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ASSESSING IMPACTS OF "ONE BIG BEAUTIFUL BILL ACT" ON CALIFORNIA's ENERGY COSTS, JOBS, HEALTH, AND EMISSIONS

On May 22, the United States House of Representatives passed its 2025 budget Reconciliation legislation entitled the One Big Beautiful Bill Act (OBBBA); the bill has now moved on to the U.S. Senate for committee markups and an eventual vote.

The legislation repeals multiple federal policies, funding programs, and tax credits that drive American energy manufacturing and deployment. As passed, the 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 bill drastically changes and terminates existing clean energy tax credits passed by Congress in 2022, which to date have generated $34 billion in new private-led investment across 307 domestic energy and manufacturing facilities in California.[1] An additional $39 billion of outstanding private investment has been announced across 590 facilities in California.

As passed in the House, the OBBBA would undercut these 897 projects, threatening billions in investments, holding back economic growth, costing jobs, and forcing families and businesses to pay higher energy bills.

Energy Innovation used its open-source, peer-reviewed Energy Policy Simulator to analyze the potential effects of the policy changes on California included in this legislation. This analysis compares a "Current Policies" scenario that includes all current law and regulations to an "EI House OBBBA" scenario that includes energy- and agriculture-related Reconciliation provisions. A full discussion of the provisions modeled is included in Appendix A of the National Modeling Report.

We find the House OBBBA as passed would increase annual energy bills by $5.2 billion across California households annually in 2030, swelling to more than $10 billion in higher energy costs by 2035, for a total of $47 billion during the budget window of 2025 to 2034. This is due to higher dependence on fossil fuels and higher fossil fuel prices. Although the House OBBBA leads to more fossil fuel production, prices still exhibit a net increase, as increased demand would raise prices more than increased domestic supply could lower them.

The changes envisioned by this bill would cost California's workforce 70,100 jobs in 2030 and more than 110,300 jobs in 2035 as new investment in domestic energy and manufacturing falters.

[1] As of June 2025

Annual GDP in California would shrink by $14 billion in 2030 and $25 billion in 2035. Between 2025 and 2034 – the Reconciliation budget window – cumulative GDP would shrink by $130 billion in California.

This report expands our initial national assessment of the draft Reconciliation bill released by House committees in May, incorporating methodological and policy updates summarized in the Methodology section of our corresponding national report and scaling impacts down to the individual state level. Notably, this modeling now reflects changes that were introduced between the OBBBA text released by House committees and the final House OBBBA text, including the repeal of passenger light-duty CAFE standards for model years 2024–2026, a change to the phaseout timeline for 45U credits for existing nuclear production, and more recent Congressional Budget Office estimates of agriculture conservation outlays.

This modeling also includes other important federal policy changes, including Congress' revocation of California's waiver for Advanced Clean Cars II and Advanced Clean Trucks rules, a newly added model feature to estimate the employment impacts of cancelled battery projects due to modified tax credits, various methodological improvements to the estimation of jobs and GDP impacts, and refined assumptions and modeling on fuel price changes from increases in demand for coal, natural gas, and refined oil products.

Less Electricity Supply

The House OBBBA text includes several modifications to the technology-neutral production tax credit and investment tax credit for clean electricity. 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), alongside restrictions on taxpayer eligibility and changes to rules on the use of components, subcomponents, and critical minerals from Foreign Entities of Concern.

Collectively, these changes would dramatically slow deployment of new electricity generating capacity in California at a time of rapidly growing electricity demand – total U.S. demand is forecast to increase 16 percent, or 128 GW, in the next four years.

Compared to the Current Policies scenario, the House OBBBA would decrease cumulative new electricity capacity in California by 7.7 gigawatts (GW) by 2030 and 46 GW by 2035.

By 2030, additions in California change by:

- 5.3 GW in decreased solar capacity (of which 3.97 GW is distributed solar)
- 1.02 GW in decreased wind capacity
- 1.37 GW in decreased battery storage capacity

By 2035, additions in California would change by:

- 31 GW in decreased solar capacity (6.1 GW distributed)
- 8.8 GW in decreased wind capacity
- 6.1 GW in decreased battery storage capacity

Making new clean electricity less economic will decrease new investment by utilities and independent power producers, threatening the ability to bring new capacity online in time to meet demand forecasts and significantly raising the costs to do so. 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. Clean electricity tax credits bolster new deployment by incentivizing development of new renewables.

Higher Energy Spending

Reduced clean energy investment will increase fuel and operating expenses in California. Wind and solar have no fuel costs and lower operation and maintenance (O&M) costs than fossil-fueled power plants, which means they put downward pressure on overall power generation prices compared to non-renewable generation sources. Repealing federal energy tax credits would hamper deployment of low-cost clean electricity and increase the share of electricity coming from fossil fuel power plants, thus increasing electricity generation prices. Higher demand for fossil fuels raises prices for those fuels which, in turn, makes electricity generation using those fuels even costlier.

Simultaneously, 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 would further increase energy spending.

Repealing these rules would hold back zero-emission vehicle (ZEV) sales in California, with ZEV sales in 2030 falling from 53 percent in the Current Policies scenario to only 34 percent in the House OBBBA scenario. Internal combustion engine vehicles are more expensive to operate than ZEVs, which increases annual fuel expenditures for vehicles.

We find that new leasing provisions in the House OBBBA would increase domestic production of oil and gas, lowering prices for these fuels. We also model the impact of lower royalty rates for domestic drilling, which act as lower taxes on domestically produced fuels. While greater production and lower royalty rates decrease prices, they are more than offset by price increases from higher demand for fossil fuels. More internal combustion engine vehicles on the road increases demand for gasoline and diesel, while greater reliance on natural gas in the power sector increases natural gas prices.

Some fuels see greater price increases than others; in California in 2035, we find a $0.41 per gallon increase in gasoline (approximately 8.5 percent), 4.4- and 2-percent increases in residential electricity and natural gas prices, respectively, and 6.3- and 4.7-percent increases in electricity and natural gas prices for industrial producers, respectively. We find the average California household will spend $220 more on annual vehicle fuel alone in 2030 and $460 annually in 2035.

Due to consumers' increased reliance on more expensive fossil fuels, the EI House OBBBA scenario forecasts an increase of $11 billion in fuel and O&M costs in 2030, rising to $19 billion in 2035.

Increased capital, fuel, and operating expenses from the OBBBA would raise California consumer energy bills, forcing households to pay more for their electricity and natural gas. The bill would increase household energy spending by an average of nearly $360 per year in 2030 and nearly $670 per year in 2035. Statewide, households will foot $57 billion in increased energy bills during the budget window of 2025 to 2034.

Less Manufacturing Investment and Fewer Jobs

Changes to funding and tax credits in the OBBBA will force developers to cancel a significant number of the announced clean energy manufacturing facilities while significantly delaying clean electricity deployment. The OBBBA provisions modeled would shrink GDP by more than $132 billion across the budget window from 2025 to 2034 in California as clean energy manufacturing and construction projects fail.

Diminished private sector investment in California causes significant job losses in the EI House OBBBA scenario. We find this legislation would cost California over 70,100 jobs compared to the Current Policies scenario in 2030 and more than 110,300 jobs in 2035.

This includes losing direct jobs from decreased investments in clean energy projects, indirect jobs from lower demand for the inputs to those projects, and induced jobs from lower induced economic activity (e.g., higher fuel costs mean consumers have less money to re-spend in the economy).

These numbers are likely conservative because we only explicitly model the potential cancellation of domestic battery manufacturing facilities, not other advanced manufacturing projects.

In particular, the 45X tax credit for advanced manufacturing is encouraging firms to build battery factories in the U.S., rather than elsewhere. Repealing 45X would cede this growth to other countries, like China, Mexico, Canada, and the European Union.

But language included in the OBBBA not only significantly shortens the timeline for 45X credits but would make compliance for the 45X credit so difficult to achieve as to effectively render it nonexistent. It will likely lead to the cancellation of most projects that have not already commenced construction (in fact it may lead to closure of already open plants if tax credits are removed and potentially clawed back). In effect, it would stop the burgeoning U.S. battery manufacturing industry in its tracks, disincentivizing corporations from building new factories in the U.S.

We estimate this change would result in the loss of approximately 10 GWh of battery manufacturing in California by 2032. Companies selling EVs in the U.S. would increasingly rely on foreign-sourced batteries and minerals, and fewer domestic factories would export to other countries.

Losing these announced facilities means the OBBBA would cost California 1,000 battery manufacturing jobs by 2030.

Higher Pollution And Negative Health Impacts

The OBBBA would also increase air pollution, particularly from power plants and vehicles. In California, emissions would increase by over -1.8 million metric tons of carbon dioxide equivalent (Mt CO2e) in 2030, and nearly 14 Mt CO2e in 2035 – the equivalent of adding 3 million cars to the road. Higher local air pollution would harm public health, leading to 20 additional premature deaths annually by 2030 in California and 148 annually by 2035. These estimates are limited to the impacts of the bill and do not incorporate impacts from other policies announced by the Trump administration, notably including a repeal of EPA's 111 rules for CO2 emissions from power plants.

Methodology

For information on this analysis, please refer to the national methodology.

Modeling for changes in federal clean energy tax credit and other federal funding programs can be found in Appendix A. Model settings for this analysis are also available on request. Extensive documentation on the EPS model architecture and methodology is available online.