

NC STATE UNIVERSITY



**NC CLEAN ENERGY**  
TECHNOLOGY CENTER

**North Carolina Cooperative Extension of Chatham County**

**NC COOPERATIVE  
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**What is REAP  
and How Does It Benefit My Farm**

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[www.nccleantech.ncsu.edu](http://www.nccleantech.ncsu.edu)

# Our Mission

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The N.C. Clean Energy Technology Center, at N.C. State University, advances a sustainable energy economy by educating, demonstrating, and providing support for clean energy technologies, practices, and policies.

For over 35 years, the Center has worked closely with partners in government, industry, academia, and the non-profit community.

## Rural Energy for America Program (REAP) Overview

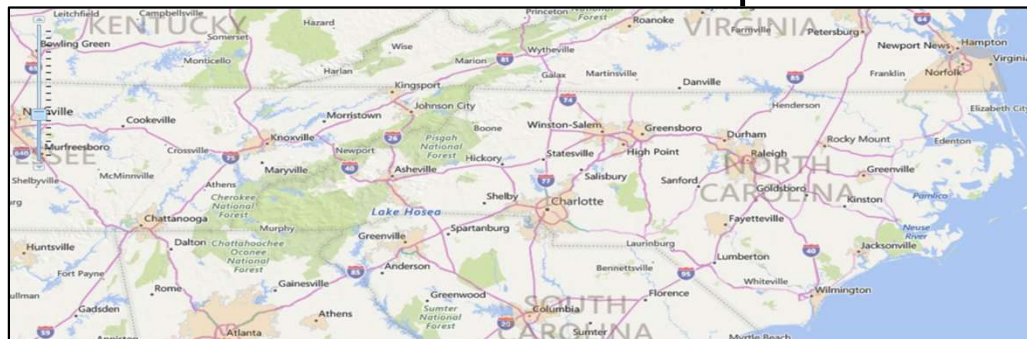
- Overall mission of REAP (per the USDA): *“increasing the private sector supply of renewable energy and decreasing the demand for energy through energy efficiency improvements. Over time, these investments can also help lower the cost of energy for small businesses and agricultural producers”*
- Eligible applicants include agricultural producers and rural small businesses
- Eligible projects include energy efficiency improvements (EEI) and renewable energy systems (RES)
- Provides guaranteed loans up to 75% of eligible project costs
- Provides grants up to (either) 25% or 50% of total eligible project costs
- Grants range from \$1,500 to \$500,000 for EEI projects and from \$2,500 to \$1,000,000 for RES projects
- Maximum award per applicant is \$1.5 MM which represents one maximum funded EEI plus one maximum funded RES project

# Agricultural Producer Eligibility

- Agricultural Producers – which includes entities
  - directly engaged in the production of agricultural products, including the cultivating, growing, and harvesting of plants and crops (including farming); breeding, raising, feeding, or housing of livestock (including ranching)
  - that derive 50 percent or greater of their gross income from the agricultural operations
- There are no size or location (i.e., urban/rural) restrictions
- If the 50 percent income criteria (above) cannot be met, consider applying as a rural small business

## What Makes a Business Eligible?

- REAP funding supports rural small businesses and agricultural producers
  - Your farm could be an ag producer **and** a rural small business
- **Rural** *essentially* means being located in an area with <50,000 population
  - An interactive map is available on the REAP website to confirm that a facility is in a rural area
- **Small Business** is *essentially* defined as a for-profit proprietorship, partnership, or corporation as well as an electric utility that serves rural customers **and** that meet Small Business Administration size standards in accordance with 13 CFR part 121



We can help determine eligibility!

NCCETC's REDA assistance covers all 100 counties

# REAP Has REAPED Benefits for NC!

## REAP Investments (2018-2022)

State	REAP Investments (2018-2022)
North Carolina	\$712,122,954
South Carolina	\$250,549,209
Maine	\$195,927,765
Minnesota	\$137,119,531
New York	\$113,347,311
Oregon	\$91,783,790
California	\$74,978,470
Arizona	\$63,633,326
Kentucky	\$55,254,542
Massachusetts	\$39,176,919

### FY 2023 Grants for North Carolina\* Quick Facts

- Total Number of REAP Grants Awarded: 53
- Total Value of REAP Grants Awarded: \$10,101,736
- Grant Amounts Range: \$9,207 to \$1,000,000 (3 awards)
- Average Grant Award: \$190,599
- Total No. Counties Represented: 34

\* Includes grants to agricultural producers and rural small businesses, but excludes technical assistance provider grants

# Examples of REAP Grants Awarded in FY 2023

## Agricultural Producers

County	Grant Amount	Project Type/Size	Estimate generation (kWh/yr)	Project Savings per year
Orange	\$9,207.00	Solar PV - 9.6 kW	13,500	\$2,747.00
Orange	\$11,267.00	Solar PV - 9.6 kW	12,867	\$1,500.00
Chatham	\$14,705.00	Greenhouse geothermal system	26,552	\$2,808.00
Forsyth	\$19,570.00	Solar PV - 9.1 kW	12,463	\$1,117.00
Surry	\$32,732.00	Solar PV - 42.4 kW	62,461	Not provided
Union	\$36,349.00	Solar PV 60 kW	85,011	\$8,501.00
McDowell	\$43,974.00	Solar PV (18.9 kW) + battery storage	24,002	\$2,400.00
Wake	\$44,452.00	Solar PV 52.9 kW	57,295	\$5,443.00
Person	\$46,659.00	Grain Dryer	245,864	\$13,194.00
Wayne	\$76,472.00	Solar PV - 86.9 kW	130,939	\$6,678.00
Duplin	\$107,010.00	Solar PV - 74.6 kW	177,130	\$15,942.00
Anson	\$123,410.00	Solar PV - 143.5 kW	213,408	\$12,804.00
Wilkes	\$133,760.00	Solar PV - 167.3 kW	221,601	\$17,728.00
Union	\$146,716.00	Solar PV - 229.9 kW	309,418	\$24,753.00
Union	\$160,026.00	Solar PV - 208.8 kW	341,701	95 % of energy demand
Hoke	\$167,786.00	Solar PV -- 79.5 kW plus 115.6 kW	299,419	\$32,936.00
Sampson	\$213,493.00	solar PV - 283.9 kW	418,295	\$29,281.00
Pitt	\$1,000,000.00	poultry litter waste-energy	1,600,000	Not provided

# What Are Eligible REAP Projects

## Energy Improvement Projects

- High-efficiency heating, ventilation, and air conditioning systems (HVAC)
- Insulation
- Lighting
- Cooling or refrigeration units
- Doors and windows
- Electric, solar, or gravity pumps for sprinkler pivots
- Switching from a diesel to an electric irrigation motor
- Replacement of energy-inefficient equipment

## Renewable Energy Projects

- Small and large solar generation
- Small and large wind generation
- Biomass – including biogas (anaerobic digesters), ethanol, biodiesel, solid fuels
- Geothermal for electric generation or direct use
- Hydropower (under 30 MW)
- Hydrogen
- Ocean generation (tidal currents)



# Tell Me More About Eligible Projects

- The project must utilize commercially available technology
- The project must have technical merit
- For locations where a residence shares an electric meter with the ag operation or small rural business, at least 50 percent of the energy generated from the RES project must be used by the farm or business
- Up to 10 percent of a grant can be used to acquire or improve broadband
- There are also specified ineligible projects. Contact us to learn more about project eligibility

# What Projects Costs are Funded by REAP

- First and foremost – project costs must be incurred after a complete application has been received by the USDA. The following eligible costs must be associated with the RES or EEI:
  - Purchase and installation of new or refurbished equipment
  - Construction, retrofitting, replacement, and improvements
  - The EEI identified in the energy assessment/audit
  - Fees for construction permits and licenses and fees required by an interconnection agreement

## Eligible Project Costs (continued)

- Professional service fees related to the project for qualified consultants, contractors, installers, and other third-party services
- Cost to install a second electric meter to separate the residence from the portion of the RES project that benefits the rural small business or agricultural operation
- There are also ineligible project costs – contact us for details

## Funding Logistics

- Applications are evaluated and scored competitively during the quarter in which the complete application is received
- Current funding (through end of FY 24) provided for six application windows representing calendar quarters. Quarters 1 through 3 covered 2023
- For 2024 the application windows are 1/2/24 - 3/31/24; 4/1/24 - 6/30/24; and 7/1/24 through 9/30/24
- Applicants compete first for state allocations followed by national allocations

## More Funding Logistics

- Applications that are not funded within their initial application window (calendar quarter) are automatically considered during the following application window
- Applications that are not funded in the final application window (7/1-9/30/24) are withdrawn from consideration
  - Doesn't rule out competing again the following FY
- **Important** – to encourage small projects, REAP has created a carve-out for grant requests of \$20,000 or less which compete separately from the pool of larger projects.

# REAP Has You Covered

In this webinar, you will learn how REAP can support farms and rural small businesses by:

- Providing energy efficiency audits;
- Providing renewable energy assessments; and
- Comprehensive application and tax implication support

Questions ??

Thank you!