



Virginia State Capitol

Virginia Energy Plan

Executive Brief



October 2026



COMMONWEALTH of VIRGINIA

Office of the Governor

Abigail D. Spanberger
Governor

October 1, 2026

My fellow Virginians,

Every four years, the Commonwealth develops an Energy Plan to guide our energy policy and decision-making for the years ahead.

We have written this Energy Plan at a moment unlike any in the recent past. Electricity demand is rising rapidly, and our energy system will need to grow at a pace we have not seen in more than 80 years.

To meet this moment, my Administration started by engaging thousands of Virginians — residents, businesses, utilities, advocates, and local government leaders — through public listening sessions, stakeholder engagement meetings, and a statewide survey. We wanted to know what they need from our energy system.

Across our Commonwealth, Virginians conveyed the same priorities. Energy should be reliable, with enough power to support Virginia's growth. It should be clean and built in a way that protects the health of our communities and the natural resources around us. It should be local, so the jobs and benefits of our energy growth stay here in Virginia. And universally, everyone said it must be affordable.

Understanding the complexity of this moment, we knew that this year's Energy Plan needed to do more than present a prescriptive path forward — it needed to analyze the options before us.

To achieve this, we used sophisticated modeling and analysis to develop this Energy Plan — the same kind of modeling utilities use to decide what to build, when, and at what cost. In fact, Virginia Energy is now one of the few state energy offices in the country that can conduct this modeling in-house.

The Energy Plan models four primary pathways to explore the costs, benefits, and realities of each potential energy mix. Some models lean more on local energy — like rooftop solar and batteries. Other models build more nuclear power here at home and rely less on electricity from

out of state. While others look at what would happen if solar deployment were limited or no new gas plants were built. Notably, each of the four models keeps Virginia on a path to net-zero emissions by 2050.

Further, the Energy Plan does not simply consider the cost of building new power — it considers the potential trade-offs that come with each modeled path forward so that they are part of the discussion from the start.

And, importantly, the Energy Plan also models the cost of walking away from our clean energy commitments. While some might question whether abandoning Virginia's Clean Economy Act or once again exiting the Regional Green House Gas Initiative could produce cost savings, the model quantitatively disputes this notion. Not only would taking these actions nearly double carbon emissions over the next two decades, doing so would also cost Virginians an estimated \$145 billion in health impacts.

In producing this Energy Plan, we have clearly demonstrated that there are multiple paths forward that would allow Virginia to meet our clean energy goals, strengthen our energy mix, and power growth, investment and innovation.

In presenting four similar, yet different modeled paths forward, rather than one prescriptive path, we are recognizing that trade-offs exist with every energy choice, that unforeseeable circumstances may influence our options, and that advancing technologies will impact our choices and outcomes into the future.

With this recognition, the work of our Administration — in concert with the General Assembly — is to ensure Virginia is prepared to be nimble, responsive, innovative in delivering an affordable, reliable, clean energy future.

I want to extend my appreciation to the Virginians who helped inform this Energy Plan, the Virginia Energy team for their tireless work, modeling, and data analyses, and the members of my Administration who worked to deliver this 2026 Virginia Energy Plan.

I look forward to working with legislators, local leaders, businesses, utilities, and communities across the Commonwealth as we demonstrate all that is possible when we deliver affordable, reliable, and local clean energy to power a thriving economy — today and for generations to come.

Sincerely,

A handwritten signature in black ink, reading "Abigail D. Spanberger". The signature is fluid and cursive, with the first name "Abigail" being more prominent and the last name "Spanberger" following in a similar style.

Abigail D. Spanberger

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Introduction

Virginia is at a pivotal moment. Rapid growth in electricity demand is creating new opportunities for jobs, investment, and innovation, but it is also putting pressure on household bills, electric grid reliability, and the communities that host new infrastructure. The choices Virginia makes today will determine whether Virginia becomes a state for energy innovation and will shape whether families can afford their bills, whether businesses can grow with confidence, and whether communities share equitably in the benefits of growth.

The 2026 Virginia Energy Plan (VEP) presents a practical path forward to meet this moment. It aims to deliver tangible improvements today while building the energy system that Virginia needs for the future. For families, that means affordable and more predictable energy costs, comfortable and efficient homes, cleaner air, and dependable service. For businesses, it means affordable, available, reliable power that supports investment, innovation, and long-term growth. This effort is guided by a unified long-term vision:

Virginia's Energy Vision

Deliver affordable, reliable, and local clean energy that works for every community in Virginia and powers a thriving economy—today and for generations to come.

As laid out in this Energy Plan, Virginia has multiple pathways towards a net zero power sector by 2050 by pursuing a Clean-First, Least-Cost approach: deploying technologies such as solar, storage, distributed energy resources (DERs), and demand flexibility, furthering energy efficiency, and improving utilization of the existing grid in the near term, while advancing clean firm resources—including advanced nuclear and offshore wind—to meet long-term needs. This approach positions the Commonwealth to lead in energy innovation, build homegrown supply chains and skilled careers, and deliver lasting local benefits.

The VEP focuses primarily on Virginia's electricity system and the path to a carbon free electric power sector under the Virginia Clean Economy Act (VCEA), with some additional consideration of transportation energy use and costs. Virginia's [2026 Comprehensive Climate Action Plan](#) (CCAP) addresses economy-wide pathways to net-zero greenhouse gas emissions by 2050 in line with the Commonwealth's Clean Energy Policy goals.

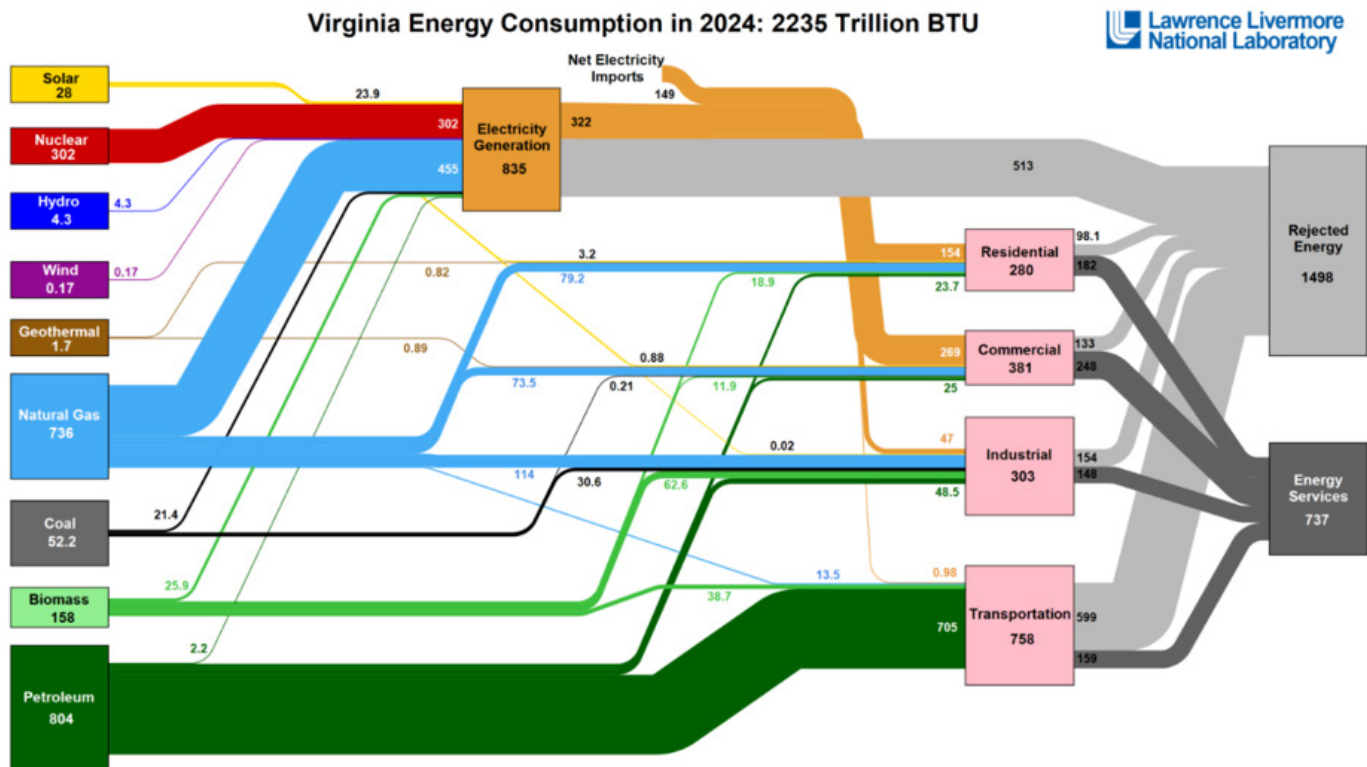
Statewide public engagement, stakeholder input sessions, and energy system modeling informed the VEP and its recommendations. This Executive Brief summarizes Virginia's changing energy landscape, outlook through 2050, and the strategies and actions needed to deliver this vision. See the 2026 Virginia Energy Plan for additional detail.¹

¹ The full 2026 Energy Plan contains all relevant citations.

The Current State of Energy in Virginia

Currently, Virginia's largest energy use is electricity generation to power homes, businesses, and industry, with petroleum for transportation the second largest use. In 2024, Virginia's electricity supply was primarily from natural gas, nuclear power, and electricity imports, with solar and offshore wind playing a growing role.

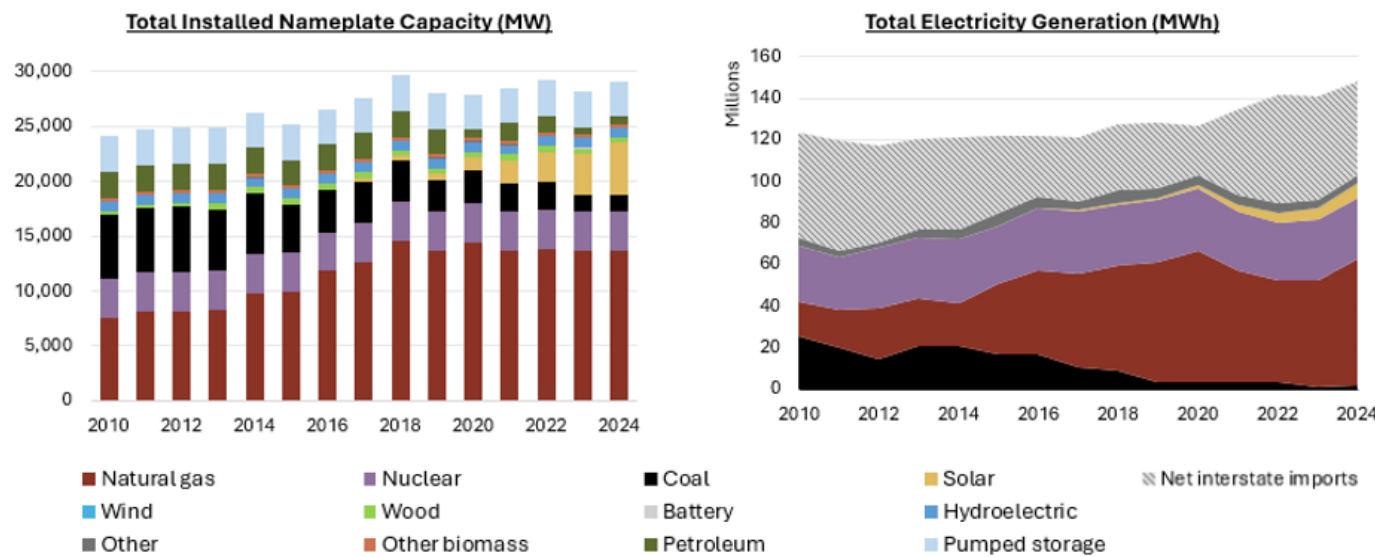
Figure 1: Virginia's Energy Consumption in 2024 (trillion BTU)



A Changing Electricity System

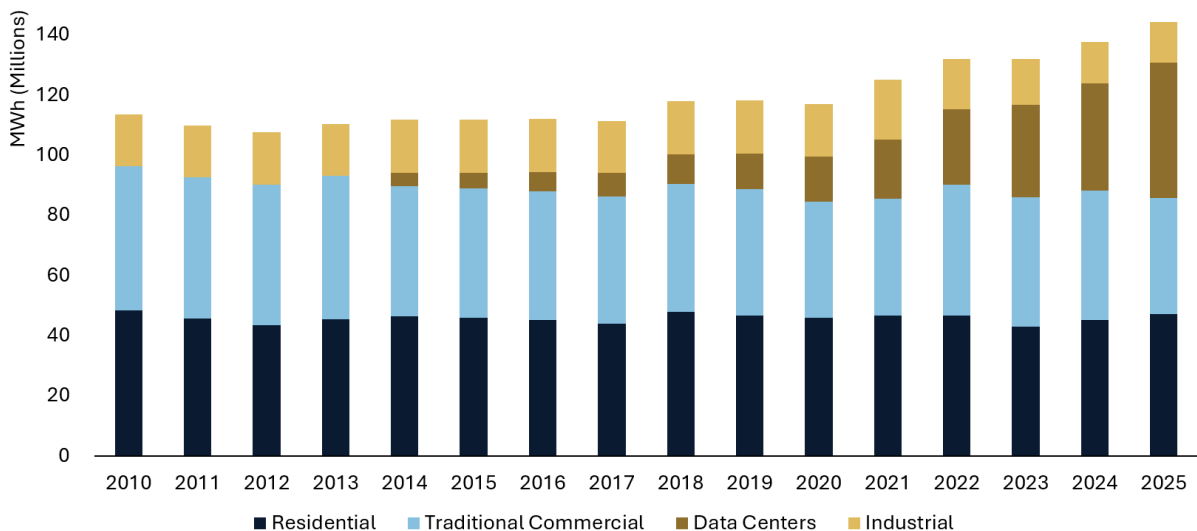
Virginia's electricity system is changing rapidly as the state's power sector shifts towards cleaner generating resources and electricity demand grows rapidly. Solar has become the largest source of annual capacity additions, coal generation has declined, natural gas remains a major source of electricity, and nuclear continues to provide reliable, carbon-free power. Distributed solar and storage are also growing, creating new opportunities to meet local needs and make better use of the existing grid. Virginia imports about 30-40% of its annual electricity use—the highest percentage in the nation—making regional transmission capacity and PJM Interconnection (PJM) market conditions important factors in the Commonwealth's reliability and electricity costs.

Figure 2. Total Virginia Installed Nameplate Power Capacity (MW) and Electricity Generation (MWh), 2010-2024



After a decade of relatively steady demand, electricity use has markedly increased in recent years. While residential, industrial, and commercial use has remained comparatively steady, data center use has increased at a far greater rate. Efficiency gains have offset some of the impacts of population growth on demand. Transportation electrification has started contributing to electricity demand but remains a relatively small portion today.

Figure 3. Virginia electricity consumption (MWh) by end-use sector



Virginia’s power system serves customers through two major investor-owned utilities (IOUs)—Dominion Energy Virginia (Dominion) and Appalachian Power (APCo)—along with 13 electric cooperatives and several municipal utilities. Both IOUs operate under the VCEA, which was signed

into law in 2020 and requires Dominion to achieve carbon free generation by 2045 and APCo by 2050. Electricity generation in Virginia is also subject to the Regional Greenhouse Gas Initiative (RGGI), which Virginia rejoined in 2026 and which steadily lowers the amount of carbon dioxide pollution that power plants may emit over time. VCEA and RGGI help drive clean energy investment and reduce harmful air pollution; from 2021–2023, RGGI generated more than \$800 million for low-income energy efficiency and climate resilience programs across Virginia, as power-sector carbon emissions fell 22% in this same period.

Energy Affordability

Energy affordability is a central priority as Virginia’s electricity system expands to meet rising demand and the state’s clean energy goals. About 17% of Virginia households—more than 550,000, representing primarily low-income households—face high energy burdens, meaning home energy costs exceed 6% of total household income. Transportation fuel is also a major household expense and often costs more annually than a home electric bill. Gasoline price increases since the start of the Iran conflict in 2026 have added more than \$1,000 in annual costs for the average Virginia household.

Virginia’s inflation-adjusted electricity prices declined from 2019 through 2024, but prices have begun to rise again as rapid demand growth across the PJM region outpaces new generation and transmission infrastructure, contributing to higher regional capacity costs and increasing transmission congestion costs.

Customer bills also reflect the cost of replacing aging infrastructure, strengthening the grid against severe weather, and building new infrastructure to serve new customers. These investments are necessary to maintain reliable service and support economic growth, but energy providers can mitigate cost pressures through prudent, cost-effective planning and by pursuing lower-cost options where available. The current IOU model can favor large capital investments over lower-cost alternatives—such as energy efficiency, grid-enhancing technologies, or non-wires alternatives—raising infrastructure buildout costs. Supply chain constraints, import tariffs, volatile fuel prices, and inflationary pressures have also raised the underlying cost of new energy projects across all technology types.

Under status quo conditions, utility plans project increased residential electricity prices of ~60% for Dominion customers and ~17% for APCo customers over the next decade to replace aging equipment and build infrastructure to serve new demand. The recommendations in this Plan are designed to help reduce those projected increases by prioritizing the lowest-cost resources, improving energy efficiency and grid utilization, strengthening competitive procurement, aligning utility incentives with more affordable outcomes, and ensuring fair cost allocation practices so that large new customers bear the costs of the infrastructure their growth requires.

Meeting Virginia's Electricity Needs through 2050

To evaluate the choices ahead, the VEP uses capacity-expansion modeling—the same type of analytical approach utilities use to assess what resources to build, when to build them, and at what cost. This 2026 Energy Plan is the first VEP to incorporate capacity expansion modeling, reflecting Virginia Energy's commitment to developing its own modeling and forecasting capabilities—making it one of the few state energy offices in the country to have these capabilities in-house to date.

The model tests three electric demand outlooks and multiple policy pathways through 2050 to evaluate a variety of system pathways and various tradeoffs across system costs, reliability, emissions, health impacts, infrastructure needs, and policy objectives. This analysis enables a new level of sophistication in making more data-driven policy decisions. These results provide directional insight across a range of potential system pathways, but actual buildouts will be sensitive to shifting market dynamics—including fuel costs, technology pricing, load growth, and evolving PJM capacity accreditation rules. This modeling does not capture localized, nodal-level transmission constraints.

The modeling finds that Virginia has multiple pathways to a net-zero power system by 2050 while meeting projected electricity demand. Across scenarios, Virginia's electric grid requires sustained deployment of solar, storage, DERs, energy efficiency solutions, clean firm generation, transmission, and continued regional electricity imports. It also shows that Virginia's near-term choices matter: flexible, fast-to-deploy resources can reduce peak demand, avoid or defer costly infrastructure, and improve reliability while longer-term, clean firm resources are scaled.

Modeling Scenarios

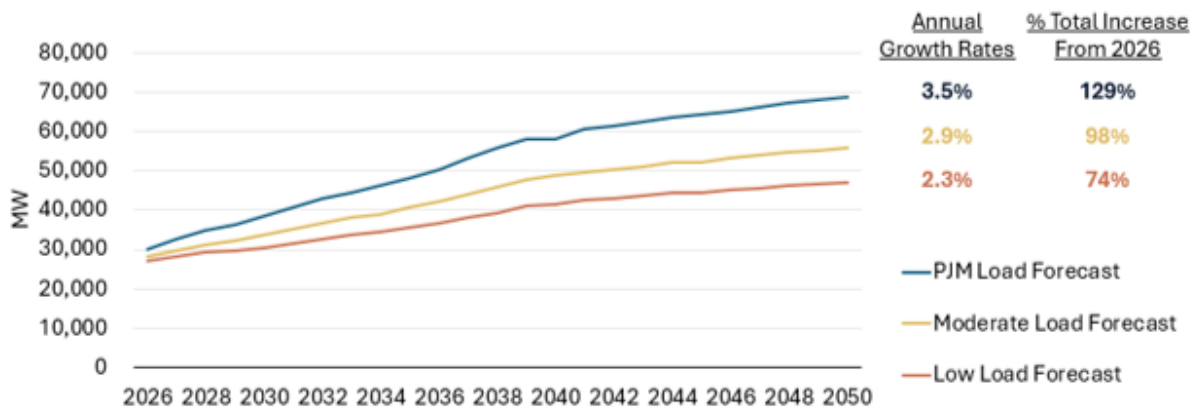
Virginia's growing electricity demand creates opportunities for investment and jobs. However, there remains considerable uncertainty in future electricity demand, particularly from data centers, in Virginia and across the PJM region. This uncertainty necessitates careful planning to maintain reliable infrastructure and power growth, without creating stranded assets—or unneeded or underused infrastructure whose costs could ultimately be borne by existing ratepayers, including households and small businesses, rather than by new investments or customers.

To account for this highly uncertain rate of demand growth, the VEP evaluates three load growth scenarios based on the likelihood of data center demand materializing: the PJM load forecast, in which all demand projected by PJM, based on utility forecasts, materializes; a moderate

load forecast, in which customers with signed service agreements—and most projects that have received utility authorization to move forward—are built; and a low load forecast, in which only customers with fully signed service agreements are built.

The moderate load forecast serves as the VEP’s central planning outlook. It reflects a more credible outlook for data center growth without assuming that every proposed project ultimately moves forward.

Figure 4. *Three Peak Load Forecast Scenarios Considered in the 2026 VEP*



All three load growth scenarios use a common outlook for residential, non–data center commercial, and other industrial load, including reductions in demand from energy efficiency improvements and additional electricity demand from electric vehicle (EV) adoption. Expanding energy efficiency through deep building retrofits, weatherization, and heating, ventilation, and air-conditioning (HVAC) upgrades could further reduce demand and costs for households and businesses.

The VEP evaluates five policy cases to understand various pathways and tradeoffs:

- **No Policy Goals:** Removes VCEA and RGGI requirements, showing the path forward without state clean energy and carbon policies.
- **Current Policies (as of October 2026):** Reflects Virginia’s current VCEA and RGGI policy requirements without assuming additional major policy changes.
- **Distributed Flexibility Scenario:** Builds on current policy with 10 GW of DERs by 2045, 10% demand flexibility from data centers, and up to 5 GW of non-combustion gas bridge resources (see text box below for additional detail).
- **Distributed Flexibility Scenario with Moderate Solar/In-State Priority:** Applies the Distributed Flexibility policies while reducing annual solar deployment limit from 1.8 GW to 1.2 GW

and reducing reliance on out-of-state capacity purchases from 20 GW to 10 GW.

- **Distributed Flexibility Scenario with No New Gas:** Applies the Distributed Flexibility policies but does not allow new natural gas generation—neither combustion nor non-combustion—to be built in Virginia.

Policy adjustments overview:

Distributed energy resources: These include customer-sited solar, batteries, smart devices, geothermal heating and cooling solutions, and other flexible resources that can be deployed quickly, reduce local grid stress, and provide grid capacity when aggregated and coordinated through virtual power plants (VPPs). Participating customers can be paid for assets that provide these grid services, a way to help return value to households and businesses.

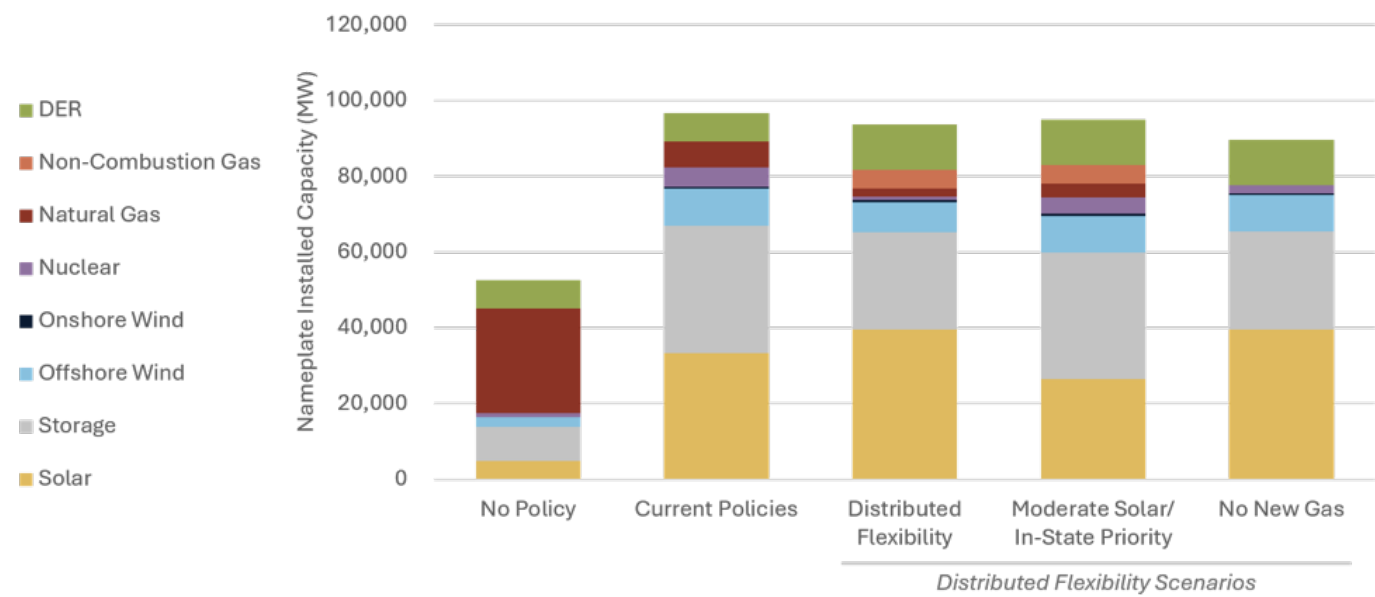
Demand flexibility: This is the ability of data centers or other customers to reduce or shift their electricity use during periods of peak demand or grid stress, helping avoid costly new peaking plants and infrastructure. This could include on-site flexibility (e.g., curtailing operations, demand response, onsite batteries) or off-site flexibility through other distributed energy efforts, like virtual power plants.

Non-combustion gas resources: Non-combustion natural gas resources—including fuel cells and linear generators—can provide firm, dispatchable capacity without conventional combustion. Compared with conventional natural gas-fired generation, they produce substantially lower local emissions of pollutants such as nitrogen oxides, sulfur dioxide, and fine particulate matter, reducing health impacts in nearby communities, particularly communities that have been disproportionately affected by energy infrastructure. These resources can generally be deployed within 18–24 months, have shorter useful lives of roughly 5–20 years, and connect to distribution infrastructure, which reduces the need for major new pipeline investments. They can therefore serve as limited-duration bridge resources for near-term reliability needs without committing to long-lived centralized natural gas infrastructure and while staying aligned with a pathway to net zero by 2050.

Modeling Outcomes

The figures below present key results from Virginia Energy’s capacity expansion modeling for the moderate load forecast. This includes the projected new capacity that will come online under each scenario (Figure 5) and the associated costs of each scenario (Table 1).

Figure 5: Total Capacity Additions 2026-2050 in a moderate load forecast across all policy scenarios (Nameplate Installed Capacity, MW)



Note: Chart only represents capacity additions (MW) through the planning period. It does not include Virginia’s existing installed capacity and does not represent energy generation (MWh) from existing or new resources.

Table 1. Costs for Policy Scenarios, Moderate Load Forecast

	No Policy	Current Policies	Distributed Flexibility	Moderate Solar/ In-State Priority	No New Gas
System Cost (\$B)	\$295	\$422	\$385	\$405	\$398
Social Cost of Carbon (\$B)	\$285	\$53	\$71	\$75	\$64
Cost of Health Impacts (\$B)	\$145	\$35	\$19	\$20	\$22
Total Cost (\$B)	\$725	\$510	\$475	\$500	\$484

The No Policy case results in the highest total cost by 2050 due to substantial increases in emissions, which are accounted for through a social cost of carbon metric, as well as direct local health impacts. In the moderate load forecast, this pathway adds approximately 27 GW of new natural gas capacity and nearly doubles carbon emissions over the next two decades to levels not seen since 2005 during peak coal consumption. It would also require significant investment in major new pipeline infrastructure and is associated with an estimated \$145 billion in health-related costs from local air pollutants (e.g., PM_{2.5}, SO_x, NO_x) for Virginia communities.

The Current Policies case represents a path under VCEA and RGGI, with significant additions of new solar, storage, and offshore wind that build on current VCEA requirements, alongside

new nuclear and some natural gas resources. In this case, under a moderate load forecast, Virginia would need to add capacity approaching triple its current installed capacity to serve new load and replace retiring infrastructure.

The Distributed Flexibility Scenario demonstrates the lowest total cost pathway for meeting Virginia's growing electricity needs with reduced health impacts. In the moderate load forecast, greater demand flexibility and DERs reduce direct system costs by about 10%, to \$385 billion, compared with \$422 billion under the Current Policies case. Limited deployment of non-combustion natural gas bridge resources support meeting near-term energy needs while clean firm resources are built. By avoiding local pollution from conventional combustion generation, these resources reduce estimated health impacts from \$35 billion under the Current Policies case to \$19 billion. This enables cleaner air and healthier communities, particularly for disadvantaged communities that have historically borne a disproportionate share of the costs of energy infrastructure buildout.

The tradeoff is somewhat higher modeled carbon emissions relative to the Current Policies case because demand flexibility reduces the amount of new baseload clean nuclear and offshore wind capacity built and increases use of carbon-emitting resources more in the near term. Even so, this pathway remains consistent with net zero goals, avoids long-lived centralized gas infrastructure, and preserves time to scale clean firm resources. Continued investment in Virginia's natural land sinks to sequester and store carbon—as laid out in the 2026 Virginia Comprehensive Climate Action Plan—can further reduce the impacts of interim carbon emissions.

The VEP also evaluates two Distributed Flexibility alternative scenarios to understand the impacts of prioritizing in-state supply while reducing solar buildout and avoiding new natural gas-fired generation altogether. The Moderate Solar/In-State Priority case limits solar to 1.2 GW annually and reduces reliance on external generation capacity, which drives more nuclear and offshore wind and raises direct system costs to \$405 billion with a small increase in carbon emissions and health pollutants due to greater reliance on fossil resources.

The No New Gas case avoids new Virginia natural gas infrastructure expansion. This case has system costs of \$398 billion, which is below Current Policies but above the Distributed Flexibility Scenario. Similar to the trends seen in the Distributed Flexibility Scenario, despite avoiding new gas generation, it produces higher carbon emissions than the Current Policies case because demand flexibility displaces some new nuclear and offshore-wind capacity, increasing reliance on carbon-emitting generation in the near term. Carbon emissions are nevertheless lower than in the Distributed Flexibility Scenario because this case does not add and operate any new gas resources. Counterintuitively, however, the No New Gas case produces greater local health impacts than the Distributed Flexibility Scenario, though still substantially lower than Current Policies, because it relies

more on existing fossil-fuel units, which tend to be older and less efficient. The No New Gas case could therefore cause greater adverse health impacts in communities near those existing facilities.

Across all modeled scenarios, Virginia continues to import up to the model-imposed cap of 30% of annual electricity consumption. This underscores the importance of continued regional engagement, because Virginia's affordability, reliability, and emissions outcomes are shaped not only by in-state choices but also by the broader PJM system and neighboring states' generation mixes.

Together, the modeling shows that Virginia has multiple pathways to meet growing demand and remain on a path towards net zero. Choices involve tradeoffs among cost, local pollution, reliance on imports, and the pace and mix of clean-resource deployment. While past IOU integrated resource plans were not aligned with these pathways, as these utility plans are updated to reflect Virginia's participation in RGGI and current market conditions, the VEP shows multiple pathways for Virginia utilities to meet current policy commitments. By translating modeled pathways into utility plans and on-the-ground investments, Virginia can continue to lead in deploying innovative energy solutions that support growth and meet Virginians' daily needs.

Other Implementation Considerations

Costs

Virginia can leverage future data center growth to accelerate Virginia's clean energy infrastructure buildout and manage associated costs. As laid out in Virginia's [Data Center Accountability Framework](#), data center-related development can be leveraged for innovation and to support Virginia's path to a more affordable, reliable, and clean energy future without causing adverse health or environmental impacts to Virginia households, small businesses, or communities. As detailed in the Accountability Framework, data centers should bear the costs of the infrastructure they require.

Data centers can pay for the energy infrastructure they require and help meet Virginia's clean energy goals. A modeled comparison with no new data center demand suggests that serving projected data center demand accounts for roughly half the system-wide cost of new energy additions in the Current Policies case under a moderate load outlook, or about \$200 billion in incremental investment. However, an average 1 GW data center pays roughly \$700 million annually for electricity under current cost-allocation frameworks. Therefore, at roughly 20 GW of projected demand in a moderate growth outlook, new data centers could generate roughly \$265 billion through 2050. That revenue—provided costs are allocated appropriately—could help finance the generation and grid investments needed to serve this growth while protecting affordability for households and small businesses.

Land Impacts

The scale of solar deployment needed to meet Virginia’s growing electricity demand has important land-use implications. If new solar were built entirely on greenfield sites and followed Virginia’s historical development pattern, the modeled buildout would affect at most about 1.5% of Virginia farmland and 0.9% of forestland in the Distributed Flexibility Scenario. The Moderate Solar/In-State Priority case would reduce those impacts by roughly 0.5% each but would increase system costs by about 10%. Prioritizing solar buildout on brownfields, former mine lands, agrivoltaics, rooftops, parking canopies, and other dual-use sites can help mitigate the land impacts of these resources, though these sites can cost more to develop.

Workforce

Investment at this scale into Virginia’s energy infrastructure will create thousands of jobs and require workforce development. Across scenarios, delivering this infrastructure will require an estimated 5,000 to 20,000 construction jobs each year over the next two decades and could create roughly 20,000 permanent operations jobs. Proactive workforce development can help ensure Virginia has the electricians, technicians, engineers, and other skilled workers needed to meet Virginia’s energy buildout.

The Path Forward

Virginia can meet rising electricity demand, protect affordability, and stay on a path towards net zero by building a more flexible, reliable, and locally beneficial electric system. The Plan's Clean-First, Least-Cost approach starts with solutions that can be deployed relatively quickly and cost-effectively—energy efficiency, solar, storage, distributed energy resources, virtual power plants, demand flexibility, and better use of the existing grid—while advancing the transmission and clean firm resources, including advanced nuclear, nuclear fusion, offshore wind, and long-duration energy storage, that Virginia will need for the decades ahead.

Where near-term capacity needs cannot be met with cleaner options, shorter-lived non-combustion resources can provide a lower-pollution bridge without committing the Commonwealth to large, long-lived natural gas infrastructure. Virginia can reduce land impacts by prioritizing solar and storage on rooftops, brownfields, agrivoltaics, parking canopies, and other dual-use sites. These investments can strengthen local economies, modernize infrastructure, and create significant jobs in every region of the Commonwealth.

Across all net zero aligned modeled scenarios, Virginia will need to more than double its existing generation capacity to meet its projected growth and clean energy goals. For example, Virginia will need to add roughly 1.2–1.8 GW of solar and 1–2 GW of energy storage each year over the next two decades. That is an increase from Virginia's historic levels, but it is achievable; similarly sized states (e.g., Ohio, Illinois) have increased their solar capacity at these rates, for example, showing that additions at this scale are possible.

This is an ambitious but achievable opportunity. It will require removing barriers and accelerating permitting, interconnection, workforce development, and supply chains to ensure efficient project delivery at the pace and scale needed.

The modeled energy buildout represents a significant economic development opportunity for Virginia. If projected data center and other commercial growth materializes, it would drive significant economic investment in addition to the hundreds of billions in energy infrastructure required to serve this growth and meet Virginia's baseline energy needs. Additional economic opportunities could result from attracting energy-related supply chain investments to Virginia.

This investment can deliver tangible improvements and lasting value to households, communities, and businesses. This means more resilient local infrastructure, efficient homes that cost less to heat and cool, reliable power for businesses and public services, cleaner air, and career opportunities that stay in Virginia.

The VEP puts Virginia on a path to achieve its vision of delivering affordable, reliable, and local clean energy that works for every community in Virginia and powers a thriving economy—today and for generations to come. Achieving this vision will require Virginia to advance three interdependent pillars at the same time:

- **Pillar 1: Affordable Energy for Every Virginian.** Lower energy burdens for households and businesses by improving efficiency, reducing system costs, and limiting exposure to volatile fuel prices.
- **Pillar 2: Clean Firm Resources that Enable Virginia’s Growth.** Meet growing demand and clean-energy goals through proactive development of reliable, clean, firm power and transmission infrastructure.
- **Pillar 3: Local and Sustainable Energy that Benefits Every Community.** Expand homegrown, distributed, and diverse clean energy solutions that strengthen resilience, create local jobs, and deliver lasting economic and environmental benefits across Virginia.

Seven mutually reinforcing strategies turn these pillars into an actionable roadmap for delivering an affordable, reliable, and local clean energy future for Virginia.

Table 2. 2026 VEP Strategies

Energy Strategies	Pillar 1: Affordable Energy	Pillar 2: Clean Firm Resources	Pillar 3: Local and Sustainable
1. Accelerate the deployment of the lowest cost, fastest, and cleanest energy solutions	✓	✓	✓
a. Advance competitive deployment of utility-scale storage and solar	✓		✓
b. Accelerate adoption of energy efficiency and consumer affordability programs	✓		✓
c. Unlock distributed energy resource deployment, aggregation, and market integration	✓		✓
d. Improve utilization of the existing grid	✓		✓
2. Ensure data center growth advances Virginia’s energy goals	✓	✓	✓
3. Align utility incentives with affordable energy outcomes	✓	✓	✓
4. Advance development of clean firm resources in Virginia	✓	✓	
5. Reduce emissions from and better leverage gas infrastructure		✓	✓

Energy Strategies	Pillar 1: Affordable Energy	Pillar 2: Clean Firm Resources	Pillar 3: Local and Sustainable
6. Drive affordable, clean transportation across the Commonwealth	✓		✓
7. Build a homegrown workforce and supply chain to power Virginia's energy economy	✓	✓	✓

✓ Primary Impact ✓ Secondary Impact

These strategies and priority actions provide a durable path forward for the Commonwealth while preserving the flexibility to respond as demand, technologies, markets, and costs evolve. Delivering these strategies will require investing in institutional capacity, regulatory expertise, and public engagement—including in state entities like Virginia Energy, the SCC, and other agencies and authorities—as well as supporting capacity building in local governments, utilities, and other external stakeholders.

These strategies guide the Administration's primary energy agenda. Governor Spanberger signed a record number of substantive clean energy bills in 2026 in support of these strategies (See *Appendix A: 2026 Energy Legislation*). The Administration continues to work relentlessly to implement those reforms. The following actions build on that progress.

Table 3. 2026 VEP Strategies and Priority Actions

1. Accelerate deployment of the lowest cost, fastest, and cleanest energy solutions

1a. Advance competitive deployment of utility-scale storage and solar

- Develop a state-led renewables marketplace to support cost-effective deployments
- Develop a proactive statewide energy planning and site identification strategy
- Scale up proactive local energy education and development technical assistance
- Prioritize greater use of unused interconnection capacity
- Advance PJM market reforms, including energy-only interconnection

1b. Accelerate adoption of energy efficiency and consumer affordability programs

- Increase the effectiveness of energy efficiency programs
- Maximize adoption of available customer programs and bill assistance resources
- Promote cost-effective strategic electrification strategies
- Advance equitable bill solutions, such as Pay As You Save models

1c. Unlock Distributed Energy Resource deployment, aggregation, and market participation

- Address DER deployment barriers (e.g., interconnection, agrivoltaics net metering)
- Enhance statewide policies and new programs that enable DER aggregations, including virtual power plants, and market participation at scale
- Prioritize low-conflict, dual-use sites for DER deployments

1d. Improve utilization of the existing grid

- Promote adoption of advanced transmission technologies
- Integrate DERs and VPPs into utility planning and operations
- Promote effective implementation of grid utilization metrics

2. Ensure data center growth advances Virginia's energy goals

- Ensure data centers pay their fair share for their infrastructure
- Leverage data center funding to drive investments in distributed energy, grid upgrades, energy efficiency, and projects that improve affordability for Virginians
- Require and ensure the ability of data centers to pursue demand flexibility
- Advance paths for data centers to bring clean power and invest in zero carbon solutions
- Reduce impact of natural gas infrastructure by limiting new behind-the-meter gas generation and promoting non-combustion gas as bridge option where needed
- Implement the Data Center Accountability Framework

3. Align utility incentives with affordable energy outcomes

- Support cost allocation and cost sharing models that enhance affordability
- Pursue return-on-equity reforms to reduce costs for customers
- Pursue debt-to-equity ratio reforms to reduce financing costs born by customers

4. Advance development of clean firm resources in Virginia

- Update VCEA renewable portfolio standard (RPS) requirements for new zero carbon technologies (e.g., nuclear fission, fusion, geothermal)
- Require the State Corporation Commission (SCC) and utilities to evaluate zero carbon generation before committing to long-lived fossil generation assets
- Accelerate responsible nuclear deployment at scale, including with appropriate cost protections, workforce preparation, siting, and permitting coordination
- Expand catalytic financing via VCEIB to support clean firm resources and energy innovation

5. Reduce emissions from and better leverage gas infrastructure

- Prioritize improved use of existing gas infrastructure before building greenfield pipelines or facilities
- Encourage programs and markets that enable durable reductions in methane emissions from gas infrastructure (e.g., biogas, mitigation, low emission markets)
- Support capture of fugitive methane emissions from coal mines, landfills, wastewater, and other existing resources for productive use

6. Drive affordable, clean transportation across the Commonwealth

- Promote higher efficiency vehicles, including EVs, hybrids, and internal combustion engine (ICE) vehicles, to reduce household and business transportation costs
- Expand transportation demand management through adoption of more Vehicle Miles Traveled-efficient transportation and land-use planning
- Expand state and private funding in transit and rail to reduce Vehicle Miles Traveled across rural, suburban, and urban Virginia

7. Build a homegrown workforce and supply chain to power Virginia's energy economy

- Scale employer-led energy training, registered apprenticeships, credentials, and work-based learning for high-demand skilled energy careers
- Target energy supply chains as a priority sector for economic development, such as for grid equipment, storage, offshore wind, and advanced nuclear
- Enhance coordination across energy planning and economic development capabilities across state agencies
- Leverage the full suite of state tools to support emerging and mature energy industries, from early-stage innovation through company expansion

An Energy Future That Works for Every Virginian

Virginia's energy future will be defined not simply by how much power the Commonwealth builds, but by whether that progress improves the lives of the people who depend on it. Success means a family can keep the lights on without sacrificing other necessities; a manufacturer, farm, hospital, school, or small business can count on reliable energy; and every community can see a fair share of the jobs, investment, resilience, and costs that new infrastructure creates without unduly bearing the health costs of heavy, localized pollution.

Virginia can meet this moment with continued ambition and innovation to achieve the Commonwealth's clean energy and climate goals. By making strategic, data-driven choices, requiring responsible and sustainable growth, and investing in the people and places that will power its future, Virginia can build an energy system that is more affordable today and over the long term, clean, homegrown, reliable and resilient. That system can benefit communities and create opportunities in every region of the Commonwealth.

Want A More In-depth Read?

Virginia Energy Plan 2026

Read the full 2026 Virginia Energy Plan at energy.virginia.gov for additional detail.

Virginia Energy Plan

Executive Brief

