
VIRGINIA CLEAN ENERGY
INNOVATION BANK
Powered by Virginia Energy
WHERE ENERGY, INNOVATION, & INVESTMENT CONVERGE
CONTACT US | ENERGYBANK@ENERGY.VIRGINIA.GOV | ENERGY.VIRGINIA.GOV

## OUR MISSION

# ACCELERATING THE DEPLOYMENT OF CLEAN POWER GENERATION & INFRASTRUCTURE ACROSS THE COMMONWEALTH.

The Virginia Clean Energy Innovation Bank mobilizes public and private capital to address critical financing gaps, alleviating financial barriers to project deployment.

**HOUSED WITHIN THE STATE ENERGY OFFICE WITHIN THE VIRGINIA DEPARTMENT OF ENERGY**

**SUPPORTS THE GOALS OF VIRGINIA'S 2026 ENERGY PLAN**

**EXPANDS ACCESS TO RELIABLE, AFFORDABLE, & CLEAN ENERGY**

**CREATES WELL-PAYING JOBS & SUPPORTS DOMESTIC SUPPLY CHAINS**

# AN ACTIVE & IMPACTFUL INAUGURAL YEAR

In 2025, the Virginia Clean Energy Innovation Bank hit the ground running and funded 12 projects after evaluating over 100.

The Bank is now a key driver of public-private investment in advanced energy projects, linking innovators, developers, and investors to advance clean manufacturing, critical minerals, grid modernization, and next-generation energy technologies.

**100+ PROJECTS** REVIEWED OR SUPPORTED THROUGH THE VCEIB PIPELINE

**$9.2M** IN PROJECTED PROJECT FUNDING

**$10M** IN THIRD-PARTY FUNDING LEVERAGED

**400 MW GENERATED** BY VCEIB PROJECTS

**16 MWH OF ENERGY STORAGE** CAPACITY FROM VCEIB PROJECTS

**300+ FULL-TIME JOBS** CREATED THROUGH VCEIB

## STATUTORY MANDATE

# VCEIB RE-ESTABLISHED IN CODE

### § 45.2-114 through 122 – Effective July 1st, 2026

- Bank Advisory Board formally created
- Broad mandate for innovative financing methods and technologies
- Focus on maximizing equitable impact, private capital leverage, economic outcomes, consumer protection, and minimizing greenhouse gas emissions.

- Increased Reporting & Transparency:
  - Quarterly Public Meetings
  - Annual Report
  - Annual Audit by Auditor of Public Accounts
  - Two-Year Strategic Plan
  - Four-Year Investment Strategy

**7 QUALIFIED PROJECT CATEGORIES:**

**GREENHOUSE GAS REDUCTION**

**ENERGY EFFICIENCY**

**CLEAN GENERATION, ENERGY STORAGE, & GRID INNOVATION**

**ELECTRIFICATION**

**CLEAN TRANSPORTATION**

**DEMAND RESPONSE INITIATIVES**

**SUSTAINABLE WATER USAGE & QUALITY MANAGEMENT**

# VCEIB IN THE NEWS

VIRGINIA MERCURY

**Virginia to Host World's First Fusion Power Plant**

CCALS Commonwealth Center for Advanced Logistics Systems

**Launch of Energy-Centric UAS Center for Critical Infrastructure**

MOUNTAIN NEWS wymt

**Advanced Nuclear Deployment Coming to Southwest Virginia**

VIRGINIA CHAMBER

**GMU Celebrates Grand Opening of Fuse at Mason Square**

GOVERNOR OF VIRGINIA Glenn Youngkin

**Virginia Energy Award Of $275,000 to UVA Wise for Nuclear Control Room Simulator**

DOGWOOD

**Virginia Invests $481K in Sussex County Project to Boost Clean Energy Supply Chain**

VIRGINIA TECH Corporate Research Center

**VCEIB Awards $1 Million for Terrapower Simulator at Virginia Tech Corporate Research Center**

## OUR WORK

# FUNDING

Helping projects move from concept to deployment through targeted financial interventions.

# FACILITATION

Linking  innovators and energy leaders to Virginia's ecosystem via effective matchmaking and expert vetting.

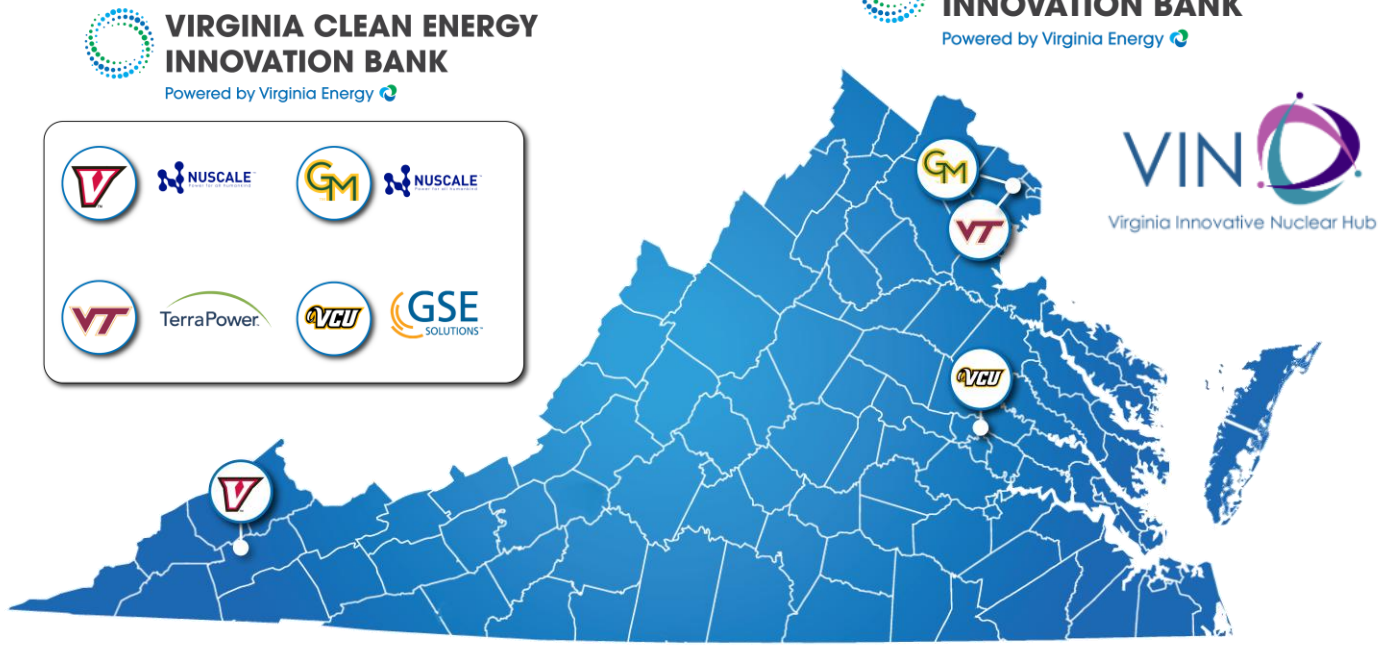
# LEVERAGE

Combining state resources with other public and private capital to ensure every public dollar unlocks  greater impact and scale.

- FUSION
- NUCLEAR
- ENERGY EFFICIENCY
- SOLAR + STORAGE
- TRANSMISSION & DISTRIBUTION
- MICROGRIDS
- BATTERY STORAGE
- WASTE-TO-ENERGY

# VIRGINIA'S WORKFORCE OF TOMORROW

Through the Virginia Clean Energy Innovation Bank, the Commonwealth has strategically invested in educational assets that will bolster the advanced nuclear workforce and poise Virginia for America's nuclear renaissance.




| | Virginia Tech | VCU | GMU | UVA Wise |
|---|---|---|---|---|
| Location | Arlington, VA | Richmond, VA | Arlington, VA | St. Paul, Wise Co, VA |
| Date Commissioned | Q2 2027 | September 2022 | May 2025 | January 2026 |
| Provider | TerraPower Natrium | GSE Solutions | NuScale E2 Center | NuScale E2 Center |
| Technology | Sodium-cooled Fast Reactor with Storage | Generic Pressurized Water Reactor (PWR) | Small Modular Reactor (SMR) Light Water PWR | |
| Capacity | 7 Operator Stations | 6 Operator Stations | 16 Operator Stations | 4 Operator Stations |
| Impact | First of its Kind to be publicly available | Versatile & Scalable to Advanced Nuclear | Largest in the US | Connects SWVA to TVA NuScale project |

## OUR FOCUS AREA

# MAKING THE PROJECT BANKABLE & ADVANCING TECHNOLOGY TO COMMERCIALIZATION

**Technology Readiness:**
- Feasibility or pilot stage
- Advancing to commercial viability
- ~TRL 5-7

**Established Financing:**
- Company is established
- Has successfully raised funds



## WHY VIRGINIA?

# VIRGINIA IS AN ECONOMIC POWERHOUSE

Our supportive business, policy, & educational ecosystem features **25** Fortune 500 companies, **86** colleges and universities, and **16** years of bipartisan state governance.

**#1**
**DATA CENTER MARKET**
*IN THE WORLD*

**#1**
**STATE FOR BUSINESS**
*CNBC - 2021, 2022, & 2024*

**25**
**FORTUNE 500 COMPANIES**
*WITH HQs IN VA*

**$800B**
**GDP**
*GROWING AT 4.2% YOY*

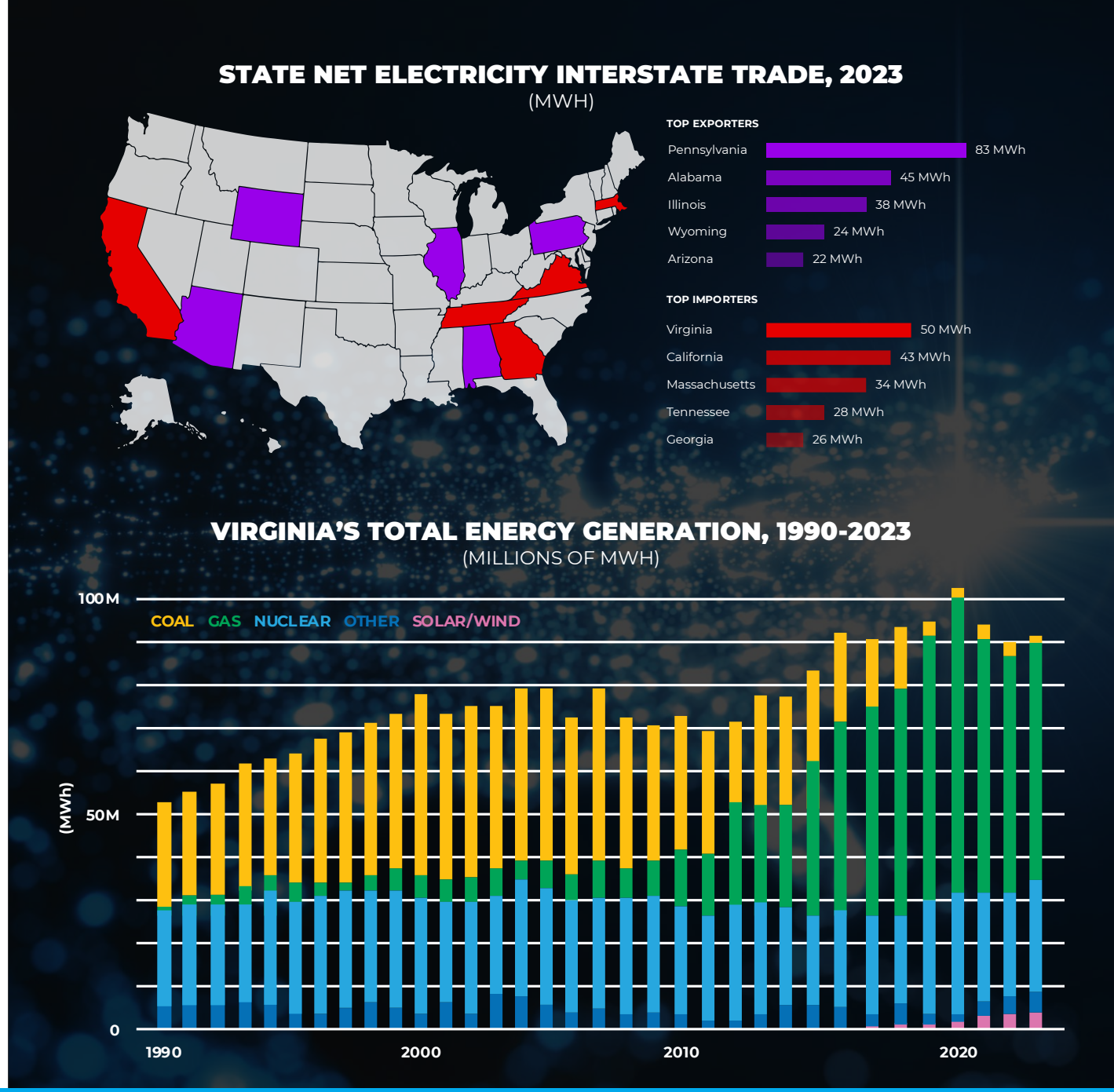
**$140B**
**CAPITAL INVESTMENT COMMITMENTS**
*SINCE 2022*

**9M**
**POPULATION**
*6% GROWTH IN LAST DECADE*

## THE NEED FOR A GREEN BANK

# VIRGINIA WAS THE LARGEST IMPORTER OF ELECTRICITY IN THE U.S. IN 2024.

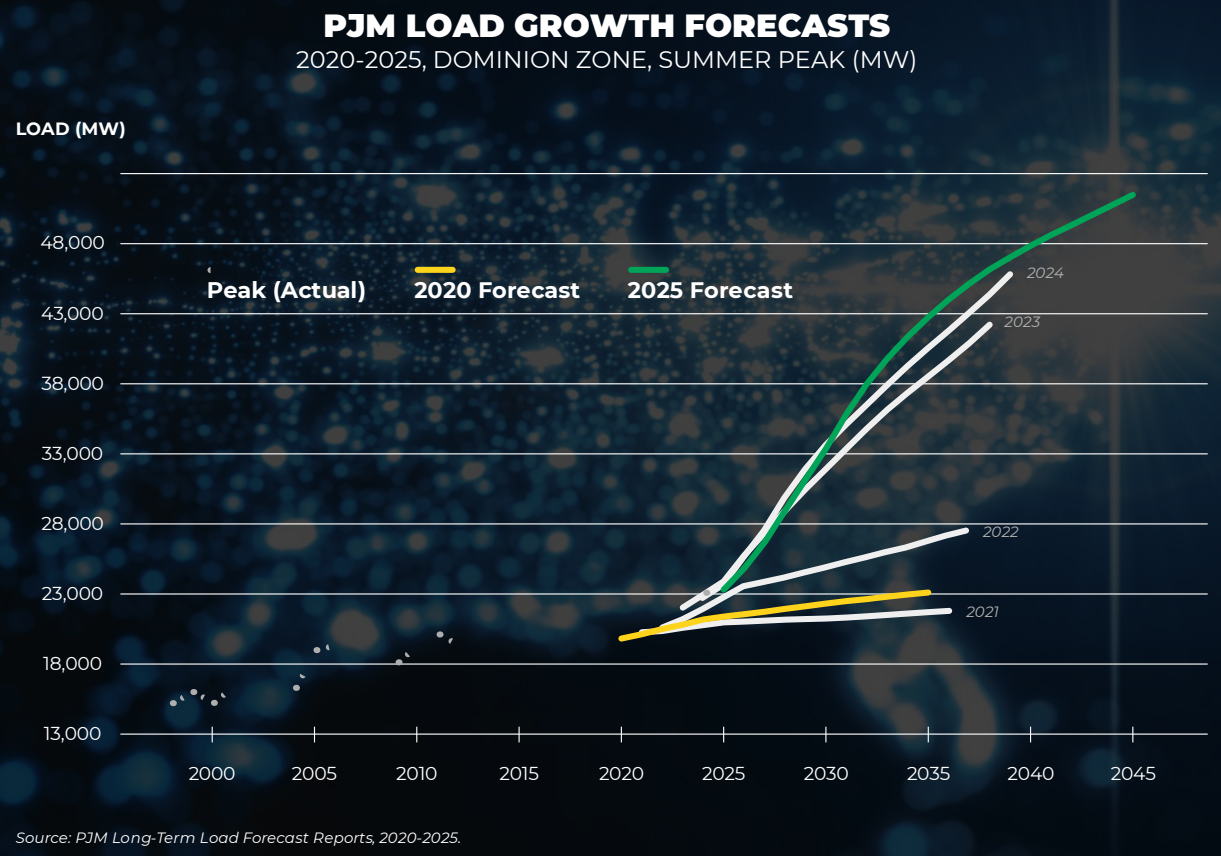
The energy mix of tomorrow will be different than today, and more capacity is needed to advance Virginia's energy independence.



## SURGING DEMAND

# VIRGINIA IS EXPERIENCING THE FASTEST GROWTH IN POWER DEMAND SINCE WWII

Power capacity will need to double over the next decade to meet growing demand, which is now projected to rise by 6.5% year over year—up sharply from the 1.4% projection made in 2020.

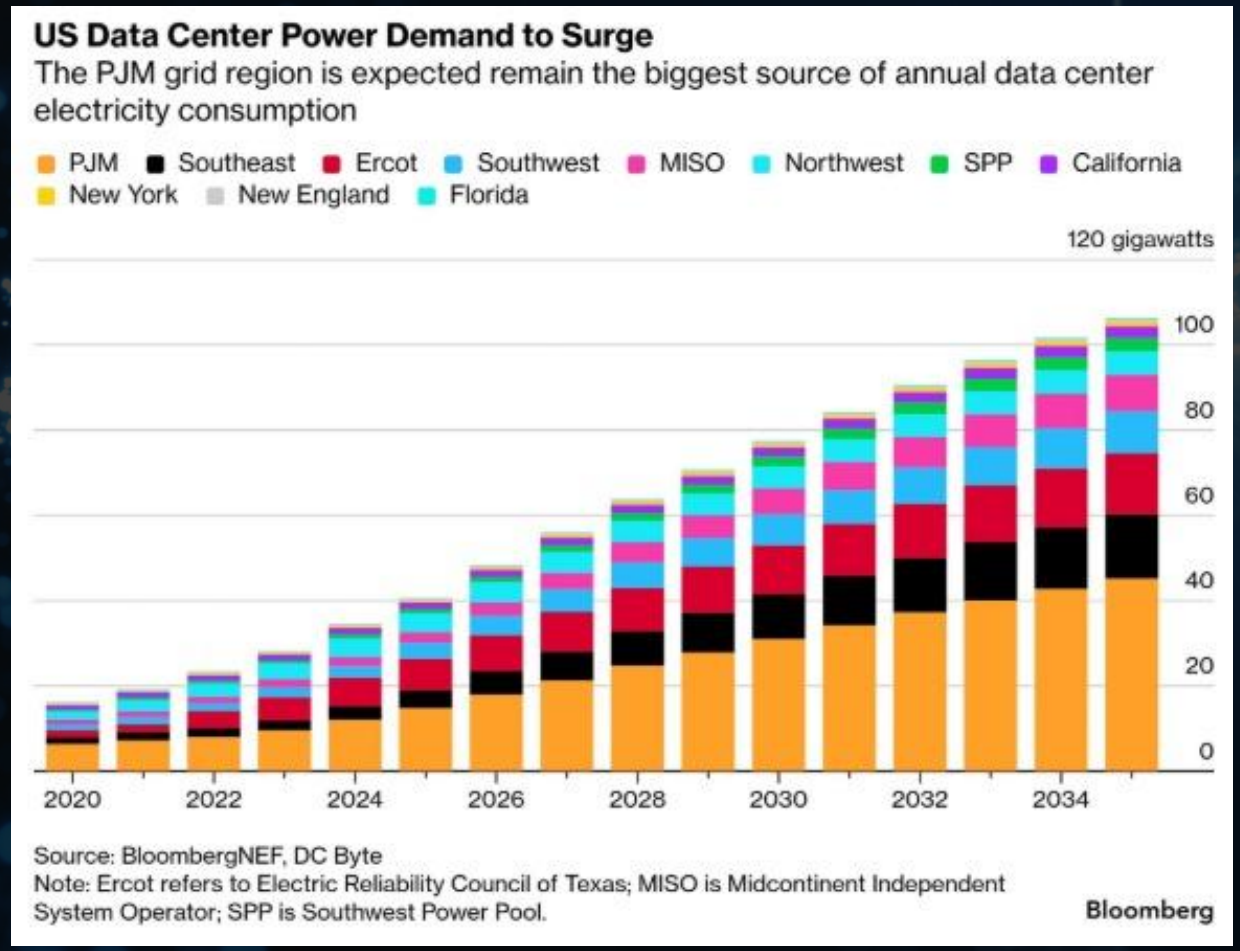



*Source: PJM Long-Term Load Forecast Reports, 2020-2025.*

## SURGING DEMAND

# LOAD GROWTH INCREASING NATIONALLY

US's energy demand will increase across the board, but especially with PJM Interconnection, the grid operator for Virginia.



# BUILDING AN ECOSYSTEM TO INNOVATE + DEPLOY

Launched in September 2024, VCEIB is **Virginia's premier State Energy Finance Institution (SEFI)** and has built an ecosystem of partners to accelerate energy innovation across the Commonwealth.

## STATE & FEDERAL

- Appalachian Regional Commission
- VEDP
- VCEDA – Virginia Coalfield Economic Development Authority
- U.S. Department of Energy | EDF
- VIPC
- Virginia Department of SBSD – Small Business & Supplier Diversity

## NONPROFITS & COMMUNITY

- Appalachian Community Capital
- Virginia Clean Cities
- Conservatives for Clean Energy Virginia
- Energy Right
- Solar Workgroup of Southwest Virginia
- Clean Virginia

## PRIVATE SECTOR

- Bezos Earth Fund
- Closed Loop Partners
- locus
- Gates Foundation
- NYCEEC – Building Financial Solutions
- octopus energy
- Capital One Bank
- FreedomFirst

# VCEIB TIMELINE

**AUG '24 — FOUNDATION**
VCEIB is established in the Virginia Department of Energy

**DEC '24 — FUSION FIRST**
VCEIB invests $1M to support the first-ever commercially viable fusion plant in Chesterfield County

**JAN '25 — DIRECTOR**
Simon Glossop is hired as the inaugural VCEIB Director

**MAR '25 — GMU & NUSCALE**
VCEIB supports George Mason University with $275K to install a NuScale SMR Simulator at the Arlington campus

**MAY '25 — HOSPITAL SOLAR**
VCEIB partners with Locus Impact Funding to refinance $869k for a ground-mount solar array for a medical center in Christiansburg

**NOV '25 — HYDROGEN DRONES**
VCEIB joins the Tobacco Region Revitalization Commission in funding CCALS to create a hydrogen-powered drone hub in Petersburg

**OCT '25 — CRITICAL MINERALS**
VCEIB invests $481K into Atlantic Strategic Minerals for engineering & feasibility plans of a rare earth element (REE) processing facility in Sussex County

**SEP-OCT '25 — OUTREACH**
VCEIB staff attend NYC Climate Week, VA Clean Energy summit, and the VBA Credit & Lending Conference

**JUL '25 — SECOND STAFF**
VCEIB hires its first Investments Lead, Shaun Mathew

**JUL '25 — SW SMRs**
VCEIB supports Wise County's nuclear microreactor feasibility study with $100K

**NOV '25 — FUSION SUPPLY CHAIN**
VCEIB funds Virginia Commonwealth University with $660K to upgrade its nuclear simulator and acquire an atomizer to 3D print fusion magnets

**DEC '25 — AI RESEARCH DATA CENTER**
VCEIB supports George Mason University with $1.5M to acquire a research-grade NVIDIA AI Data Center for a novel public database

**DEC '25 — BATTERY STORAGE**
VCEIB invests $3M into Rappahannock Electric Cooperative for a battery energy storage system (BESS) in Caroline County for cost savings and grid resilience.

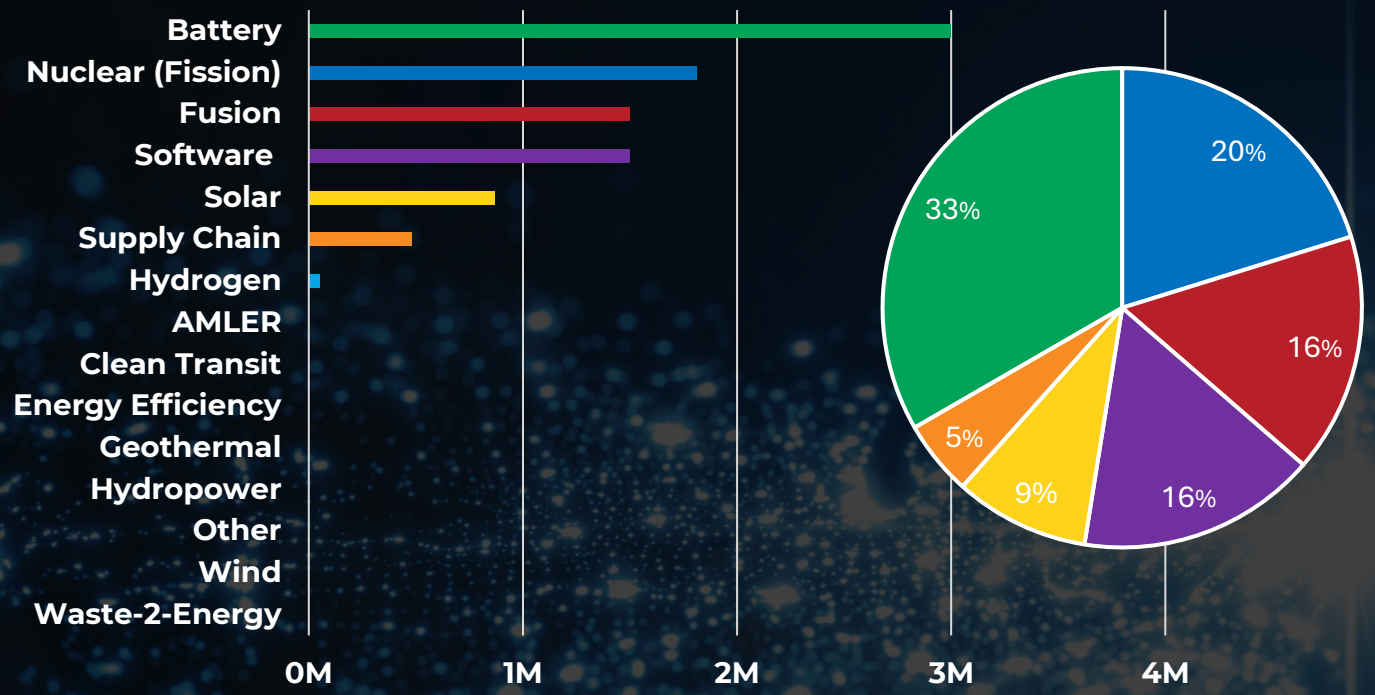
**JAN '26 — TERRAPOWER & NUSCALE IN SW**
VCEIB funds Virginia Tech with $1M for a TerraPower SMR Simulator, and UVA Wise with $275K for a NuScale SMR Simulator

**JUL '26 — WAITING IN THE WINGS**
During the 2026 regular and reconvened General Assembly sessions, VCEIB was formally reestablished in Code and was funded with $10M for 2 years.

**SEP '26 — SUSTAINED GROWTH**
VCEIB hires its second Investments Lead, Trang Ly.

# EXECUTED PORTFOLIO

Our portfolio represents a cross-section of innovative technologies, with ample room for growth.






## PIPELINE SNAPSHOT – OCTOBER 2026



### $1M LOAN FOR INTEGRATED SOLAR, STORAGE, DIGITAL BILLBOARD & EV CHARGERS

Distributed generation at hotel parking lots in Richmond, Chester, Mechanicsville, & Newport News



### $300K PREFERRED EQUITY IN PURE-PLAY DEVELOPMENT OF ADVANCED FISSION

900 MW SMR Campus in Halifax County (Southern VA) to provide clean, baseload power for rising loads



### $435K LOAN FOR PUBLIC-FACING EV CHARGING STATION

Downtown Richmond location serves HEDC regions and I-95/I-64 Interchange traffic



### $360K LOAN FOR UTILITY-SCALE BATTERY STORAGE

Enhances grid reliability and affordability in Amherst County (Western VA)



### ELECTRIC SCHOOL BUS INCENTIVE PROGRAMS & MODULAR/EDGE COMPUTING

Promotes fleet electrification and clean air for students in Northern Virginia Public Schools



### ADVANCED SEPARATION OF CRITICAL MINERALS & RARE EARTH ELEMENTS

Makes use of mine waste tailings in Southwest Virginia Coalfields for manufacturing renewables



### MODULAR SOLAR PANEL RECYCLING TECHNOLOGY

Separates glass, panels, and solar cells to reuse silicon to limit waste, and reduce cost and footprint

# FUNDING

Helping projects move from concept to deployment through targeted financial interventions—from early support to large-scale backing.

## ALL PROJECTS FOLLOW OUR STANDARD INTAKE, DUE DILIGENCE, & APPROVAL PROCESS.

### PROJECT LOANS

Up to $1-2M secured loans at a government rate for up to 10 years. VCEIB looks for commercially viable projects and will have seniority claim on collateral.

### INNOVATIVE OR STRUCTURED FINANCE

Up to $2M via bespoke financial instruments, credit enhancements, loan loss reserves, loan guarantees, ownership stakes, & first-loss positions.

### DEVELOPMENT LOANS

Up to $500k for unsecured loans at a further subsidized rate for up to 5 years. The target borrowers for development loans are municipalities and established companies with minimal credit risk.

### SMALL GRANTS

Up to $10k for occasional small-scale projects. These projects might fund academic research or workforce development initiatives.

# LEVERAGE

Combining state resources with other public and private capital to amplify investment, ensuring every public dollar unlocks even greater impact and scale.

## UNLOCKING PRIVATE CAPITAL FOR VIRGINIA

VCEIB frequently works with large private-sector financing firms with the aim to attract their investment to Virginia.

As a **State Energy Finance Institution (SEFI**), VCEIB has access to the federal DOE's Office of Energy Dominance Financing, which can finance a significant amount of large-scale clean energy infrastructure projects exceeding $100 million.

***Example:***
*VCEIB jointly-refinanced a solar array for a hospital in Christiansburg, VA. VCEIB's contribution was matched in principal by Locus Impact Bank.*

APPIAN CAPITAL ADVISORY
DEVENGINE WE BUILD DISTRIBUTED TEAMS
Armstrong
RIOT
locus
RED CELL
amalgamated bank

# FACILITATION

Linking innovators and established energy leaders to Virginia's ecosystem through effective matchmaking, executive-level introductions, expert vetting, and letters of support.

## OUR FACILITATION PROCESS

**Intake:** Companies submit proposals to the Clean Energy Innovation Bank for consideration.

**Research:** Our experts analyze technical documentation and assess the potential value for the Commonwealth.

**Demonstration:** Companies present their technology in detail; VCEIB and VDOE staff evaluate performance and ask critical questions.

**References:** Corporate references are requested and reviewed to validate credibility, experience, and proven results.

**Approval & Facilitation:** With support from VDOE leadership, VCEIB issues letters of support and makes executive-level introductions to utilities and industry leaders.

# FACILITATION

Linking innovators and established energy leaders to Virginia's ecosystem through effective matchmaking, executive-level introductions, expert vetting, and letters of support.

| PROCESS | REFER | RECOMMEND | SPONSOR |
|---|---|---|---|
| INTAKE & VETTING | ✓ | ✓ | ✓ |
| ADVISE TO CONTACT PARTNER | ✓ | ✓ | ✓ |
| INTRO & RECOMMEND | | ✓ | ✓ |
| REFERENCES CONTACTED | | | ✓ |
| SENIOR-LEVEL INTRODUCTION | | | ✓ |
| SENIOR LETTER OF SUPPORT | | | ✓ |


DEVELOPING CLEAN ENERGY SOLUTIONS WITH THE POTENTIAL TO SCALE?
WE CAN HELP.
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