



PERFORMANCE & IMPACT REPORT

2022 - 2025

Advancing Reliability, Affordability, Innovation, & Responsible
Resource Management Across the Commonwealth

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Glenn Davis
Director,
Virginia Energy

When Governor Glenn Youngkin took office four years ago, he challenged every state agency to think bigger, move faster, and serve Virginians better. Virginia Energy rose to that challenge by streamlining operations, modernizing outdated systems, and building stronger partnerships between our communities, industry partners, and government agencies. We have proven that when you trust talented people and give them the tools to innovate, government can deliver results that truly make a difference.

Across every division, the results speak for themselves.

Our State Energy Office strengthened grid reliability and affordability, expanded access to efficiency programs, modernized planning tools, and helped attract billions in all-of-the-above energy investment—from nuclear and fusion to hydrogen, storage, grid modernization, and beyond.

Our mining and mine-safety teams achieved record safety performance while helping communities reclaim and repurpose former mine lands for new economic use.

Our geology and mineral resources division advanced cutting-edge research to help identify the resources and risks that underpin Virginia's economic future.

Our oil and gas program ensured safe, responsible production while improving oversight of thousands of active wells and supporting landowners through the CBM Escrow program.

This agency is now more agile, data-driven, and collaborative than ever before. We've built a culture that values innovation, accountability, and service—and it shows in every project completed, every partnership formed, and every community served. None of this would have been possible without the dedication and professionalism of our staff who transform challenges into opportunities for success every single day.

To the next administration: you inherit an agency that is strong, united, and full of momentum. The opportunities ahead—whether in energy, geology, or resource management—will demand the same forward-thinking spirit that brought us here. My challenge to you is simple: keep leading. Keep breaking down silos, building partnerships, and empowering the people who make this work possible.

I am proud of what we've built together, and confident that this agency's best work is still ahead.

Glenn Davis
Director, Virginia Department of Energy

AGENCY OVERVIEW (2022–2025)

From 2022 through 2025 and across every division—energy development, mining and minerals, geology, abandoned mine lands, and innovation—Virginia Energy streamlined operations, leveraged record investment, and positioned the Commonwealth as a national leader in advanced energy and resource management.

\$568M in Federal & State Grants Administered

\$320M in Appropriations Funding Managed

58 Federal & State Grants Managed

70% Reduction in Regulatory Burdens

Over 42,000 Trainings & Certifications



**Over
200,000 jobs**

Across Virginia's Energy, Mining,
and Geological Sectors



STATE ENERGY OFFICE

Advancing Reliability, Innovation, & Investment Across Virginia

Over the past four years, the State Energy Office has driven historic progress in strengthening Virginia's energy resilience and accelerating innovation across every region of the Commonwealth. Through major initiatives in energy supply chain financing, grid modernization, and workforce development, the Office has advanced an all-of-the-above strategy that prioritizes reliability, affordability, and technology-neutral solutions. From expanding nuclear and hydrogen partnerships to launching the Virginia Clean Energy Innovation Bank and Virginia Energy Connect, these efforts have positioned Virginia as a national leader in practical, results-driven energy policy for reliable, affordable, and increasingly clean energy.

Industry Headlines

The New York Times

Fusion Start-Up Plans to Build Its First Power Plant in Virginia

CBS

Dominion, Amazon Join Forces to Develop SMRs in Virginia

Richmond Times-Dispatch

Hitachi Announces 825 Jobs, \$457 Million Investment; Virginia to Make Key Grid Equipment

 **Reuters**

Amazon's AWS to Invest \$35 Billion in Virginia

 **Associated Press**

George Mason University Unveils NuScale Energy Exploration Center

THE WALL STREET JOURNAL

Google Signs Deal to Buy Fusion Energy From Bill Gates-Backed Nuclear Startup



Naval Weapons Station Yorktown and Dominion Look at Nuclear Plant on Base



BlackRock, Nvidia, Microsoft in \$40B Data Center Deal



CEL Critical Power Invests \$5.2M in Manufacturing Facility in James City County

Major Highlights & Achievements

Launched the Virginia Clean Energy Innovation Bank (VCEIB)

Accelerating investment in and deployment of advanced energy technologies and supply chain

Launched Virginia Energy Connect

Expanding access to money-saving energy efficiency incentives and rebates

Funded Nation's Largest SMR Control Room Simulator at GMU

Preparing the next generation of nuclear leaders to support Virginia's energy future

Funded World's First Commercial Fusion Power Plant

Further cementing Virginia's role as a global leader in energy innovation

Launched the SPARK Youth Energy Workforce Grant Program

Promoting energy career pathways for Virginians ages 14–25

Launched the Energy DELTA Lab

Positioning SWVA as a national hub for energy R&D and commercialization

Launched the Virginia Power Innovation Program

Strengthening Virginia's nuclear supply chain and advancing energy innovation statewide

Launched Virginia's First Energy Storage Deployment Grants

Supporting pilot projects for long-duration storage, microgrids, and resilience technologies

Concluded the Mid-Atlantic Electrification Partnership

Creating a regional EV ecosystem in Virginia, Washington DC, Maryland and West Virginia

Funding the SWVA Hydrogen Hub

Advancing hydrogen production and coalfield economic development

Secured Virginia's First EECBG Allocation in Over a Decade

Providing localities with funding for energy efficiency, planning, and resilience projects

Established a New In-House Energy Modeling Unit

Building Virginia's independent capability to evaluate utility forecasts

Created a Unified, Data-Driven Planning Framework

Reducing costs, and strengthening long-term reliability, affordability, and sustainability analysis

Strengthened Grid Reliability Through Targeted Investments

Leveraging federal funds to support projects that directly reduce outage frequency and duration

Advanced Statewide Grid Resilience and Security

Building partnerships that deliver measurable improvements for communities and businesses

Completed a Multi-State Electrification Initiative

Deploying 334 EV chargers, 113 electric vehicles, and 80+ education events

Built a Strong Foundation for Regional EV Adoption

Expanding access and improving charging reliability across the Commonwealth

Achieved Federal Certification of Virginia's Energy Security Plan

Affirming IJIA 40108 compliance and advancing Virginia's energy security and resilience



VIRGINIA CLEAN ENERGY INNOVATION BANK

Powered by Virginia Energy

Catalyzing Energy Investment & Innovation Across Virginia

The Virginia Clean Energy Innovation Bank (VCEIB) has become a cornerstone of the Commonwealth's strategy to accelerate public-private investment in advanced energy projects. Through its three focus areas—funding, leverage, and facilitation—VCEIB connects innovators, developers, and investors to unlock new opportunities in clean manufacturing, critical minerals, grid modernization, and next-generation energy technologies.

Funded Projects

By supporting projects at different stages of development, VCEIB is helping generate results today while also securing long-term opportunities for Virginia. As these initiatives mature, they will continue driving new jobs, investment, and energy leadership statewide.



World's First Commercial Fusion Power Plant

Commonwealth Fusion Systems
Chesterfield County

- ✓ Will provide enough power for ~150,000 homes
- ✓ Will create 200–300 full-time jobs



Nation's Largest SMR Control-Room Simulator

George Mason University
Arlington

- ✓ Expands hands-on training for next-generation nuclear professionals
- ✓ Strengthens Virginia's K-12, STEM workforce development pipeline



Energy Resilience for Rural Healthcare

E2C Solar Project
Montgomery County

- ✓ Supports operation of a 1.3 MW solar array at a rural hospital
- ✓ Helps stabilize long-term HVAC and facility energy costs



Expanding Clean Energy in Southwest Virginia

UVA Wise
Wise County

- ✓ Nuclear feasibility study for future reliable clean-energy deployment
- ✓ Broadens energy infrastructure and job creation pathways



Building a U.S. Critical-Minerals Hub

Atlantic Strategic Minerals
Sussex County

- ✓ Advances engineering and feasibility for a rare earth processing facility
- ✓ Positions Southside Virginia as a key hub in the U.S. critical-minerals supply chain



Simulator Upgrade

Virginia Commonwealth
University (VCU)
Richmond

- ✓ Modernizing nuclear simulator to support fusion-aligned training
- ✓ Establishes collaboration with Virginia's nuclear and fusion companies



Hydrogen-Powered Drone Innovation Center

Commonwealth Center for
Advanced Logistics Systems
Petersburg + Regional Sites

- ✓ Establishing an energy-focused unmanned systems research and testing center
- ✓ Creates 25 new jobs and draws 3–5 relocating businesses



Advanced Magnetic Materials Processing Lab

Virginia Commonwealth
University (VCU)
Richmond

- ✓ Enables additive manufacturing of rare magnetic metal powders used in fusion reactors
- ✓ Unlocks \$4–5M of subsequent research and reduces lead times by 90%



First TerraPower Natrium Simulator

Virginia Tech
Arlington

- ✓ Grants Virginia Tech and Northern Virginia first-mover benefits for TerraPower's future East Coast hub
- ✓ Supplements workforce-development, research, and K-12 education opportunities with Virginia Tech



SMR Simulator Strengthens SWVA's Emerging Nuclear Hub

UVA Wise
Wise County

- ✓ Expands advanced nuclear education and workforce development in historically coal-dependent communities
- ✓ Expands Virginia's multi-college nuclear innovation collaboration to SWVA



AI Data Center Research Lab

George Mason University (GMU)
Arlington

- ✓ Establishes a first-of-its-kind, grid-integrated AI data center research and workforce training platform
- ✓ Will create a groundbreaking open source database on data center operation and prepare engineers and technicians to support the world's largest data center market



Battery Storage for Grid Resilience & Affordability
Rappahannock Electric Cooperative
Caroline County

- ✓ Battery Energy Storage System (BESS) Will provide ~\$9M in cost savings for members
- ✓ Enables Peak Shaving during periods of high demand and offers resilience "islands" during outage events

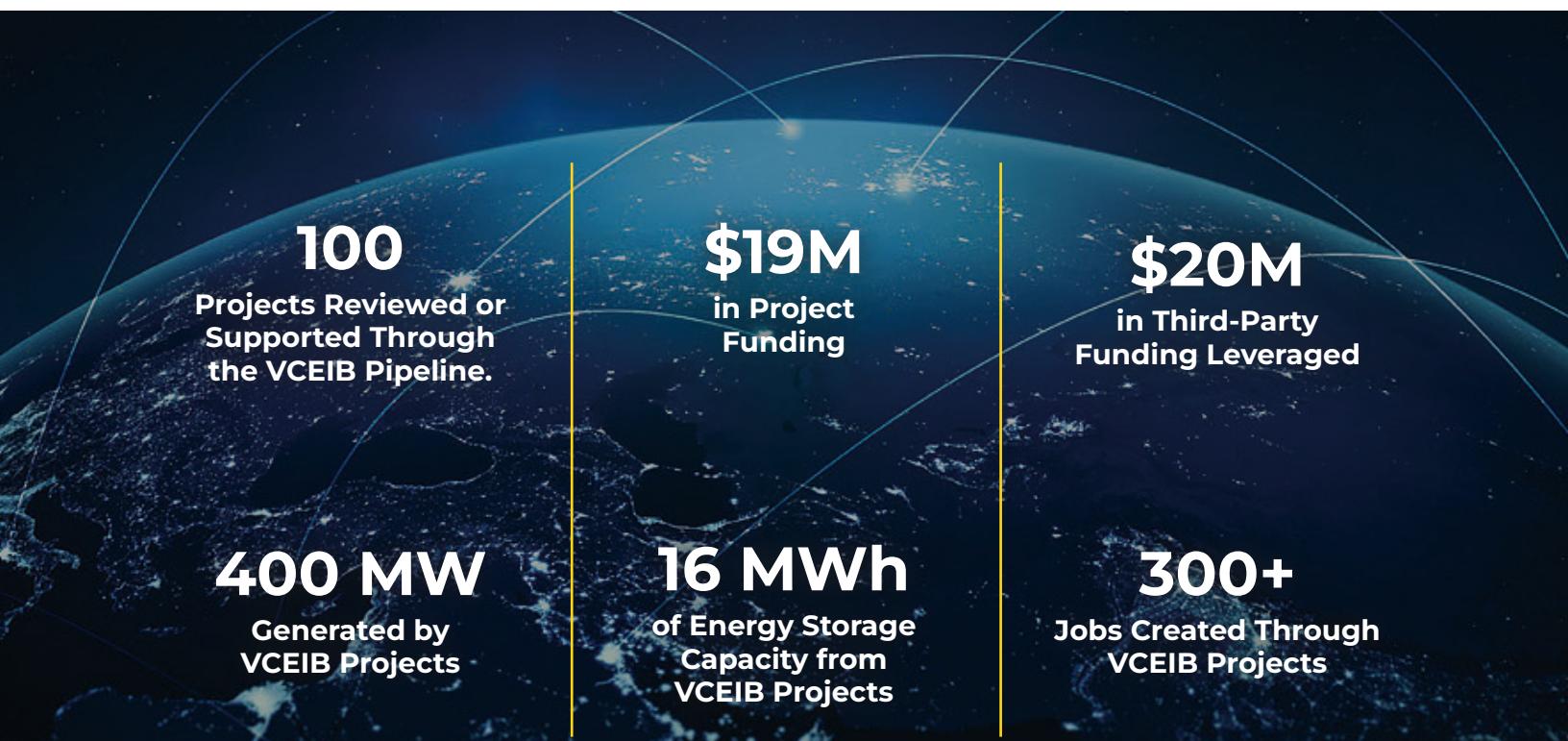


Virginia Fusion Innovation Hub
Statewide

- ✓ Establishes an industry-led collaboration to accelerate fusion commercialization, supply-chain readiness, and workforce development
- ✓ Aligns private industry, universities, and state partners to position Virginia as a national hub for fusion innovation

Letters of Support Facilitated by VCEIB

The Bank has provided letters of support for five private-sector companies working across solar manufacturing, battery storage and grid resiliency, advanced grid modeling, data-center energy efficiency, and nuclear SMR development. These letters help connect innovative businesses with utilities, local partners, and grant or investment opportunities—strengthening Virginia's clean-energy ecosystem without endorsing specific companies.



VIRGINIA POWER INNOVATION PROGRAM

Driving Breakthrough Energy Solutions in Nuclear, Hydrogen, Storage, and Emerging Technologies

Through strategic grants to industry and academic partners, the Virginia Power Innovation Program (VPIP) accelerates nuclear, hydrogen, and other cutting edge energy technologies that strengthen Virginia's energy grid, expand domestic manufacturing, and support a cleaner, more secure energy future.

Featured Projects

Nuclear Research Reactor Study

Funding a planning project to assess the feasibility, design, and implementation strategy for a nuclear research reactor in Virginia.

- ✓ Builds in-state capacity for advanced materials testing and reactor research
- ✓ Reduces reliance on out-of-state labs for essential nuclear work

Virginia Center for Nuclear Materials & Reliability (VA-CNMR)

Funding the development of a collaboration model for a research center focused on materials degradation in non-aqueous environments critical to next generation reactor systems.

- ✓ Addresses key materials science gaps for Gen-IV and advanced systems
- ✓ Strengthens Virginia's leadership in nuclear research and industry collaboration

Nuclear Workforce & Supply Chain Acceleration Program

Funding a small-grants program that strengthens Virginia's nuclear workforce, manufacturing capacity, and supply-chain readiness through targeted local, industry, and university partnerships.

- ✓ Expands statewide capabilities in advanced nuclear engineering, manufacturing, and skilled trades
- ✓ Builds a coordinated ecosystem that supports long-term nuclear innovation and economic growth in Virginia

Other VPIP Grants Include:

- ✓ Funding for safety and maintenance improvements on live-line sensor installations
- ✓ Funding for innovative technologies that extend transformer lifespan and reduce replacement costs

MINED LAND RECLAMATION & ECONOMIC REVITALIZATION

Building Economic Opportunity Throughout Virginia's Coalfield Communities

Virginia's mine-land programs work together to protect communities, restore the environment, and convert former mining sites into productive assets. Through rigorous reclamation, safety oversight, and strategic investment in community-driven redevelopment, Virginia is turning legacy mine lands into safe, stable ground for housing, infrastructure, outdoor recreation, and new economic growth. This combined effort from our Mined Land Reclamation, Abandoned Mine Land, and Economic Revitalization teams reduces environmental and public safety risks today while laying the foundation for long-term prosperity across Southwest Virginia.

Restoring & Securing Former Mine Lands

- ✓ Drainage Correction
- ✓ Equipment Removal
- ✓ Flood Prevention
- ✓ Gob Removal
- ✓ Highwall Remediation
- ✓ Landslide Remediation
- ✓ Mine Dewatering
- ✓ Mine Opening Closure
- ✓ Portal Closure
- ✓ Shaft Closure
- ✓ Subsidence Remediation
- ✓ Surface Burning Remediation
- ✓ Vertical Opening Closure

75
Projects
Completed

3,000
Acres
Reclaimed

75
Projects in
Progress

43,500
People No
Longer at Risk

\$53M
Deployed/
Approved

1,000
Permits with
Zero Off-site
Impacts

MINERAL MINING & COAL MINE SAFETY

Protecting Virginia's Miners, Environment, & Economic Future

Virginia Energy's Mining and Coal Mine Safety divisions uphold an exemplary safety record while supporting the Commonwealth's economy through training, certification, and regulatory excellence. Through ongoing inspections, safety education, and reclamation oversight, the divisions ensure that mining remains safe, responsible, and economically viable for workers and communities across Virginia.

Major Highlights & Achievements



Achieved all-time record-low fatality and injury rates, reflecting strong compliance and continuous safety improvement.



Issued thousands of certifications and safety trainings, maintaining a highly skilled and safety-conscious workforce.



Maintained a near-perfect inspection completion rate, exceeding state and federal oversight requirements.

27,500

Certifications Issued

14,300

Miners Trained

320M Tons

Coal & Minerals Produced

\$14.5B

Production Value



87,000

Hours of Job Safety Inspections Completed

GEOLOGY & MINERAL RESOURCES (DGMR)

Mapping Virginia's Past to Guide its Future

The Division of Geology and Mineral Resources (DGMR) provides the scientific foundation for understanding Virginia's geology, mineral resources, and natural hazards. Through advanced mapping, data modernization, and applied research, DGMR supports responsible land use, resource development, and environmental protection statewide.

Major Highlights & Achievements

Launched KarstView, an interactive platform that maps Virginia's sinkholes and karst systems for public and scientific use, providing critical data needed to reduce the impact of landslides on Virginia Communities

Deployed the Geoprobe drilling system to collect new subsurface data supporting critical mineral exploration and geologic mapping

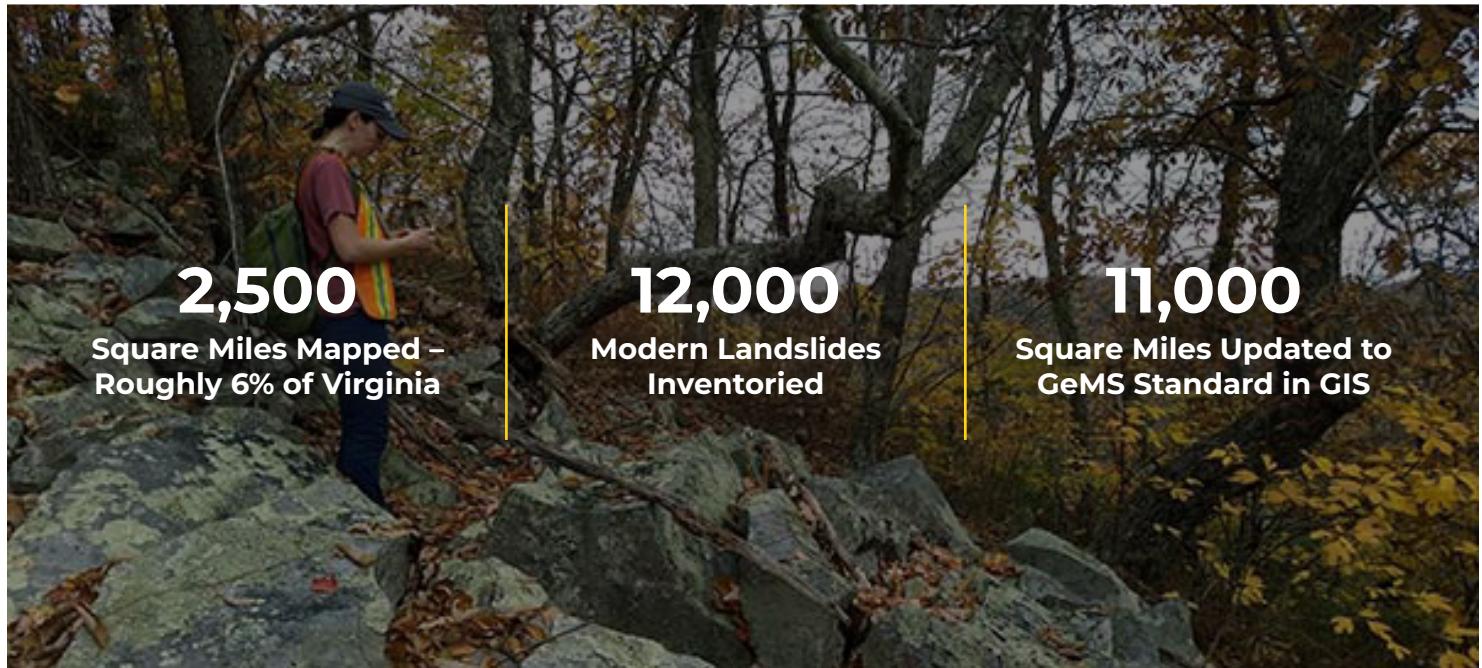
Doubled Virginia's federal funding for critical mineral assessment, geologic mapping, and geologic hazard assessment through competitive grant applications

Finished and updated Virginia's statewide geologic map

Developed map viewers to relay information about geologic hazards associated with karst and landslides

Published 24 new geologic maps and **five mineral and energy resource assessments**

Submitted 39 digital geologic map databases to support development of a digital geologic framework for the nation



GAS & OIL

Ensuring Safety, Sustainability, & Innovation in Virginia's Energy Production

Virginia's Gas and Oil Program regulates exploration, drilling, and production to ensure safe operations and environmental protection. The program also advances methane mitigation initiatives that reduce emissions and improve air quality, while overseeing key programs like the Coalbed Methane (CBM) Escrow distribution that support mineral owners and operators.



8,500

Active Wells
Regulated

13

Wells Destroying
Mine Methane Gas

14,500+

Inspections
Conducted

560 McF

Natural Gas Produced
(\$3.35B)

18,500

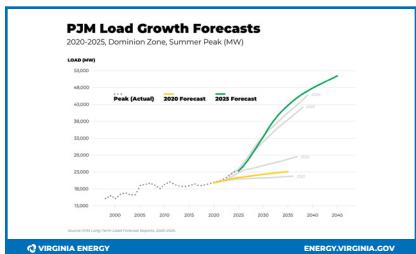
Barrels of Oil Produced
(\$1.32M)

\$2.1M+

Distributed from CBM
Escrow Program

OUTREACH & ENGAGEMENT

Over the past four years, Virginia Energy has rebuilt its communications strategy to better serve the Commonwealth and support the priorities of the executive branch—making our work clearer, more accessible, and more accountable to the people we serve. We've focused on educating legislators with timely, data-driven information; equipping media with accurate context on complex energy and resource issues; and keeping taxpayers informed about where and how public dollars are being invested to improve lives, strengthen communities, and support long-term economic growth.



DATA VISUALS & INFOGRAPHICS

Our redesigned charts, graphics, videos, and even occasional cartoons reflect a data-first approach that makes complex information clearer, more engaging, and easier to understand.



FROM GROUND TO GRID

Debuting in 2025, *From Ground to Grid* provides direct, expert insights from agency leadership on the issues shaping Virginia's energy and resource future.



MONTHLY NEWSLETTER

Launched in 2024, our monthly newsletter delivers clear, timely updates that keep legislators, partners, and taxpayers informed about our work across the Commonwealth.

5.4M
People Reached
on Social Media

1M
Videos
Watched

650K+
Website
Users

17,000+
Social Media
Followers

8,000+
Media
Hits





RICHMOND

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BIG STONE GAP

Gas & Oil | Coal Mine Safety | Mined Land Repurposing

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