Unpacking Trump's EV Policy Overhaul

What will happen to EV adoption, emissions, and the fiscal balance?

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This appendix and the related paper represent the authors' views and do not represent official views of the Salata Institute or Harvard University.



What do potential federal EV policy changes mean for EV sales, for emissions, and for federal government spending?

Model eight scenarios under discussion in DC

Specifically, we model drivers' vehicle purchase choice and EV charging-station buildout Estimate BEV share of new vehicle sales, EVs on the road, fiscal savings over FY2026-2035, carbon emissions.

Biggest single policy effect is removing EV tax credits:

Cuts 2030 EV sales share by 6 ppts. Yields 97% potential fiscal savings, \$169 B, from reversing IRA/IIJA EV provisions.

Cutting NEVI would be particularly harmful:

Lose 3 ppts 2030 EV sales share. Yields least taxpayer savings per ppt EV sales lost—\$2.6 to \$12 B.

Most likely scenario based on House bill: Cut EV credits, 30C charger credits, CA waiver (done), add \$250 fee Down 12 ppts 2030 EV sales share. Yields maximum taxpayer savings at \$228B.

Cutting federal policy support for EV adoption will slow, but not stall, EV sales growth.

Even removing *all* the policies we model would still see EV sales climb to 32% in 2030, 4x 2024's 8%. Removing all policies and adding the \$250 fee would yield 31% EV sales share in 2030.

Model limitations: Cannot model changes in fuel economy or emissions standards. No automaker supply dynamics. *May underestimate effects.*



Policy Simulations

Scenarios

- 1. Baseline: Current law
- 2. Remove all 3 EV tax credits 30D, 45W, 25E
- 3. Remove 30C home and business charger credits
- 4. Remove 45X battery manufacturing, critical mineral processing
- 5. Cap NEVI at FY2022-2024 approved plans: \$2.385 billion
- 6. Eliminate California waiver
- 7. Add \$250 annual federal fee

+ combinations



Outcomes reported

- EV sales penetration (2030)
- Fiscal costs (undiscounted 10-year budget window)
- EVs on the road (registered, 2030)
- CO2 emissions

Policies not modeled:

- EPA's GHG rules
- Changes in CAFE standards
- Tariffs
- State EV & charger incentives (held constant)

Where we are

Scenarios

- 1. Remove all 3 EV tax credits 30D, 45W, 25E
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Status

BBB eliminates

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BBB adds restrictions

Frozen by DoT; not in BBB

Eliminated by Congress

In BBB



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Most likely: Eliminate EV credits + 30C + CA waiver + add \$250 fee



Where we are

Policies not modeled

Status

EPA's GHG rules

EPA stated intention to ease or eliminate

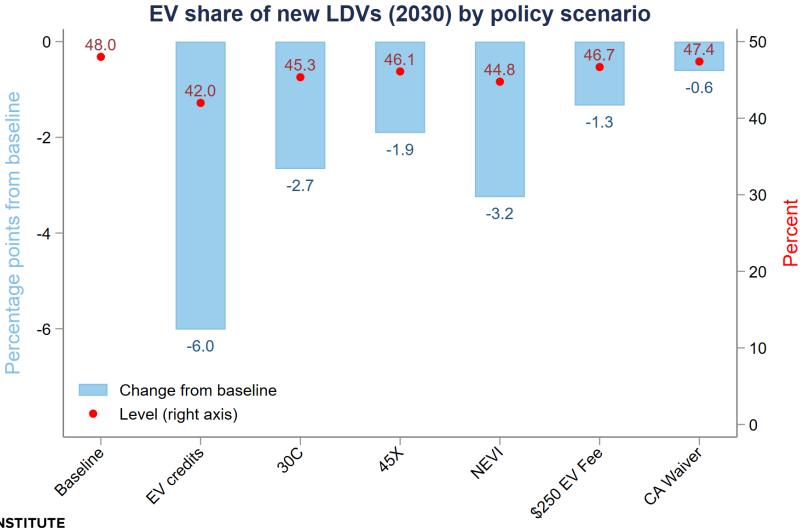
Changes in CAFE standards

DoT stated intention to ease or eliminate

Tariffs

Make new vehicles, inc. EVs, and chargers more expensive

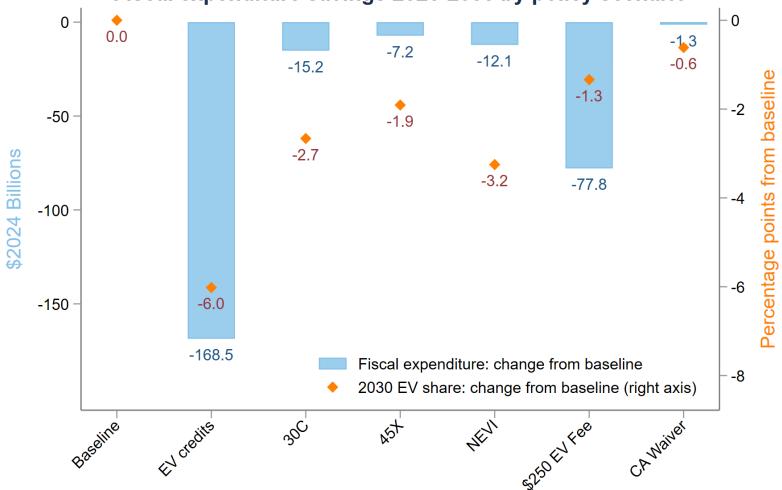
Results: EV Share of New Vehicle Sales in 2030 (ppts)





Results: Total fiscal costs 2026-2035, change vs. baseline (\$B)

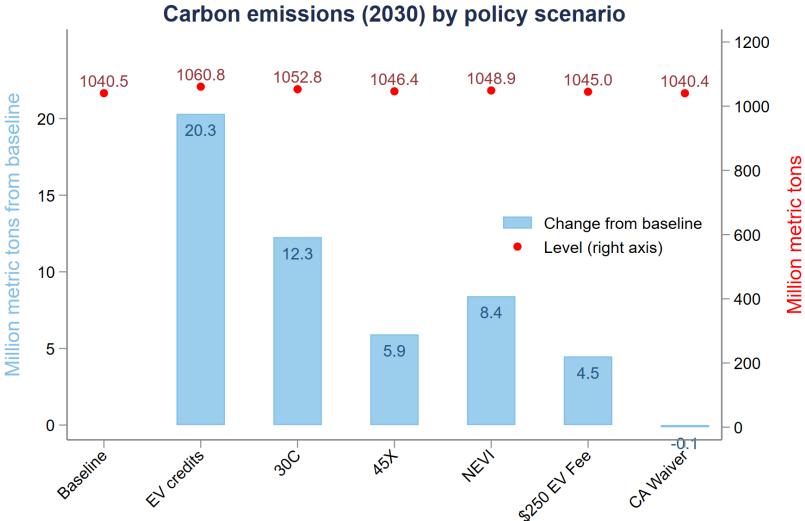




Note: These estimates of the fiscal impact may or may not align with the fiscal score produced by the Joint Committee on Taxation. Differences could include the current-law baseline projection, projections of the number of EVs eligible for the 30D tax credit, and take-up rates for the 25E and 45W tax credits.



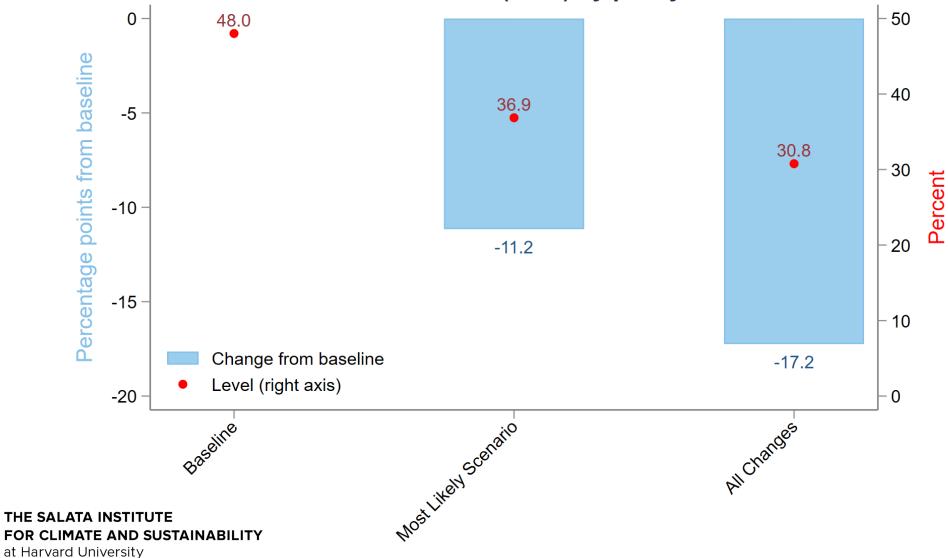
Results: 2030 carbon emissions, millions of metric tons



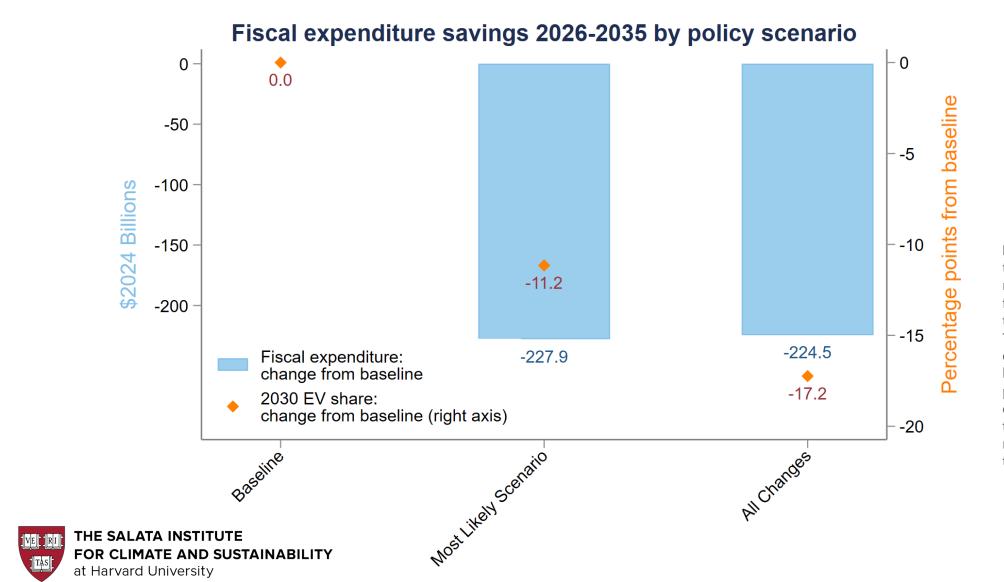


Combo results: EV Share of New Vehicle Sales in 2030 (ppts)

EV share of new LDVs (2030) by policy scenario

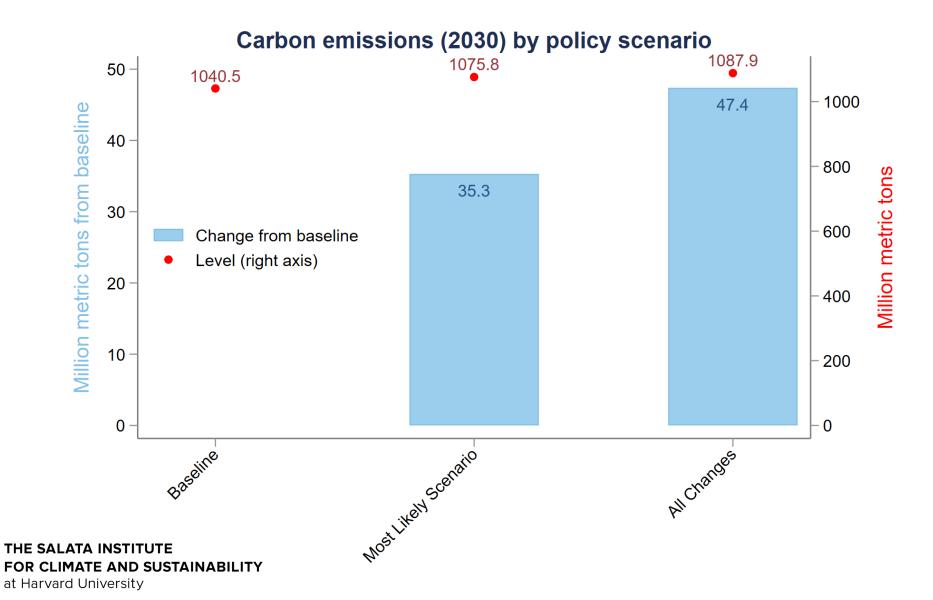


Combo results: Total fiscal costs 2026-2035, change vs. baseline (\$B)



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Combo results: 2030 carbon emissions, millions of metric tons



Fiscal Savings per

NEVI, 30C, 45X cost-effective	are
support for EV	S,
in terms of taxpa	ayer
dollars	-

\$250 annual EV fee raises a lot of money with limited emissions impact

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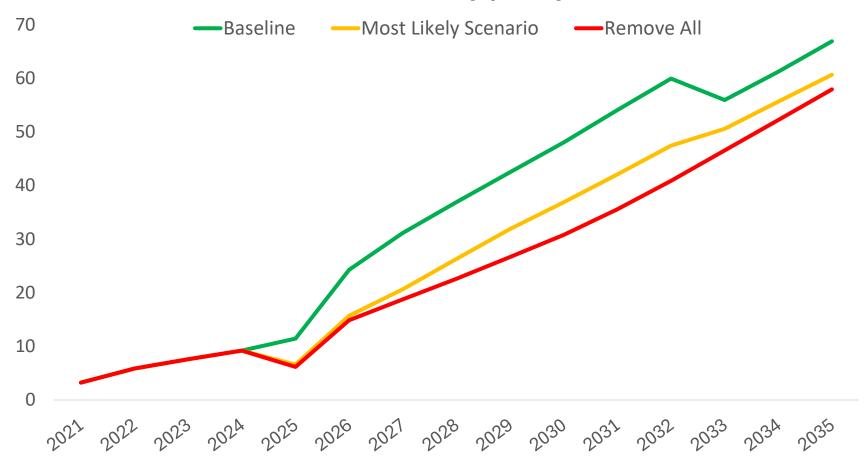
	Total Fiscal Costs (\$B)	PPT of EV Sales Share Lost ¹	mmt Additional CO ₂ Emissions
	2026-2035	2030	2026-2035
Baseline	173.2		
Changes from Baseline			
EV Credits	-168.5	28.0	1.0
30C	-15.2	5.7	0.1
45X	-7.2	3.8	0.1
NEVI	-12.1	3.7	0.2
\$250 EV fee	-77.8	6.1	1.8
CA Waiver	-1.3	2.2	0.1
Most Likely	-227.9	20.3	0.7
All	-224.5	13.1	0.5

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¹ Light-duty EVs only.

Results: EV share of new LDV sales over time

EV share over time by policy scenario



Source: Elaine Buckberg and Cassandra Cole, "Trump EV Policy Overhaul: What Will Happen to EV Adoption, Emissions, and the Fiscal Balance," Salata Institute Policy Brief, March 18, 2025.

Key Takeaways

Policy impacts are more than additive

Key is the two-way network effect between vehicles and chargers

Each incremental price change \rightarrow fewer EVs on the road \rightarrow fewer chargers built \rightarrow even fewer EVs

What is most cost-effective, in terms of taxpayer dollars?

Most: Charger subsidies (NEVI, 30C), battery/critical mineral production credits

Least: vehicle subsidies



For technical questions on the model, please see our <u>technical appendix</u> posted March 18, 2025.

