

# 2025 Virginia Legislative Session

Summary and commentary on new laws  
addressing climate change



# Notable climate laws from the 2025 session of the Virginia General Assembly

During the 2025 session of the Virginia General Assembly, legislators introduced several bills addressing climate change, with some signed into law and others failing to gain sufficient support. This legislative session included a particular focus on the nexus between electricity use and data center development. Given that Northern Virginia (NoVa) hosts the largest concentration of data centers in the world, these bills are likely to have impacts that ripple beyond the Commonwealth of Virginia. Below is a brief overview of this legislation with commentary on implications for climate stakeholders.

## Legislation enacted in 2025

### **HB 1779** Carbon-free energy or clean energy; definition of fusion energy

**Summary:** HB 1779 adds fusion energy to the list of energy generation sources that qualify as “carbon-free energy” or “clean energy” alongside solar, wind, hydroelectric, wave, tidal, geothermal, and nuclear energy.

**Outcome:** HB 1779 passed both the House of Delegates and the Senate. Governor Youngkin signed the bill into law on March 19, 2025.

**Commentary:** HB 1779 expands Virginia’s options for achieving its carbon-free electricity goals by including fusion energy in the definition of clean energy. This move aligns with the state’s commitment to advancing clean energy technologies and reducing greenhouse gas emissions. The bill follows in the footsteps of California—which became the first state to classify fusion energy as a distinct technology, separate from traditional nuclear fission, when Governor Newsom signed [AB-1172](#) into law in 2023. The following year, Governor Inslee of Washington signed [HB 1924](#) into law, incorporating fusion energy into the state’s clean energy policies.

1. Data Center Map. n.d. Data Center Alley & Northern Virginia - The World's Densest Data Center Hub. Data Center Map. [accessed 2025 Apr 3]. <https://www.datacentermap.com/content/nova/>.

## **HB 1821 Electric utilities; accelerated renewable energy buyers, zero-carbon electricity**

**Summary:** HB 1821 expands Virginia's [Accelerated Renewable Energy Buyers](#) (ARBs) program to allow for certain large utility customers to get credit for using battery energy storage systems. Utility customers enrolled in the ARBs program are eligible for exemptions to certain utility fees.

**Outcome:** HB 1821 passed both the House of Delegates and the Senate. Governor Youngkin [suggested changes](#) to the bill known as "Governor's Recommendations" on March 24, 2025. These changes would substitute the text of the bill that the legislature passed an [updated version](#). The General Assembly entered a "Reconvened Session" on April 2, 2025 and rejected the Governor's recommendations. Despite the General Assembly rejecting the Governor's recommendations, he signed the bill on May 2, 2025.

**Commentary:** By opening additional incentives to battery energy storage, HB 1821 will accelerate the deployment of the technology. Virginia joins a growing list of states that provide incentives for energy storage, including California through their Self-Generation Incentive Program (SGIP) and New Jersey through their Energy Storage Incentive Program (NJSIP).

## **HB 1934/SB 1192 Electric utilities; generation of electricity from renewable and zero carbon sources**

**Summary:** HB 1934 amends regulations for electric utilities in an attempt to spur solar power buildout on school property. The bill allows electric utilities to count renewable energy projects on or adjacent to public elementary or secondary schools towards their renewable energy portfolio standard (RPS) program compliance.

**Outcome:** HB 1934 passed both the House of Delegates and the Senate. Governor Youngkin [suggested changes](#) to the bill known as "Governor's Recommendations" on March 24, 2025. These changes would substitute the text of the bill that the legislature passed with an [updated version](#). This version removed the text of the bill and inserted unrelated language from a bill regarding coal combustion residuals that was defeated in committee during the regular session. The General Assembly entered a "Reconvened Session" on April 2, 2025 and rejected the Governor's recommendations. Despite the General Assembly rejecting the Governor's recommendations, he signed the bill on May 2, 2025.

**Commentary:** HB 1934 aims to encourage the development of clean energy projects in educational settings, potentially benefiting both schools and utilities. By expanding the scope of qualifying projects, HB 1934 supports Virginia's broader efforts to transition to clean energy sources and meet its goal of [100% carbon-free electricity by 2050](#).

## **HB 2346/SB 1100 Virtual power plant pilot program; each Phase II Utility shall petition SCC for approval to conduct**

**Summary:** HB 2346 requires utilities in Virginia to establish a virtual power plant (VPP) pilot program by December 1, 2025. The program aims to optimize electric demand through various technology applications. The bill mandates a 450 MW pilot for Dominion and a 150 MW pilot for Appalachian Power Company. The State Corporation Commission (SCC) will evaluate electric grid capacity needs and the ability of VPPs to provide grid services, particularly during peak demand periods. Participating customers with distributed energy resources like solar panels, battery storage, and smart appliances can receive bill credits. The SCC will assess the pilot in 2028 to establish a permanent VPP program.

**Outcome:** HB 2346 passed both the House of Delegates and the Senate. Governor Youngkin [suggested changes](#) to the bill known as “Governor’s Recommendations” on March 24, 2025. These changes would substitute the text of the bill that the legislature passed with a [simplified version](#). This version only requires the SCC to “evaluate and assess the benefits, impacts, best practices, and implementation recommendations” of virtual power plant programs. It does not direct the state’s utilities to implement VPP pilot programs. The General Assembly entered a “Reconvened Session” on April 2, 2025 and rejected the Governor’s recommendations. Despite the General Assembly rejecting the Governor’s recommendations, he signed the bill on May 2, 2025.

**Commentary:** Virtual Power Plants, also known as demand response programs, are a mechanism that utilities can use to encourage peak demand to shift to other periods when electricity is more plentiful. This can be achieved through incentives or price signals. These types of programs can sometimes save the grid from costly upgrades and even reduce the need for peaker plants. Peaker plants are power generators that utilities rarely use, but maintain for “peak” grid demand, which is usually for only a few hours at a time. Historically, peaker plants have been older fossil fuel plants so they are dirtier and have a higher level of emissions per unit of energy generated. Reducing the need for peaker plants is a key step in reducing greenhouse gas emissions on the grid.

# Failed legislation

The bills listed below failed to become law in 2025. Some didn't make it all the way through the legislature and others were passed by both chambers of the Virginia General Assembly, but were vetoed by Governor Youngkin.

## **HB 2413/SB 1021** Electric utilities; integrated resource plans, Phase I or Phase II files updated plans, etc.

**Summary:** HB 2413 introduces reforms to the Integrated Resource Planning (IRP) process for electric utilities. The bill would have extended the planning horizon from 15 to 20 years, and mandated utilities incorporate advanced technologies and consider the social cost of carbon in cost-benefit analyses. The bill aimed to modernize energy planning by enhancing transparency, allowing greater stakeholder input, and requiring utilities to disclose modeling data.

**Outcome:** HB 2413 passed both the House of Delegates and the Senate before Governor Youngkin vetoed the bill on March 24, 2025.

**Commentary:** HB 2413 proposed changes would have aligned with Virginia's commitment to achieving 100% carbon-free electricity by 2050 under the Virginia Clean Economy Act. This bill sought to ensure more accountable energy planning with more stakeholder engagement while addressing environmental and economic considerations. In Governor Youngkin's [veto message](#) on HB 2413, he noted his opposition to the goals of the Virginia Clean Economy Act and said the SCC possesses the authority to alter the IRP process on its own as it sees fit.

## **SB 823** Electric utilities; construction of renewable energy facilities

**Summary:** SB 823 requires Dominion Energy Virginia and Appalachian Power to develop and submit comprehensive workforce plans when constructing renewable energy facilities. The bill aimed to enhance renewable energy development and workforce considerations in the state. It mandates electric utilities to provide detailed plans to the SCC for the construction of renewable energy projects.

**Outcome:** SB 823 passed both the House of Delegates and the Senate before Governor Youngkin vetoed the bill on March 24, 2025.

**Commentary:** Building out the infrastructure necessary for a clean energy transition will require a variety of skilled and specialized positions. This legislation serves to help Virginia create jobs in the clean energy sector and promote economic growth. In Governor Youngkin's [veto message](#) on SB 823, he claimed that the new requirements would "lengthen the time for approval" which he said would increase costs for ratepayers.

## **SB 960 Electric utilities; data center cost allocation**

**Summary:** SB 960 aims to address the impact of data center growth on electricity costs. The bill would have directed the SCC to examine whether non-data center customers were subsidizing data center energy costs. This bill also would have required the SCC to determine if utilities were using reasonable customer classifications and, if necessary, adjust the cost allocation formula to protect other utility customers from increasing electricity costs related to data center growth. The SCC would have had until January 1, 2026, to complete this task.

**Outcome:** SB 960 initially passed the Senate but changes were made before passage in the House. Although the two chambers designated delegates to a Conference Committee to resolve the differences, they were unable to come to an agreement before the legislative session concluded.

**Commentary:** SB 960 was part of broader efforts to ensure fair energy cost distribution, and protect residential and small business customers from potential rate increases due to data center expansion. Supporters of SB 960 say that the sudden energy demand from data centers may lead to higher energy prices for some ratepayers, who would also endure the risks and environmental impacts associated with fossil fuel generation.

## **HB 2035 High-energy facilities; water and energy usage information reports statewide clearinghouse established**

**Summary:** HB 2035 would establish reporting requirements and a statewide clearinghouse for water and energy usage data from high-energy facilities, such as data centers. Facility owners would have had to submit quarterly reports detailing operational resource usage to Virginia's Department of Environmental Quality starting May 1, 2026.

**Outcome:** The House Committee on Labor and Commerce tabled the bill in January after its introduction on January 7, 2025.

**Commentary:** The expansion of the data center industry around Virginia places extreme strain on the state and regional water and energy supplies. HB 2035 would have enhanced transparency and environmental oversight of high-energy operations like data centers and in doing so, increased data center operators accountability. Ultimately, transparency like this might encourage the use of more efficient technologies and empower communities to make informed decisions about data center siting.

## **HB 2027 State Corporation Commission; certificate of operation for high load facilities**

**Summary:** HB 2027 requires that high load facilities, such as data centers, must obtain a certificate of operation from the SCC. The bill defines high load facilities as those with electricity demand of 100 megawatts or greater. Under this bill, the SCC would only issue certificates if the facility met specific criteria, including no adverse effects on utility rates, service reliability, and environmental compliance. Additionally, the bill also would have required facilities to transition to zero-carbon resources, reaching 100% by 2040.

**Outcome:** Similar to HB 2035, the House Committee on Labor and Commerce tabled the bill in January after its introduction on January 7, 2025.

**Commentary:** The JLARC study found that data center load growth may cause higher electricity costs for some residential utility customers. The study also found significant risks of stranded assets if this growth does not materialize—or if a single data center company changes its business plans. HB 2027 would have empowered the SCC to investigate and determine the public interest of data centers in order to better manage their development.

## **HB 2578 Retail Sales and Use Tax; exemption for data centers, reports.**

**Summary:** HB 2578 proposes new requirements for data centers to maintain their sales and use tax exemption. Key provisions included requiring backup generators to meet specific emissions standards by July 1, 2027, and requiring data centers to purchase a percentage of their annual electricity from clean energy resources by July 1, 2030. Under this bill, data centers would have to demonstrate investment in energy efficiency measures, including certain certifications and green building standards by July 1, 2030. Additionally, the bill would have directed Virginia's Department of Energy to develop strategies for reusing data center waste heat and required utilities to file voluntary tariffs for large customer clean energy procurement.

**Outcome:** The House Committee on Labor and Commerce tabled the bill in January after its introduction on January 12, 2025.

**Commentary:** HB 2578 intended to balance data center growth with environmental concerns and grid stability. The JLARC study found that in FY2023 data centers in Virginia benefited from \$928 million in tax savings as a result of changes to the state's tax code in 2010 intended to boost the data center industry. This bill would have made those savings contingent on adopting more energy efficient and sustainable practices.

## **HB 1601/SB 1449 Data centers; site assessment for high energy use facility**

**Summary:** HB 1601 establishes new requirements for siting high energy use facilities (HEUFs), particularly large data centers. The bill mandates that localities require site assessments for HEUFs consuming 100 megawatts (MW) or more of power. These assessments must examine noise impacts on nearby residences and schools within 500 feet. Localities may also require evaluations of effects on water resources, agricultural land, parks, historic sites, and forests.

**Outcome:** HB 1601 passed both the House of Delegates and the Senate. Governor Youngkin [suggested changes](#) to the bill known as “Governor’s Recommendations” on March 24, 2025. These changes would delay the bill’s enactment, requiring the legislature to vote on it again in 2026. The suggestions would also change the mandate that localities require site assessments into an option for localities. The General Assembly entered a “Reconvened Session” on April 2, 2025 and rejected the Governor’s recommendations. The Governor vetoed the bill on May 2, 2025.

**Commentary:** HB 1601 aims to enhance transparency and informed decision-making for local officials when considering data center proposals. The bill aligns with recommendations from the Joint Legislative Audit and Review Commission’s (JLARC) 2024 [study on data center impacts](#).

## **HB 1883/SB 1040 Electric utilities; renewable energy portfolio standard program requirements**

**Summary:** HB 1883 amends the RPS program requirements for Dominion Energy in Virginia. The bill adjusts the annual percentage targets for renewable energy sales. It allows Dominion Energy to recover costs associated with previously approved or pending petitions for cost recovery related to the RPS program through December 31, 2032.

**Outcome:** HB 1883 passed both the House of Delegates and the Senate. On March 24, Governor Youngkin [suggested changes](#) to the bill known as “Governor’s Recommendations.” These changes would substitute the text of the bill that the legislature passed with an [updated version](#) that would curtail the ambitions of the bill and delay the timeline for the state’s RPS program by three years. The General Assembly entered a “Reconvened Session” on April 2, 2025 and rejected the Governor’s recommendations. The Governor vetoed the bill on May 2, 2025.

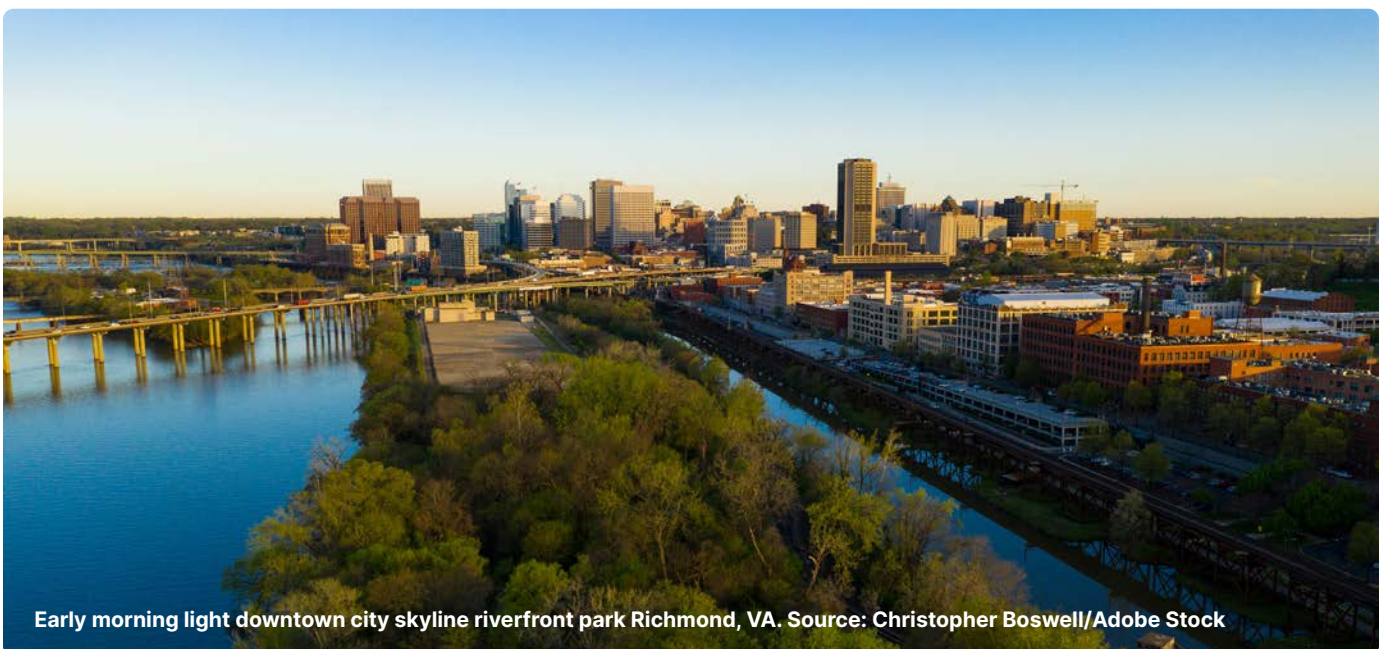
**Commentary:** HB 1883 aims to refine the implementation of Virginia’s Clean Economy Act, which mandates 100% renewable energy generation by 2045 for Dominion Energy. HB 1883 received bipartisan support, passing both chambers of the legislature.

## **HB 2537/SB 1394 Energy storage requirements; Department of Energy, et al., to develop model ordinances, reports**

**Summary:** HB 2537 significantly increases energy storage capacity targets for the state's utilities. It requires the state's two major utilities to deploy at least 10,000 MW of energy storage by 2045. HB 2537 mandates Dominion Energy must acquire 5,220 MW of short-duration and 3,480 MW of long-duration storage, and require Appalachian Power to deploy 780 MW of short-duration and 520 MW of long-duration energy storage by 2045. The bill also directs the SCC to conduct a technology demonstration program for long-duration storage. Additionally, it requires the Virginia Department of Energy and other state agencies to develop model ordinances for localities to regulate energy storage projects by December 1, 2025.

**Outcome:** HB 2537 passed both the House of Delegates and the Senate. Governor Youngkin suggested changes to the bill known as "Governor's Recommendations" on March 24, 2025. These changes would substitute the text of the bill that the legislature passed with an updated version. The General Assembly entered a "Reconvened Session" on April 2, 2025 and rejected the Governor's recommendations. The Governor vetoed the bill on May 2, 2025.

**Commentary:** Storage is critical to providing reliable, dispatchable, clean power to meet growing energy demand while supporting the clean energy transition. HB 2537 intends to modernize Virginia's energy infrastructure, enhance grid resilience, and support the state's transition to clean energy. The bill will support the deployment of renewable energy by mandating the deployment of a complementary technology.



Early morning light downtown city skyline riverfront park Richmond, VA. Source: Christopher Boswell/Adobe Stock

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