BREAKOUT SESSION

Rural Energy Efficiency: No Town Left Behind



Rural Energy Efficiency: No Town Left Behind **Speakers**

Adia Holland, U.S. Department of Agriculture
Will Payne, Energy DELTA Lab
Lance Hostutler, Optimum Building Solutions
Leigh Anne Ratliff, Trane Technologies (moderator)







Rural Energy for America Program (REAP)





Rural Business-Cooperative Service

Adia Holland Loan and Grant Analyst Public Private Partnership Division Rural Energy for America Program (REAP)

Rural Energy for America Program (REAP) Background



2022 REAP | Inflation Reduction Act (IRA) Funding: Background



The Rural Energy for America Program was funded with an additional \$2.02 billion dollars over the next decade to invest in over 45,000 farms and small businesses



Investment

- \$1.7 Billion for REAP
- \$304 Million for underutilized technologies and technical assistance

REAP Financial Assistance Types

Grants

Loan Guarantees

Combination Grant/Loan Guarantees



REAP Project Types

Renewable Energy Systems (RES)

Energy Efficiency Improvements (EEI)

Energy Efficiency Equipment and Systems (EEE) for Agricultural Production or Processing (Loan Guarantee Only)



Who is Eligible?

Rural Small Businesses

Rural Small Business: Eligibility

An entity that meets SBA size standards AND one of the following:

- Private for-profit entity
- A cooperative
- An electric utility
- A tribal corporation or other tribal business entity

*Located in a rural area or non-metro community of < 50,000

Agricultural Producers

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Agricultural Producer: Eligibility

An individual or entity that receives 50 percent or more of their gross income from agricultural operations:

- Crops
- Livestock
- Aquaculture

- Forestry operations
- Nurseries
- Dairies

*Located in a rural or non-rural areas

How to Determine Geographic Eligibility

Visit eligibility.sc.egov .usda.gov/

Click Rural Business tab

Click the first category of programs

Search the map for your address What Types of Projects are Eligible Under REAP?







What Funding is Available?

Funding Requirements for REAP Grants

Up to 50%* of Eligible Project Costs

Re Ener	enewable gy Systems	Energe HTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	gy Efficiency rovements
Minimum Grant Request	\$2,500	Minimum Grant Request	\$1,500
Maximum Grant Request	\$1,000,000	Maximum Grant Request	\$500,000

*maximum financing for loan/grant combo is 75% of eligible project cost

Use of Funds

Eligible Project Costs

- Equipment:
 - Purchase & installation New or refurbished
- <u>Post-application</u> construction & facility improvements
- Retrofitting
- Professional service fees
- Permits & license fees
- Working capital, land acquisition (Guarantee loan ONLY with restrictions)

Solution Notice State Stat

- Residential energy projects
- Equipment:
 - Farm tillage
 - equipment Used
 - equipment
 - Vehicles
- Pre-application construction & facility improvements
- Application preparation or grant writer fees
- Line of credit
- Lease payments
- Payment to the applicant/business
 owner, beneficiary, or relative

REAP Project Examples

Energy Efficiency Improvement (EEI) Poultry Houses



Poultry Farm

- Radiant heating, fans, vents & computerized controls
- \$99,293 Total Project Cost
- \$20,000 REAP Grant
- \$79,293 Commercial Loan



Saved 122,631 KWH, improved egg production, increased labor efficiency

Energy Efficiency Improvement (EEI) Equipment Upgrade



Laundromat & Dry Cleaners

> Washer & Dryer Replacement

- \$42,040 Total Project Cost
- \$10,510 REAP Grant
- \$31,531 Dealer Financing



52% energy savings, improved customer experience

Energy Efficiency Improvement (EEI) Equipment Upgrade



Nursery

Energy efficient glass roof, radiant heat, fans, vents & computerized controls

- \$287,855 Total Project Cost
- \$71,964 REAP Grant
- \$100,000 REAP Guarantee
- \$115,891 Commercial Loan



40% reduction in energy costs, improved plant health & quality

Energy Efficiency Improvement (EEI) Lighting & Cooling



Rural Assembly Manufacturer

Lighting replacement

- \$78,511 Total Project Cost
- \$19,695 REAP Grant
- \$58,816 Applicant Funds





Grocery Store

Cooler door replacement

- \$41,363 Total Project Cost
- \$8,827 REAP Grant
- \$2,950 Electric Co-op Rebate



Energy Efficiency Improvement (EEI) Heating & Cooling



Flower & Gift Shop

HVAC and insulation upgrades

- \$34,509 Total Project Cost
- \$8,627 REAP Grant
- \$17,200 REAP Guarantee
- \$8,682 Applicant Contribution



60% energy savings, retained store front on community's Main Street

Energy Efficiency Improvement (EEI) Equipment Upgrade



Local Farm

Installation of sap preheating & evaporation system

- \$14,096 Total Project Cost
- \$3,185 REAP Grant
- \$10,911 Applicant Contribution



40% energy savings, increased production

Energy Efficient Equipment and Systems Assistance (EEE) Equipment Installation



Hydroponic Greenhouse

Installation of commercial scale hydroponic tomato facility operation

- \$66,662,731 Total Project Cost
- \$17,000,000 REAP Guarantee
- \$24,500,000 B&I Loan Guarantee



Replacing 25,613,890 (kWh) of electricity per year - enough to power 2,364 houses

REAP Guaranteed Loan Funding

Funding Requirements for REAP Guaranteed Loans

Guaranteed Loan Amount

Minimum Request	\$5,000
Maximum Request	\$25,000,000



REAP Guaranteed Loan Additional Information

Subject to OneRD Guarantee Loan Program Guidelines

Loan amount cannot exceed 75% of eligible project cost

Loan/Grant Combo financing max at 75% of eligible project cost



Fees, appraisals, equity & collateral requirements apply

What funding is Available for Energy Efficient Equipment and Systems (EEE) Assistance?

Energy Efficient Equipment & Systems Assistance (EEE)



The 2018 Farm Bill expanded REAP provisions to include guaranteed loan funding up to 15% to agricultural producers for Energy Efficient Equipment and Systems (EEE).

The funding is a guaranteed loan <u>ONLY</u>. Loan funds can be used for the purchase and installation of equipment that exceeds current efficiency standards.

When are REAP applications due?

REAP Application Deadlines: Grants

Quarter 1	April 1, 2023 through June 30, 2023
Quarter 2	July 1, 2023 through September 30, 2023
Quarter 3	October 1, 2023 through December 31, 2023
Quarter 4	January 2, 2024 through March 31, 2024
Quarter 5	April 1, 2024 through June 30, 2024
Quarter 6	July 1, 2024 through September 30, 2024

REAP Application Deadlines: Guaranteed Loans & EA/REDA

Guaranteed Loan Applications are Accepted Continuously, as are Combined Loan and Grant Applications

January 31st is the EA/READA Application Deadline

Technical Assistance for REAP

How to Apply:

Visit the RBCS How-To Video Series for Applicants <u>Here</u>

Contact the USDA Rural Development <u>State Energy Coordinators</u> with questions

Application packages can be found under the 'To Apply' tab on the <u>REAP</u> program website

Applications may be mailed or emailed to <u>Rural Development staff</u> or submitted through <u>Grants.gov</u>



Contact Information

Adia Holland Loan and Grant Analyst

adia.holland@usda.gov

615-499-9307

www.rd.usda.gov





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Transforming Southwest Virginia Leveraging the Past to Build for the Future

October 4, 2023

Virginia Energy Efficiency Council Forum



Region in transition



320,000 315,000 310,000 300,000 295,000 295,000 285,000 285,000 275,000	310,849	313,069	285,209
270,000	2000	2010 U.S. Census Data	2020

Virginia's Southwest Region



Со	mmonw	ealth of Vir	ginia
9,200,000			
8,600,000			
8,000,000			8,631,393
7,400,000		8,001,024	
6,800,000	7.078.513		
6,200,000			
5,600,000			
5,000,000			
	2000	2010 U.S. Census Data	2020

- Over the last 30 years, coal production has plummeted by 79% while related employment has decreased by 82%.
- At the same time, the region's population has steadily declined, while Virginia's population has increased significantly.
- Remaining coal mining jobs pay \$82,951 while the region's median income is half that amount at \$35,571. In addition, 55% of the energy-based employment is tied to coal mining, which is in decline. Those jobs will ultimately need to be replaced, but can the salaries remain as high?
- The region is federally designated "distressed" and "double distressed" due to unemployment and poverty levels far greater than Virginia's average. If the region does not comprehensively address the loss of talent (the so-called "brain drain"), it will be left behind.



Why now?

- Willing community: Wise County + greater SWVA region
- Supportive state
 - 2022 Virginia Energy Plan
 - RPS standard Carbon Free by 2045/2050
- · Federal support: Billions in grant funds for coal transition
- Project vehicle: Energy DELTA Lab

Energy DELTA Lab

- Private sector alternative alternative with core principles of ensuring speed-to-market, reducing overhead costs and expediting land use agreements
- Chaired by Mike Quillen, former CEO of Alpha Natural Resources
- Raised over \$8M in grant funds since 2019 to research energy projects and pursuing nearly \$600 million in federal grants for projects
- Has over \$8B in a dozen projects under some form of development that would create over 1,600 new jobs
- Leveraging network of private developers and partners InvestSWVA, Virginia Department of Energy and the Southwest Virginia Energy Research and Development Authority



Project Portfolio





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Energy

Wind

Storage

(4)



Transmission



Data centers



Hydrogen





Advanced Nuclear

Other

Energy DELTA Lab | VAEEC Energy Efficiency Forum



ENERGY DELTA LAB

Will Payne Coalfield Strategies, LLC

+1 804-393-8380 m

Will.Payne@CoalfieldLLC.com

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Energy Efficiency Challenges in Rural Virginia



Lance Hostutler, CEO

Challenge Number One: OUTREACH

Challenge Number Two: HOMEOWNER EDUCATION

POTENTIAL SOLUTIONS

Education Through:

- Utility Companies
- Department of Social Services
- Media Resources
- Social Media
- Local Resources

Challenge Number Three: HOUSING STOCK





POTENTIAL SOLUTIONS

Preserve, Expand and Maximize Funding Sources

- USDA
- Emergency Home Repair
- RGGI- Weatherization Deferral Repair
- Utilities
- State and Federal Grants and Funding

Challenge Number Three: IMPLEMENTATION

POTENTIAL SOLUTIONS:

- State Resources (DHCD)
- Utility Companies
- Community Action Agencies
- Non-Profit Housing Agencies
- Qualified and Willing for-profit Contractors

THOUGHTS AND QUESTIONS??

Lance Hostutler lance.hostutler@optimumbuildingsolutions.org 804-495-6997



Rural Energy Efficiency: No Town Left Behind Audience Q&A

Adia Holland, U.S. Department of Agriculture adia.holland@usda.gov

Lance Hostutler, Optimum Building Solutions lance.hostutler@optimumbuildingsolutions.org

Will Payne, Energy DELTA Lab will.payne@coalfieldllc.com

Leigh Anne Ratliff, Trane Technologies (moderator) leighanne.ratliff@tranetechnologies.com

