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ASSESSING IMPACTS OF THE 2025 RECONCILIATION BILL ON U.S. ENERGY COSTS, JOBS, HEALTH, AND EMISSIONS

The United States House of Representatives is advancing its 2025 budget Reconciliation legislation, which seeks to repeal or modify many existing clean energy tax credits and funding programs. On May 12th, text was released from the final set of committees, providing a first look at what policies and policy changes the eventual budget Reconciliation bill may include.

The legislation includes several changes to policy, funding, and tax credits that affect energy manufacturing and deployment. The current text claws back unobligated funding, expands new oil and gas leasing, changes and eliminates existing energy and manufacturing tax credits, and repeals certain Clean Air Act programs. In particular, the Reconciliation text drastically changes and terminates existing clean energy tax credits passed by Congress in 2022. To date, these credits have generated $321 billion in new private investment across 2,369 domestic clean-energy facilities, representing 4.7 percent of all US private investment in the first quarter of 2025.[1] An additional $522 billion private sector investment has been announced across 2,217 facilities.

As currently written, the Reconciliation legislation undercuts these nearly 5,000 projects, risking billions in investments, dampening economic growth, eliminating jobs, and raising energy bills for people and businesses. Uncertainty about the continuation of these programs has already resulted in $6.9 billion worth of project cancellations between January and March 2025.

Energy Innovation used its open-source, peer-reviewed Energy Policy Simulator to analyze the potential effects of the policy changes included in this legislation. This analysis compares a "Current Policies" scenario that includes all current legislation and regulations to a "EI Reconciliation May 2025" scenario that includes select Reconciliation provisions from each of the following U.S. House Committees: Agriculture, Energy and Commerce, Natural Resources, Transportation and Infrastructure, and Ways and Means. A full discussion of the provisions modeled is included in the Appendix.

We find the Reconciliation text as drafted would increase cumulative energy costs by more than $16 billion across all American households annually in 2030, swelling to more than $33 billion in higher energy costs by 2035. This increase happens even if oil and gas production rise and help reduce fossil fuel prices, as envisioned by the bill. The changes envisioned by this bill create near-term impacts that persist over time, costing America's workforce more than 830,000 jobs in 2030 and nearly 720,000 jobs in 2035 as new investment in domestic energy falters and GDP shrinks by $117 billion in 2030 and $135 billion in 2035. Between 2025 and 2034, the Reconciliation budget window, cumulative GDP decreases by more than $1 trillion.

[1] As of May 2025

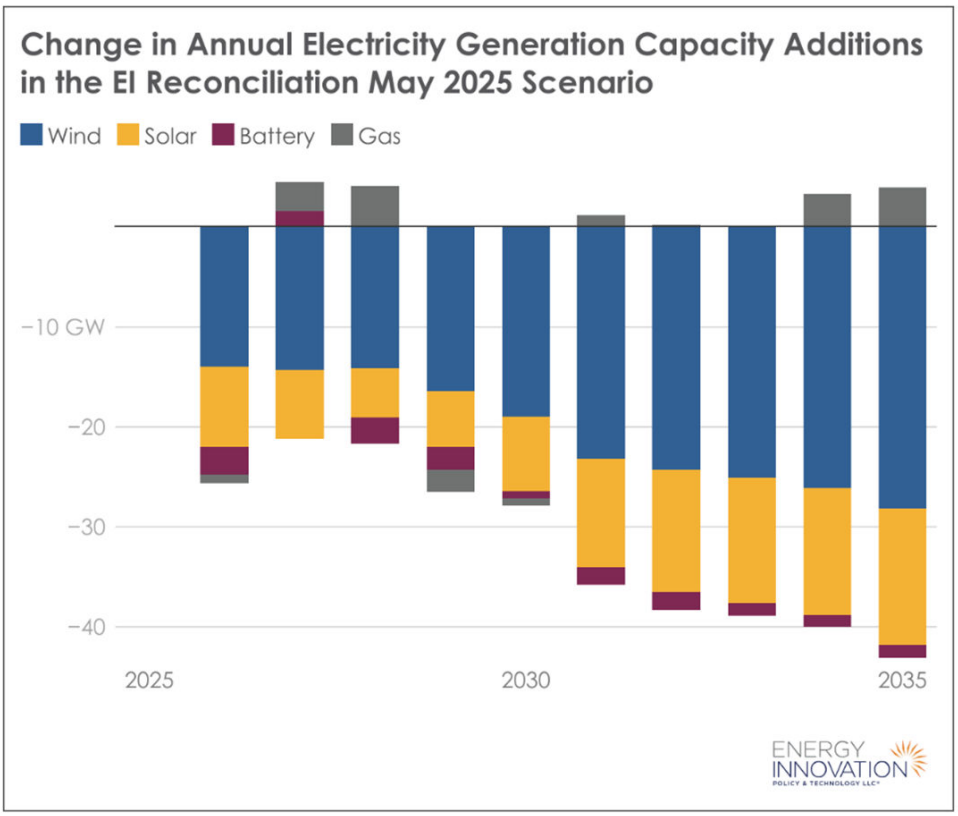
Less Electricity Supply

The current Reconciliation text includes numerous changes to the technology-neutral section 45Y production tax credit (PTC) and section 48E investment tax credit (ITC). These changes include an earlier phaseout timeline for the credits, new language tethering credit eligibility to a placed-in-service date instead of a commence-construction date (effectively ending the credits four years earlier and making it such that many projects already in the planning phase would be affected), restrictions on taxpayer eligibility, and changes to rules on the use of components, subcomponents, and critical minerals from Foreign Entities of Concern (FEOC).

Collectively, these changes would significantly slow deployment of new electricity generating capacity at a time of rapidly growing electricity demand – total U.S. demand is forecast to increase 15.8 percent, or 128 GW, in the next four years. Making new clean electricity less economic will decrease new market-driven capacity, threatening the ability of utilities to bring new capacity online in time to meet demand forecasts – clean energy composed more than 90 percent of all new capacity added to the U.S. grid in 2024, while gas turbine manufacturers face delivery backlogs until at least 2029.

Compared to the Current Policies scenario, the Reconciliation bill would decrease total new electricity capacity additions by 114 gigawatts (GW) by 2030 and 302 GW by 2035. This includes a 33 GW decrease in solar capacity (of which 4 GW is distributed solar), 78 GW decrease in wind capacity, and 7 GW decrease in battery storage capacity by 2030; new capacity installations fall by 95 GW for solar (of which 5 is distributed), 205 GW for wind, and 14 GW for battery storage respectively by 2035.

Without these new resources, the cost of meeting growing demand increases considerably; we find a roughly 50 percent increase in wholesale power prices by 2035 from the loss of new capacity and higher fossil fuel prices.



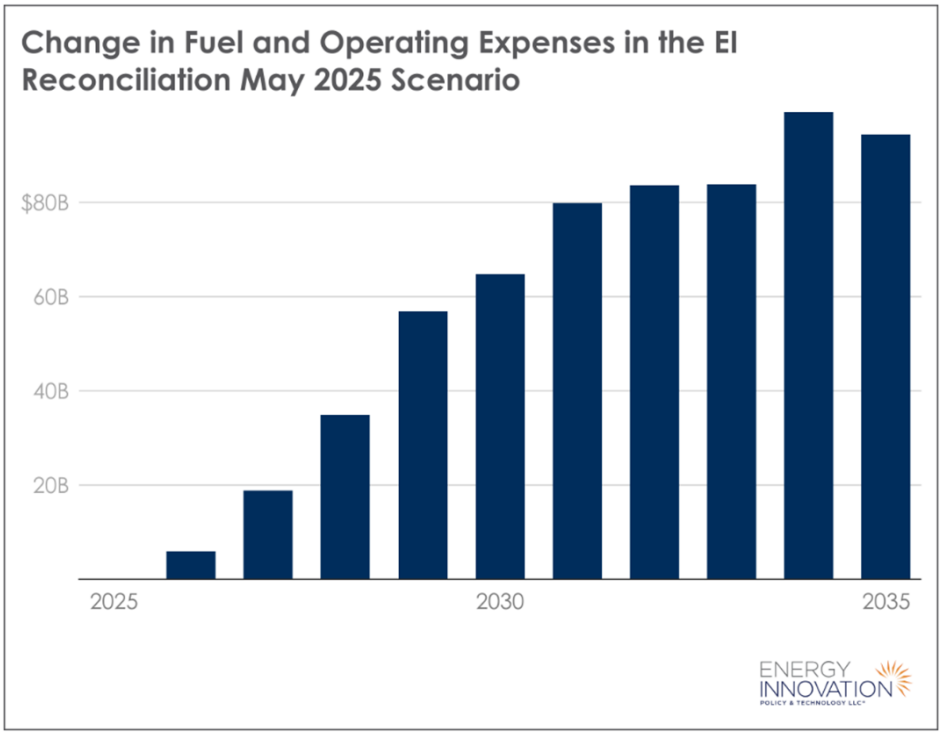
Higher Energy Spending

Reduced clean energy investment will increase fuel and operating expenses across the country. Wind and solar have no fuel costs and lower operation and maintenance (O&M) costs than fossil-fueled power plants, which means they push down overall power prices compared to non-renewable generation sources. Changes in federal energy tax credits and fossil fuel land leasing would decrease deployment of low-cost clean electricity and increase the share of electricity coming from fossil fuel power plants, thus increasing electricity generation prices. The higher demand for fossil fuels raises prices for those fuels which, in turn, makes electricity generation using those fuels even costlier. While gas generation is currently cost competitive with clean energy, the U.S. Energy Information Administration (EIA) data forecasts gas prices could rise 91 percent by 2026, threatening to raise overall electricity generation prices even further unless clean energy continues to be added to the grid.

Furthermore, repealing other incentives and existing standards, including U.S. Environmental Protection Agency and National Highway Traffic Safety Administration standards on vehicle tailpipe emissions and fuel economy increases energy spending. Battery electric vehicles, which existing incentives and standards support, are about three times as efficient as their gasoline and diesel counterparts. As a result, cutting incentives and standards leads to more gas and diesel vehicles, which in turn cost vehicle owners more to operate.

This modeling also assumes that new oil and gas land leasing provisions in the Reconciliation bill increase overall domestic production of these fuels, which reduces overall prices. It also includes lower royalty rates as included in Reconciliation text. However, more internal combustion engine vehicles on the road mean more demand for gasoline and diesel. Similarly, greater reliance on natural gas in the power sector increases natural gas prices. This higher demand increases prices for those fuels, more than offsetting any decrease in prices that arise from new oil and gas drilling and production. The net effect of supply and demand increases is to raise oil and natural gas prices and consumption, which further increases household energy costs.

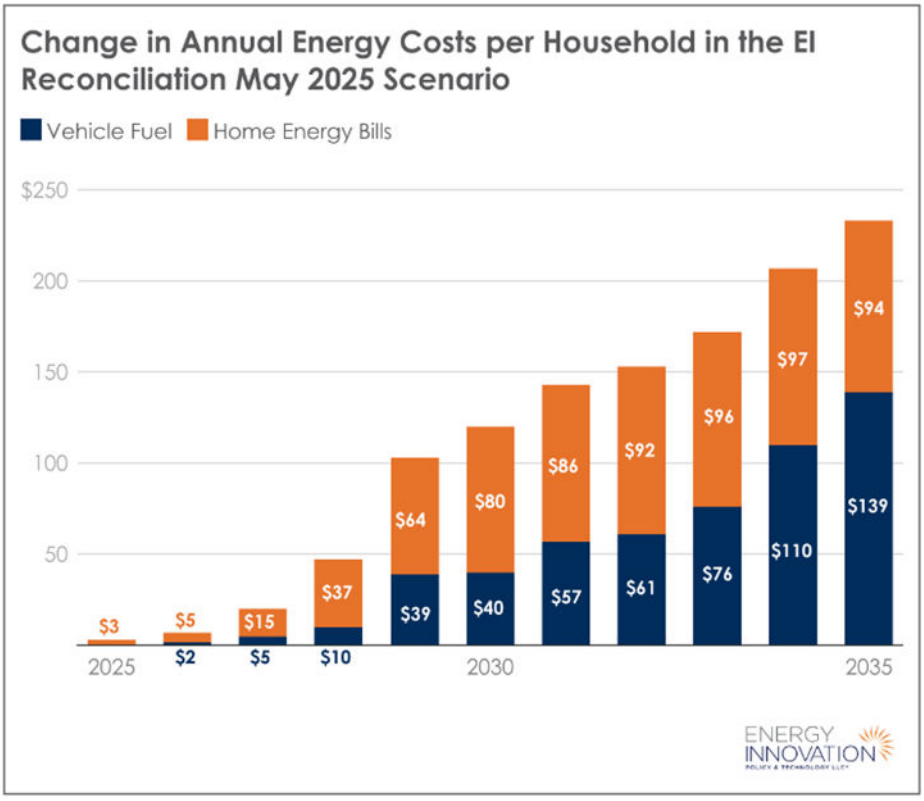
As a result of greater reliance on more expensive fossil fuels, the EI Reconciliation May 2025 scenario forecasts higher total energy spending, increasing fuel and O&M costs $65 billion in 2030, rising to $94 billion in 2035.



Proposed tax credit changes would also make new clean electricity more expensive. When utilities and market operators need to bring additional capacity online for reliability, these changes will result in that new capacity being more expensive, and that increased cost is passed through directly to consumers.

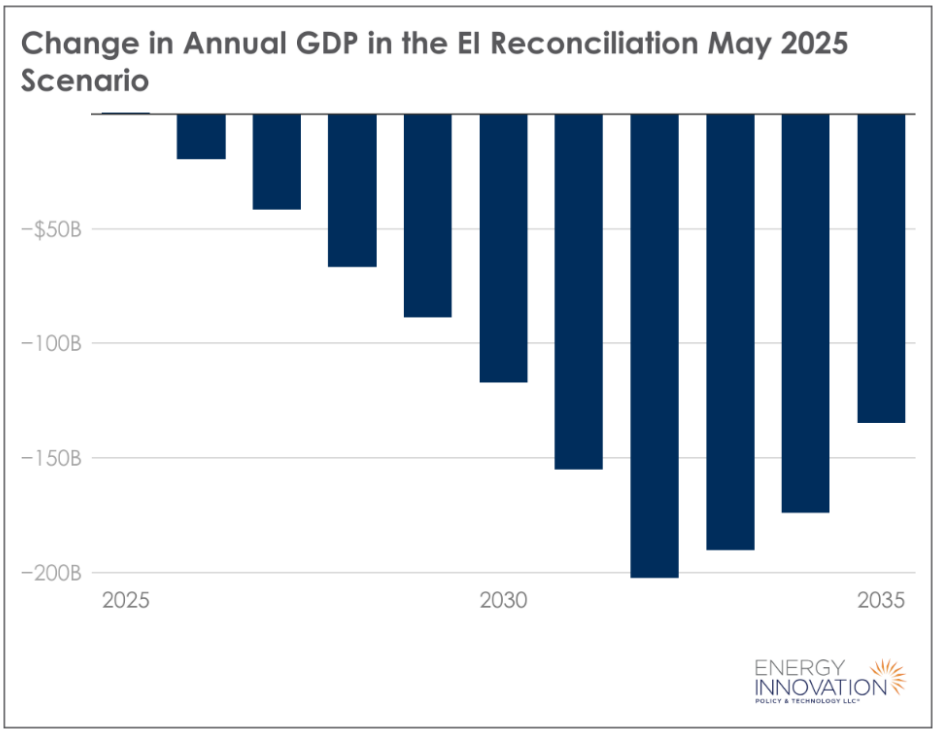
Increased capital, fuel, and operating expenses from changes to the tax credits would result in higher electricity rates for American households, which will be forced to pay more for their electricity. These effects would increase annual energy spending on a per household basis by an average of $120 per year in 2030 and more than $230 per year in 2035, with costs continuing to increase in subsequent years.

As noted above, this is true even after accounting for fossil fuel prices declining due to increased U.S. oil and gas production because of the legislation. In other words, price reductions from higher production are more than offset by greater demand for those fuels and impacts on electricity costs, forcing households to pay more for their energy under the EI Reconciliation May 2025 Scenario.

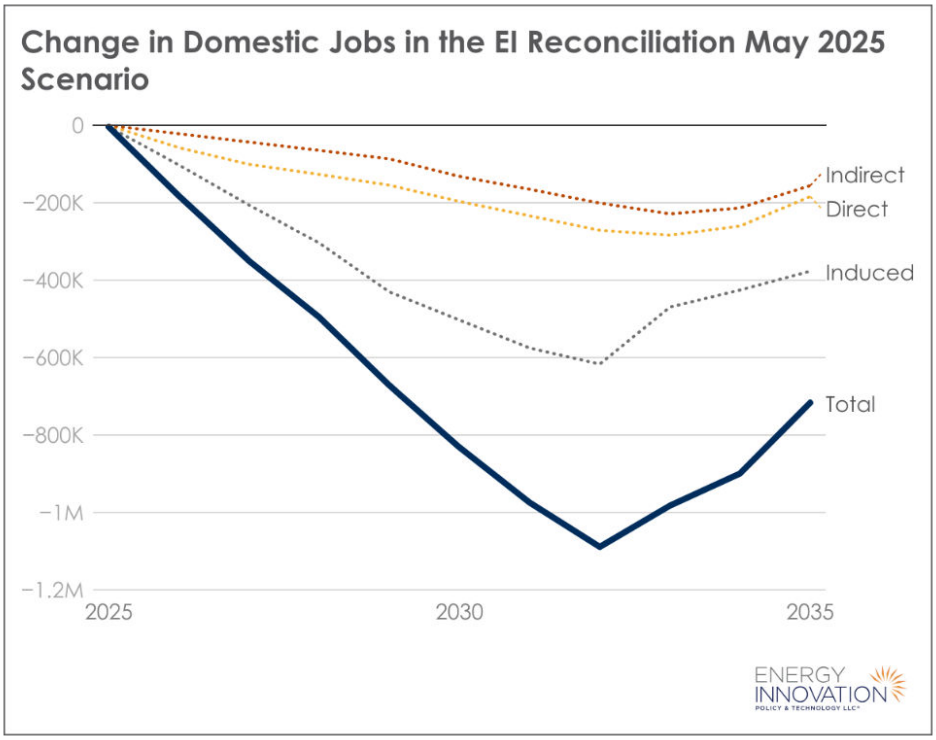


Less Manufacturing Investment And Fewer Jobs

Changes to funding and tax credits in Reconciliation legislation will cause developers to cancel a significant number of the announced clean energy manufacturing facilities while significantly decreasing clean electricity generation deployment. Cumulative GDP falls by more than $1 trillion as a result of fewer clean energy manufacturing and construction projects.



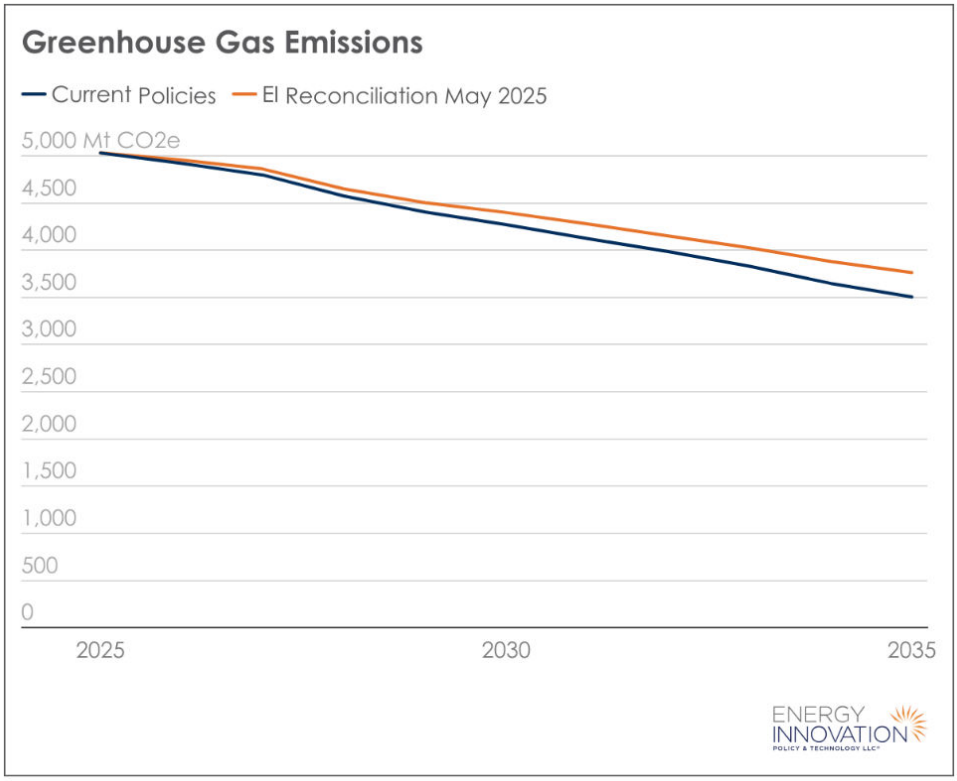
Cutting private sector investment costs our economy significant job losses in the EI Reconciliation May 2025 scenario. We find this legislation would cost Americans more than 830,000 jobs compared to the Current Policies scenario in 2030, and nearly 720,000 jobs in 2035. This includes losing direct and indirect jobs from decreased investments in clean energy projects and lower demand for the inputs to those projects, as well as from induced economic activity (e.g., high fuel costs mean consumers have less money to re-spend in the economy).



These numbers are likely conservative because they do not account for the significant potential cancellation of planned clean energy manufacturing facilities. As of May 2025, $522 billion of outstanding investment has been announced across 2,217 facilities, which is expected to create more than 680,000 operational and construction jobs. Many of these announced investments are at risk of being cancelled if the Reconciliation text is passed as drafted.

Higher Pollution And Negative Health Impacts

The EI Reconciliation May 2025 scenario also increases air pollution, particularly from power plants and vehicles. Under the proposed legislation, emissions would increase by nearly 130 million metric tons of carbon dioxide equivalent (Mt CO_2e) in 2030, rising to nearly 260 Mt CO_2e in 2035 – the equivalent of adding 56 million cars to the road. Higher local air pollution would harm public health, leading to nearly 350 additional premature deaths annually by 2030 and nearly 670 by 2035.



Methodology

The Current Policies scenario includes the IRA, the Infrastructure Investment and Jobs Act (IIJA), and the CHIPS and Science Act, as well as finalized U.S. EPA rules including oil and gas methane standards; tailpipe carbon dioxide (CO_2) standards for light-, medium-, and heavy-duty vehicles; and power plant CO_2 standards. It also includes any state-level renewable portfolio or clean energy standards, state carbon pricing schemes, and adoption of the Advanced Clean Cars I and II rules as well as the Advanced Clean Trucks rule.

The EI Reconciliation May 2025 Scenario models select Reconciliation provisions from each of the following U.S. House Committees: Agriculture, Energy and Commerce, Natural Resources, Transportation and Infrastructure, and Ways and Means. This scenario repeals the EPA tailpipe CO_2 standards for light-, medium-, and heavy-duty vehicles based on May 2025 Reconciliation Bill text from the Energy and Commerce committee. All other EPA rules modeled in the Current Policies scenario are left in place. A full discussion of the provisions modeled is

included in the Appendix. It does not reflect changes in the share of technologies that are produced domestically after Reconciliation such as potential cancellations of domestic manufacturing projects, meaning these estimates are likely conservative and impacts are likely greater than reported here.

For more information on how we modeled changes in federal clean energy tax credit and other federal funding programs, see Appendix A. Model settings for this analysis are also available on request. Documentation on the EPS model architecture and methodology can be found on Energy Innovation's website.

APPENDIX A:

This appendix contains detail on the provisions in the 2025 Reconciliation Bill that were modeled in this assessment. The appendix is organized by U.S. House committee.

Ways and Means	
Sec. 112002. Termination of Clean Vehicle Credit	§112002(a) terminates the clean vehicle tax credit under I.R.C. §30D in 2027 rather than 2032. This credit provided up to $7,500 to taxpayers for the purchase or lease of qualifying clean vehicles. §112002(b) adds a special rule for taxable year 2026 wherein vehicles only qualify for the credit if the cumulative number of covered vehicles sold by the manufacturer of that vehicle is under 200,000 as of December 31, 2025. Using data from Marklines and Cox Automotive, we find this disqualifies most clean vehicles from qualification, as several manufacturers have hit this limit. See Appendix B: 2026 Qualification for 30D Credits for a summary table of OEM qualifications for credits. If vehicle qualification criteria remain unchanged, only two vehicles would qualify for credits in 2026. We phase out federal incentives for battery electric-, plugin hybrid-, and fuel cell cars and SUVs according to this updated schedule, leaving only sales-weighted state-level incentives.
Sec. 112003. Termination of Qualified Commercial Clean Vehicles Credit	§112003 terminates the commercial clean vehicle tax credit under I.R.C. 45W in 2026 rather than 2032. This credit provided up to $7,500 or $40,000 to taxpayers for the purchase or lease of new vehicles under or over 14,000 pounds gross vehicle weight rating. We phase out federal incentives for battery electric-, plugin hybrid-, and fuel cell vehicles according to this updated schedule.
Sec. 112006. Termination of Residential Clean Energy Credit	§112006 phases out the residential clean energy credit under I.R.C. §25D in 2026 rather than 2035. This credit covered 30 percent of the costs of new, qualified clean energy property for homes, such as solar panels, wind turbines, batteries, and heat pumps. We calculate annual distributed energy capacity additions in AEO 2023's Reference and No IRA scenarios, then subtract the difference from the Current Policies scenario's projected capacity.
Sec. 112008. Phase-out and Restrictions on Clean Electricity Production Credit	§112008 accelerates the phaseout of the clean electricity tax credit under I.R.C §45Y, moves from a commenced construction to a placed in service timeline, applies restrictions to the requirements for qualifying facilities, and revokes credit transferability. The foreign entities restrictions in this section restrict qualifying taxpayers and forbid recipient taxpayers from receiving material assistance from prohibited foreign entities in the form of payments from, or components, subcomponents, or critical minerals included in

	property extracted, processed, recycled, manufactured, or assembled by a prohibited foreign entity. We conclude that as written these requirements are sufficiently prohibitive as to prevent any taxpayer from earning the credits in the window before the accelerated timeline established in §112008 concludes. As a result, we assume the new restrictions will be binding, preventing newly built clean electricity plants from qualifying for the tax credit as of 2026 for any projects not currently under construction.
Sec. 112009. Phase-out and Restrictions on Clean Electricity Investment Credit	§112009 accelerates the phaseout of the clean electricity investment tax credit under I.R.C §48E, applies restrictions to the requirements for qualifying facilities, and revokes credit transferability. For the same reasons as with §112008, we assume the new restrictions will be binding, preventing newly built clean electricity plants from qualifying for the tax credit as of 2026.
Sec. 112011. Restrictions on Carbon Oxide Sequestration Credit	§112011 places restrictions on the carbon oxide capture credit under I.R.C. §45Q. It forbids the issuance of carbon oxide capture credits to foreign entities and repeals the transferability of the credits. Unlike the foreign entities requirements in §§112008–112009, this provision does not forbid material assistance from foreign entities. We do not believe the foreign entities restriction in §112011 will have a material impact on the taxpayers being issued the carbon oxide credit. Additionally, due to the nature of taxpayers being issued carbon oxide credits, we do not believe the repeal of transferability will have a material impact on the credit's use. As a result, we model no change to carbon oxide sequestration in our EI Reconciliation May 2025 scenario.
Sec. 112012. Phase-out and Restrictions on Zero-emission Nuclear Power Production Credit	§112012 accelerates the phaseout of and places restrictions on the nuclear power production tax credit under I.R.C. §45U. It forbids the issuance of nuclear power production credits to foreign entities and repeals the transferability of the credits. We assume that the limited foreign entities provisions and the repeal of transferability will have no impact on the collection of the credit due to the nature of the taxpayers producing nuclear power. We assume that the credit phases out in line with the schedule established in §112012(a), reaching zero percent in 2032.
Sec. 112013. Termination of Clean Hydrogen Production Credit	§112003 terminates the clean hydrogen production tax credit under I.R.C. 45V in 2026 rather than 2032. No facilities for which the construction begins after December 31, 2025 qualify for the credit. The Current Policies scenario assumes hydrogen production aligns with the Current Policy scenario of Evolved Energy Research's Annual Decarbonization Perspective report, with 63 percent and 3 percent of U.S. hydrogen supplied by electrolyzers and reforming with carbon capture, respectively, by 2040.[2] With the early termination of the 45V

[2] https://www.evolved.energy/us-adp-2024

	credit, we assume production remains stagnant at 2025 levels through midcentury.
Sec. 112014. Phase-out and Restrictions on Advanced Manufacturing Production Credit	§112014 terminates tax credits for advanced manufacturing under I.R.C. §45X a year early in 2031, removes wind components from eligibility after December 31, 2027, repeals the transferability of the credits, and applies foreign entities restrictions. The foreign entities restrictions in this section forbid recipient taxpayers from receiving material assistance from prohibited foreign entities in the form of payments from, or components, subcomponents, or critical minerals included in property extracted, processed, recycled, manufactured, or assembled by a prohibited foreign entity. We find that the restriction is sufficiently prohibitive to prevent any taxpayer from earning the credits. The Current Policies scenario does not include §45X tax credits for all eligible technologies, but the EPS does explicitly include tax credits for domestic battery manufacturing. The Current Policies scenario reads in the expected growth in U.S. battery manufacturing capacity to track government tax credit outlays for production, and we assume manufacturers pass 50 percent of their tax credit revenue through to consumers in the form of lower battery prices (for vehicles and grid batteries). The EI Reconciliation May 2025 Scenario assumes all planned battery manufacturing capacity that is not currently under construction will be cancelled, and no battery manufacturing facilities receive §45X starting in 2026. Note that this methodology tracks the change in government outlays and the change in battery costs due to more restrictive §45X tax credits. It does not track the lost manufacturing jobs as a result of fewer battery facilities.
Energy and Commerce	
Sec. 42113	§42113 rescinds unobligated funds for the reduction of methane emissions from oil and gas operations and delays collection of the Methane Fee until 2034. We use information from EPA's Regulatory Impact Assessment[3] of the Waste Emissions Charge to find the emissions reductions and revenue collection attributable to the fee (leaving EPA's OOOO rules for oil and gas operations in place). We remove these impacts in the EI Reconciliation May 2025 Scenario.
Sec. 42201 and Sec. 42301	These sections repeal EPA tailpipe rules for light-, medium-, and heavy-duty vehicles as well as the NHTSA rule for CAFE standards for passenger light-duty vehicles. The Current Policies scenario uses vehicle sales shares by technology (e.g., battery electric, gasoline, plug-in hybrid) from EPA's Regulatory

[3] https://www.epa.gov/system/files/documents/2024-11/wec-ria-final_11-2024.pdf

	Impact Assessments. We remove the binding sales shares requirements from the baseline to order repeal of the rules.
Transportation and Infrastructure	
Sec. 100004. Registration Fee on Motor Vehicles	§100004 establishes $250 and $100 annual registration fees imposed on the owner of electric and hybrid vehicles registered for operation by State transportation departments. These fees are increased on an annual basis to account for inflation each fiscal year. We add annual fees to the calculation of the net present cost of vehicle technologies used to inform consumer choice in the EPS transportation structure.
Natural Resources	
Sec. 80105. Reinstate Reasonable Royalty Rates	See Appendix C: Natural Resources Methodology
Sec. 80143. Coal Royalty	See Appendix C: Natural Resources Methodology
Sec. 80171. Mandatory Offshore Oil and Gas Lease Sales	See Appendix C: Natural Resources Methodology
Agriculture	
Sec. 10102. Conservation	§10102(d)(1)-(2) expand funding for agricultural conservation by approximately $10.7 billion from 2026 to 2031. We balance this funding with rescissions in §10105(d)(4) to calculate change in the uptake of climate mitigation opportunities in the agriculture sector. §10102(d)(4) rescinds the unobligated balances of IRA §21001(a) appropriated funds for agricultural conservation. We assume that all $7.95 billion appropriated for fiscal year 2026 are rescinded, as well as 30 percent of fiscal year 2025 appropriations, in line with the $9.7 billion in unobligated Department of Agriculture tracked by Atlas.[4] We add in the $10.7 billion in expanded funding from §10102(d) to calculate a net change in appropriated funding in each fiscal year. We then use curve fitting of CBO outlay projections for conservation programs[5] and appropriated funds to estimate the share of each year's appropriated funds outlaid in subsequent years. We assign conservation funds to various mitigation opportunities from lowest to highest marginal cost using cost estimates from EPA's non-CO2 emissions report.[6] Lastly, we compare the emissions reduction potential for all funds appropriated under IRA with those assumed to be obligated and divide emissions reductions between methane and nitrous oxide based on each pollutant's share of U.S. agricultural emissions.

[4] https://www.cbpp.org/research/climate-change/with-federal-climate-funding-at-risk-policymakers-should-protect-benefits

[5] https://www.cbo.gov/system/files/2024-06/51317-2024-06-usda.pdf

[6] https://www.epa.gov/global-mitigation-non-co2-greenhouse-gases/global-non-co2-greenhouse-gas-emission-projections

Sec. 10105. Secure Rural Schools; Forestry	§10105(d)(1) rescinds the unobligated balances of IRA §23002(a) appropriated funds for grants for non-federal forest landowners. We use CBO projections of IRA budgetary effects to estimate the unobligated balances of these funds as the sum of outlays from 2026 to 2031 divided by the total budget authority of the program.[7] §10105(d)(1) rescinds $101 million in unobligated balances from IRA §23002(a) appropriated funds for state and private forestry conservation. We calculate the change in annual outlays due to each of these rescissions and compare it with the total IRA budget authority under each section. We then assign outlays to various mitigation opportunities from lowest to highest marginal cost using cost estimates from EPA's non-CO2 emissions report and sum to estimate the change in forest management emissions changes over the program lifetime.[6]

[7] https://www.cbo.gov/system/files/2022-08/hr5376_IR_Act_8-3-22.pdf

APPENDIX B: 2026 QUALIFICATION FOR 30D CREDITS

Parent group (controlled group)	Over/under 200k cap?	2025 30D-qualifying vehicles[8]
Tesla	Over	Cybertruck Model 3 Model X Model Y
General Motors	Over	Cadillac LYRIQ Cadillac OPTIQ Cadillac VISTIQ Chevrolet Blazer Chevrolet Equinox Chevrolet Silverado GMC Sierra EV
Ford Motor Co.	Over	Ford F-150 Lightning
Toyota Motor Co.	Over	
Hyundai Motor Group	Over	Genesis Electrified GV70 Hyundai IONIQ 5 Hyundai IONIQ 6 Kia EV6 Kia EV9
Stellantis	Over	Chrysler Pacifica Jeep Wagoneer
BMW	Over	
Nissan Motor Co.	Over	
Volkswagen Group	Over	
Volvo/Geely	Under	
Mercedes-Benz Group	Under	
Honda Motor Co.	Under	Acura ZDX Honda Prologue
Rivian Automotive	Under	
Mitsubishi Motors	Under	
Subaru Corp.	Under	
Mazda Motor Corp.	Under	
Lucid Group	Under	
Jaguar Land Rover	Under	
Fisker Inc.	Under	
VinFast	Under	
Ferrari	Under	
McLaren Automotive	Under	
Karma Automotive	Under	
Moke	Under	
Lordstown Motors	Under	
Mullen Automotive	Under	

[8] Not all configurations or model years may qualify

APPENDIX C: NATURAL RESOURCES METHODOLOGY

Offshore Leasing (Title VIII; Part VIII; Sec. 80171)

In 2023, the Bureau of Ocean Energy Management (BOEM) published the 2024–2029 National Outer Continental Shelf Oil and Gas Leasing Proposed Final Program.[9] The proposal includes a total of three oil and gas lease auctions in the Gulf of Mexico over five years.

This leasing program stands in contrast with the House Natural Resources Committee's portion of the 2025 reconciliation text. §80171 would require "not fewer than 30 lease sales in the Gulf of America during the 15-year period [after enactment of the law]" and "not fewer than 6 lease sales in the Cook Inlet…during the 10-year period [after enactment of the law]." Each Gulf lease sale would offer "not fewer than 80,000,000 acres" and each in the Cook Inlet "not fewer than 1,000,000 acres."

Royalty Rates (Title VIII; Part VIII; Secs. 80105, 80143)

§80105 of the House Natural Resource Committee's portion of the 2025 reconciliation text would return oil and gas royalties to 2022 levels. This results in lowering onshore leasing royalties from 16.67 percent to 12.5 percent and offshore royalties from 16.67–18.75 percent to 12.5–18.75 percent. We model the decrease in federal royalty rates as a decrease in taxes on the share new of oil and gas produced on federal land in line with methodology from Resources for the Future.[10] We also decrease coal royalties from 12.5% to 7% in line with Sec. 80143.

Onshore Leasing (Title VIII; Part VIII; Secs. 80101, 80121, 80122)

§80101 of the House Natural Resources Committee's portion of 2025 reconciliation text would require the Secretary of the Interior to "immediately resume quarterly onshore oil and gas lease sales...in each of the following states: Wyoming, New Mexico, Colorado, Utah, Montana, North Dakota, Oklahoma, Nevada, Alaska," alongside any other state with land available for oil and gas leasing. The Secretary is required to offer "not less than 50 percent of all parcels nominated…through the submission of an expression of interest."

We expect production to increase due to resumed lease sales, but the size of the increase is uncertain as expressions of interest could vary significantly with oil prices and demand projections. Therefore, we do not model changes in onshore leasing in this study. For an analysis of return to onshore leasing levels during the first three years of the first Trump administration, see prior Energy Innovation modeling.[11]

Modeling Summary

We developed two scenarios to determine the incremental impact of expanded oil and gas drilling in line with the 2025 reconciliation text against an IRA backdrop. The Current Policies scenario assumes a continuation of the least amount of additional federal oil and gas leasing allowed under current law. The EI Reconciliation May 2025 scenario assumes the least amount of additional federal leasing allowed under the reconciliation text.

- Current Policies: Assumes the 2024–29 five-year offshore plan is implemented through 2029, and biannual, 60-million-acre auctions continue through 2050.

[9] https://www.boem.gov/sites/default/files/documents/oil-gas-energy/leasing/2024-2029_NationalOCSProgram_PFP_Sept_2023_Compliant.pdf

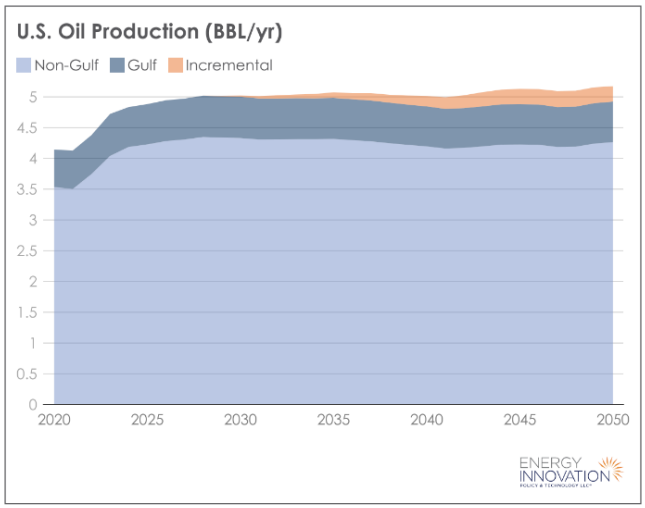
[10] https://www.resources.org/common-resources/if-then-new-cuts-to-oil-and-gas-royalty-rates-in-budget-reconciliation-will-reduce-federal-revenues

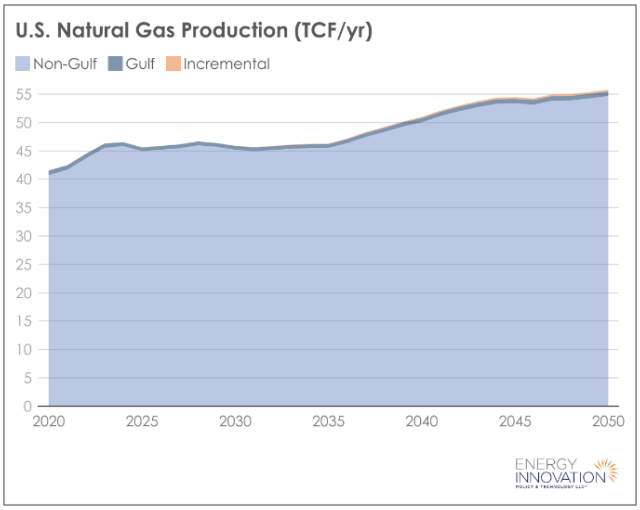
[11] https://energyinnovation.org/wp-content/uploads/The-Second-Half-of-The-Decisive-Decade-Potential-U.S.-Pathways-on-Climate-Jobs-and-Health.pdf

- EI Reconciliation May 2025: Assumes offshore leasing expands to levels proposed under the Natural Resources Committee text, with semi-annual, 80-million-acre Gulf auctions through 2040 and six one-million-acre auctions in the Cook Inlet. Assumes royalty rates are returned to pre-IRA levels.

Results

We calculated the incremental change in production associated with new leasing required by the Reconciliation text and fed this increase into the U.S. EPS. The additional, incremental production in the EI Reconciliation May 2025 scenario is equivalent to a six-percent increase above Current Policies oil production and a one-percent increase above Current Policies natural gas production by 2050. 88 percent of new, incremental oil production and 96 percent of new, incremental gas would come from leases in the Gulf. This incremental production amounts to approximately a third of existing Gulf production of oil and gas.





This incremental increase in production would result in lower oil and gas prices before accounting for changes in prices from demand changes. Natural gas prices fall approximately 0.2 percent by 2030 and one percent by 2035 from incremental production. Gasoline prices would fall around 0.1 percent by 2030 and 0.4 percent by 2035 (~0.3 cents per gallon in 2030 and 1.4 cents per gallon in 2035). Falling prices would reduce average household energy bills by three dollars per year in 2030 and $12 per year in 2035 before incorporating increases in prices from demand changes. Incorporated into the context of the full EI Reconciliation May 2025 scenario, these changes are overshadowed by greater increases in the price of oil, natural gas, and petroleum products due to shifting demand towards fossil fuels and away from electrification and low-cost renewable electricity generation.

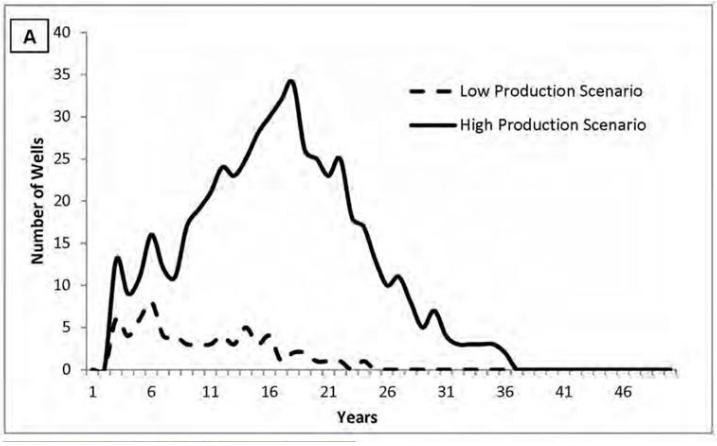
The reduction in coal, oil, and gas royalties would cost the government approximately $10.5 billion in direct lost revenue over the budget window from 2025 to 2035.

Methodology

We begin by determining the number of leases in each sceanrio. In the Current Policies scenario, we assume lease auctions continue at the biannual rate set out in the 2024–2029 OCS Proposed Final Program, with offerings of 60 million acres put up every other year. In the EI Reconciliation May 2025 scenario, we assume 30 sales for Gulf leases are held from 2025 to 2040 acocording to the schedule established in §80171(a)(1)(D), alongside six Cook Inlet sales from 2026 to 2032, according to the schedule established in §80171(a)(2)(D). We assume these offerings are additional to the five lease sales dictated in the 2024–2029 National Outer Continental Shelf Oil and Gas Leasing Program remain in place, as established by §80171(b).

We then calculate production intensities to convert these land offerings to estimated lease sales. We source program area sizes from Table 5-2 in the 2023–2028 Proposed Program[12] and Table 11-2 in the 2017–2022 Proposed Program,[13] and source anticipated production levels from Table 5-2 in the former. This yields production intensity by area, which we divide by the number of lease sales proposed in each program area to yield the per-lease estimated ultimate recovery (EUR) per unit land area leased.

Next, we produce well-drilling profiles for new leases using BOEM data on the timeline of well completions for a given area of development. Typically, wells on leased land are drilled over a period of approximately 30 years, peaking after about 15 to 20 years. We take the average of the Low and High Production Scenarios from the BOEM data in the following figure.



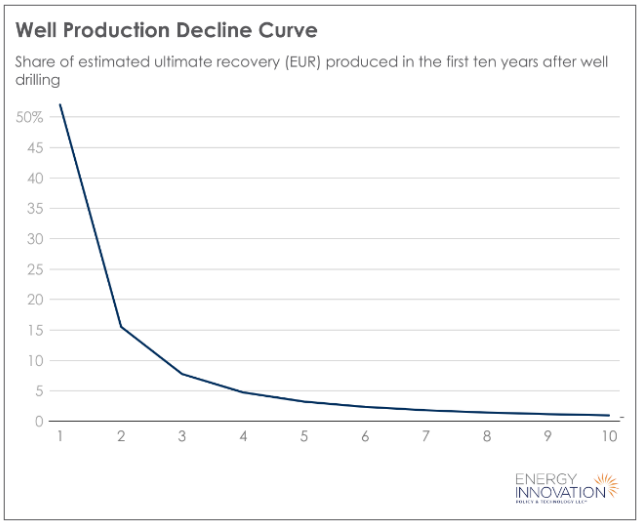
We then estimate production depletion profiles[14] to reflect the varying amount of product produced over the lifetime of each well. For example, around half of an average well's total product is produced in the first year after drilling. We averaged production profiles from EIA's AEO 2021[15] and then used curve fitting to find decline parameters matching the average profile. Multiplying this depletion curve by the BOEM drilling profile and dividing by the average total number of drills results in the cumulative production profile that determines the share of EUR recovered by age of the lease.

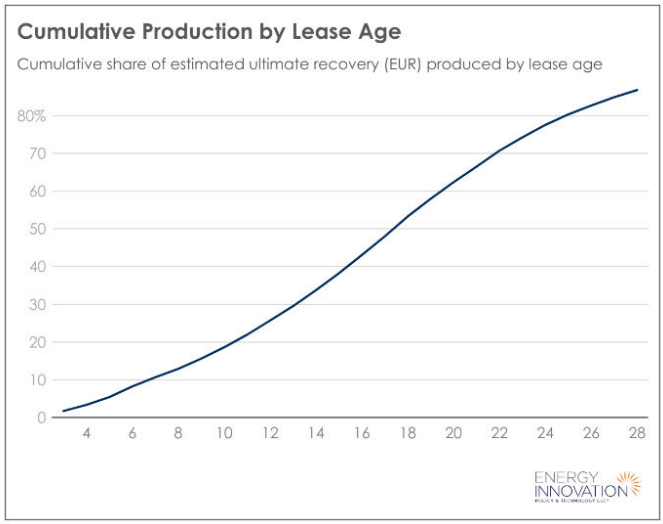
[12] https://www.boem.gov/sites/default/files/documents/oil-gas-energy/national-program/2023-2028_Proposed%20Program_July2022.pdf

[13] https://www.boem.gov/sites/default/files/oil-and-gas-energy-program/Leasing/Five-Year-Program/2017-2022/2017-2022-Proposed-Program-Decision.pdf

[14] https://www.eia.gov/analysis/drilling/curve_analysis/

[15] eia.gov/analysis/drilling/curve_analysis/2021/excel/AEO2021_decline_curves.xlsx





Next, we reduce our calculated incremental production to account for rebound effects on state and private land. Data from Resources for the Future indicates that 52 to 72 percent of emissions from increased production on public lands is offset by decreases in production elsewhere. 30 percent of this rebound effect is due to decreases in production on state and private land – i.e., other domestic production decreases. As a result, we reduce our estimated incremental production values by 19 percent (62 percent of 30 percent).[16]

We then calculate the change in domestic fuel prices resulting from the incremental increase in production and reduced royalties. To do so, we estimated the percent price impact per percent change in U.S. production using data from the U.S. EIA's AEO 2025 Reference and High Oil and Gas Supply scenarios.We also reduced oil and gas taxes in line with reduced royalties for newly leased acreage, using data on the area of new production from Resources for the Future.[17] Lastly, we reduced the cost of petroleum-derived fuelss in line with the share of each fuel's cost that comes from crude oil – these shares ranged from approximately 40 to 60 percent.

Lastly, we combined these supply-driven fuel price changes with demand-driven changes calculated from AEO 2023's Reference and No IRA scenarios and AEO 2025's Reference and Alternative Transportation scenarios. We input the increased production values and estimated price and tax changes into the EPS to simulate changes in economy-wide energy use, spending, and downstream impacts from changes in pollution.

[16] media.rff.org/documents/WP_20-16__Dec_2021.pdf

[17] resources.org/common-resources/if-then-new-cuts-to-oil-and-gas-royalty-rates-in-budget-reconciliation-will-reduce-federal-revenues