Reducing Up-front Costs for Rural Energy Efficiency Projects

Improving the energy efficiency of rural homes, businesses, and institutions keeps hard-earned money in community members' pockets. However programs to provide efficiency upgrades often require upfront investments, which may be a barrier for some rural community members. Utilities, state and local governments, advocates, and efficiency program implementers can help rural residents and businesses access various funding sources to offset the cost of efficiency improvements.

Type	Funding Source	Program Provider	Example Program
Utility	Ratepayer or member funds	Investor-owned utilities (IOUs), municipal utilities (munis), distribution co-operatives (co-ops), generation and transmission (G&T) co-ops, and statewide efficiency program administrators, often in collaboration with community action agencies (CAAs) and municipal and nonprofit housing and energy providers	Oncor MainStreet Efficiency Program[1] (small commercial)
State	State budget allocations	State energy offices, state departments of commerce	Washington State Department of Commerce Home Rehabilitation Loan Program[2] (low-income residential)
Federal	US Department of Agriculture (USDA) Rural Energy for America Program (REAP) [3]	Agricultural producers and small businesses in rural areas	Colorado Agricultural Energy Efficiency (AGEE) Program[4] (agriculture)
	USDA Rural Energy Savings Program (RESP)	Utilities and other service providers serving rural areas	Northeast Ohio Public Energy Council Savings Through Efficiency Program (STEP)[5] (commercial and multifamily)
	USDA Energy Efficiency and Conservation Loan Program (EECLP)	Utilities serving rural areas	Roanoke Electric Cooperative Upgrade to $ave[6] (residential and commercial)
	US Department of Energy (DOE) Weatherization Assistance Program (WAP)	State weatherization offices and their sub-grantees (CAAs, municipalities, and weatherization contractors)	Maine State Housing Authority Weatherization Initiatives[7] (low-income residential)
	DOE State Energy Program (SEP)[8]	State energy offices and partners from utilities and nonprofits	Massachusetts Department of Energy Resources, West Virginia Office of Energy, National Grid, and others for energy efficiency projects in public buildings in small, medium, and rural communities[9] (public)
Other	Private lenders (e.g. National Rural Cooperative Financing Corporation, CoBank)	Community development financial institutions, state energy offices, co-ops, IOUs, or munis	Natural Capital Investment Fund Energy Efficient Enterprises Initiative[10] (commercial)
	Nonprofit/Philanthropic	Nonprofits, foundations	North Carolina Sustainable Energy Association Energy Solutions Reserve Fund[11] (residential and small commercial)

Endnotes

1 www.texasefficiency.com/images/documents/RegulatoryFilings/EEPRs/2017_EEPRs/
2 www.commerce.wa.gov/growing-the-economy/energy/weatherization-and-energy-efficiency/rural-rehab/
3 USDA offers REAP loans and grants directly to agricultural producers and small businesses. USDA offers RESP to rural utilities and service providers to re-lend or seed financing programs for members. USDA offers EECLP to utilities serving rural areas to seed financing programs for members or make direct investments in the utility system.
4 aceee.org/sites/default/files/pdf/conferences/rural/2018/michael%20turner%20.pdf
5 www.nopec.org/small-businesses/energy-efficiency-financing/step-loan/
6 www.roanokeelectric.com/usda-eeclp
7 MaineHousing coordinates with Efficiency Maine – the statewide efficiency program administrator – on low-income weatherization programs: www.efficiencymaine.com/docs/EMT-FY18-Annual-Report.pdf.
8 The US Department of Energy compiles rural resources for states, local governments, and K-12 school districts here: www.energy.gov/eere/slsc/downloads/rural-resources-states-local-governments-and-k-12-school-districts.
9 neep.org/blog/top-seven-things-know-about-ace?utm_source=NEEP+Master+List&utm_campaign=1e7abbe7de-EMAIL_CAMPAIGN_2018_02_07_COPY_01&utm_medium=email&utm_term=0_d09b004d10-1e7abbe7de-238633313

Financing models for rural energy efficiency

Financing can help rural customers overcome sometimes high upfront costs of energy efficiency improvements. Below are a few financing mechanisms that can effectively channel much-needed capital from the funding sources above to rural community members.

Financing Model	Description	Provider	Example Program
On-bill repayment	Loans tied to the borrower that are repaid through customer's utility bill	IOUs, munis, co-ops, or other financial lenders or institutions	South Carolina Help My House[12] (residential)
Tariffed on-bill financing	Tariff tied to the property meter and repaid through customer's utility bill	IOUs, munis, co-ops, or other financial lenders or institutions	Ouachita Electric Cooperative Help Pay As You Save® (PAYS)[13] (residential)
Property Assessed Clean Energy (PACE)	Voluntary assessment on customer's property tax bill, tied to the property and not the individual property owner or borrower[14]	Third-party financier or the local government that enables the PACE program	Lean & Green Michigan[15] (residential multifamily)
Revolving loan fund	Public funding for loans to customers to stimulate private investments	State energy offices and green banks	Missouri Agricultural and Energy Saving Team Energy Efficient Farmstead Retrofit Program[16] (agriculture)
Energy Savings Performance Contracting (ESPC)	A performance-based agreement by which public facilities pay an energy service company (ESCO) for its services with the money saved from installed efficiency measures	State department of general services and ESCOs	Kentucky Local Government Energy Retrofit Program[17] (public)
Entergy Mortgages	Combine energy efficiency improvements with the cost of a mortgage	Fannie Mae	HomeStyle® Energy[18] (residential)
		Federal Housing Authority	Energy Efficient Mortgage Program[19] (residential)

Strategies for maximizing energy efficiency resources

1. **Couple financial resources with technical assistance to make efficiency improvements.** Help customers conduct energy audits, identify energy efficiency measures, and work with qualified contractors to conduct selected improvements.
2. **Leverage state and federal funds.** The program providers listed above can partner and pool program resources among multiple organizations serving rural customers. Moreover, DOE and USDA provide valuable, low-cost capital. Rural efficiency program implementers unfamiliar with the application process or eligibility requirements can engage community-based organizations for technical application support.[20]
3. **Include strong consumer protections.** Achieving net energy bill savings is especially important for rural on-bill programs to reduce high energy burdens. Evaluation, measurement, and verification of energy savings is critical to ensure bill-neutral or -positive results. Account for the impact of potential rate changes on tariffs and loans.

Endnotes

10 ncifund.org/what-we-do/strategic-initiatives/energy-initiative
11 energync.org/esrf/
12 www.eesi.org/OBF/coops/helpmyhouse
13 www.oecc.com/help
14 PACE financing is used for energy efficiency and renewable energy projects.
15 leanandgreenmi.com/uploads/PDFs/CaseStudy3.pdf
16 agriculture.mo.gov/abd/financial/maestro.php
17 kydlgweb.ky.gov/StateGrants/16_SpecProg.cfm
18 www.knowyouroptions.com/buy-overview/affordable-mortgage-options/homestyle-energy-mortgage
19 www.hud.gov/program_offices/housing/sfh/eem/energy-r
20 The Natural Capital Investment Fund, for example, helps businesses identify grants, rebates and financing opportunities:
    ncifund.org/what-we-do/strategic-initiatives/energy-initiative/technical-assistance-process.

For more information on ACEEE's Rural Energy Initiative, see:
aceee.org/topics/rural-and-small-town-communities

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