National Association of State Energy Officials

To: State and Territory Energy Offices and Affiliate Partners
From: Sam Cramer, Senior Program Director, NASEO
Subject: Changes to Energy Incentives and U.S. DOE Loan Programs Resulting from the Passage of the *One Big Beautiful Bill Act*

Summary

The National Association of State Energy Officials (NASEO) developed this memo to inform State Energy Offices and Affiliate Partners about the changes to federal energy tax incentives and U.S. Department of Energy (DOE) loan programs enacted into law with the passage of the *One Big Beautiful Bill Act* (OBBB). The memo overviews changes to energy-related tax credits as well as non-energy tax incentives that may have value to energy projects. It also discusses changes the OBBB made to DOE's loan programs. NASEO recommends consultation with tax advisors to best understand the implications of changes of these incentives for affected energy sectors.

Energy-Related Tax Incentives

The passage of the OBBB includes changes to the following energy-related tax incentives.

Production Tax Credit/Investment Tax Credit (45Y/48E)

The OBBB phases out the Clean Electricity Production and Investment Tax Credits under Sections 45Y and 48E, respectively. Wind and solar energy facilities must commence construction within one year after the enactment of the bill (July 4, 2025) or be placed into service by December 31, 2027, to receive the full amount of the tax credit.[1] For other eligible technologies, such as geothermal, nuclear, hydroelectric power, and energy storage, the full credit is available for projects that begin construction by the end of 2033. For those projects beginning construction after 2033, the credit phases down to 75 percent in 2034, 50 percent in 2035, and expires after December 31, 2035.

Since the passage of the OBBB, President Trump has signed an Executive Order titled "Ending Market Distorting Subsidies for Unreliable, Foreign Controlled Energy Sources," which directs the U.S. Treasury to enforce the termination of the production and investment tax credits for wind and solar facilities.[2] This includes (1) issuing new and revised guidance on the "beginning of construction" rules, in which it is expected that the administration wants to tighten these rules to make it more difficult to show that construction has started, to prevent artificial acceleration or manipulation of eligibility; and (2) implementing Foreign Entity of Concern (FEOC) restrictions specified in the OBBB. It also directs the U.S. Department of the Interior to review its policies and programs to ensure that wind and solar facilities do not receive favorable treatment.

Nuclear Energy Production Tax Credit (45U)

The Nuclear Energy Production Tax Credit (Section 45U) has no change to its expiration date. However, the credit is unavailable to specified foreign entities (i.e., generally Chinese, Iranian, North Korean, and Russian entities) beginning in taxable years after July 4, 2025, and to foreign-influenced entities beginning in taxable years after July 4, 2027.

Advanced Manufacturing Tax Credit (45X) and Critical Mineral Production

The final bill's adjustments to the Advanced Manufacturing Production Credit (Section 45X) terminate wind component manufacturing eligibility after December 31, 2027. Critical mineral production continues to be eligible for this credit but will be subject to a phase-out starting in 2031. Qualified critical mineral production can claim 75 percent of the credit in 2031, 50 percent in 2032, and 25 percent in 2033. The credit terminates for critical mineral production after December 31, 2033. Furthermore, metallurgical coal is added as an eligible component but becomes ineligible for the credit after December 31, 2029. Restrictions on foreign ownership and sourcing consistent with FEOC definitions are included in the eligibility criteria.

Automotive Tax Credits[3]

The Clean Vehicle Tax Credit (Section 30D) for new electric vehicles will terminate on September 30, 2025. The credit for Previously Owned Clean Vehicles (Section 25E) will terminate September 30, 2025. The Qualified Commercial Clean Vehicles Credit (Section 45W) will terminate for any vehicles purchased after September 30, 2025. The Alternative Fuel Vehicle Refueling Property Credit (30C) will terminate for any refueling property placed into service after June 30, 2026.

Clean Hydrogen Production Credit (45V)

The Clean Hydrogen Production Credit under Section 45V will expire for new projects that begin construction after December 31, 2027.

Clean Fuel Production Credit (45Z)

The Clean Fuel Production Credit (Section 45Z) incentivizes the production of low-emission transportation fuels, including Sustainable Aviation Fuel (SAF). The OBBB extended the expiration date of this tax credit to December 31, 2029, but eliminated the excise tax credit for SAF after September 30, 2025, and reduced the value of the credit from $1.75/gallon to $1.00/gallon for fuel produced after 2025.[4]

Residential Energy Credits (25C/25D/45L)

The OBBB repeals both the Energy Efficient Home Improvement Credit (Section 25C) and the Residential Clean Energy Credit (Section 25D). For 25C, the credit is terminated for any property placed into service after December 31, 2025, and 25D terminates for any expenditures made after December 31, 2025. The New Energy Efficient Home Credit (Section 45L) terminates for any qualified homes acquired after June 30, 2026.[5]

Energy Efficient Commercial Buildings Deduction (179D)
The OBBB terminates this deduction for any property beginning construction after June 30, 2026.

Transferability, Bonus Credits, and Direct Pay
The OBBB preserves the existing bonus credits that were passed into law with the passage of the *Inflation Reduction Act* (IRA), including the energy communities and domestic content bonuses. The OBBB also extends the energy community bonus for nuclear projects in areas that have at least 0.17 percent of direct total employment related to nuclear energy development.[6]

The OBBB also preserves credit transferability under Section 6418, though it imposes new restrictions on entities linked to FEOCs. However, it eliminates clean energy facility (wind, solar, energy storage) eligibility for five-year Modified Accelerated Cost Recovery System (MACRS) accelerated depreciation.

Finally, Direct Pay is preserved in the OBBB for these and other tax incentives expanded by the IRA but, given the phase out of many energy credits, Direct Pay will have limited practical application.

Non-Energy Tax Incentives of Potential Value to Most Energy Projects

The following sections of the OBBB adjust tax incentives that do not specifically apply to energy but may be of value to energy projects and companies moving forward. NASEO encourages State Energy Officials to consult with their tax advisors to understand the implications of these changes for energy project development.

Bonus Depreciation
The final bill permanently extends "bonus depreciation" under Section 168(k), allowing taxpayers to deduct 100 percent of the cost of qualified property the tax year it is placed into service if it is placed into service on or after January 20, 2025.[7] The final bill also adopts the House bill's provision allowing taxpayers to immediately expense up to $2.5 million of the cost of qualifying property under Section 179. Finally, the bill adopts 100 percent bonus depreciation for "qualified production property" (typically property used for manufacturing, agriculture, or chemical production) that is either newly acquired or has begun construction after January 1, 2025 and before January 1, 2029 if that property is placed into service before January 1, 2031.[8]

Research and Development Deduction
The final bill permanently enables taxpayers to deduct domestic research and development (R&D) expenses beginning on or after January 1, 2025. It also enables eligible small businesses to retroactively expense R&D costs that they incurred after January 1, 2022.[9] Furthermore, it permits taxpayers who incurred domestic R&D expenses between January 1, 2022 and January 1, 2025 to deduct any remaining unamortized amounts over either a one-year or two-year period.

Opportunity Zones

The final bill permanently extends the Qualified Opportunity Zones provision and creates rolling ten-year Opportunity Zones beginning January 1, 2027.[10] The bill also updates the definition of "low-income community" and it stipulates that no tax is imposed on gains on Qualified Opportunity Fund investments held for at least ten years and up to 30 years.

Qualified Small Business Stock Benefits

The OBBB updated the Qualified Small Business Stock (QSBS) rules to further encourage investment into America's start-up companies. The bill raises the dollar thresholds for the per-taxpayer gain exclusion cap from $10 million to $15 million and changes the five-year holding period requirement to a percentage exclusion after three years have passed.[11] For example, if a stockholder holds QSBS for three years, the stockholder can claim a 50 percent taxation exclusion of the capital gains from the QSBS when it sells the stock; if it holds QSBS for four years, it can claim a 75 percent exclusion; and it can claim a full 100 percent exclusion if it holds QSBS for five years. The bill also raises the aggregate gross assets test to qualify as a small business from $50 million to $75 million.

Changes to DOE Loan Programs

The following changes will be made to DOE Loan Programs:

The OBBB repeals and rescinds the unobligated balances under the DOE Loan Program for the Advanced Technology Vehicles Manufacturing (ATVM) loan program.[12]

The remaining unobligated IRA funds for the following programs are rescinded:

- The Title XVII loan guarantee program;
- The Tribal Energy Loan Guarantee Program; and
- The Section 1706 Energy Infrastructure Reinvestment (EIR) program.

The OBBB also establishes the Energy Dominance Fund and appropriates $1 billion to DOE's Loan Programs Office (LPO), and IRA Section 1706 now authorizes loan guarantees for projects that either repower, repurpose, or expand decommissioned energy infrastructure, including nuclear, critical minerals, and fossil energy, or projects that improve or increase grid reliability or capacity and output.[13]

Considerations

The OBBB changes to tax incentives and to DOE's Loan Program impact energy projects across the country. The complex nature of tax law changes, necessary U.S. Treasury Department guidance, and consideration of the unique circumstances of various energy industry segments and projects will require additional research and discussion in the coming months. NASEO recommends that State Energy Offices and Affiliate Partners consult with tax advisors to better understand the implications of these changes for existing and projected energy projects in their states. NASEO will also include discussion of particular tax provisions during NASEO meetings and webinars. If you have any questions, please contact Sam Cramer, Senior Program Director, NASEO at scramer@naseo.org.

[1] J. Davis et. al., “Amendments to IRA Tax Credits in the Senate Budget Bill,” White & Case (July 3, 2025), https://www.whitecase.com/insight-alert/amendments-ira-tax-credits-congressional-budget-bill.

[2] “Ending Market Distorting Subsidies for Unreliable, Foreign Controlled Energy Sources,” The White House (July 7, 2025), https://www.whitehouse.gov/presidential-actions/2025/07/ending-market-distorting-subsidies-for-unreliable-foreign%E2%80%91controlled-energy-sources/?emci=5c941f3f-245c-f011-8f7c-6045bdfe8e9c&emdi=3f4b06cc-3b5c-f011-8f7c-6045bdfe8e9c&ceid=6059278.

[3] N. Elliott et. al., “One Big Beautiful Bill Act to Scale Back Clean Energy Tax Credits Under Inflation Reduction Act,” Holland & Knight (July 7, 2025), https://www.hklaw.com/en/insights/publications/2025/06/senate-moves-to-scale-back-clean-energy-tax-credits-latest-updates.

[4] “One Big Beautiful Bill: New Law Disrupts Clean Energy Investment,” Latham & Watkins (July 8, 2025), https://www.lw.com/en/insights/one-big-beautiful-bill-new-law-disrupts-clean-energy-investment.

[5] *Ibid.*

[6] D. Lonczak et. al., “Senate Votes to Advance the Big, Beautiful Bill: The Latest on Renewable Energy Tax Credits,” Pillsbury (June 30, 2025), https://www.pillsburylaw.com/en/news-and-insights/renewable-energy-tax-credits-big-beautiful-bill-senate.html?

[7] R. Sherrill and M. Sutanto Shen, “The One Big Beautiful Bill: Tax Provisions in Final Legislation Impacting Domestic and Multinational Businesses,” Wilson Sonsini (July 8, 2025), https://www.wsgr.com/en/insights/the-one-big-beautiful-bill-tax-provisions-impacting-domestic-and-multinational-businesses-in-final-legislation.html.

[8] *Ibid.*

[9] Small businesses are any corporations or partnerships whose gross receipts for the previous three years before 2025 did not exceed $31 million.

[10] R. Sherrill and M. Sutanto Shen, “The One Big Beautiful Bill: Tax Provisions in Final Legislation Impacting Domestic and Multinational Businesses,” Wilson Sonsini (July 8, 2025), https://www.wsgr.com/en/insights/the-one-big-beautiful-bill-tax-provisions-impacting-domestic-and-multinational-businesses-in-final-legislation.html.

[11] “One Big Beautiful Bill Act Doubles Down on QSBS Benefits for Startup Investors,” Frost Brown Todd Attorneys (July 3, 2025), https://frostbrowntodd.com/one-big-beautiful-bill-act-doubles-down-on-qsbs-benefits-for-startup-investors/

[12] “Department of Energy Loan Guarantee Program Update: New Energy Dominance Financing Mechanism,” Hunton (July 17, 2025), https://www.hunton.com/insights/legal/department-of-energy-loan-guarantee-program-update-new-energy-dominance-financing-mechanism#:~:text=%3E%20Insights-,Department%20of%20Energy%20Loan%20Guarantee%20Program%20Update:%20New%20Energy%20Dominance,of%20the%20OBBB%20are%20rescinded.

[13] *Ibid.*