

Multifamily Multiverse Speakers

KC Bleile, VEIC

Stephen Evanko, Dominion Due Diligence Group

Phillip Cunningham, Virginia Housing

Sunshine Mathon, Piedmont Housing Alliance

Rebecca Hui, VAEEC (moderator)





veic

Agenda

Who is VEIC?

IRA Funding & Timelines

What is the IRA deployment

landscape?

Case Study

VAEEC 2024 Fall Forum

VEIC: High-impact energy solutions that decarbonize buildings, transportation, and utility grids, today.

- Nonprofit founded in 1986
- National consulting practice working across over 75% of the country
- Program design and implementation for award-winning energy efficiency and clean energy programs



Our footprint

National reach, local approach







veic

Innovative clean energy expertise to move us forward

Over 300 employees across 6 offices

Consultants, engineers, policy experts, M&V specialists, program designers, project managers, marketing experts, consumer insights specialists, researchers, and analysts

17

Results that make a difference

Our work since 2000 will reduce greenhouse gas emissions by an estimated

112,270,110

metric tons over the lifetime of efficiency and renewable energy investments

\$4.9

B

Participants across our programs will save more than an estimated \$4.9B over the lifetime of efficiency measures

26

Since 2020 we have worked in 26 states/provinces across North

America

\$124M

We've paid incentives totaling over \$124M to program participants and partners for low-income programs



IRA HER/HEAR Guidance Analysis

Government Affairs & Policy Department

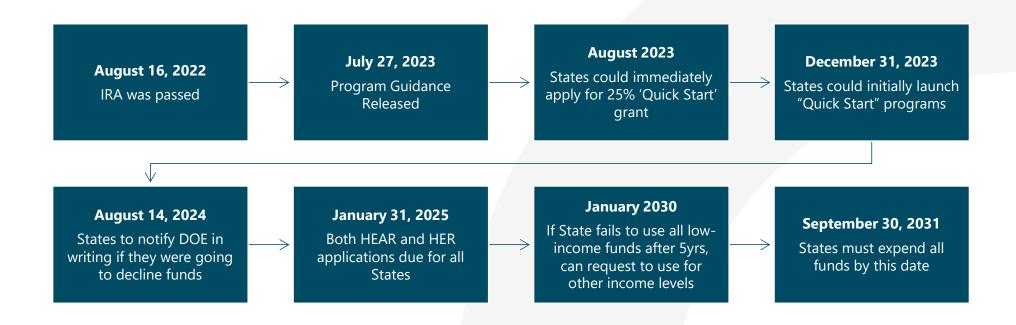
The Inflation Reduction Act

\$733B bill focused on heath, taxes, and climate

- Passed along party lines in summer 2022.
- \$369B in climate and clean energy investments.
 - The most significant climate bill in America's history.
- Experts estimate the bill could reduce net U.S. GHG emissions 42% by 2030!
- A mix of grants, loans, and tax incentives.
- Ten-year timeframe for most, but not all, funds.
- Grants awarded via formula based largely on population.
- Virginia to receive \$188,334,635 allocated in total for both HEAR and HER programs.



HER/HEAR – High-Level Timeline



VEIC's Perspective on IRA Home Energy Rebates

VEIC is working in the following states:

- **Delaware**: Leading development of HEAR and HER applications, Implementation Blueprint Plans, and planning for implementation.
- California: Supporting development of the HEAR Implementation Blueprint Plans.
- **Connecticut**: Leading the development of the HEAR and HER applications and Implementation Blueprint Plans.
- Vermont: Assisting with HEAR program planning and design.
- **Washington, DC**: Supporting DC's HEAR and HER applications and Implementation Blueprint Plans; implementation through existing DCSEU programs.

Home Energy Performance Based Whole-House Rebates (HER)

- Total funding \$4.3 billion rebate program administered by SEOs.
- Awarding grants to SEOs to provide rebates that discount the price of energy-saving retrofits in single-family and multi-family buildings.
- Designed for residential air sealing, weatherization, and building envelope measures.
- All income levels eligible, rebates doubled for low- and moderate-income (LMI).
- Can be stacked with IRA tax credits and all state/utility/local incentives.
- Two pathways:
 - HER <u>Measured</u> energy savings rebates cannot be stacked with HEAR
 - HER <u>Modeled</u> energy savings rebates can be provided they are for a different single upgrade.

High-Efficiency Electric Appliance Rebate Program (HEAR)

- Total funding \$4.5 billion rebate program administered by SEOs.
- Program offers point-of-sale consumer rebates for qualified electrification projects.
 - Provides up to \$14,000 per household including up to \$8,000 for heat pumps, \$1,750 for heat pump water heaters, and \$840 for electric stoves.
 - Includes rebates for improvements to electrical panels or wiring.
 - Up to 100% of costs covered for low-income. All eligible recipients **must fall below** 150% of Area Median Income (AMI).
 - Can be stacked with IRA tax credits and all state/utility/local incentives.
 - Single household cannot receive a rebate for more than one appliance of a single type.



HER Program Requirements: Low Income

- At **a minimum**, States must allocate a specified percentage of its rebate funding for each of the rebate programs in line with its percentage of low-income households (40% nationally).
- Allocate at least 10% of its rebate funding to serve low-income multifamily buildings. This allocation **must be additional to and separate from** the low-income allocation.
- If a State has failed to disburse the rebate funds allocated to low-income households within 5 years of receipt of its total allocation, it may request that DOE authorize the State to reallocate those funds to households at other income levels.
- Allows categorical co-enrollment based on other Federal programs that meet the income thresholds.
- States are responsible for income verification.

HER Program Requirements: Community Benefit Plan

States required to submit Plans that adhere to J40 requirements, and include the following:

- **Engage Community and Labor** States must hold at least one public input session and integrate the feedback. Must also describe what community and outreach strategies will be used to reach contractor and workforce orgs, LMI households, and other marginalized groups. Partnerships with organized labor and CBOs are strongly encouraged.
- **Engage Qualified Workforce** Plan must outline the process to work with responsible contractors and develop a skilled workforce.
- **Incorporate DEIA** State Plan needs to detail partnerships with underrepresented businesses.
- Address J40 Initiatives Plan needs to include the definition of and method of delivery to disadvantaged communities.

HER Program Requirements: Program Evaluation, Consumer Experience

- Data collection and data sharing must be secure to protect privacy.
- States must participate in DOE-led process and impact evaluations.
 - Also an option to conduct their own evaluations consistent with requirements.
- States must submit an Outreach and Education Implementation Blueprint Plan, to include:
 - Partnerships (local government, CBOs, non-profits, etc.)
 - Estimated budget devoted to outreach and education, with description of channels and educational materials.

States may choose either a Measured or Modeled path, or both, for energy savings

HER Program Requirements: Modeled Savings Rebate Amounts

Single-Family				
Modeled Energy Savings	Income Level	Rebate Amount		
20%-34%	Less than 80% AMI* Lesser of \$4,000 or 80% of project			
	80% AMI and greater	Lesser of \$2,000 or 50% of project cost		
35% and	Less than 80% AMI*	Lesser of \$8,000 or 80% of project cost		

Lesser of \$4,000 or 50% of project cost

80% AMI and greater

Multifamily

greater

Modeled Energy Savings	Income Level	Rebate Amount	
20%-34%	A building with at least 50% of households with incomes less than 80% AMI*	Lesser of \$4,000 per dwelling unit or 80% of project cost	
	A building with at least 50% of households with incomes 80% AMI and greater	\$2,000 per dwelling unit up to \$200,000 per building	
Greater than 35%	A building with at least 50% of households with incomes less than 80% AMI *	Lesser of \$8,000 per dwelling unit or 80% of project cost	
	A building with at least 50% of households with incomes 80% AMI and greater	\$4,000 per dwelling unit up to \$400,000 per building	

*States may increase the maximum amount available for low-income households upon approval from DOE. 19 See section 3.1.3 for details.

States may choose either a Measured or Modeled path, or both, for energy savings

HER Program Requirements: Measured Savings Rebate Amounts

Single-Family				
Measured Energy Savings	Income Level	Rebate Amount		
15% or greater	kWh, or kWh equivalent, payment rate equal to \$4,000 for a 20% reduction of energy use for the average home in the State or 80% of project cos			
	80% AMI and greater	kWh, or kWh equivalent, payment rate equal to \$2,000 for a 20% reduction of energy use for the average home in the State or 50% of project cost		

Multifamily

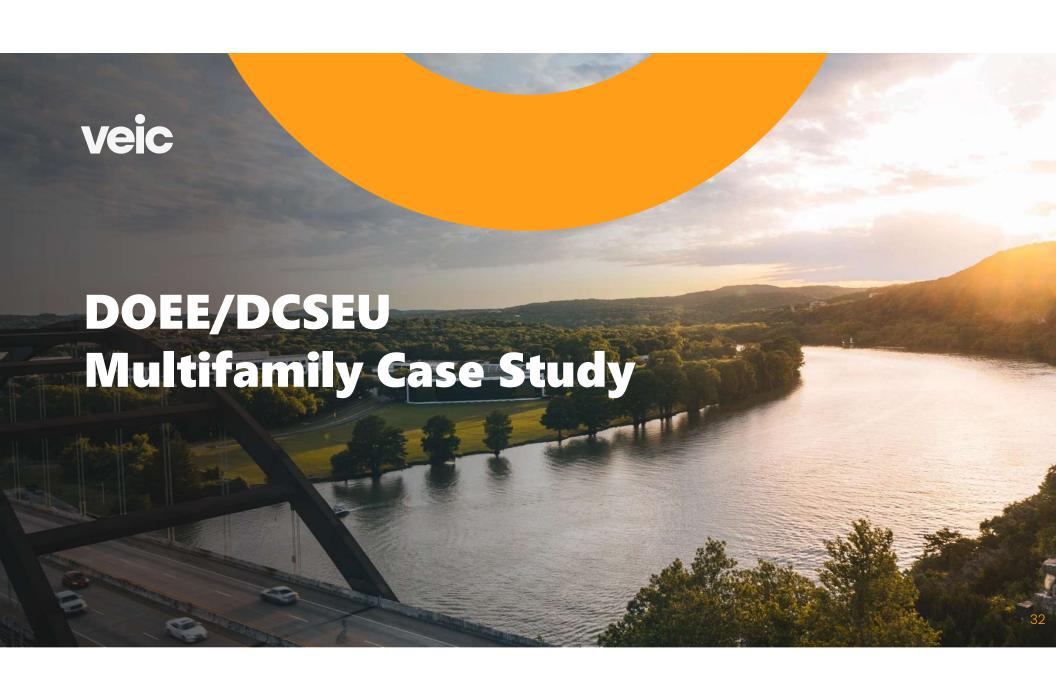
Measured Energy Savings	Income Level	Rebate Amount	
15% or greater	A building with at least 50% of households with incomes less than 80% AMI	kWh, or kWh equivalent, payment rate equal to \$4,000 for a 20% reduction of energy use per dwelling for the average multifamily building in the State or 80% of project cost**	
	A building with at least 50% of households with incomes 80% AMI and greater	kWh, or kWh equivalent, payment rate equal to \$2,000 for a 20% reduction of energy use per dwelling for the average multifamily building in the State or 50% of project cost	

^{*} Per statute, the measured energy saving of the home or portfolio of homes must achieve 15% savings, but the calculation of the rebate is based on a 20% reduction of average home energy use of an in the state.

^{**}States may increase the maximum amount available for low-income households upon approval from DOE. 20 See section 3.1.3 for details.

Rules for Combining Other Funding with Rebates

Sources of Funding	Allow	ance	Requirements to Combine Funding Within Same Household	Examples
Other Federal Grants E.g., funding from WAP, LIHEAP	Can Braid		Must "braid" and use other federal grants to fund distinct and separable measures from "single upgrades" funded by rebate.	Traditional EE measures from WAP (insulation, air sealing, LEDs), appliance measures from rebate (heat pump, HP water heater)
Federal Loans: E.g., Loan from Greenhouse Gas Reduction Fund	Can Co- Fund		Can co-fund any remaining costs for the <u>same</u> <u>"single upgrade"</u> above the value of the Home Energy Rebate.	Loan from GGRF recipient covers remaining upgrade costs after rebate has been applied
Non-Federal Funding: E.g., EE Utility \$, State/Local \$	Can Co- Fund		Can co-fund any remaining costs for the same "single upgrade" above the value of the Home Energy Rebate.	Utility incentive provides additional funding toward remaining upgrade costs after rebate has been applied
Tax Credits: E.g., 25C, 25D, 179D, 45L, LIHTC, state/ local tax credits	Reduce Credit Basis		Reduce basis amount of the expenditure on which tax credit is claimed by rebate, then claim a tax credit based on the remainder of the cost. (DOE Proposal pending final IRS decision)	Tax credit claimed on remaining basis of EE measures after rebate has been applied



What is the Sustainable Energy Utility?

- Created by the Clean & Affordable Energy Act (2008)
- Ratepayer-funded, privately operated
- Performance-based contract to DOEE
- Designed to fulfill DC's clean energy and climate goals through communitycentered initiatives that foster equity and deliver lasting value to the people and businesses of the District.
- Since 2011, has helped District residents and businesses generate more than \$1.2 billion in lifetime energy cost savings.

Braiding and Stacking with an Existing Program

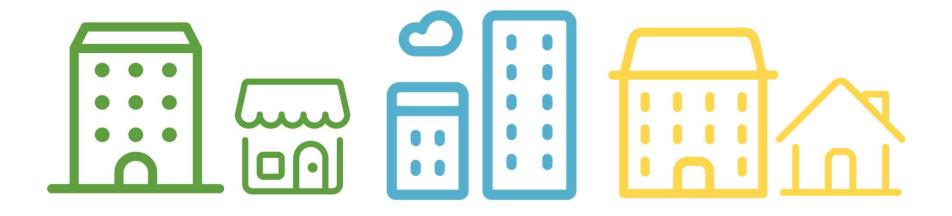
DCSEU Affordable Housing Retrofit Accelerator (AHRA)

- Provides owners and managers of affordable MF housing with the tools they need to upgrade their buildings and meet the District's Building Energy Performance Standards (BEPS)
- ASHRAE Level II audits
- Measures could include chillers, boiler controls, building automation systems, heat pumps, smart thermostats, lighting, pipe insulation, retro-commissioning, low-flow water fixtures, and radiator enclosures
- Through the Income Qualified Efficiency Fund (IQEF), DCSEU provides technical assistance, direct contractor services, and incentives
- Through the Low-Income Comprehensive program, DCSEU account managers and engineers provided no-cost technical assistance to help property owners and managers complete projects

DCSEU - Standard Offerings

- Prescriptive Rebates
- Custom Incentives
- Income Qualified Support

- Technical Assistance
- Workforce Development
- Pay for Performance



Paradise at Parkside: Affordable Multifamily

Built in 1965 653 units

Community Renewable Energy Facilities – 24 Solar for All Community Solar Systems installed from 2020-2021

Solar for All



24 CREFs/ 1.8MW

in solar capacity installed



514

Income-qualified household. 140+ households within the complex.



Up to

\$3.8 million

in electricity bill savings over the next 15 years for incomequalified families.

HVAC Electrification – **541** inverter heat pumps purchased and installed. ASHRAE Level II Audit for all 15 buildings. \$4.57 million in incentives across 3 programs from 2022-2024

AHRA IQEF Custom



17,083 MMBtu

in natural gas savings from fuel switch



1.56 million

lbs of CO₂e prevented annually



\$1.61 million

in energy cost savings over next 15 years



veic

Thank you!

For More Information:

KC Bleile

kbleile@veic.org

802-540-7798

Dan Reilly

dreilly@veic.org

202-510-2272

Chandler Kucera

cKucera@veic.org

802-540-7750







VAEEC Fall Forum

We are the nation's leading full-service environmental, engineering, and energy due diligence firm. We innovate solutions to our nation's largest challenges with affordable housing.

Stephen Evanko

LEED AP, NGBS Master Green Verifier, BPI-MFBA&HHE, GPR EHMF Rater Managing Director of Energy and Sustainability P: (804) 237-1892 E: s.evanko@d3g.com

0

804.358.2020

Robert Hazelton

LEED-AP

CEO and Founder P: (804) 513-6354 E: r.Hazelton@d3g.com



www.d3g.com









AFFORDABLE HOUSING

D3G has 50+ dedicated staff to affordable housing and offers the following services to PHAs, Developers, and Lenders:

- Repositioning Analysis to assess housing stabilization and Recapitalization options via HUD's various Repositioning Programs
- Technical assistance, including hourly and full-service Consulting on RAD and Section 18 Transactions
- Needs Assessments, Energy Studies, and Environmental Reporting tailored to RAD, Section 18, and LIHTC guidance
- · Section 18 Physical Needs Assessments (PNAs)
- Expert knowledge of RAD, Section 18, and Streamlined Voluntary Conversion Programs
- · RAD Application Management and Assistance

Programs

- ✓ Rental Assistance Demonstration (RAD)
- ✓ Section 18
- ✓ Faircloth-to-RAD
- Section 8
- LINTO
- Linic
- Mixed-finance
- ✓ HOME funds
- ✓ National Housing Trust
- ✓ Moving-to-Work (MTW)
- V POAD/Section to ble
- Choice Neighborhood: Initiative



ENVIRONMENTAL SERVICES

Phase I Environmental Site Assessments (ESA):

- · Regulatory and Historical Records Review
- Site Evaluation and Report Preparation by trained and qualified Environmental Professionals (EPs)
- Interviews with Owners, Operators, Occupants, and Local Government
- Regulatory File Reviews with respective Local, State, and Federal Agencies, as necessary

NEPA Studies and HUD HEROS:

- Part 50/58 Environmental Reviews (HUD MF, OROF, RAD, SAC, HOME, CDBG, etc.) and HEROS submissions
- Floodplain and Wetland Consulting, inclusive of the 8-Step and Modified 8-Step Processes
- Coordination of Agency Consultation regarding Historic Preservation, Coastal Zone Management, Endangered Species, Climate Resiliency, Air Quality, and other NEPA-Related Toolics
- Noise Surveys, STC and Barrier Calculations, ASD Calculations, and Resultant Mitigation

Phase II Subsurface Investigations:

- · Soil and Groundwater Testing
- Risk Assessment/Remedial Investigations and Feasibility
 Studies
- Vapor Intrusion/Vapor Encroachment Assessments Tier II Invasive (ASTM E 2600-22, (as amended)
- · Corrective Action and Remediation Plans
- · Brownfields and Site Redevelopment
- Underground Storage Tank (UST), Decommissioning, and Regulatory Guidance

Hazardous Materials Inspections Testing:

- LBP Inspections and Risk Assessments
- Asbestos Surveys
- Operations and Maintenance (O&M) for Asbestos & LBP
- Radon Gas Inspections
- · Coordination of Radon Mitigation Services
- Lead in Drinking Water Sampling
- Mold Inspections

ENGINEERING SERVICES

Capital Needs Assessments (CNA):

- HUD/FHA using CNA e-Tool
- · Rental Assistance Demonstration (RAD) RPCA
- * Tax Credit Applications LIHTC 4% and 9% nationwide
- · Fannie Mae and Freddie Mac
- · Replacement Reserves Analysis (R4R) Studies
- · Diagnostic Evaluation of Major Building Components
- · 'Green' CNAs with Energy Audit

Architectural Design and Construction Cost

- · Architectural Plan Reviews
- · Building Code Compliance Reviews
- Accessibility Compliance Reviews and Consulting (ADA, FHA, UFAS, ANSI-A117.1)
- · Pre-Construction Reviews and Consulting
- · Independent Construction Cost Estimation
- · Replacement Reserve Analysis
- · Cost Not Attributable (CNA) Calculations
- · HUD e-Tool Completion
- · Permits and Approvals Reporting
- · Construction Phase Monitoring and Draw Inspections

ENERGY SERVICES

Benchmarking, Auditing, Modeling, and Certifications:

- · ASHRAE Compliant Energy Audits
- · Utility Allowance Calculations
- · HUD Green MIP, 45L, GRRP, RAD, LIHTC, PACE, etc.
- Energy Modeling Statement of Energy Design Intent (SEDI)
- · Certified HERS Rating and Diagnostic Testing
- · Healthy HOMES Evaluations
- · Statement of Energy Performance (SEP)
- Green Capital Needs Assessments and Integrated Physical Needs Assessment (IPNA)
- National Green Building Standard (NGBS) Green Consulting and Verification
- · EPA ENERGY STAR Existing Building Certification
- EPA ENERGY STAR Multifamily New Construction Certification
- Green Point Rated Existing Home Multifamily
 Costification





HUD's Green Resilient Retrofit Program (GRRP)



- Eligibility was limited to HUD's Multifamily assisted portfolio (e.g., S8 PBRA, Section 202, Section 811)
- Funding to be provided as Grant or Cash Surplus Loan (Interest Rate 1%)
- Applications started in June 2023 and finished in July 2024
- Awards were made based on energy-efficiency and climate resilience needs with geographic considerations

Element Awards

- Provide additional funding / gap-financing for owner-driven specific energy-efficiency and climate investments
- Recapitalization efforts should already be materially advanced
- Maximum awards of up to \$750,000 per property with a per unit cap of \$40,000

Leading Edge Awards

- Provide additional funding / gap-financing for more ambitious owner-driven energyefficiency and climate investments
- Requires <u>ambitious</u> net-zero green building certification
- Maximum awards of up to \$10M per property with a per unit cap of \$60,000

Comprehensive Awards

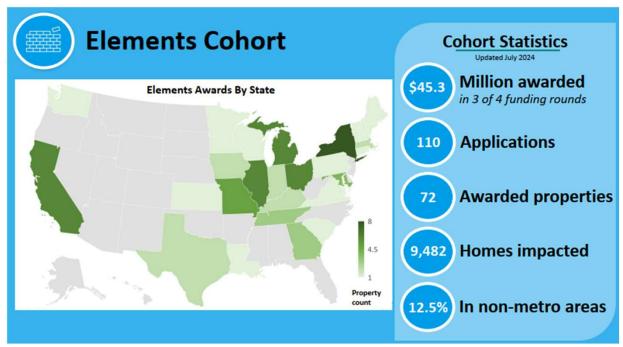
- May fund a stand-alone initiative or be the foundation for a larger recapitalization
- Maximum awards of up to \$20M per property with a per unit cap of \$80,000







Three of four GRRP-Elements rounds

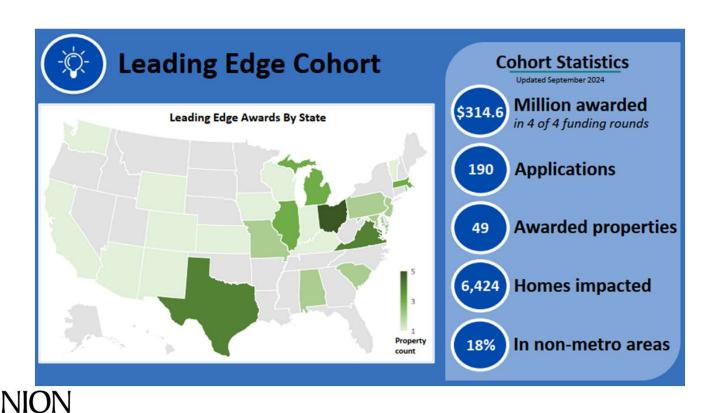




Source: hud.gov/GRRP



All four GRRP Leading Edge rounds have been awarded

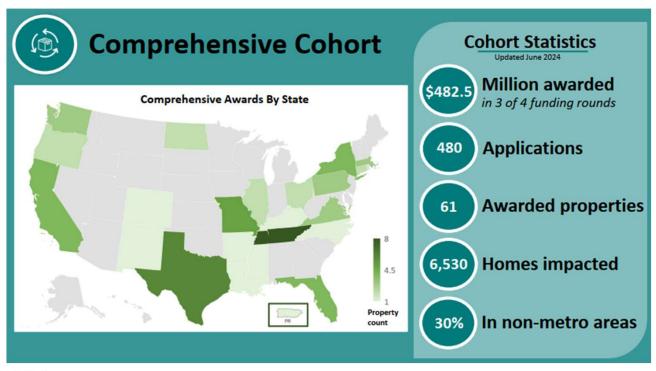


Due Diligence Group

Source: hud.gov/GRRP



Three of four GRRP-Comprehensive awards





Source: hud.gov/GRRP









HUD's Green and Energy Efficient Housing Program

- Green and Energy Efficient Housing Program launched in 2016 and has been extensively used to reduce Mortgage Insurance Premium (MIP) rates
- Sample New Construction Deal
 - Year 1: MIP drops from 100bp to 25bp
 - Year 2-30/40: MIP drops from 60bp to 25bp
 - Example \$20M loan Year 1 savings \$150,000 plus 70,000 per year - ~\$2M in interest savings
- Similar program exists for refinancing existing multifamily properties and a parallel program exists for Assisted Living and Skilled Nursing Homes



Green MIP Requirements

- Energy-Efficient Performance as demonstrated thru an ENERGY STAR Portfolio Manager Benchmark Score of 75+
- Commitment for annual Energy Benchmarking and maintaining a score of 75+
- Securing a Green Building Certification such as NGBS, EarthCraft, ENERGY STAR MFNC, etc
- New construction must specify
 - ENERGY STAR Cooling Efficiency (15.2 SEER2 or better)
 - **ENERGY STAR Appliances**
 - WaterSense Plumbing Fixtures









Housing Credits & Green Building

VAECC Forum 2024



Helping Virginians attain quality affordable housing



Ownership



Rental



Outreach & Education

Virginia Housing

•••••

Rental Housing Report 2023

2,848

rental units financed for a total of **\$483.2M.**

Since our beginning, we have financed **146,407** rental units.





Low Income Housing Tax Credit

Federal Framework

- IRC Section 42
- Income & Rent Limits
- Public Private Partnerships

State Specifics

- Qualified Allocation Plan & Manual
- Policy Priorities
- Iteration & Innovation

Virginia Housing

Policy Influenced Design

Minimum Design & Construction Requirements

Updated with QAP

Energy Efficiency

Baseline & Optional Certifications

Amenities

Systems, Materials, Practicalities

Unit Mix

of Bedrooms, Layouts, # of Units per Project

Accessibility

UFAS, ADA, ANSI

Universal Design

Optional – Above & Beyond Accessibility Standards

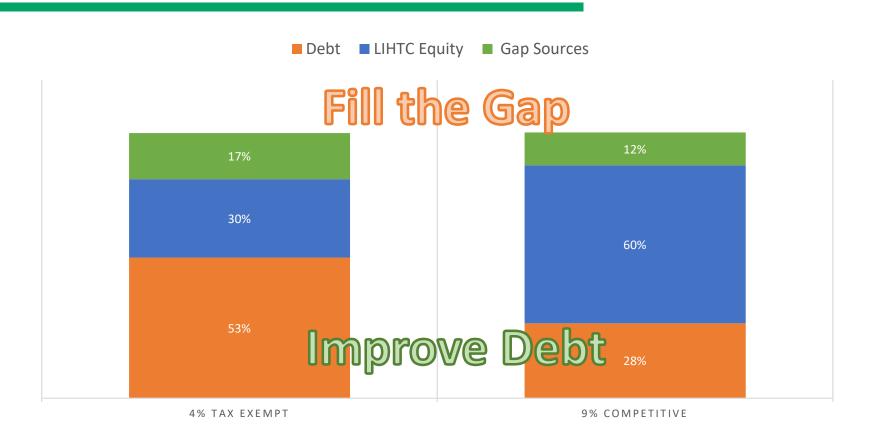
LIHTC & Efficiency

- ► <u>Baseline</u>
 - EnergyStar for New Construction
 - ▶ HERS Maximum for Rehab
- ► Optional Certifications
 - ► EarthCraft
 - ► NGBS
 - ► EGC
 - ► LEED
 - ► ZERH
 - ► Passive House

- ► Enhancements
 - ► Humidity
 - ► Low Flow Water
 - ► Renewable Energy/Solar



AVERAGE LIHTC CAPITAL STACK



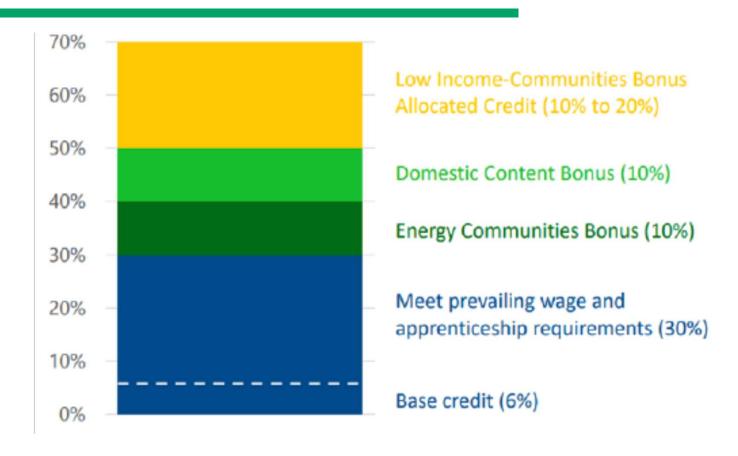
45L Credit – Efficiency & Wages

MEETS PREVAILING WAGE?

ENERGY STANDARD

	Yes	No
ENERGY STAR New Construction	\$2,500 per unit	\$500 per unit
DOE's Zero Energy Ready Homes	\$5,000 per unit	\$1,000 per unit

48 Solar ITC – Generation & Storage



Greenhouse Gas Reduction Fund – IRA

\$27 Billion from EPA

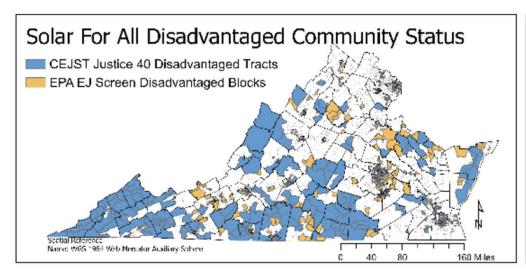
- Solar For All \$7B
- Clean Communities Investment Accelerator -\$6B
- National Clean Investment Fund \$14B

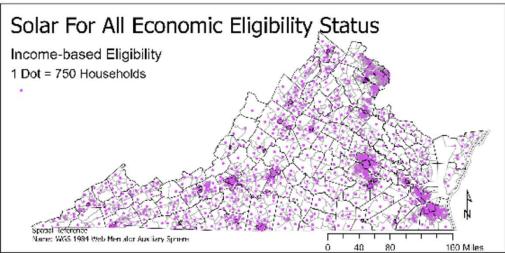
Net Zero 2050

Low-Income and Disadvantaged Communities

Geographic

Economic





Sources: CEJST: https://screeningtool.geoplatform.gov/en/; EPA EJScreen: https://ejscreen.epa.gov/mapper/; DOE LEAD: https://ejscreen.epa.gov/mapper/; DOE LEAD: https://www.energy.gov/scep/slsc/lead-tool

Energy

Solar For All

►\$156 Million

- ▶ 100% to LIDAC Benefits
- ► 20% Bill savings
- ► Sept. 2025-2029

►Eligibility

- ► Financial Assistance
- ► Technical Assistance

- ▶ Single Family
- Multi Family
- ► Community
- Infrastructure & Interconnection



Clean Communities Investment Accelerator - \$6B

- ▶100% LIDAC
 - Community Development Financial Institutions (CDFIs)
 - Building capacity of local community lenders



- ► Debt, Equity, or Credit Enhancements
 - Energy Generation & Storage
 - Net-Zero Buildings
 - Zero-Emissions Transportation



/inclusiv/







National Clean Investment Fund - \$14B

- ▶3 Nat'l Awardees 40% LIDAC
 - ► Climate United Fund \$6.97B
 - ► Coalition for Green Capital \$5B
 - ► Power Forward Communities \$2B









Building & Predevelopment

- ► Low-Cost Subordinate Loans
- Outreach, Engagement, Education
- Program Administration





LISC



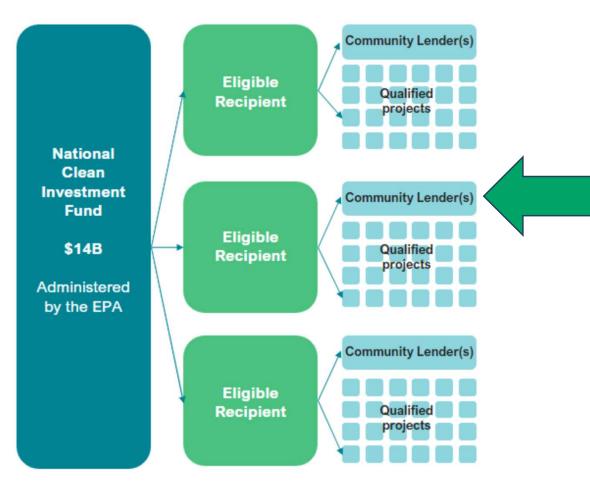






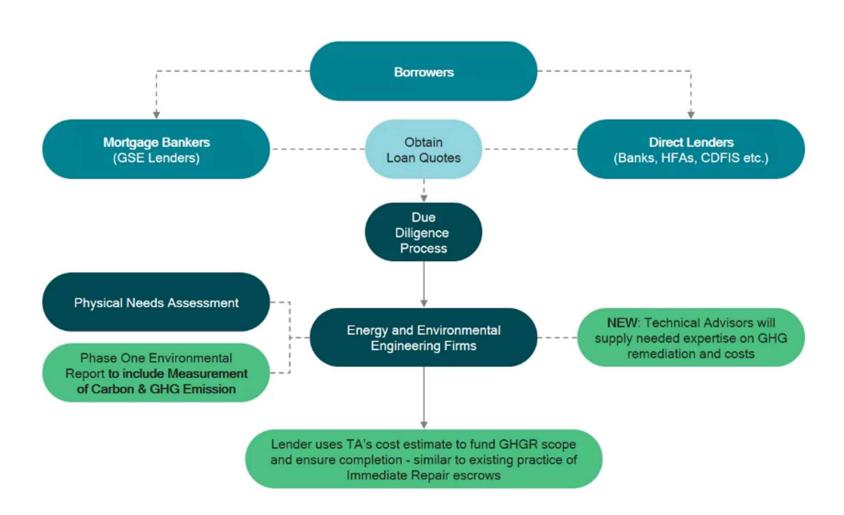


Structure



"Community Lender" responds to RFP with portfolio of projects to qualify for funding

Or Project goes direct to Awardee



Compliance

Build America, Buy America

Sourcing Requirements on certain products/materials

Davis Bacon Act

Prevailing Wages & Benefits

Justice40 - LIDAC

40% of overall benefits for disadvantaged communities

Quarterly/Annual Reports

Report up to Funding Partners, who report to EPA

Process Integration

Underwriting standards & thirdparty reports

Product Growth

Greening existing products and/or build new offerings

Thank You.

Multifamily Multiverse

Sunshine MathonPiedmont Housing Alliance





Kindlewood phase 1 (Charlottesville)

• HUD: GRRP (Leading Edge)

• Treasury: 45L, Solar ITC (30%+20%)

Virginia: 9% LIHTC, HIEE

Hickory Hope Apts (Albemarle County)

• Treasury: 45L, Solar ITC (30% + ?%)

• Virginia: 4% LIHTC bonds, HIEE

Pipeline projects

• EPA: Community Change

• Treasury: 45L, Solar ITC (30% + ?%)

DOE: NCIF and/or CCIA

• Virginia: Solar for All, LIHTC, HIEE?



Multifamily Multiverse

Audience Q&A

OSS Survey

VAEEC, in collaboration with the State Energy Office, is conducting a survey to gather stakeholder feedback for the Virginia Energy One Stop Shop.

Live Poll: https://www.menti.com/alj sbi8zwxkf



