NCSL State Trends and Federal Update

Testimony to the Vermont House Committee on Energy and Digital Infrastructure

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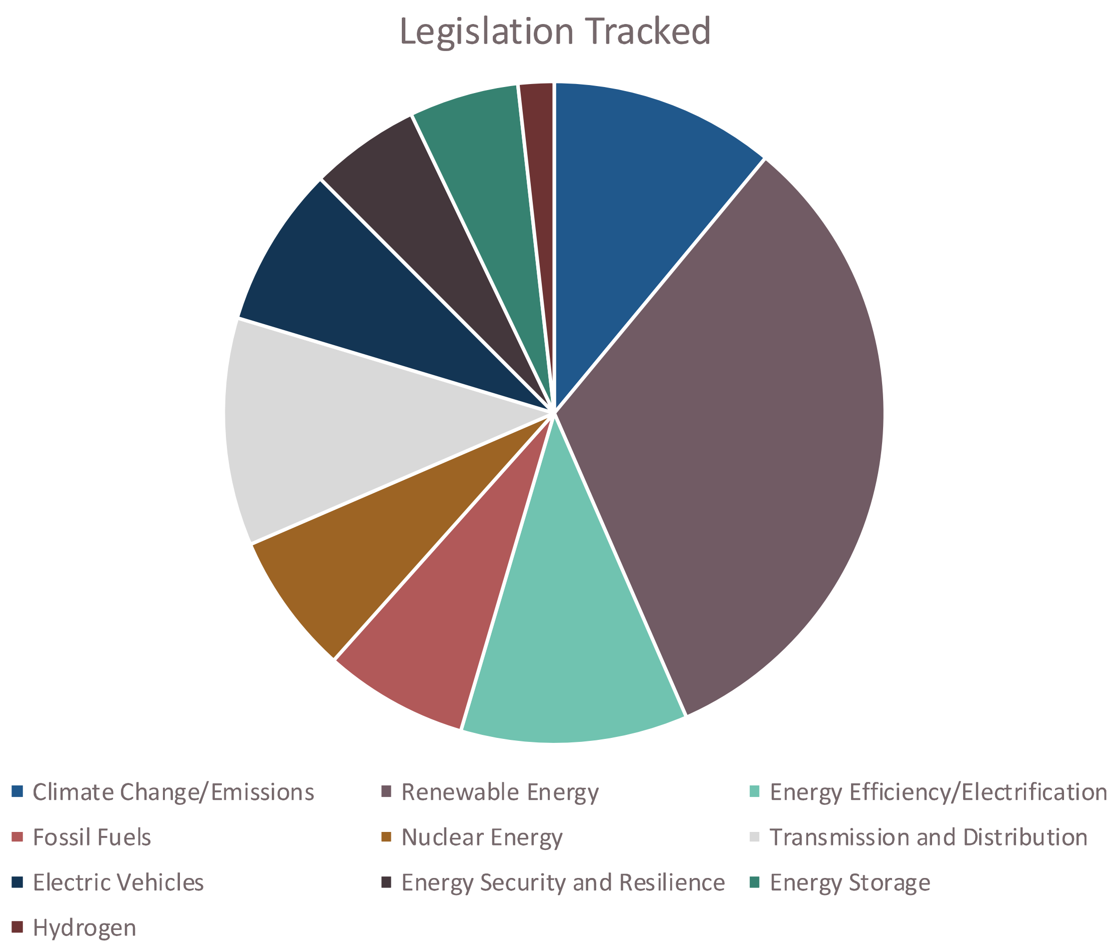
General State Trends

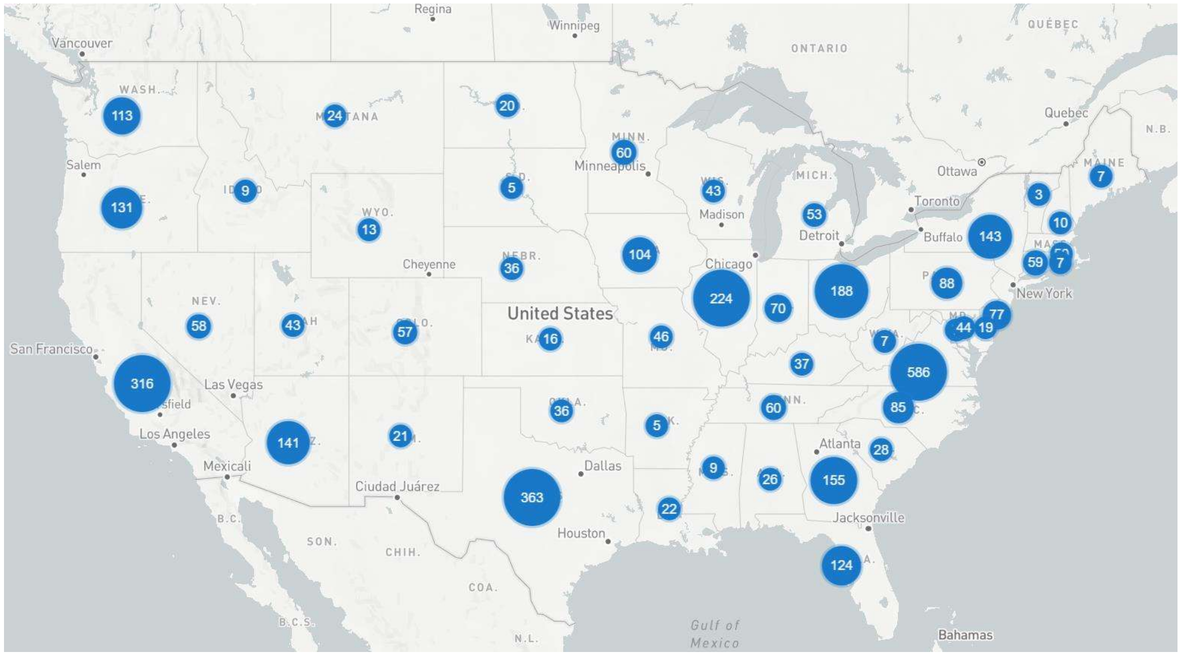
- States respond to demand driven by AI and data centers.
- Grid modernization efforts and upgrades continue.
- States are split on the future of natural gas.
- Reduction in emissions remains priority for many.
- Pursuit of new technology continues: Nuclear, carbon capture, fusion, hydrogen, storage and more.



States Meeting the Energy Demand

AI drives need for new energy as states mediate costs and reliability

- According to the Data Center Map: 4130 data centers in the U.S.
- Data centers could make up over 9% of electricity consumption by 2030.
- As of October 2025, 20 states have considered over 60 pieces of legislation addressing data center energy consumption
- State legislation: incentives for energy efficient technologies, energy reporting requirements, impact studies, and utility rate regulation.
- Other electric demand includes continued electrification and large manufacturing.



Source: Data Center Map

Note: US power demand to increase 1.7% annually
Source: USEIA

Grid Modernization and Resilience

Natural disasters continue to stress the grid, states consider options and investments

In 2024, there were 27 storms that resulted in over $1B in damages. This included flooding, wildfires, hail, tornadoes, winter storms and tropical cyclones.

- **States are taking various approaches to financing resilient infrastructure**

  This includes legislation to allow automatic rate adjustments after wildfires, add flood resiliency for qualifying improvements for commercial clean energy projects, allow utilities to issue storm recovery bonds to recover costs from hurricanes and proposed legislation to use state energy funds to support dispatchable electric generation during periods of high demand.

- **Wildfires are increasingly a national issue though Western states are leading in innovation**
  - The expanding cost and liability of utility-caused wildfires has led to significant concern surrounding their financial solvency.
  - California (AB 1054) and Utah (SB 224) have established state wildfire funding pools to supplement other insurance and provide a financial backstop for utilities. Hawaii (SB 514) and Oregon (HB 3917) have introduced similar legislation this year.
  - Texas enacted HB 145 to allow utilities to self-insure all or part of the potential liability or catastrophic property loss that could not have been reasonable anticipated.

Natural Gas Policy Varies

Natural gas represents an opportunity or challenge for many states.

- Some states have moved to define natural gas as “green energy” making the fuel source similar to renewable energy sources like wind and solar.
    - Louisiana and Indiana enacted HB 692 and SB 178 respectively to include natural gas and propane as “clean” or “green” energy opening the fuel types to state and federal funding opportunities.
- States are **split on** promoting expanded development vs. lessening their reliability on natural gas all together.
    - Some states continue to pursue electrification by reducing the reliance on fossil fuels in buildings
    - Others are preventing bans on natural gas uses.

Renewable Energy

States continue to move forward with renewable energy

- States have introduced more than 1,000 bills related to renewable energy in 2025.
- Legislation is emphasizing distributed energy resources (DERs), also known as local energy assets (LEAs) such as rooftop solar or microgrids.
    - DERs/LEAs are gaining attention due to the lack of infrastructure necessary for implementation and their energy resilience benefits.
    - With the rise of DERs/LEAs, more policies are aimed at protecting customers.

Source: SolarReviews

Nuclear Moves Forward with Bipartisan Support

States continue to introduce novel legislation focusing on nuclear at historic levels

- 15+ states now have a dedicated board, committee, task force, or outside consultant to evaluate nuclear development in the state.
- Trend in states adding nuclear to the definition of "clean" energy and development of advanced nuclear (i.e. SMRs).
- Movement toward spent-fuel recycling/reprocessing, but no national storage strategy yet
- Federal Executive Orders highlight federal support for continuing nuclear development, DOE continues funding both fuel and reactor pilot programs

Source: iStock

Demand for Storage

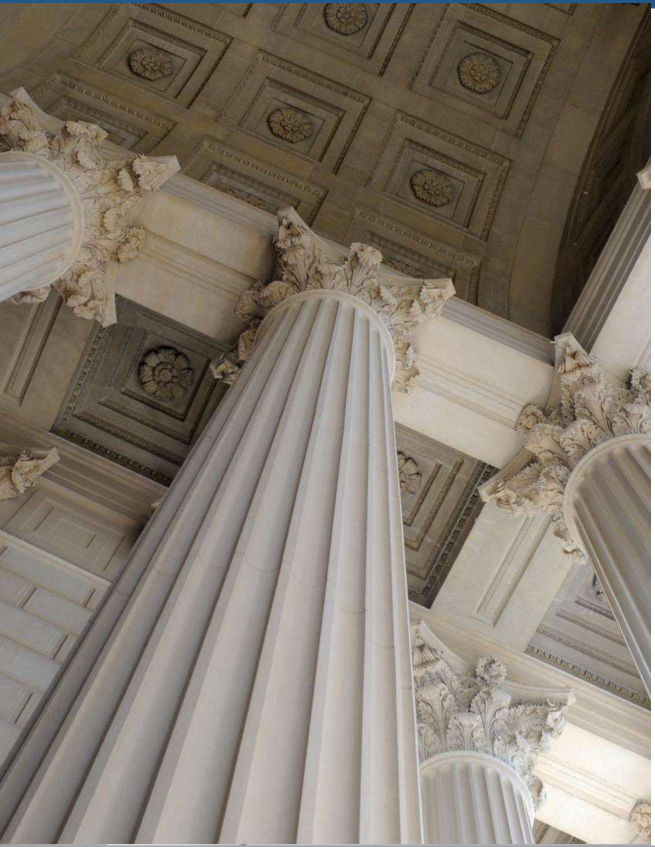
As new investments in generation and transmission expand, storage may bolster reliability and resilience

- **Almost 200 bills across at least 38 states introduced this year on energy storage.**
  - Balancing demand and intermittent resources; grid resilience and backup power supply; and potential to stabilize utility costs. Incentives for on-site energy storage or back-up power to offset commercial loads particularly a growing trend.
- **Encourage energy users to ensure their own reliable power – and support the grid when needed. Generally categorized into tax and financing options, state-funded rebates/incentives, or regulatory incentives.**
    - Maine (LD 819): business property tax exemptions for battery systems up to 2MW; primarily for on-site needs, but also grid-connected storage.
    - N.C. (SB 802, 2024) new C-PACE program – storage financed through property tax assessments.
    - Some direct rebates, e.g. Oregon (SB 827). Also new action to meet state storage targets: NJ PUC program to deploy 2,000 MW by 2030. Goal is to mitigate ratepayer costs; will initially use state funds.
    - Texas (SB 6): state grid operator can disconnect data centers from the grid during emergencies; encourages large loads to have storage and/or generation on-site.
- **Looking Ahead**
    - More bills to incentivize battery manufacturing? (Utah SB 213, 2025)
    - Compressed air storage: recent article from Penn State, research suggesting depleted oil and gas wells can be an effective energy storage option alongside geothermal.

NCSL Federal Energy Update

October 2025

Context for Vermont



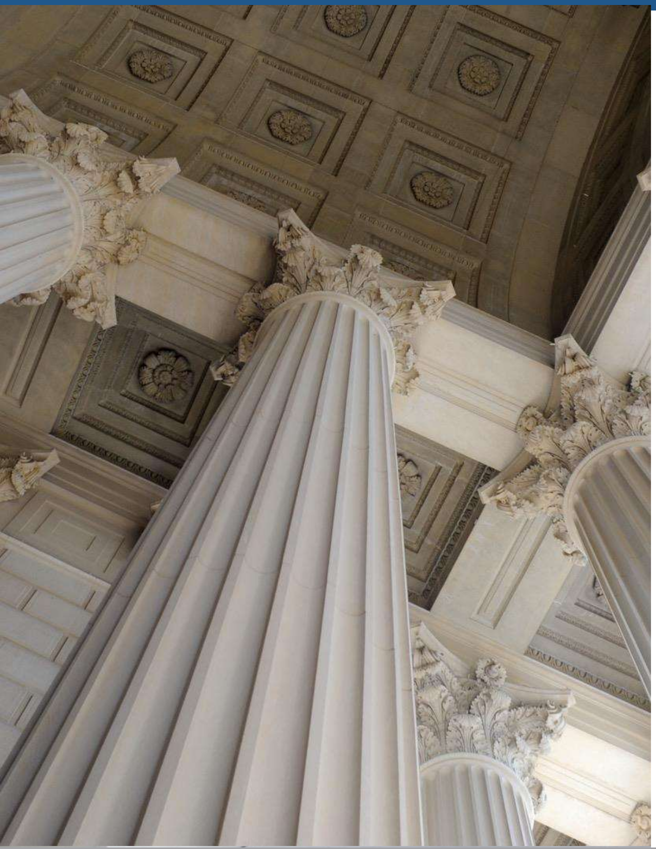
According to the Energy Information Administration:

- Vermont generated nearly 100% of its electricity from renewable sources in 2023, a larger share than in any other state.
- 57% from hydropower. 13% from wind energy, a larger share than in two-thirds of the states.
- 80% of the state's electricity supply comes from out of state since 2014

According to the Conveners Network:

- As of May 2025, Vermont had an installed clean energy generation capacity of 696 megawatts (MW) enough to power approximately 124,600 homes.
- In 2023, Vermont had 16,251 clean energy jobs, making up 5.2 percent of total jobs, the highest in the country.
- Vermont was awarded $201 million in federal funding from the IIJA and IRA.

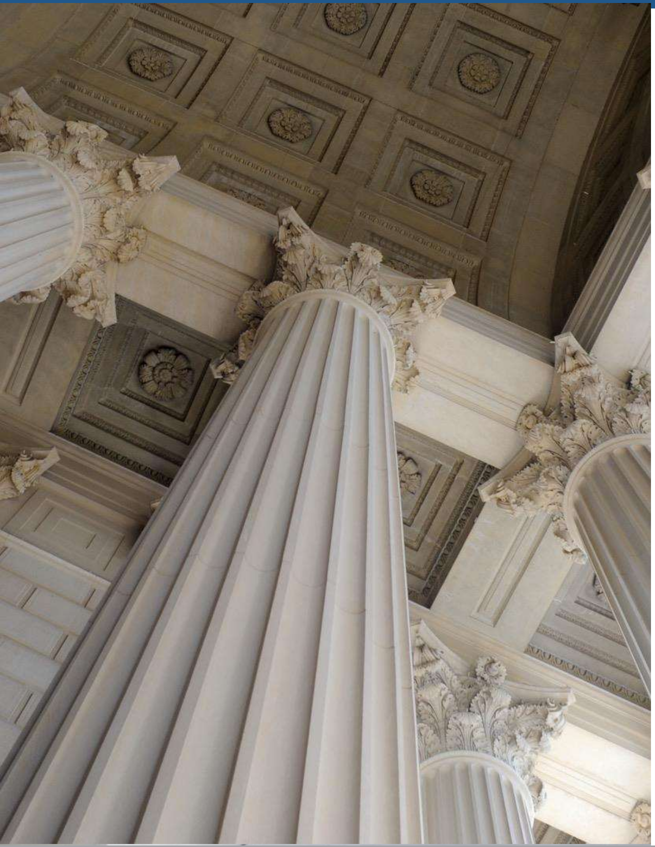
Context for Vermont: Federal Executive Actions



- The Administration has taken several **Executive Orders** that could affect Vermont's energy future:
  - Ending Market Distorting Subsidies for Unreliable, Foreign Controlled Energy Sources
  - Unleashing American Energy
  - Declaring a National Energy Emergency
  - Protecting American Energy from State Overreach
  - Zero-Based Regulatory Budgeting to Unleash American Energy
  - Accelerating Federal Permitting of Data Center Infrastructure
- Department of Energy has taken steps to eliminate ~ **$7.6 billion in funding** for more than **220 projects** nationwide. Two are in Vermont:
  - $3.4 million at UVM to study "place-based renewable power generation" and develop a program to help communities make local energy decisions.
  - $1.8 million at Beta Technologies in Burlington to develop technology to recharge batteries in "austere" environments with "little or no electric infrastructure."

Federal Legislation: Renewable Energy Credits

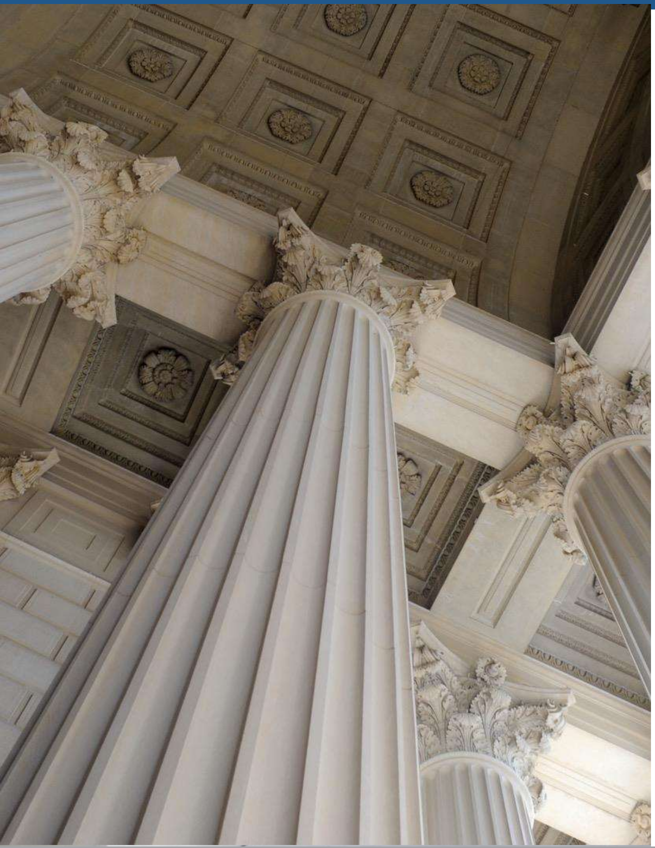
"One Big, Beautiful Bill Act"



- Tax credits for wind and solar phasing out
  - Wind and solar projects placed in service after 2027 ineligible for ~$2.7 billion in credits
  - Executive order on "Ending Market Distorting Subsidies for Unreliable, Foreign Controlled Energy Sources"
- Energy credits retained for nuclear, geothermal, hydropower or energy storage projects into 2032
- Clean hydrogen production credits extended until 2028

Federal Legislation: Residential Renewable Energy Credits

"One Big, Beautiful Bill Act"

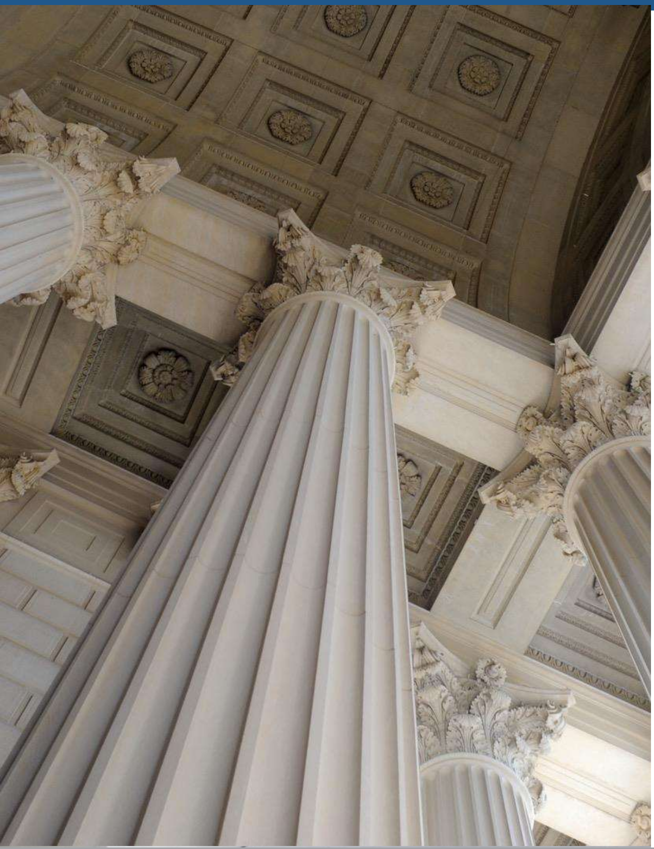


Residential credit changes

- Residential rooftop solar credits expire at the end of the year
- EV tax credits terminated September 30
- Home EV charger credits remain until June 2026

Federal Legislation: Environmental Review Process

"One Big, Beautiful Bill Act"

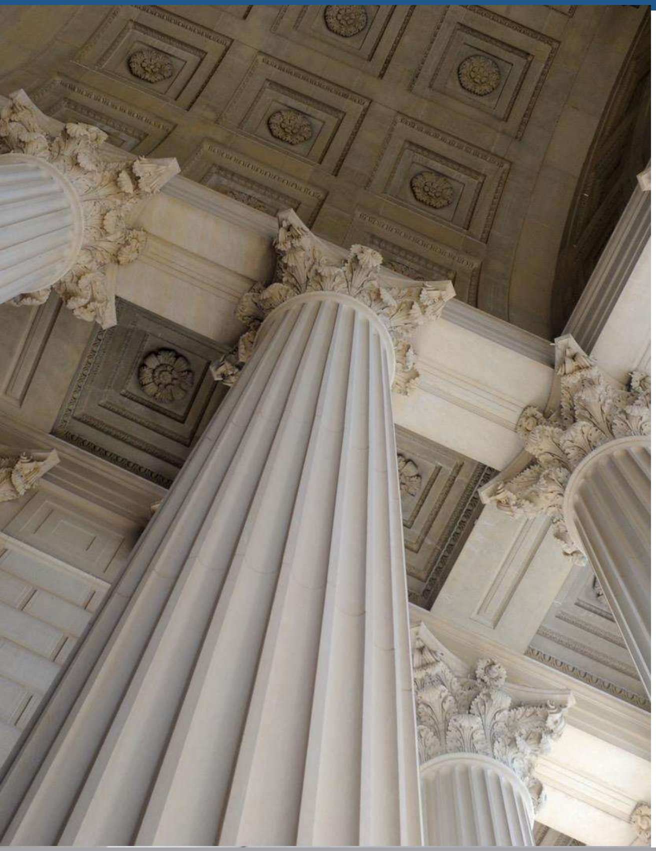


Voluntary expedited environmental review process

- Project sponsors can speed up environmental review processes by paying 125% of anticipated assessment or impact statement costs
- Council on Environmental Quality (CEQ) has 180 days to complete an environmental assessment once payment is received
- CEQ has one year to complete the environmental impact statement once a notice of intent has been published

Proposed Federal Legislation: SPEED Act

"Standardizing Permitting and Expediting Economic Development"



Significant changes to The National Environmental Policy Act (NEPA) <u>proposed</u>

- NEPA is the environmental review required for federal construction, land management and federal approvals.
- Clarifies NEPA's role as a "purely procedural" prescribed process that does not require specific outcomes.
- Expands the list of review exceptions
- Changes the standard for federal agencies' assessments and prohibits consideration of speculative effects
- Bar legal claims under many circumstances and limited judicial reviews
- Other changes aimed at increasing speed of reviews and issuance of documents/findings

Source [H.R. 4776, 119th Congress]

NCSL Resources

- **NCSL Executive Order Tracker**
  - www.ncsl.org/in-dc/2025-administration-actions-key-executive-orders-and-policies

Search: Energy

Key 2025 Trump Administration Executive Orders and Policies

Title and Overview	Type	Topic	Latest Action	Date Introduced
Maintaining Acceptable Water Pressure in Showerheads	Executive Order	Rescinds the Energy Conservation Program	04/09/2025	04/09/2025
Zero-Based Regulatory Budgeting to Unleash American Energy	Executive Order	Adding sunset provisions to federal regulations	04/09/2025	04/09/2025
Protecting American Energy From State Overreach	Executive Order	Examining state energy laws and regulations	04/08/2025	04/08/2025
Regulatory Relief for Certain	Executive Order	Federal exemptions	04/08/2025	04/08/2025