savings	\$410	\$72	EPA underestimated by \$338 billion
Climate Benefit (SCC at 3% discount rate)	\$330	\$22	EPA underestimated by \$308 billion
ENSE Port Costs (charging stations) + Grid Upgrades	-\$120	-\$330	EPA underestimated by \$210 billion
Repair Savings	\$170	-\$4	EPA underestimated by \$174 billion
Energy Security Benefits	\$41	\$41	Did not quantify
Air Pollutant Benefits	\$249	\$249	Did not quantify
Increased Refueling Time & Misc. Costs	-\$90	-\$90	Did not quantify
Estimated Net Benefit/Cost	\$1,600	-\$1,407	The EPA's EV rule would cost the U.S. economy and taxpayers \$1,407 billion, an underestimation of \$3,007 billion.



