2026 VIRGINIA ENERGY PLAN

Fall 2026

PRESENTED BY:

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VIRGINIA Energy

ENERGY PLAN OVERVIEW

The Virginia Energy Plan is required every four years at the beginning of every Governor's term, governed by § 45.2-1710, to lay out the next decade and beyond of the state's energy strategy to achieve its net-zero ambitions

The 2026 Virginia Energy Plan has been informed by:

- Extensive stakeholder input
- Power sector modeling
- Research and analysis

Stakeholder input

3,000+
responses to the public survey

200+
participants in 6 in-person regional listening sessions

400+
participants in 20 virtual listening sessions and consultations

70+
participants in the public town hall

OUR VISION FOR VIRGINIA'S ENERGY FUTURE

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.

Strategic Pillars

PILLAR 1

Affordable Energy for Every Virginian

PILLAR 2

Clean Firm Resources to Enable Virginia's Growth

PILLAR 3

Local and Sustainable Energy that Benefits Every Community

STAKEHOLDER ENGAGEMENT KEY THEMES

Affordability, reliability, and growing demand

Across regions, people consistently emphasized affordable and reliable energy and the need to prepare for rapid growth in electricity demand.

Data centers and rapid load growth

Data centers were the most frequently raised issue in written survey comments. About 64% of respondents mentioned them, most often citing demand growth, infrastructure costs, customer protections, and impacts on land, water, and communities.

Infrastructure planning and coordination

Participants asked for clearer demand forecasts, more transparent decisions, and safeguards so new large energy users pay the costs they create.

Efficiency, demand management, and grid modernization

Participants pointed to efficiency, weatherization, demand response, distributed solar, storage, and virtual power plants as ways to lower costs and strengthen reliability.

STAKEHOLDER ENGAGEMENT KEY THEMES

(Continued)

Workforce, supply chains, and financing

Participants also raised workforce shortages, equipment delays, financing barriers, and limited implementation capacity as challenges Virginia will need to address.

Community impacts and public trust

Public trust was the most frequently identified implementation barrier in the survey. Participants called for earlier engagement, clearer information, and more meaningful involvement from affected communities.

Where views differed

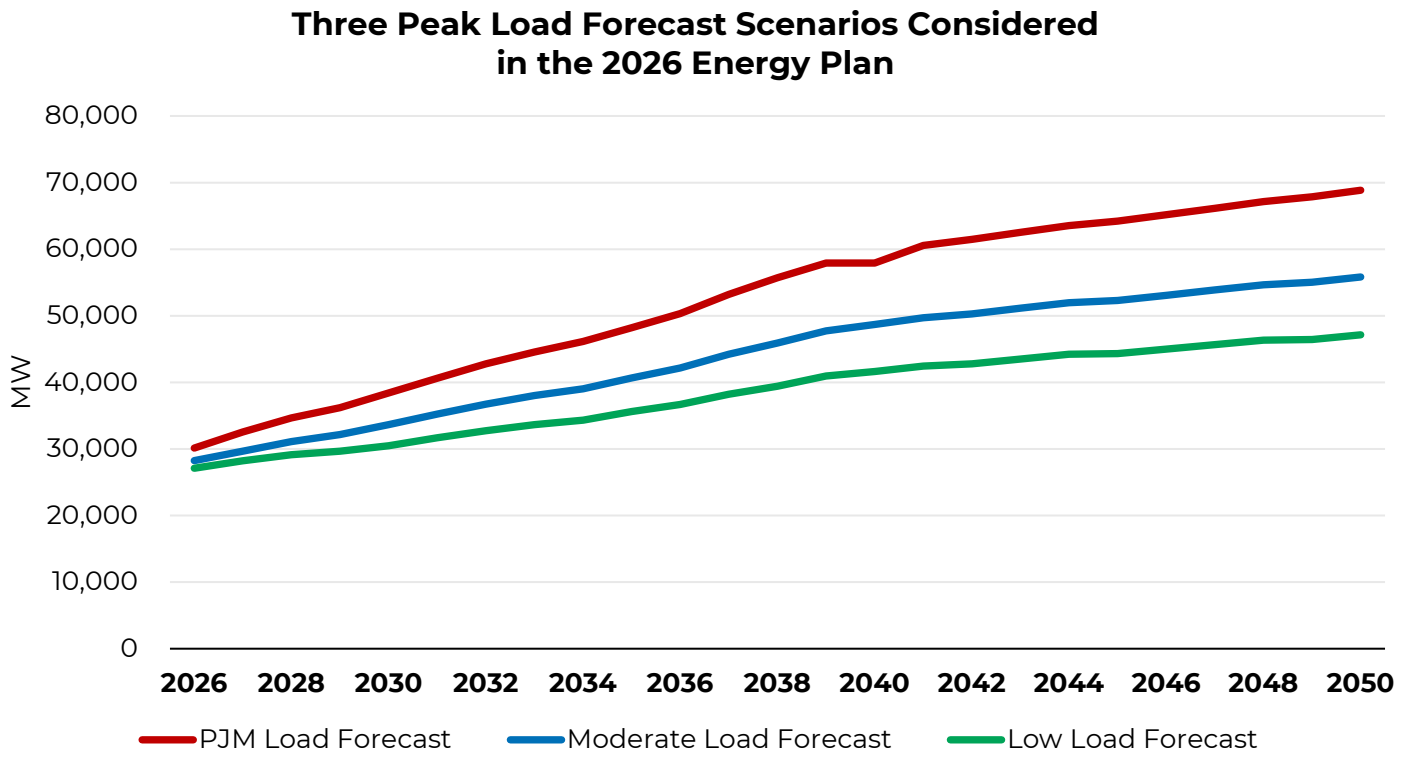
People often agreed on the problems Virginia needs to solve, but not always on the best solution. Views differed on technology choices, timing, state and local roles, and who should bear costs and risks.

POWER SECTOR MODELING

WHAT IS POWER SECTOR CAPACITY EXPANSION MODELING?

1. Capacity expansion modeling is used to understand what energy resources need to be built to meet Virginia's electricity demand and policy-driven clean energy goals
2. This is the same type of modeling used by utilities in their resource planning analysis
3. The model finds the lowest financial cost pathways to meet grid needs under the policies and requirements its given
4. Multiple load growth and policy scenarios are evaluated to capture a range of possible futures

THREE LOAD GROWTH SCENARIOS CONSIDERED



PJM Load Forecast

3.50%
Annual growth rate

129%
Total increase from 2026 peak demand

Moderate Load Forecast

2.88%
Annual growth rate

98%
Total increase from 2026 peak demand

Low Load Forecast

2.33%
Annual growth rate

74%
Total increase from 2026 peak demand

FIVE POLICY CASES CONSIDERED

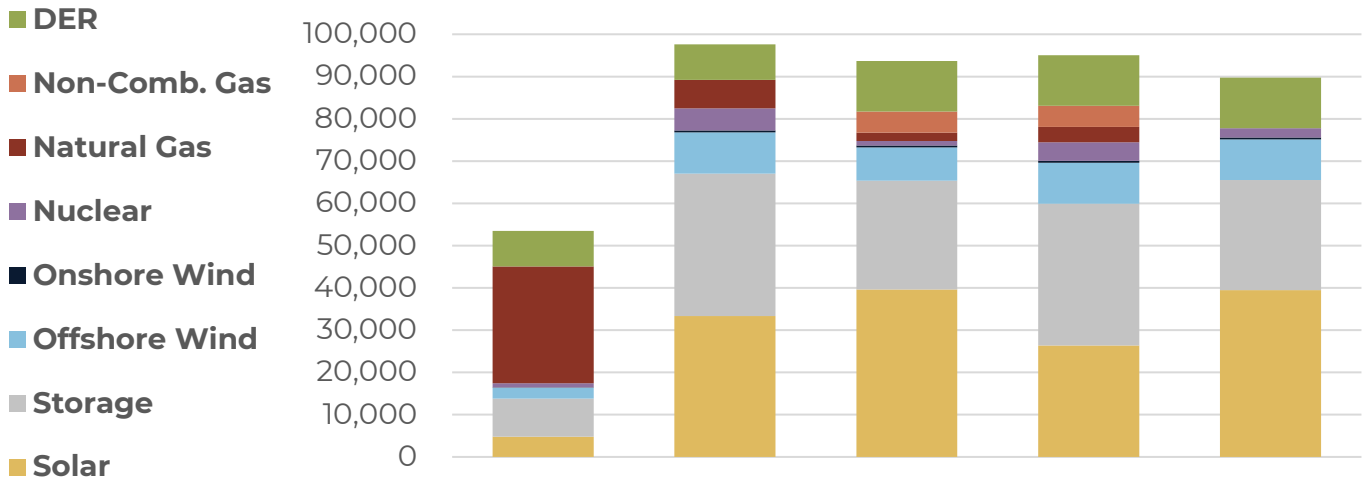
No Policy Goals	Removes VCEA and RGGI requirements
Current Policies (as of October 2026)	Reflects Virginia's current VCEA and RGGI policies
Distributed Flexibility Scenario	Current policies and three new variables: • 10 GW of DERs by 2045 • 10% demand flexibility from data centers • 5 GW of non-combustion gas bridge resources—e.g., fuel cells or linear generators that have lower localized air emissions and shorter lifespans
Distributed Flexibility with Moderate Solar/In-State Priority	Applies the Distributed Flexibility policies but reduces solar build limits and out of state capacity purchases
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

MODELING KEY FINDINGS

- Multiple pathways to meet Virginia's rising demand while staying on track for a net zero power system by 2050
- Considering tradeoffs in system, carbon, and health impacts can help inform policy choices
- No Policies result in highest overall cost when considering carbon and health impacts
- Distributed Flexibility solutions can help reduce system costs
- Non-combustion gas resources can reduce health costs over traditional gas
- Significant build out required in all scenarios to meet Virginia's growth and clean energy goals

Capacity Additions in Moderate Load Growth Forecast

2026-2050, Nameplate Installed (MW)



	No Policy	Current Policies	Distributed Flexibility	Moderate Solar In-State Priority	No New Gas
Total 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	$22
Total Societal Cost ($B)	**$687**	**$511**	**$475**	**$501**	**$483**

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.

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SEVEN STRATEGIES TO GUIDE VIRGINIA'S ENERGY FUTURE

1. **Accelerate the deployment of the lowest cost, fastest, and cleanest energy solutions**
   a) Deploy utility-scale storage and solar
   b) Accelerate adoption of energy efficiency and consumer affordability programs
   c) Unlock cost-effective, strategic DER adoption 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**
6. **Drive affordable, clean transportation across the Commonwealth**
7. **Build a homegrown workforce and supply chain to power Virginia's energy economy**

AN ENERGY FUTURE THAT WORKS FOR EVERY VIRGINIAN AND POWERS A THRIVING ECONOMY

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