



Rural Development Energy Programs

October 7, 2020

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



Energy Programs

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Energy Programs

Our programs, authorized by the Agricultural Act of 2014, offer funding to complete energy audits, provide renewable energy development assistance, make energy efficiency improvements and install renewable energy systems. We have programs that help convert older heating sources to cleaner technologies, produce advanced biofuels, install solar panels, build biorefineries, and much more. USDA Rural Development is at the forefront of renewable energy financing, with options including grants, guaranteed loans and payments.

Rural Development Energy Programs

- [Advanced Biofuel Payment Program](#)
- [Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program](#)
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- [Rural Energy for America Program Energy Audits & Renewable Energy Development Grants](#)
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Other Resources

- [USDA Energy Investment Map](#)
- [USDA Energy Matrix](#)

Rural Energy for America Program

Section 9007 - Rural Energy for America Program

Rural Energy for American Program (REAP) provides Grants and Guaranteed Loan funding for installation of Renewable Energy Systems and Energy Efficiency Improvements for Agriculture Producers and Rural Small Businesses

Rural Energy for America Program

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

Eligible Applicants

Rural Small Business





- **For-profit small business** - as defined by the Small Business Administration (SBA)

<https://www.sba.gov/size-standards/>

- **Rural area or non-metro community of \leq 50,000**

Rural Energy for America Program

REAP Grant Assistance*

 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 Assistance*

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

Eligible 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

Project Cost Considerations

✓ Eligible Project Costs

- **Equipment:**
 - 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)**

⊘ Ineligible Project Costs

- **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**

Project Examples

Rural Energy for America Program





Renewable Energy System: Solar Array

- \$30,750 REAP Grant
- 33.6 kW and 17.1 kW solar arrays
- Replace 92% annual energy usage for rural veterinary clinic
- Generates estimated 59,912 kWh of electricity per year, or enough electricity to power 5 homes

Renewable Energy System: Wind Turbine

- \$20,000 REAP Grant
- 90 kW wind turbine
- Generates 1.95 times farm's annual energy usage
- Excess production helps supports the energy grid






Renewable Energy System: Anaerobic Digester

- \$100,000 REAP Grant & \$2.65 million REAP Guarantee
- 1 MW Anaerobic Digester
- Processes 600,000 gallons of animal waste into electricity
- Generates enough electricity to power 700 homes per year





Energy Efficiency Improvement: Refrigeration Units

- \$15,873 REAP Grant
 - Energy efficient refrigeration
 - Reduce annual energy usage by 71%
 - Lower overhead costs in rural grocery store allows higher access to healthy foods at lower prices
-





Energy Efficiency Improvement: Lighting

- \$6,126 REAP Grant
- High efficiency LED bulb upgrade
- Reduce annual energy usage 87%
- Save 169,000 kWh of electricity per year, or enough electricity to power 15 homes



Energy Efficiency Improvement: Grain Dryer

- \$11,074 REAP Grant
- Energy efficient grain drying system
- Reduce annual energy usage by 59%
- Saved Agricultural Producer \$5,803 per year



Geothermal & Energy Efficiency Improvements

- \$49,650 REAP Grant
- Geothermal heat, energy efficient coolers & lighting
- 40% reduction in annual energy usage

Rural Energy for America Program

Section 9007 – Energy Audit & Renewable Energy Development Assistance Grants

Energy Audit & Renewable Energy Development Assistance Grants (EA/REDA) assists rural small businesses and agricultural producers by conducting and promoting Energy Audits and providing Renewable Energy Development Assistance

Rural Energy for America Program

EA/REDA Eligibility

What does this program do?

Grantees assist rural small businesses and agricultural producers by conducting and promoting:

1. Energy Audits (EA)
2. Renewable Energy Development Assistance (REDA)
 - Improve energy efficiency
 - Implement Renewable Energy technologies

Who may apply?

- State and local governments
- Federally-recognized Tribes
- A land-grant college or university, or other Institutions of Higher Education
- Rural electric cooperatives
- Public power entities
- An Instrumentality of a state, tribal, or local government

Rural Energy for America Program

EA/REDA Grant Assistance

Maximum Grant Assistance	\$100,000
Details	A grantee that conducts Energy Audits requires recipient to cost share a minimum of 25% of the Energy Audit cost
Recipient	Assistance must be provided to an Agricultural Producer or Rural Small Business
Eligible Rural Area	Rural Small Businesses must be located in an eligible rural area

Rural Energy for America Program

Project Cost Considerations

✓ Eligible Project Costs

- Salaries directly related to the project
- Travel directly related to conducting energy audits or renewable energy development assistance
- Office Supplies
- Administrative Expenses up to a max of 5% of the grant
 - Utilities
 - Office Space
 - Operation Expenses

⊘ Ineligible Project Costs

- Payment for construction-related activities
- Purchase or lease of equipment
- Payment of judgments or debt owed to the government
- Good or services provided by a person or entity who has a conflict of interest
- Costs incurred in preparing the application package
- Funding political or lobbying activities

Rural Energy for America Program

REAP Application Deadlines

November 2, 2020	➤ Set Aside Fund Competition-Grant Request \$20,000 or less
February 1, 2021	➤ EA/REDA Grant applications
March 31, 2021	➤ Set Aside Fund Competition-Grant Request \$20,000 or less ➤ Grant Request > \$20,000 ➤ Combination Grant/Loan Request
Continuous Application Cycle	➤ Guaranteed Loans

Rural Energy for America Program

Section 9005 – Advanced Biofuel Producer Payment Program

Advanced Biofuel Producer Payment Program (9005) supports the increased production of advanced biofuels through payments to eligible advanced biofuel producers

Rural Energy for America Program

9005 Eligibility

What does this program do?

Quarterly payments for actual quantity of advanced biofuel produced

No minimum or maximum payment

Application deadline October 31, 2020

Who may apply?

- Advanced Biofuel Producer*
 - Definition of advanced biofuel in 7 CFR Part 4288.102
 - Liquid, gas, or solid
 - Derived from renewable biomass, other than corn kernel starch
 - Final product
 - Produced in the United States

* An entity that blends advanced biofuels into a blended biofuel is not considered eligible under 9005

Rural Energy for America Program

Section 9003 – Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program

Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program (9003) provides Guaranteed Loan funding to assist in the development, construction, and retrofitting of new and emerging technologies in the areas of: advanced biofuels, renewable chemicals, and biobased products

Rural Energy for America Program

9003 Guaranteed Loan Assistance

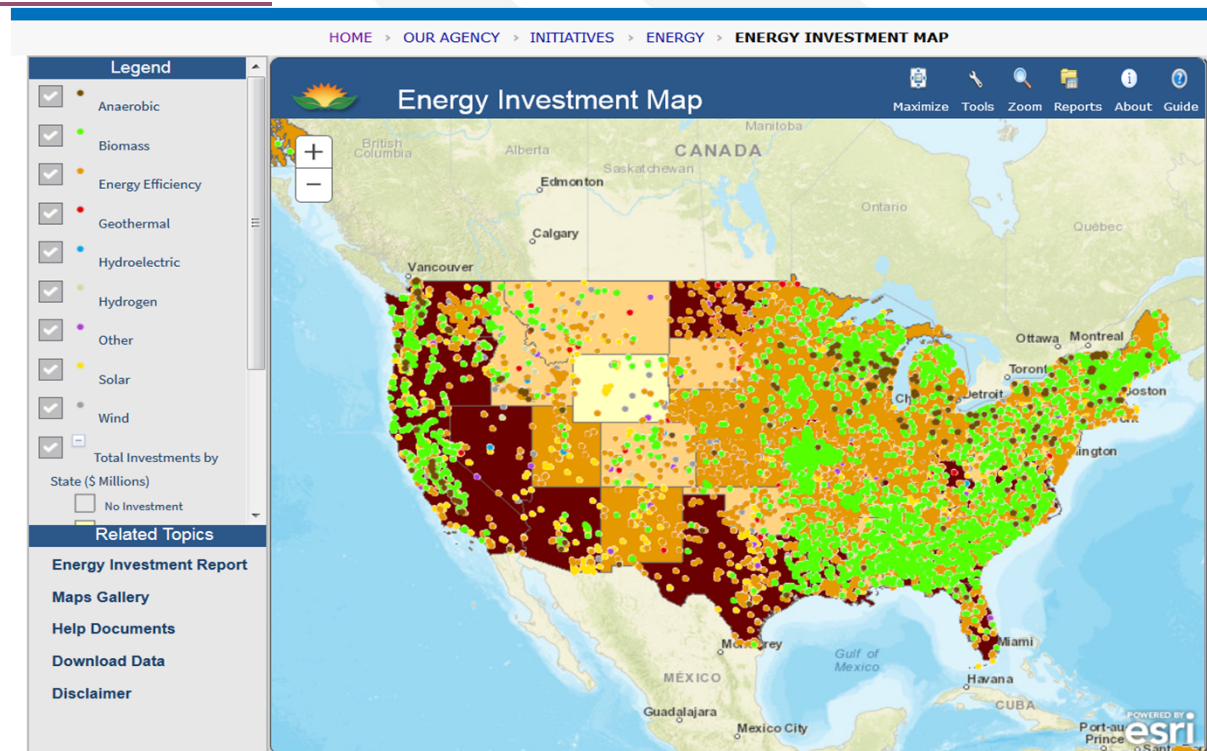
Maximum Loan Amount	\$250 million Up to 80% of Total Eligible Project Costs
Details	<ul style="list-style-type: none">• USDA guarantees a commercial loan; applicant must have a willing lender• Terms are negotiated between the lender and borrower• Fees, appraisals, equity & collateral requirements apply
Eligible Projects	Fund the development, construction and retrofitting of: <ul style="list-style-type: none">• <u>Commercial-Scale</u> Biorefineries using <u>Eligible Technology</u>• Biobased Product Manufacturing facilities that use Technologically New Commercial-Scale processing and manufacturing equipment to convert Renewable Chemicals and other biobased outputs of <u>Biorefineries</u> into end-user products on a commercial scale
Application Deadline	<ul style="list-style-type: none">• Letter of Intent to apply due no later than 30 days prior to October 1, 2020 and April 1, 2021• https://www.rd.usda.gov/programs-services/biorefinery-renewable-chemical-and-biobased-product-manufacturing-assistance• Contact Aaron Morris at (202) 720-0410 or aaron.morris@usda.gov

Rural Energy for America Program

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.



Iowa

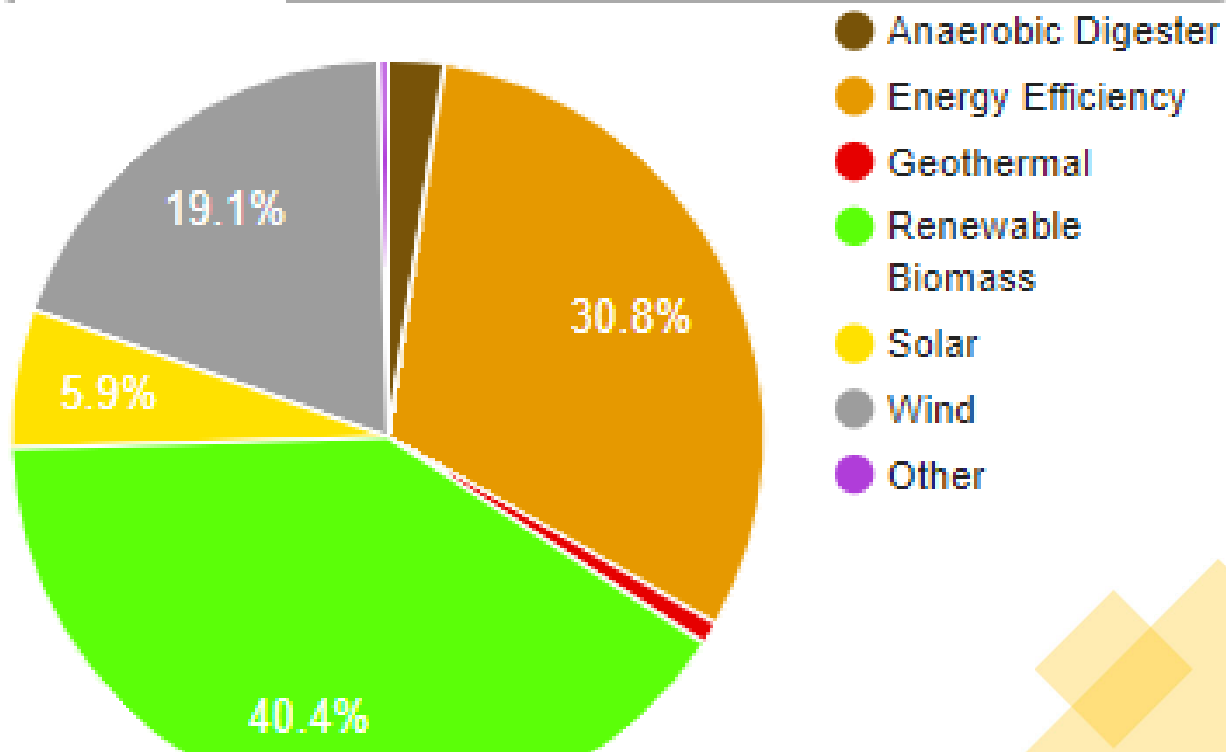
Total Investments: \$212.9 Million

State Summary Totals (\$ Million)

Totals are for all years and types*.

Chart

Table



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

Iowa - REAP Contact

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www.rd.usda.gov/REAP





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