VIRGINIA'S ENERGY FUTURE

PATHWAYS FOR COMMUNITIES TO PARTICIPATE IN CLEAN ENERGY SOLUTIONS

October 23, 2026

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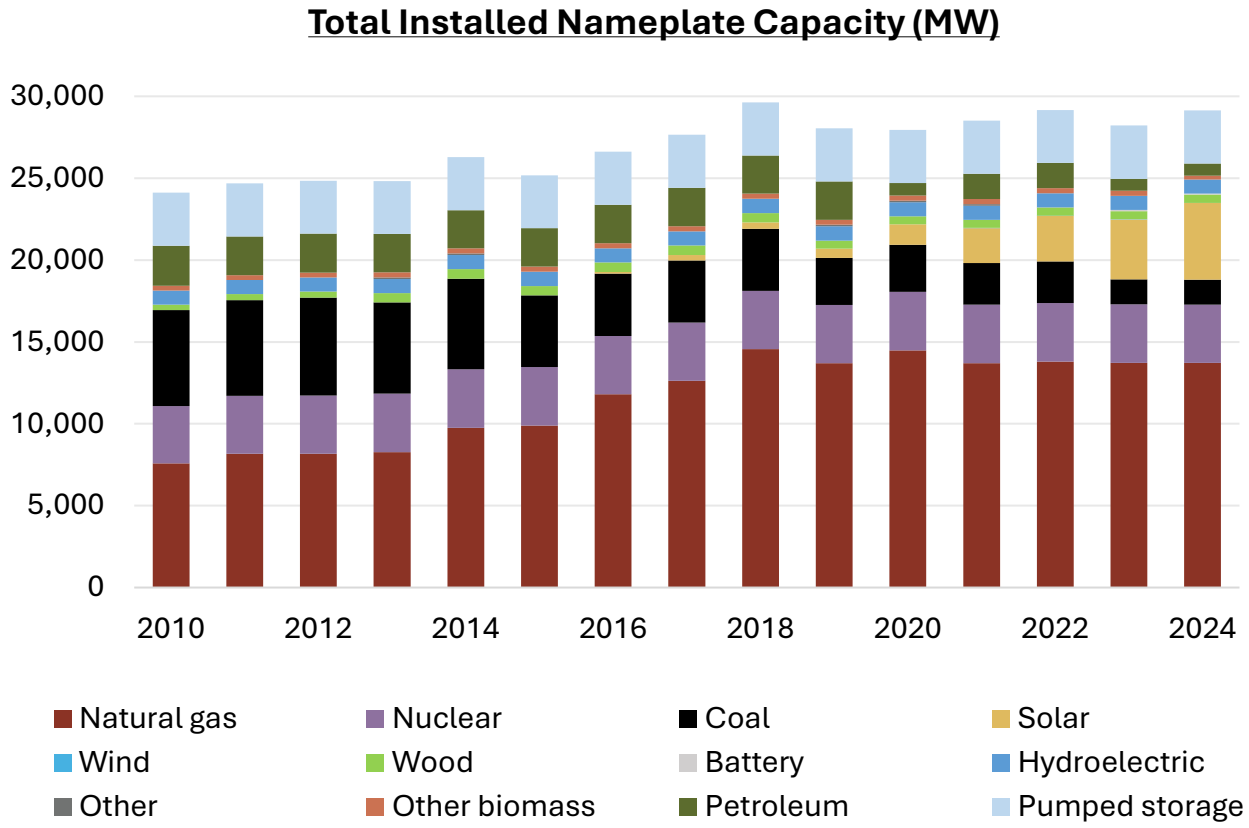
VIRGINIA Energy

VIRGINIA'S ENERGY PROFILE TODAY

Virginia's Energy System

Virginia's energy system is diversifying as we move toward a net-zero economy.

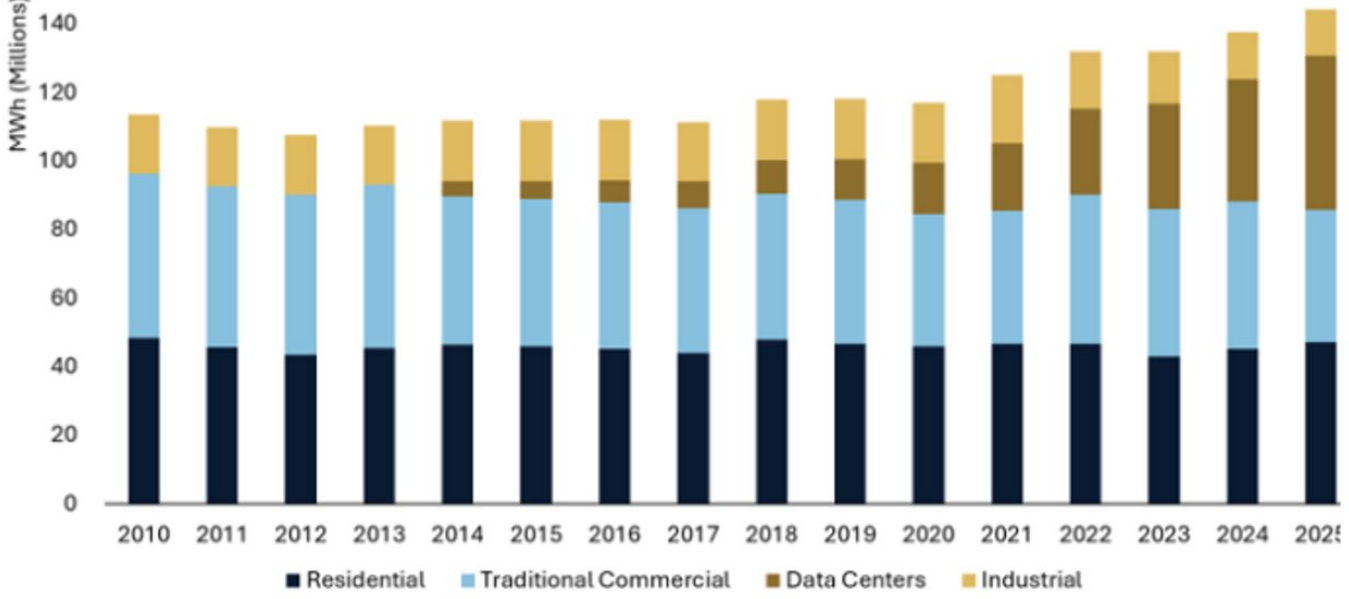
- Virginia has ~30,000 MW of installed generation capacity
- Solar has grown the fastest in the last five years
- Virginia currently has ~57,100 MW of additional capacity in PJM's queue
    - Approximately 11,700 MW of nameplate capacity has generation interconnection agreements in the PJM queue



Virginia's Energy System

- Demand remained relatively flat through 2020
- Residential electricity consumption has remained flat as efficiency gains offset population growth
- Data centers account for approximately 31% of Virginia's annual electricity consumption as of 2025.

Virginia Electricity Consumption (MWh) by end-use sector

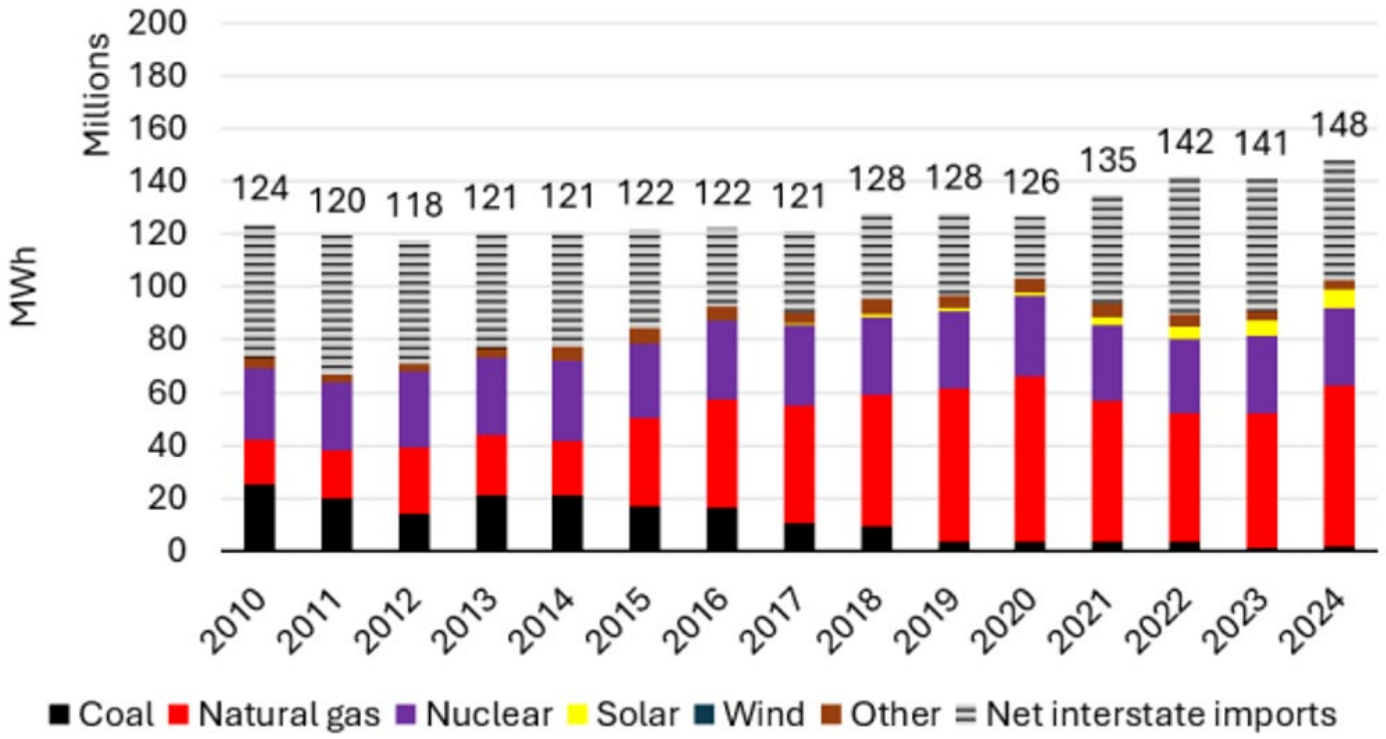


Virginia's Energy System

Virginia's energy system is diversifying as we move toward a net-zero economy.

- In 2024, 30.6% of Virginia's total annual electricity consumption was supplied by imports
- Natural gas & nuclear continue to provide critical baseload capacity
- Coal has continued to decline since 2020

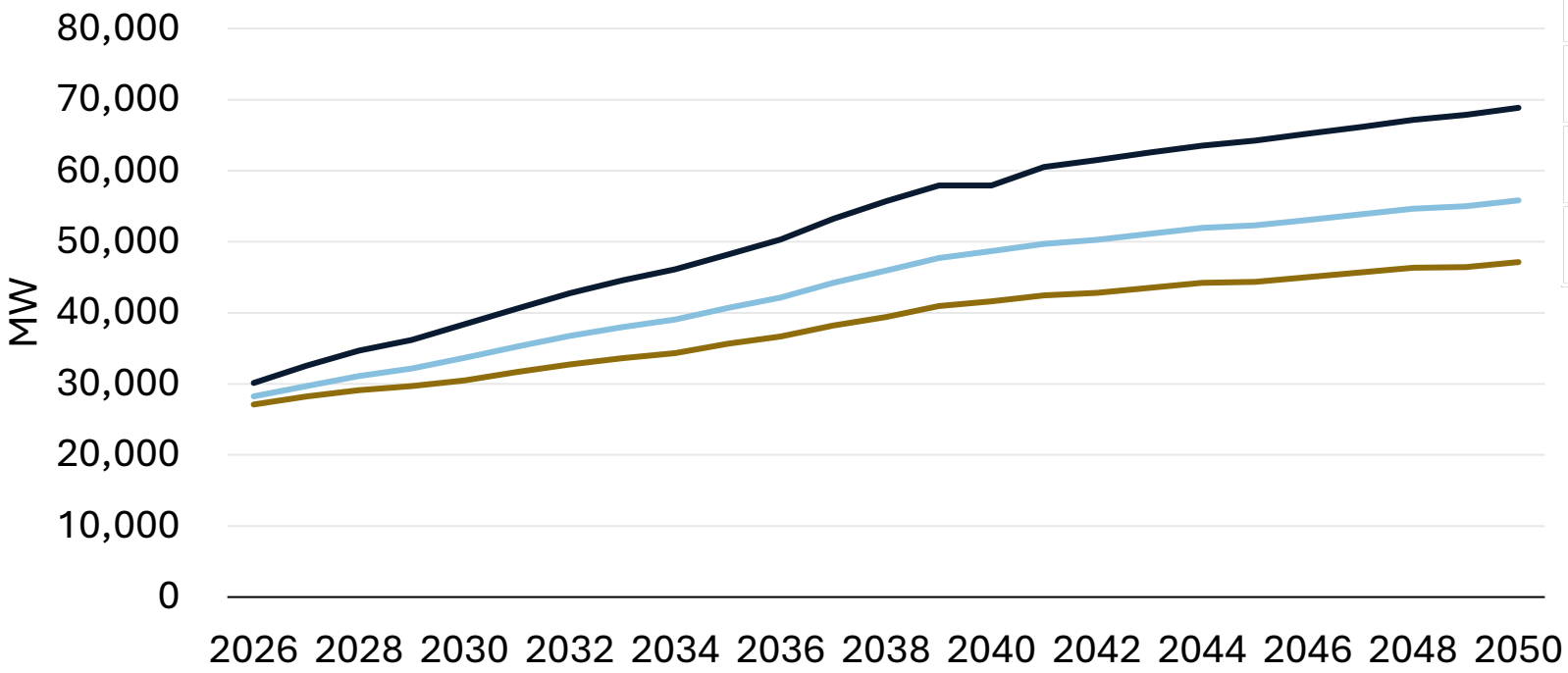
Virginia Electricity Generation by Source (MWh), Including Imports



VIRGINIA'S ENERGY FUTURE

Load Growth Scenarios

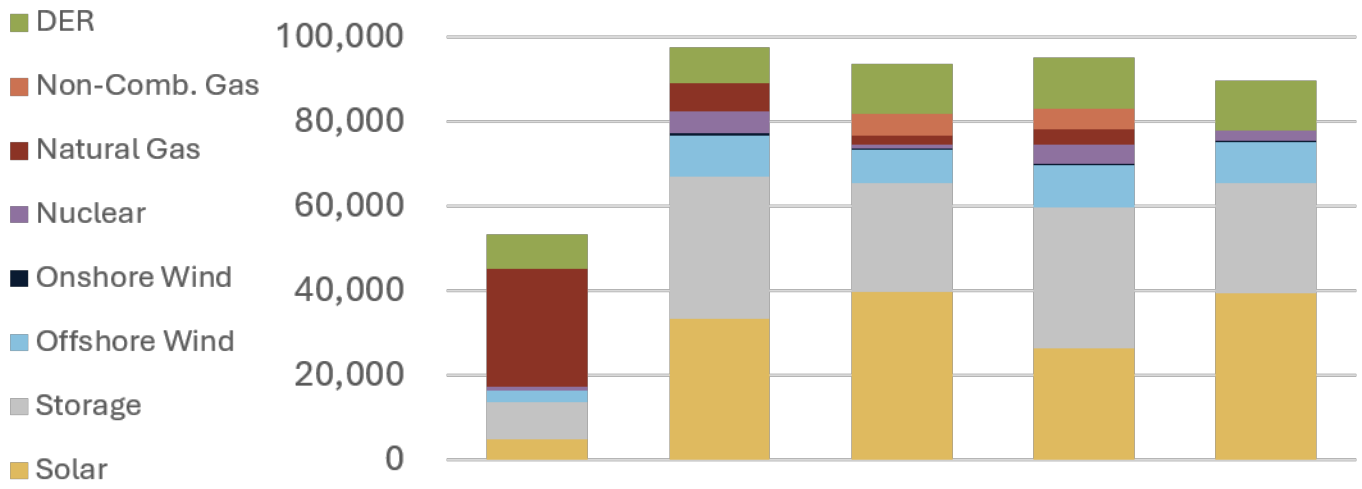
Three Peak Load Forecast Scenarios Considered in the 2026 Energy Plan



Annual Growth Rates	% Total Increase From 2026
3.5%	129%
2.9%	98%
2.3%	74%

Key Modeling Findings

Capacity Additions in Moderate Load Growth Forecast 2026-2050, Nameplate Installed (MW)



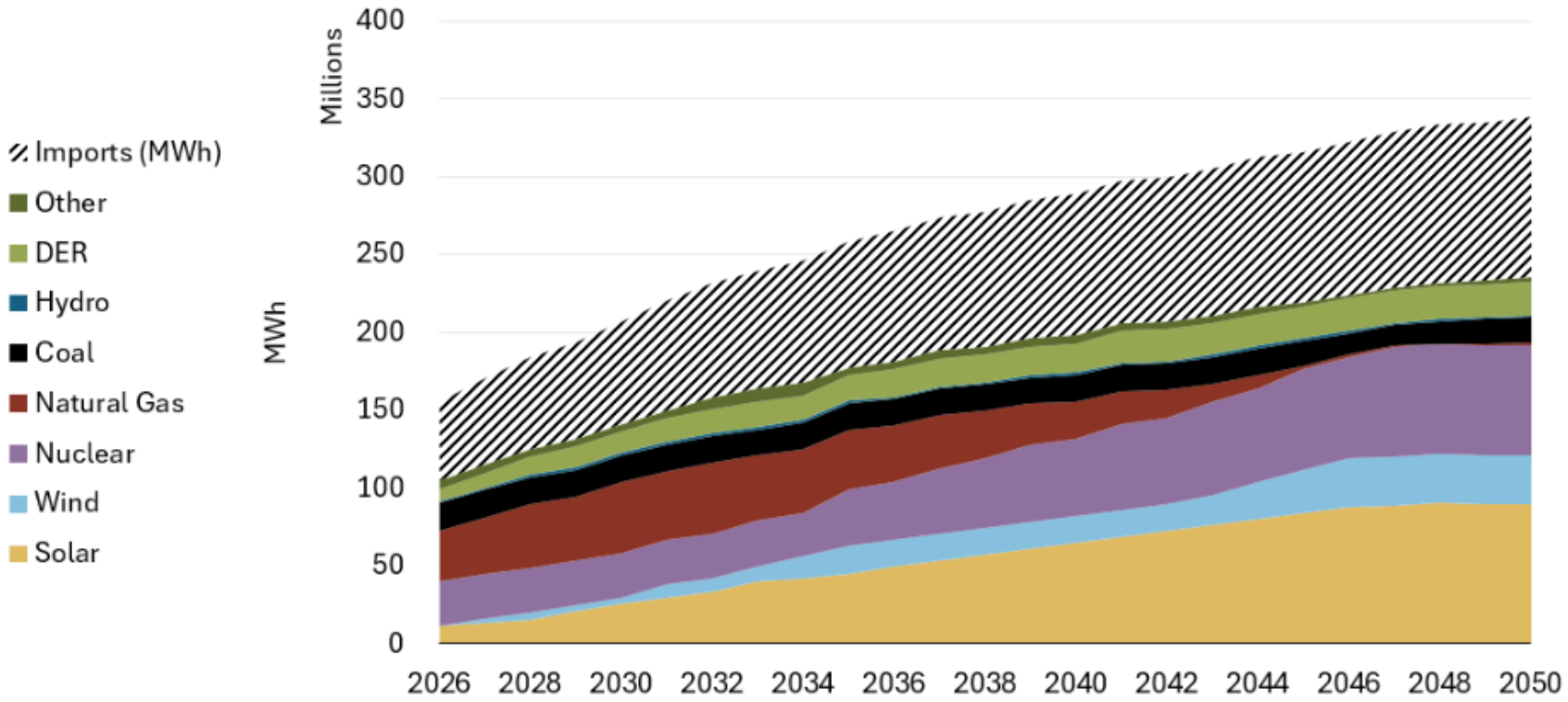
	No Policy	Current Policies	Distributed Flexibility	Moderate Solar In-State Priority	No New Gas
Total System Cost ($B)	$295	$422	$385	$405	$398
Social Cost of Carbon ($B)	$285	$53	$71	$75	$64
Cost of Health Impacts ($B)	$145	$35	$19	$20	$22
Total Societal Cost ($B)	**$725**	**$510**	**$475**	**$500**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

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.

- 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
- Distributed Flexibility solutions can help reduce system costs
- **Significant build out required in all scenarios to meet Virginia's growth and clean energy goals**

Future Annual In-State Generation

Annual generation for Current Policies in the moderate load forecast (reflective of similar trends across other scenarios)



- Virginia continues to be a net importer of electricity across all scenarios as load grows
- Continued regional engagement continues to be important to ensure resource adequacy and advance overall climate goals

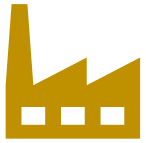
Economic Development | Energy build out can drive significant economic activity across Virginia



Jobs | Energy buildout will require 5,000–20,000 annual construction jobs and nearly 20,000 new operations jobs by 2050.



Economic Competitiveness | Affordable, reliable, clean energy is a decisive advantage for attracting and retaining businesses.



Energy Supply Chains | Building Virginia's energy supply chain to serve this buildout can drive local innovation, advanced manufacturing expansion, new jobs, and broad in-state investment

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**

Key Recommendations of Virginia Energy Plan

- **Scale up proactive local energy education and development support:**
  - Provide technical assistance, model ordinances and revenue sharing agreements, and flexible funding that help localities adopt safe, predictable solar and storage permitting frameworks, while also supporting equitable local development through statewide coordination, education, and additional assistance for planning boards, local governments, and fire departments.
- **Develop a proactive statewide energy planning and site readiness identification strategy:**
  - Identify high value areas and corridors for utility-scale solar, storage, and transmission; assess grid access, environmental and community impacts, land-use compatibility, and economic-development opportunities; and use the results to guide early site readiness, transmission planning, and local engagement.
- **Prioritize low-conflict, dual-use sites for DER deployment:**
  - Expand support for site-redevelopment tools that reduce costs and encourage use of previously disturbed land, agrivoltaics, and other dual-use projects through existing siting frameworks and disturbed-land carve-outs. Support streamlined approval pathways for solar and storage on brownfields, closed landfills, abandoned mines, industrial sites, parking lots, and warehouse roofs so projects can move faster and with fewer land-use impacts (e.g., greater use of existing permit-by-rule standards for small-scale projects, providing additional funding and incentives for dual-use and brownfield projects).
- **Deploy DERs at public facilities:**
  - Prioritize deployment of solar, storage, and other DERs—paired with EE programs— at schools, municipal buildings, and other public facilities to reduce costs, save taxpayer money, and enhance community resilience. Expand education resources (e.g., model solar and storage PPAs for public facilities, tailored outreach), remove deployment barriers, and support with low-cost financing to support adoption.

RECENT ENERGY LEGISLATION

Recent Energy Legislation

- **Expanding access to distributed energy resources is a key priority**
  - Localities may adopt ordinances requiring solar canopies over up to 50% of qualifying new or expanded nonresidential surface parking areas with at least 100 new contiguous off-street spaces (*SB 26 / HB 1234*)
  - Localities must accept building permit applications for residential rooftop solar through an automated permitting platform. Localities may use the to be established state platform or an equivalent automated platform (*SB 382*)
  - Investor-owned utilities must procure more renewable energy on previously developed project sites and a larger share of the RPS must come from distributed resources (*HB 628 / SB 175*)
  - Shared solar program expansion to increase development of solar projects less than 5 MW (*SB 254 / SB 255*)

Recent Energy Legislation

- **Make better use of existing gird infrastructure**
  - Requires utilities to assess surplus interconnection capacity at existing and planned intermittent generation facilities to identify opportunities to collocate resources or use existing grid connections (HB 1065)
  - Department of Energy to conduct a comprehensive analysis of existing electric utility infrastructure to identify cost-saving opportunities that improve or preserve electric system reliability as an alternative or supplement to new infrastructure projects (SB 267)
  - Policy of the Commonwealth to prioritize the siting of new electric transmission in existing rights-of-way (HB 889)

Recent Energy Legislation

- **Large-scale solar siting rules are changing** (HB 711 / SB 347)
  - All solar projects greater than 1 MW are eligible for a local discretionary permit
  - Sets consistent standards for setbacks, fencing, height, visual screening, topsoil removal, vegetative cover, and decommissioning
  - Localities to report on outcome of discretionary permit decisions to the SCC
- **Energy storage is emerging as a distinct land use**
  - Expanding energy storage deployment requirements for investor-owned utilities (SB 448 / HB 895)
  - Department of Energy must develop model ordinances to assist localities with regulating energy storage projects
  - A battery energy storage project can qualify as a permitted accessory use in any zoning district on a parcel with an approved solar special exception (HB 891 / SB 443)

PROGRAM UPDATES

Updates

- Model Ordinance for Energy Storage to be completed by December 1, 2026
  - Department of Energy will provide training and technical assistance to support the added resources
- *Data Center Planning and Community Engagement Toolkit* under development as instructed by Executive Order 22
  - To explore model approaches for community benefit agreements, best practices for community engagement, and guidance for evaluating anticipated project impacts
- Virginia Local Energy and Accountable Data Centers (“VA-LEAD”) designation criteria and implementation plan under development
  - Standardized, tiered scoring system to evaluate data center facilities based on factors such as energy, water, land use, noise, etc. impacts

Updates

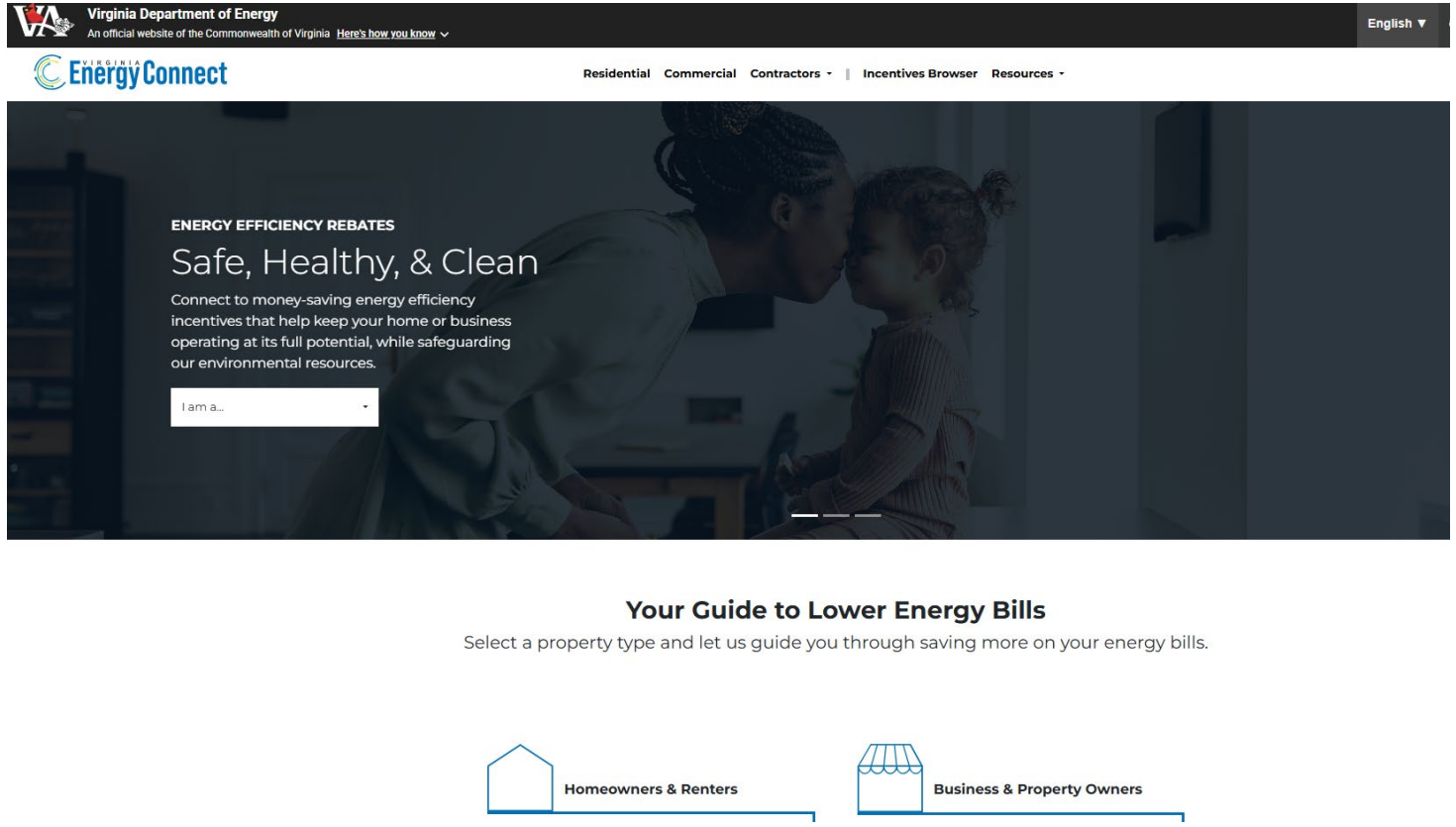
SolSmart

- SolSmart helps **local governments, counties and regional organizations** take action to remove barriers to solar energy growth and make it easier for residents and businesses to go solar
- The program offers **no-cost technical assistance and resources** that help communities become national solar energy leaders
- **SolSmart designation (Bronze, Silver, Gold, Platinum)** recognizes local communities that have adopted established best practices that encourage the growth of solar energy
  - Permitting and Inspection
  - Planning and Zoning
  - Government Operations
  - Community Engagement
  - Market Development

Updates

“Virginia Energy Connect” Online Platform

- One-Stop Hub Simplifies Access to Local, State, and Federal Energy Incentive Programs for Virginia Families and Businesses
- Personalized information on energy-efficient appliances, solar installations, weatherization, EV charging, and more



THANK YOU

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