



Rural Energy for America Program (REAP)



Rural Development
U.S. DEPARTMENT OF AGRICULTURE

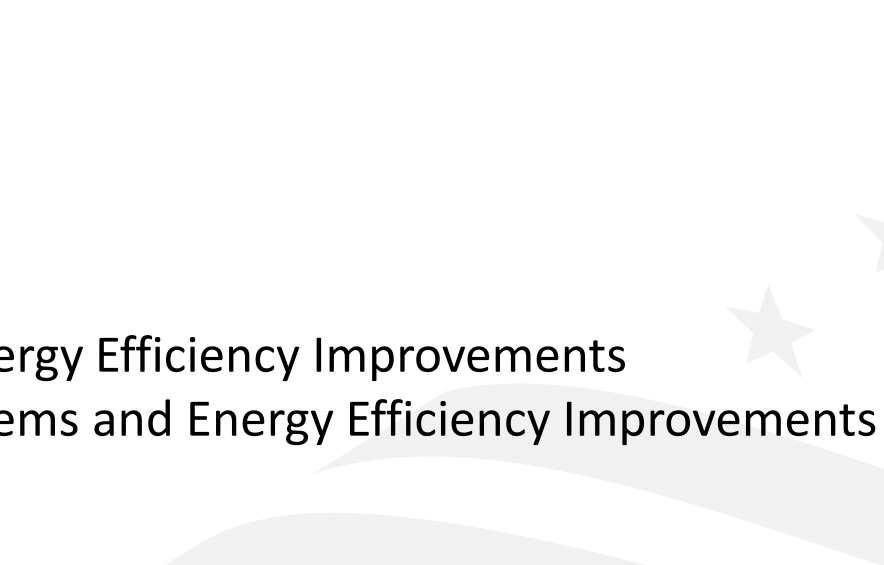
Rural Energy for America Program (REAP)

Overview

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 - ☐ Success Stories
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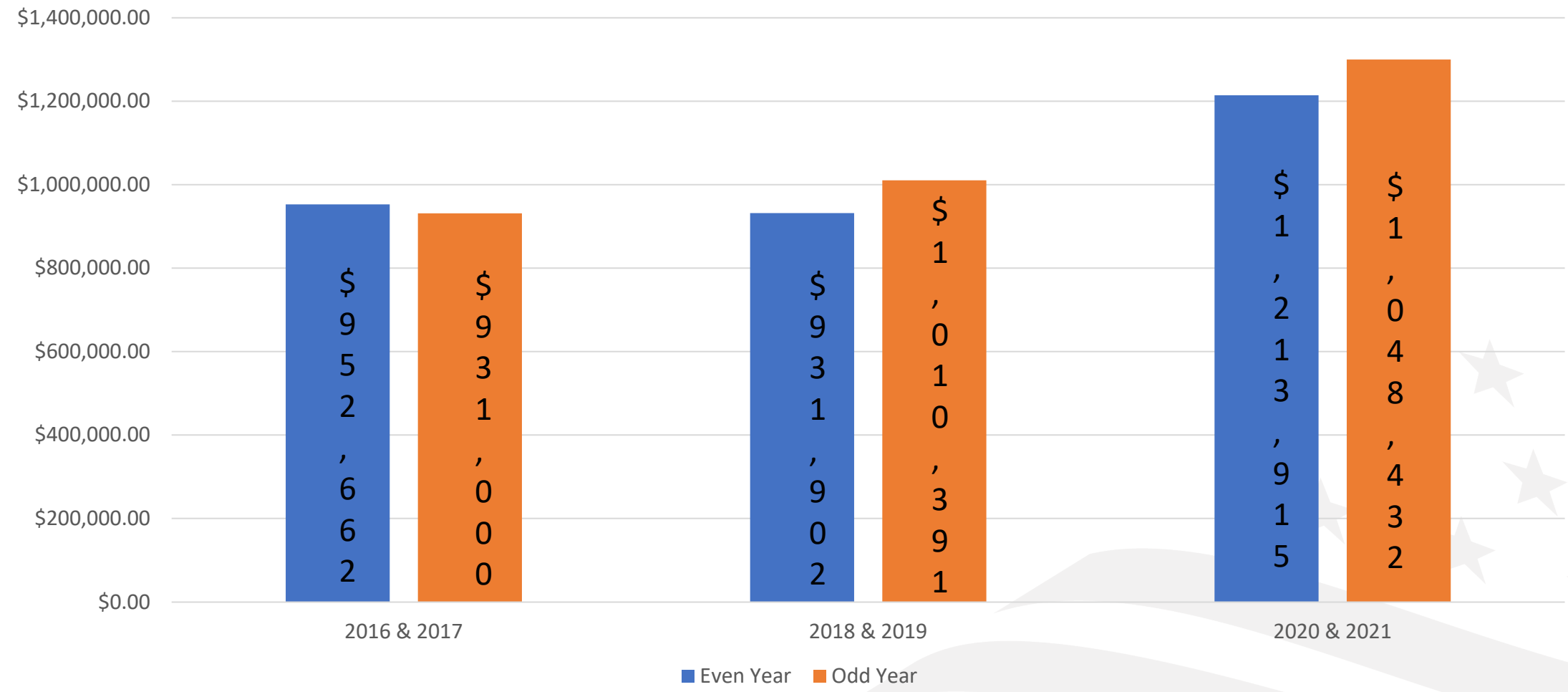
Rural Energy for America Program (REAP)

Background

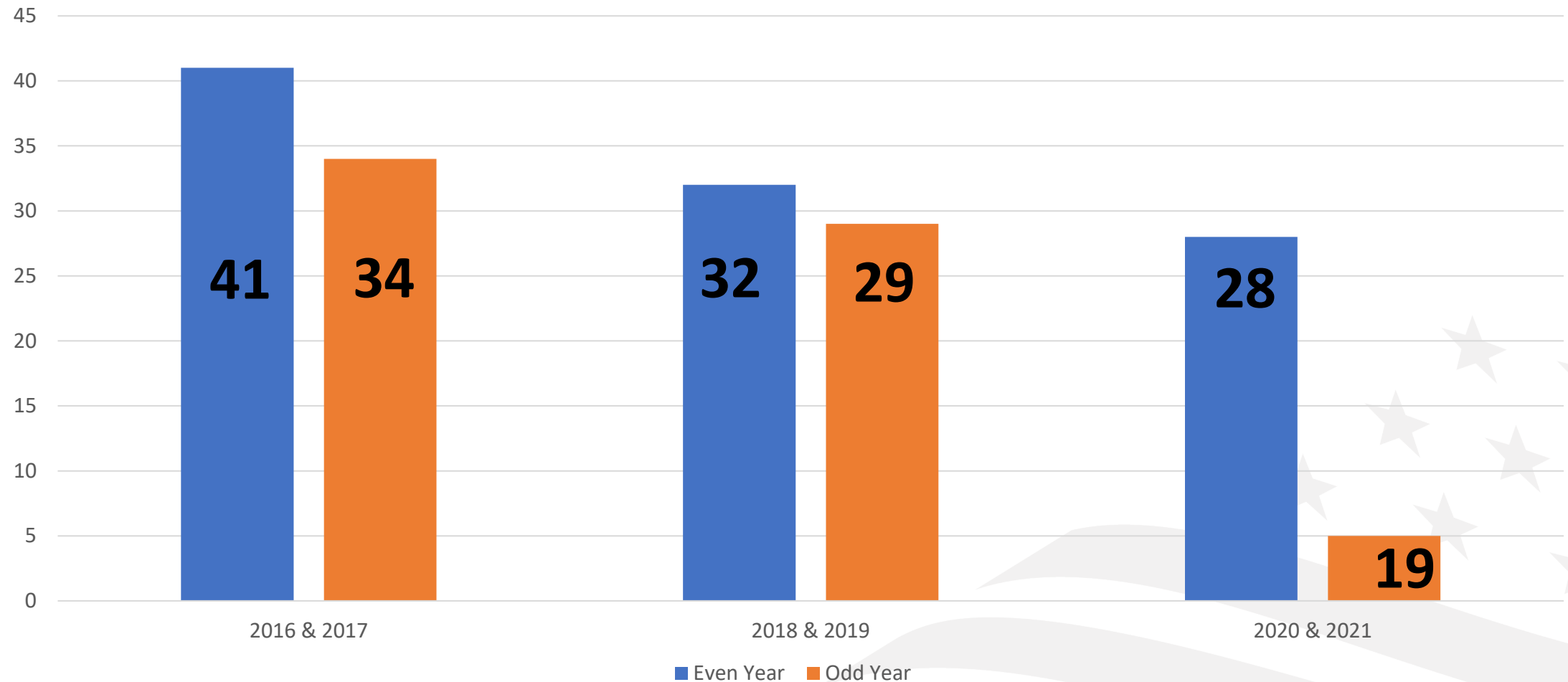
- ❑ Rural Development's First Energy Program, Section 9006, was authorized in 2002 Farm Bill (Title IX, Section 9006).
- ❑ 2008 Farm Bill 9006 was reauthorized under Section 9007 and titled: **Rural Energy for America Program (REAP)**
- ❑ 2008 Farm Bill also created new energy programs
 - ❑ Biorefinery Assistance (9003)
 - ❑ Repowering Assistance (9004)
 - ❑ Bioenergy Program for Advanced Biofuels (9005)
- ❑ 2014 Farm Bill reauthorized the energy programs
- ❑ 2018 Farm Bill reauthorized 3 of the 4, letting the Repowering Assistance program expire.

Rural Energy for America Program (REAP)

Funding in TN



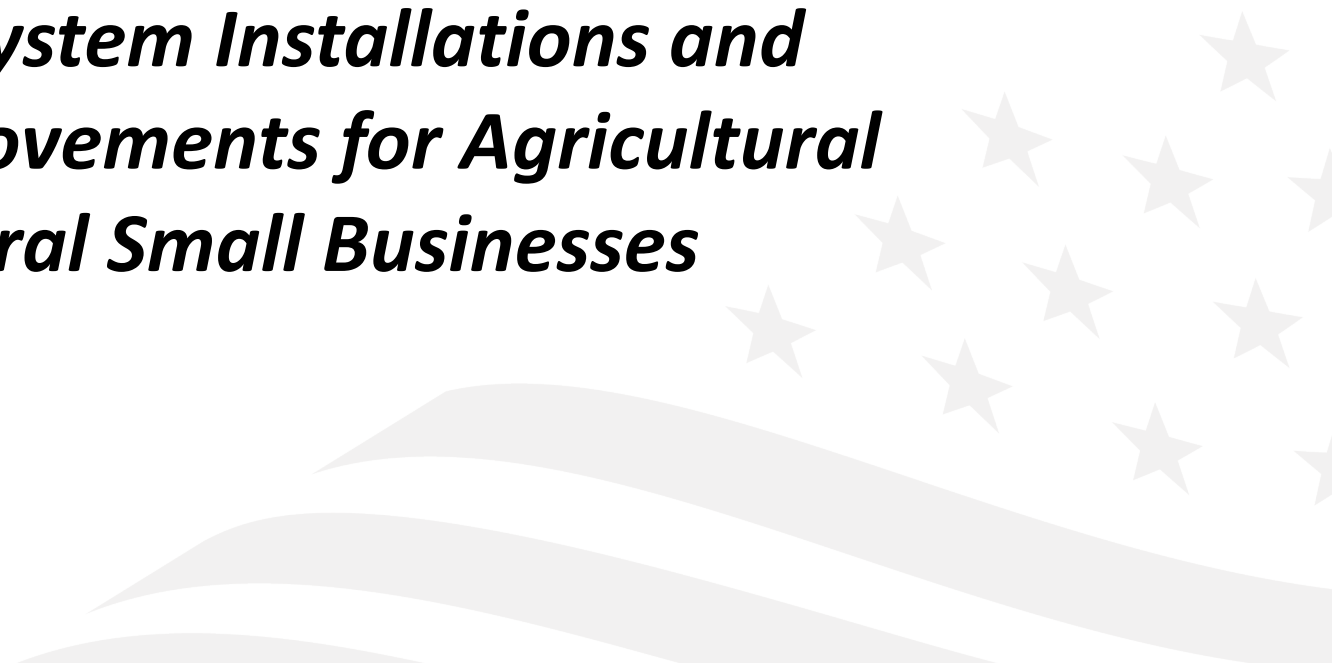
Rural Energy for America Program (REAP) Projects in TN



Rural Energy for America Program (REAP)

Program Purpose

***Rural Energy for American Program (REAP) provides
Grants and Guaranteed Loan funding for
Renewable Energy System Installations and
Energy Efficiency Improvements for Agricultural
Producers and Rural Small Businesses***



Rural Energy for America Program (REAP)

Eligibility – Applicants

Agricultural Producer



- **Individual or entity that receives 51 percent or more of their gross income from agricultural production** – crops, livestock, aquaculture, forestry operations, nurseries, dairies

Rural Small Business





- **For-profit small business** - as defined by the Small Business Administration (SBA)
- **Rural area or non-metro community of $\leq 50,000$**

Rural Energy for America Program (REAP)

Grant Funding*

Application Deadline March 30th

 Renewable Energy Systems		 Energy Efficiency Improvements	
Minimum Grant Request	\$2,500 Total eligible project costs \geq \$10,000	Minimum Grant Request	\$1,500 Total eligible project costs \geq \$6,000
Maximum Grant Request	\$500,000 Total eligible project costs \geq \$2 million	Maximum Grant Request	\$250,000 Total eligible project costs \geq \$1 million

*Up to 25% of Total Eligible Project Costs

Rural Energy for America Program (REAP)

Guaranteed Loan Funding*

Guaranteed Loan Applications Accepted Year-round















Minimum Loan Amount	\$5,000 Total eligible project costs \geq \$6,667
Maximum Loan Amount	\$25 million Total eligible project costs \geq \$33.4 million
Details	<ul style="list-style-type: none">• USDA guarantees a commercial loan; applicant must have a willing lender.• Terms are negotiated between the lender and borrower.• Fees, appraisals, equity & collateral requirements apply.

*Up to 75% of Total Eligible Project Costs

Rural Energy for America Program (REAP)

Eligible Technologies

Commercially Available Technologies

Energy Efficiency		Renewable Energy	
	Lighting		Solar
	Heating		Wind
	Cooling		Small Hydroelectric
	Ventilation		Anaerobic Digesters
	Fans		Biomass
	Automated Controls		Geothermal
	Insulation		Wave/Ocean Power

Rural Energy for America Program (REAP)

Project Costs

✓ Eligible Project Costs	⊘ Ineligible Project Costs
<ul style="list-style-type: none">• Equipment:<ul style="list-style-type: none">• Purchase & installation• New or refurbished• Post-application construction & facility improvements• Retrofitting• Professional service fees• Permits & license fees• Working capital, land acquisition (Guarantee loan ONLY with restrictions)	<ul style="list-style-type: none">• Residential energy projects• Equipment:<ul style="list-style-type: none">• 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

Rural Energy for America Program (REAP)

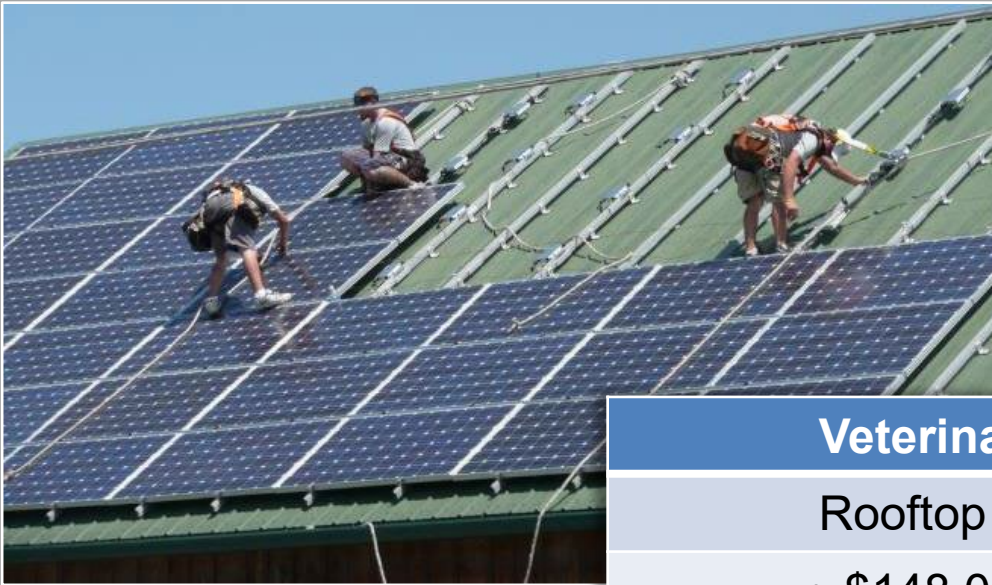
Renewable Energy Systems (RES)



Rural Energy for America Program (REAP)

Renewable Energy Systems (RES)

Renewable Energy System: Solar Array



Veterinary Hospital

Rooftop solar panels



- \$148,050 Total Cost
- \$ 20,000 REAP Grant
- \$128,050 Applicant Funds

30-40% reduction in operating expenses

Rural Energy for America Program (REAP)

Renewable Energy Systems (RES)

Renewable Energy System: Solar Array



Electric Cooperative

Community Solar Project



- \$784,792 Total Cost
- \$ 20,000 REAP Grant
- \$764,791 Applicant Funds
- Production of 443 mWh annually

Rural Energy for America Program (REAP)

Renewable Energy Systems (RES)

Renewable Energy System: Anaerobic Digester



Small Energy Company & Dairy Farmers

1 MW Anaerobic digester



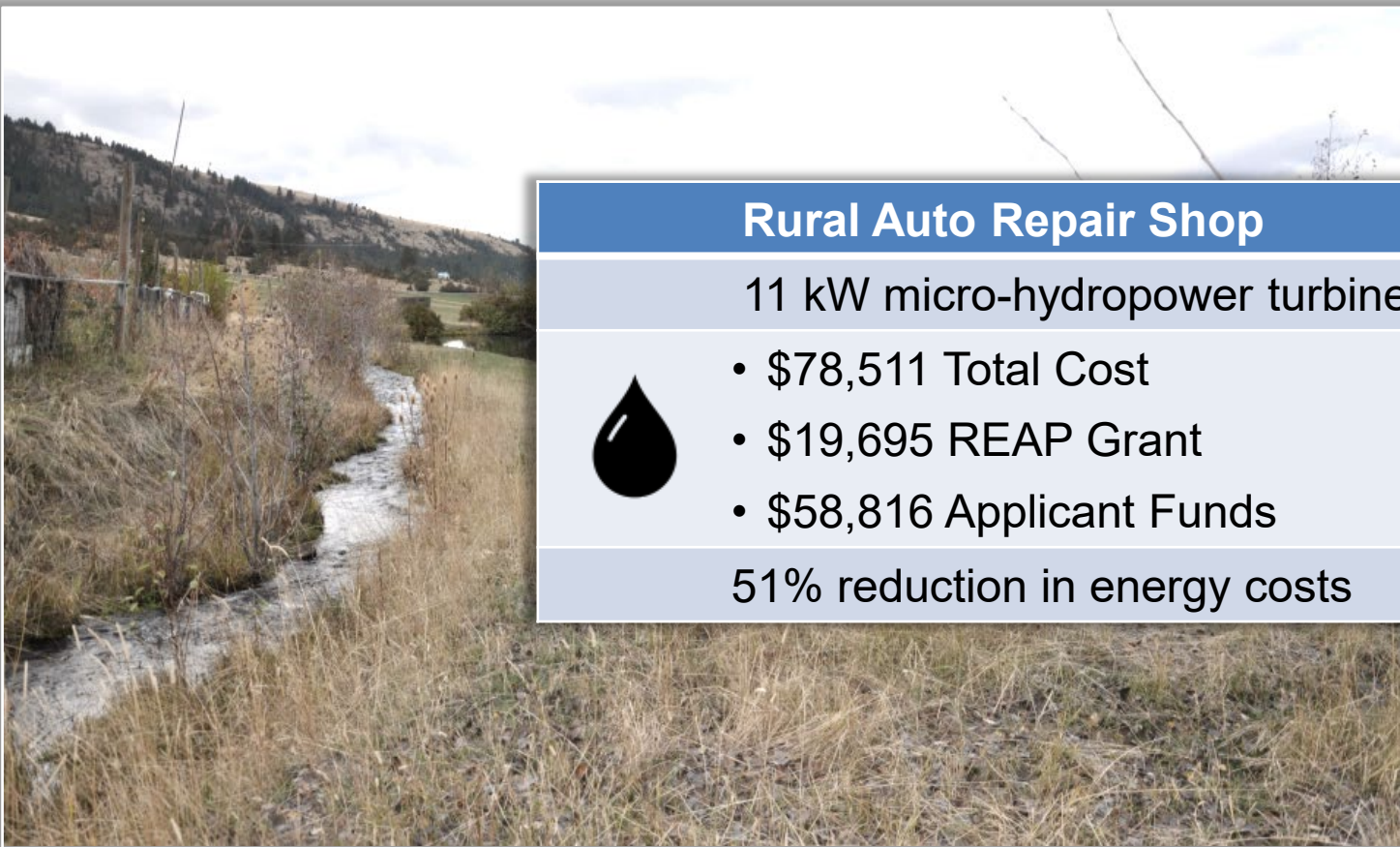
- \$4.15 Million Total Cost
- \$100,000 REAP Grant
- \$2.65 Million REAP Guarantee

Powers an equivalent of 700 homes/year

Rural Energy for America Program (REAP)

Renewable Energy Systems (RES)

Renewable Energy System: Hydropower



Rural Auto Repair Shop

11 kW micro-hydropower turbine



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

51% reduction in energy costs



Rural Energy for America Program (REAP)

Renewable Energy Systems (RES)

Geothermal & Energy Efficiency Improvements



Grocery Store



Geothermal heat, energy efficient coolers & lighting



- \$198,600 Total Cost
- \$ 49,650 REAP Grant
- \$148,950 Commercial Loan



40% reduction in energy costs

Rural Energy for America Program (REAP)

Renewable Energy Systems (RES)

Renewable Energy System: Solar Array



Michigan Winery

- \$104,088 REAP grant



- 148 kW Solar
- Estimated replacement of 40% energy usage
- Will generate estimated 172,351 kWh of electricity per year, or enough electricity to power 15 homes

Rural Energy for America Program (REAP)

Renewable Energy Systems (RES)

Renewable Energy System: Solar Array

On Farm Solar

- \$19,984 REAP grant



- 28.5 kW Solar
- \$79,936 Total Project Cost
- Estimated payback of 9 years



Rural Energy for America Program (REAP)

Renewable Energy Systems (RES)

Renewable Energy System: Solar Array

On Farm Solar



- \$47,762 REAP grant
- 54 kW Solar
- \$191,048 Total Project Cost
- Estimated replacement of 65% of the farm's energy usage



Rural Energy for America Program (REAP)

Energy Efficiency Improvement (EEI)

Energy Efficiency Improvement: Maple Syrup Operation

Maple Ledge Farm

New energy efficient reverse osmosis equipment

- \$43,500 Total Cost
- \$10,875 REAP Grant
- \$32,625 Applicant Funds

50% reduction in energy costs

Enough savings to power 4 homes for a year



Rural Energy for America Program (REAP)

Energy Efficiency Improvement (EEI)

Energy Efficiency Improvement: Maple Syrup Operation



Sweet Bear Farm

Installing a steam-away to reduce their energy load and increase production

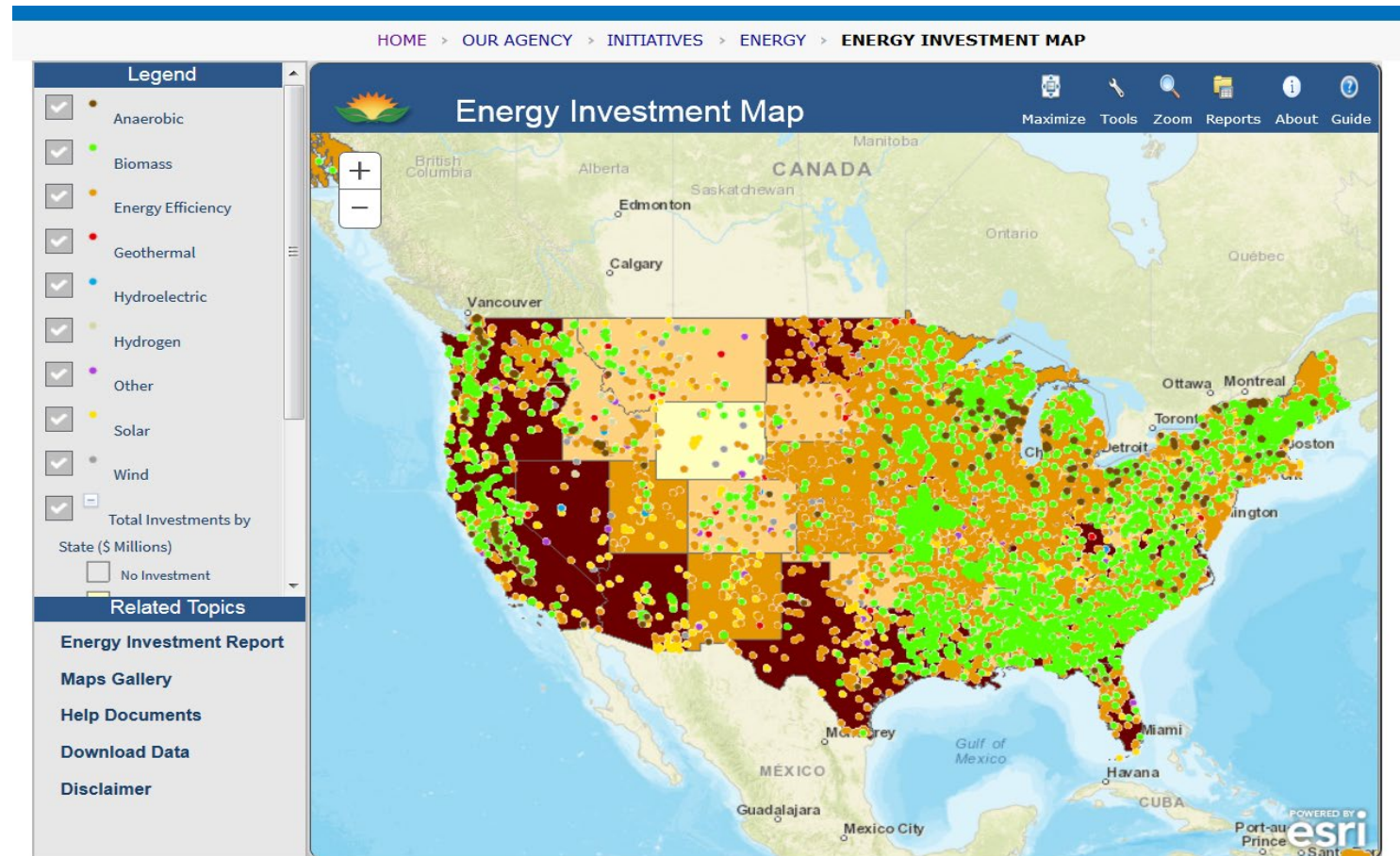
- \$14,096 Total Cost
- \$ 3,185 REAP Grant
- \$10,911 Applicant Funds

40% reduction in energy costs

USDA Energy Investment Map

<https://www.usda.gov/energy/maps/maps/Investment.htm>

- Provides information on USDA programs that support renewable energy and energy efficiency projects.
- The map displays investment location, type of energy, assistance provided and the associated USDA program.
- The energy investment data is summarized by state, county and congressional districts by total number of investments and total dollar amounts.



Rural Energy for America Program (REAP)

Application Priority Deadlines*

October 31st	➤ Set Aside Fund Competition-Grant Request \$20,000 or less
January 31st	➤ EA/REDA Grant applications
March 31st	<div>➤ Set Aside Fund Competition-Grant Request \$20,000 or less</div> <div>➤ Unrestricted Grant Request > \$20,000</div>
Continuous Application Cycle	➤ Guaranteed Loans

Rural Energy for America Program (REAP)

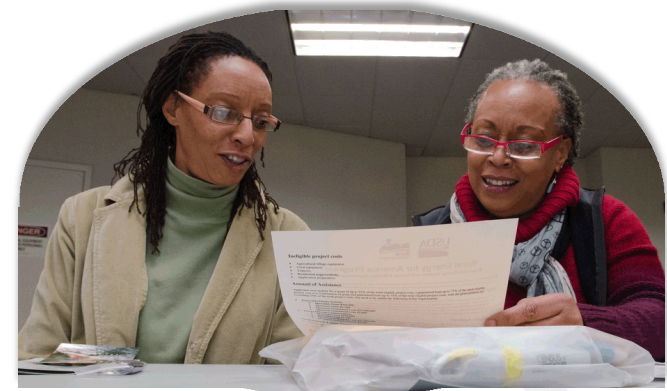
How to Apply?

- Contact the USDA Rural Development Energy Coordinator in your state for application materials and resources:

https://www.rd.usda.gov/files/RBS_StateEnergyCoordinators.pdf

- Submit applications any time of year.
- Applications compete for funding based on score throughout the year.
- Rural Locator Tool – Location Eligibility

<https://eligibility.sc.egov.usda.gov/eligibility/welcomeAction.do?pageAction=RBSmenu>

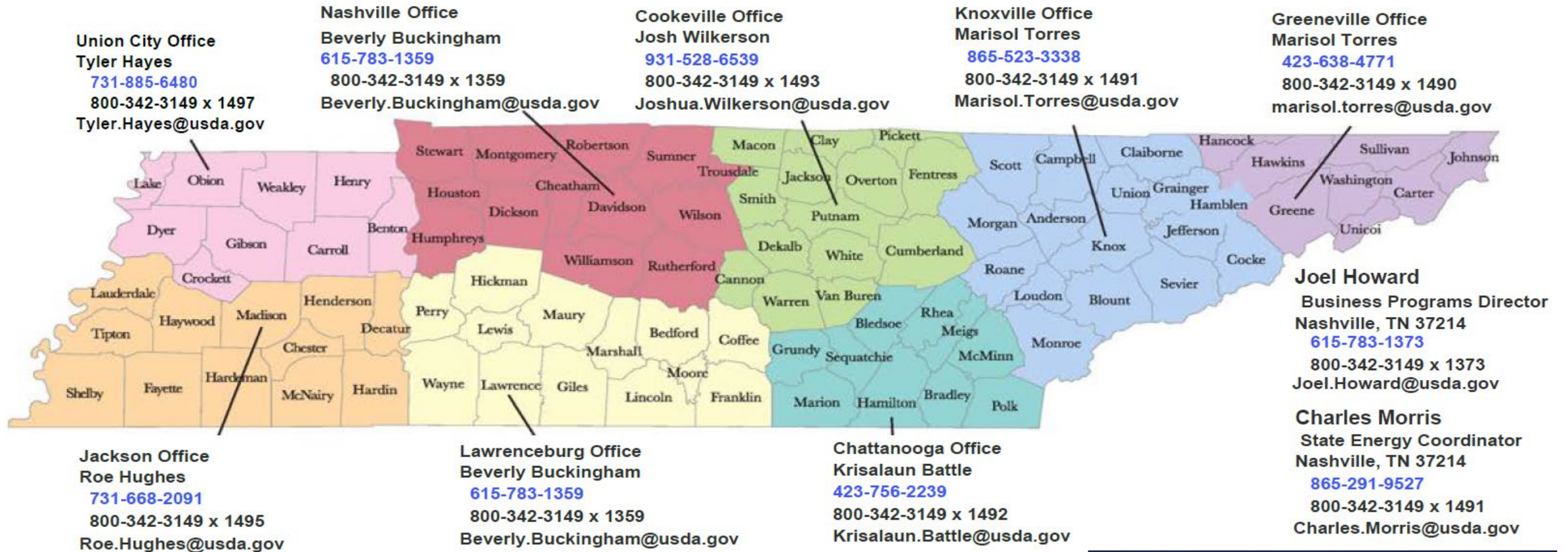


Application Information

Instructions and Forms for applying can be found at the link below:

<https://www.rd.usda.gov/programs-services/rural-energy-america-program-renewable-energy-systems-energy-efficiency/tn>

Contact Info for TN Staff



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QUESTIONS??



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