

POLICIES AND MARKET DESIGN FOR THE ENERGY TRANSITION: A VIEW FROM THE U.S.

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THE U.S. TAX CODE WILL RE-OPEN IN 2025



MODELED SCENARIOS

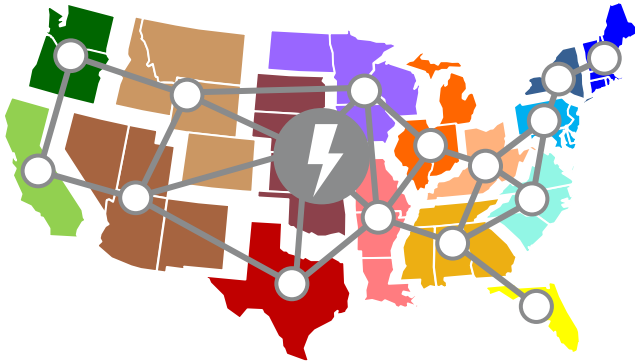


Policy	Scenario	Abbr.
Reference	On-the-books state and federal policies, including IRA incentives, EPA's proposed power plant and vehicle standards	1-Ref
No Proposed Standards	Reference without EPA's proposed power plant or vehicle standards	2-No111
Repeal IRA and Proposed EPA Standards	Repeal IRA's climate provisions (and assumed not to be replaced) as well as regulatory proposals for power plants and vehicles	3-Repeal
Expand IRA	Expand IRA tax credits by increasing magnitudes of power sector tax credits by 50%	4-IRAexp
Broad Carbon Fee with Carve Outs	Fee with carve out for retail gasoline sales; fee starts at \$15/t-CO ₂ in 2027 and rises to \$65/t-CO ₂ by 2035	5-Fee
Clean Electricity Standard	Assume reconciliation-compliant system of fees and rewards with targets that vary by region over time	6-CES
Fee with Carve Outs and Partial IRA Repeal	Same carbon fee with carve outs for retail gasoline sales as above with partial IRA repeal (retaining electric sector PTC/ITC and nuclear credits with expiration)	7-FeeIRAp

OVERVIEW OF US-REGEN



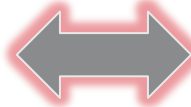
Electric Generation



Detailed representation of:

- Energy and capacity requirements
- Renewable integration, transmission, storage
- State-level policies and constraints

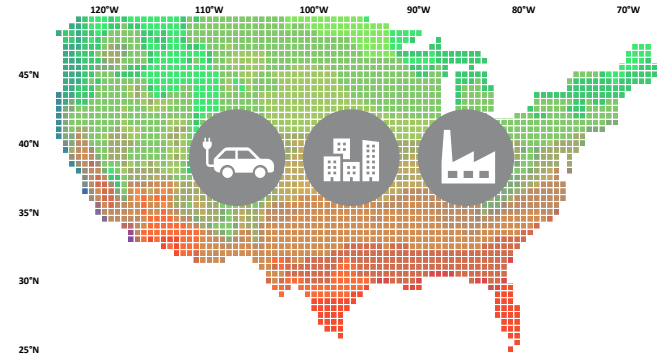
Integrated



Hourly Load,
Renewables,
and Prices

Model Outputs:
Generation, capacity,
and end-use mix
Power sector and
economy emissions

Energy Use

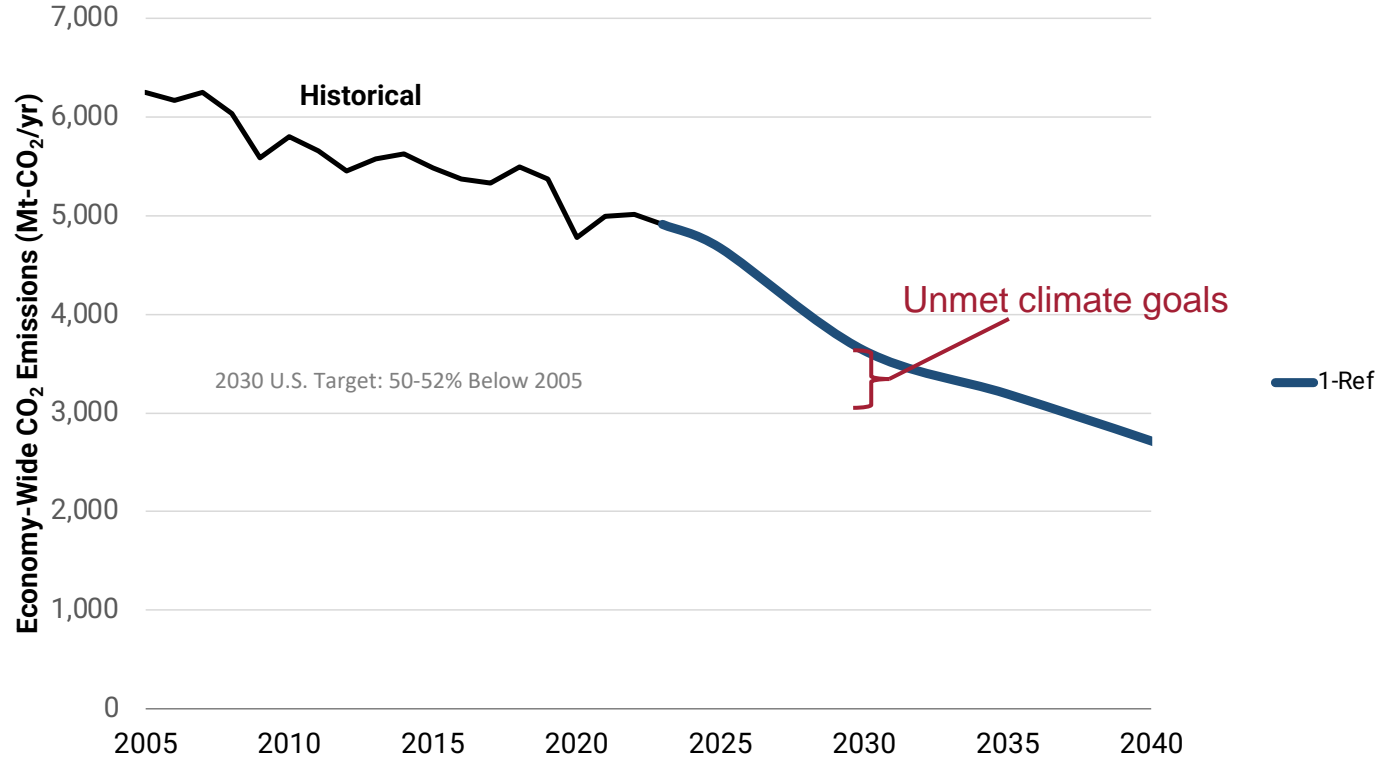


Detailed representation of:

- Customer differences across end-use sectors
- End-use technology trade-offs
- Electrification and efficiency opportunities

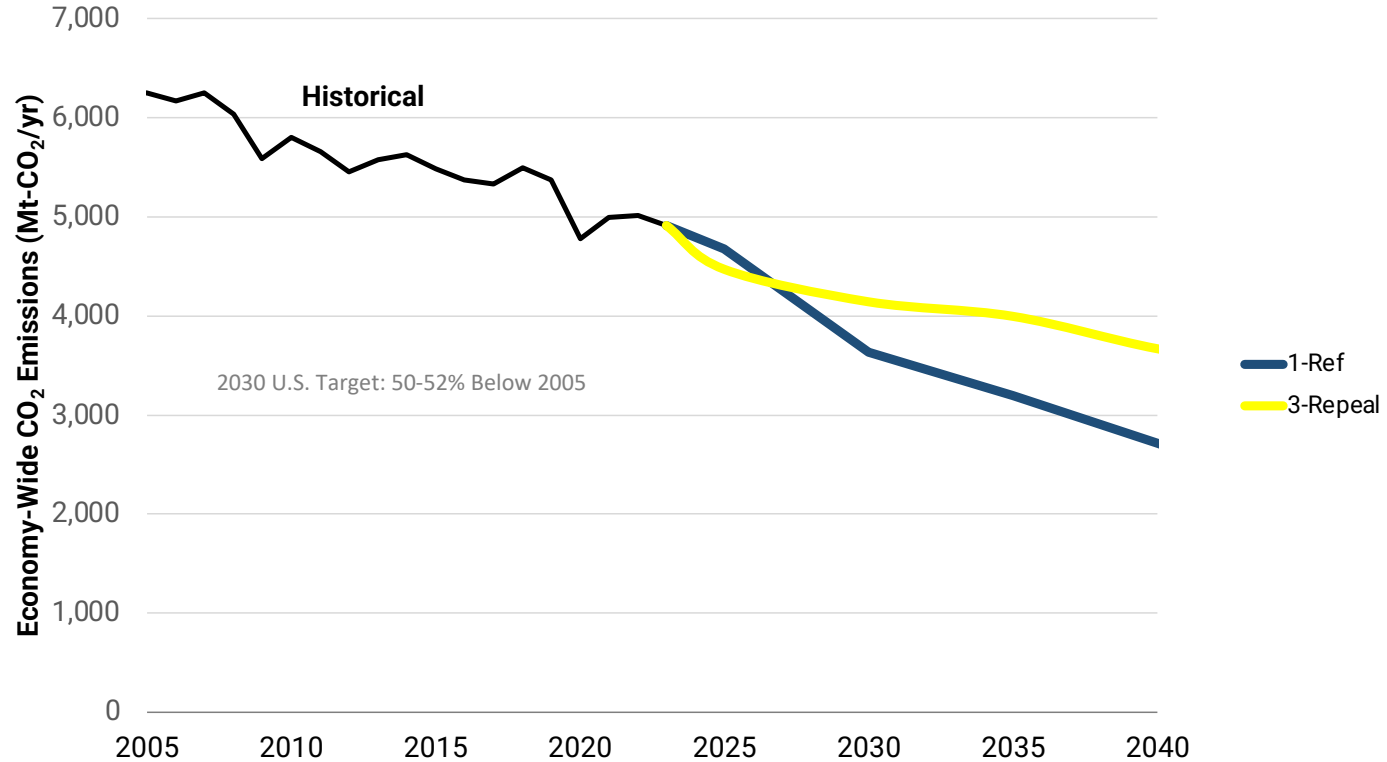
Documentation, articles, and reports available at <https://esca.epri.com>

INFLATION REDUCTION ACT PROJECTED IMPACTS



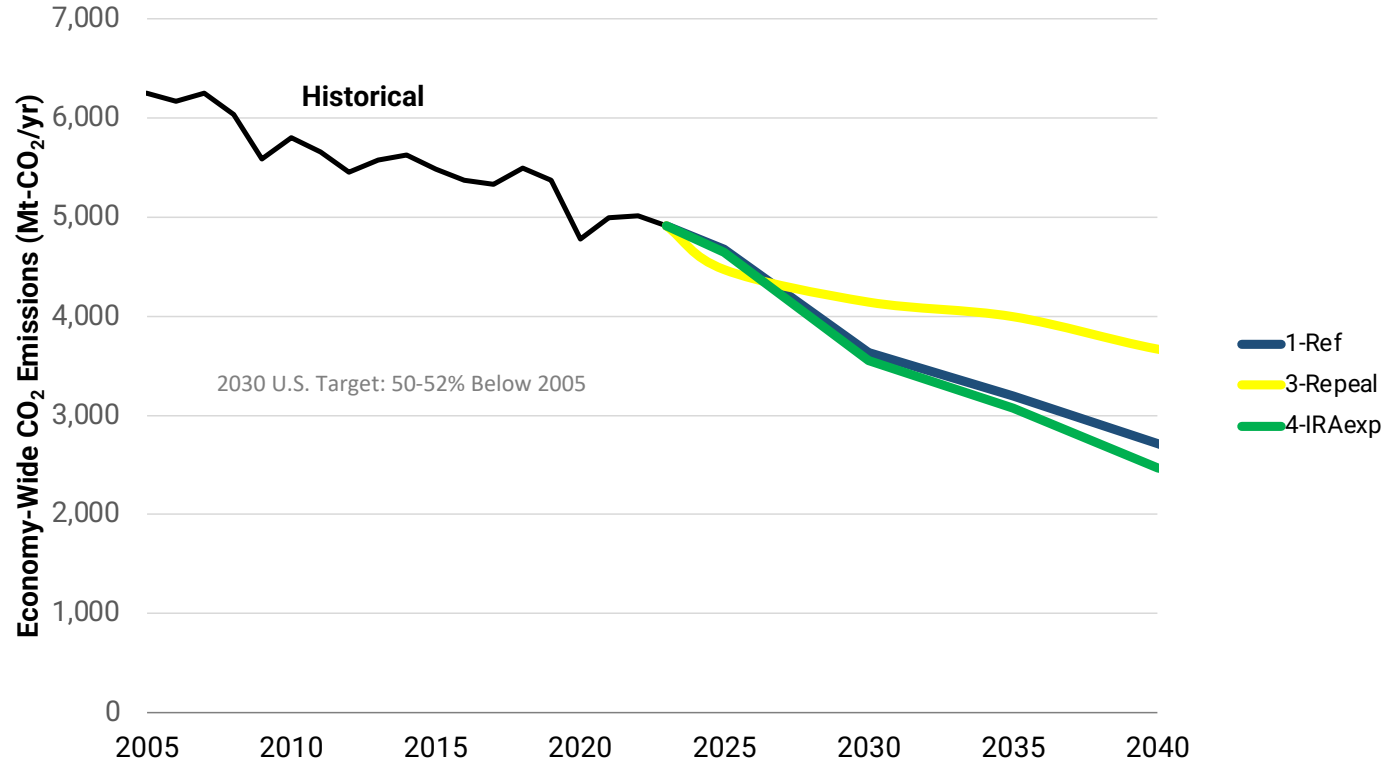
Source: Bistline, Clausing, Mehrotra, Stock, and Wolfram (2024)

WHAT'S NEXT?



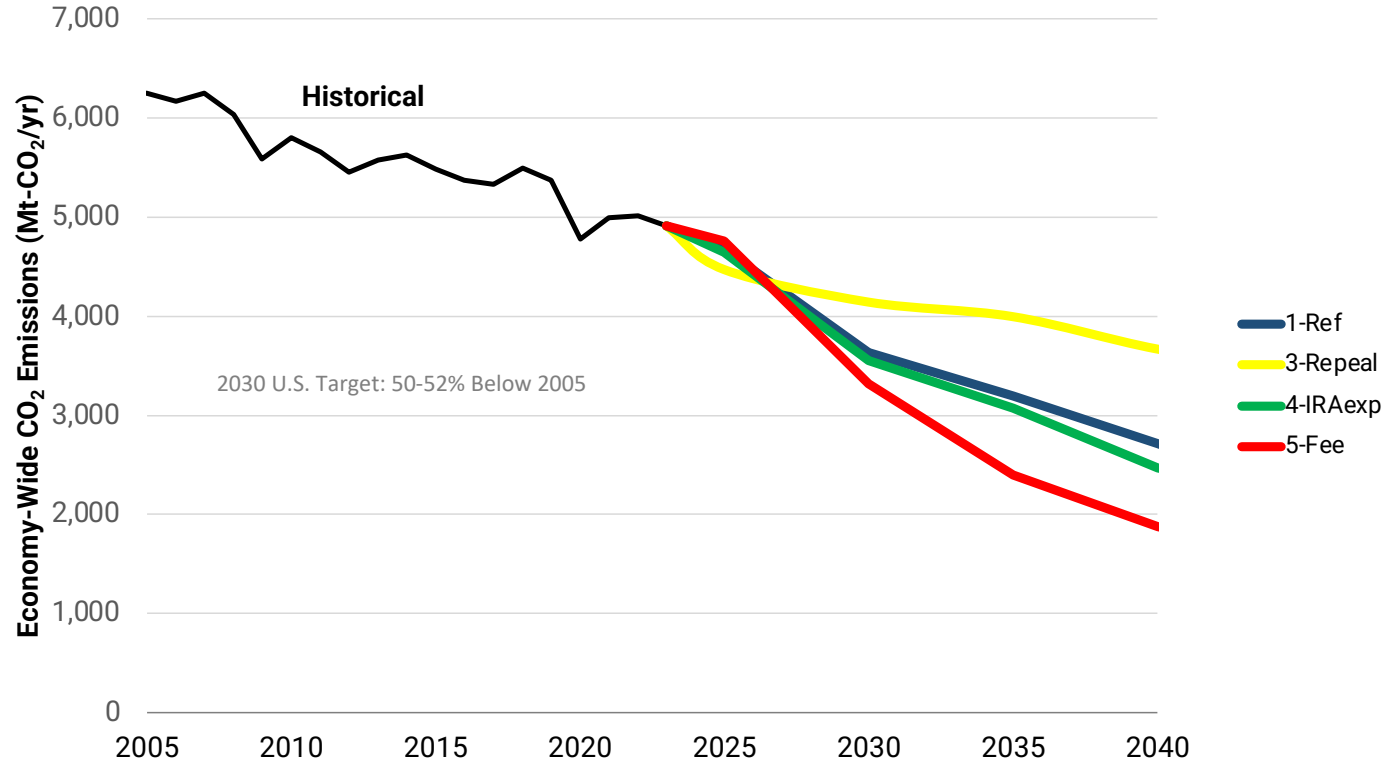
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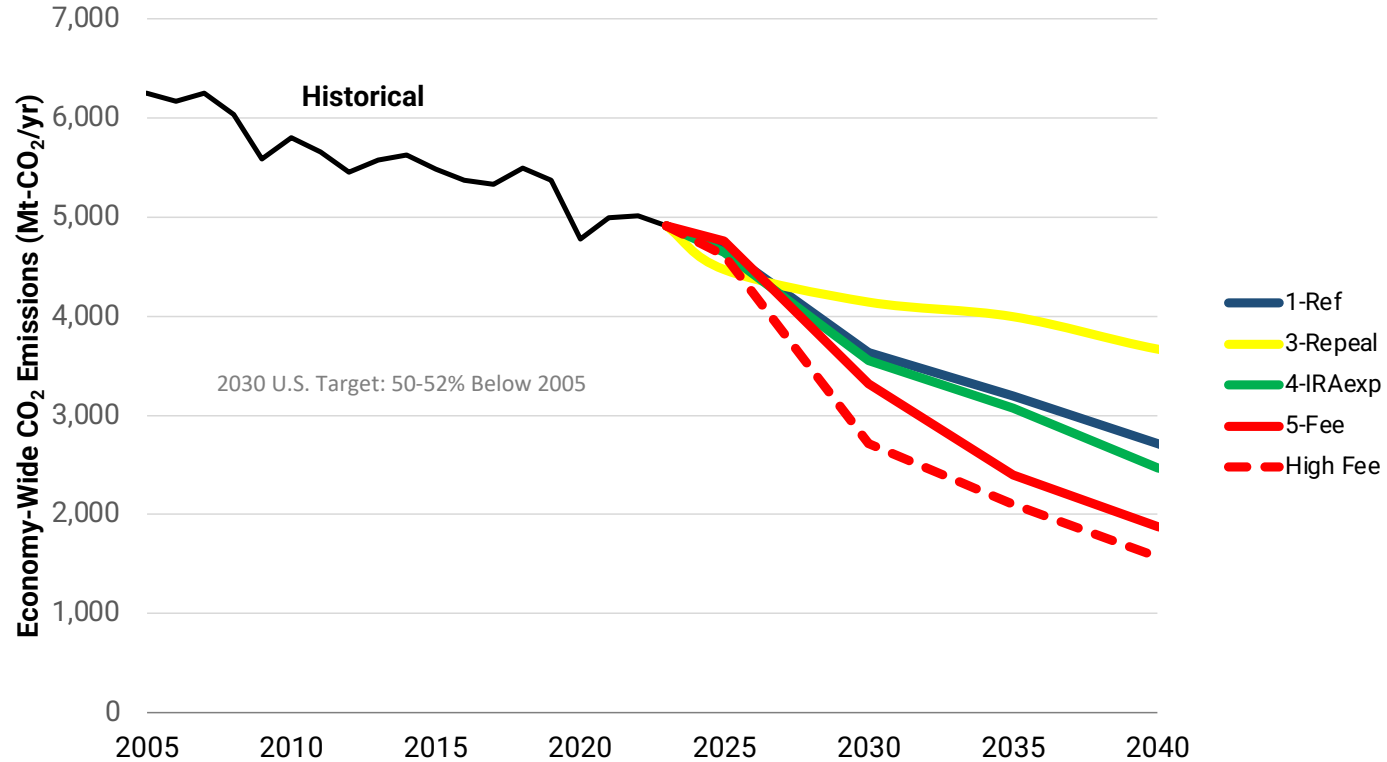
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FISCAL IMPACTS



Scenario	Estimated Fiscal Impact (\$B)
1-Ref	NA
3-Repeal	+\$1,500
4-IRAExp	-\$530
5-Fee	+\$590
5a-High Fee	+2,010

Source: Bistline, Clausing, Mehrotra, Stock, and Wolfram (2024)

THANK YOU

