







Energy Efficiency for Everyone

Pay As You Save (PAYS) Inclusive On-bill Financing: Making Home Improvement Affordable





MACED: How\$martKY's Program Operator

What does MACED mean?: Mountain Association for Community Economic Development

What is MACED?: We're a Community Development Financial Institution (CDFI)

What is a CDFI?: Community development financial institutions (CDFIs) are private financial institutions that are 100% dedicated to delivering responsible, affordable lending to help low-income, low-wealth, and other disadvantaged people and communities join the economic mainstream.

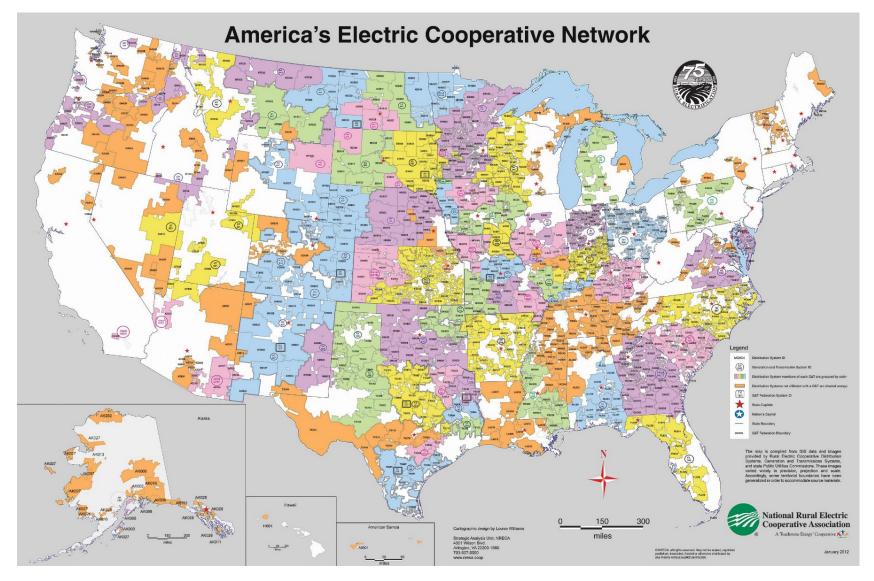
What do we do?: MACED partners with local people to support community economic development through non-traditional business lending, entrepreneurial support systems, policy work, and investment programs like How\$martKY.

Why do we do this?: MACED wants to build upon the strengths of Kentucky and Central Appalachia and serve as a catalyst for a Just Transition in the region as demand for coal declines. We create economic alternatives in clean energy and other key sectors and strive to make Appalachian communities better places to live.





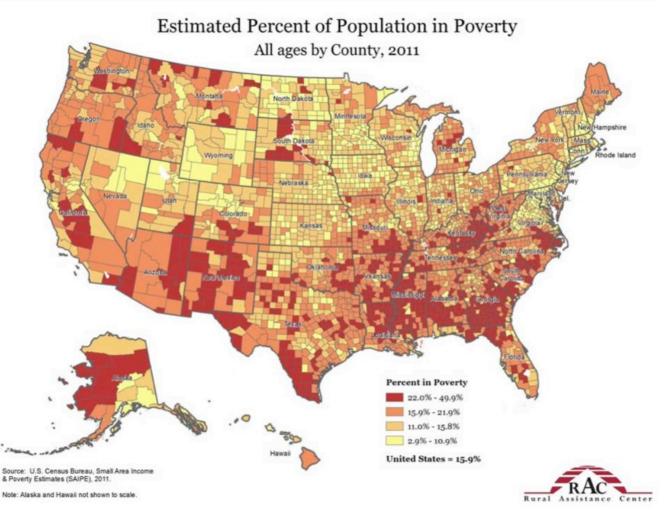
Why create a PAYS program?







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"93% of Persistent Poverty Counties in the U.S. overlap with Rural Electric Cooperative service territories." – National Rural Electric Cooperative Association, 2011



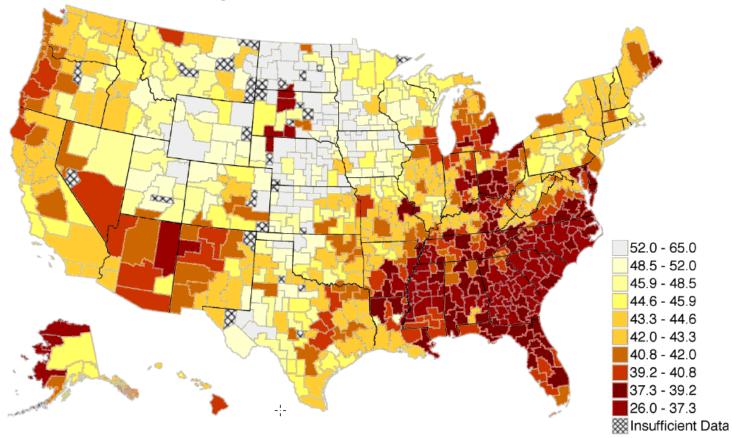




Why How\$martKY[™]?

Intergenerational Upward Mobility in the U.S.

Darker Color = Less Absolute Upward Mobility Average Percentile Rank of a Child of Parents at the 25th Percentile



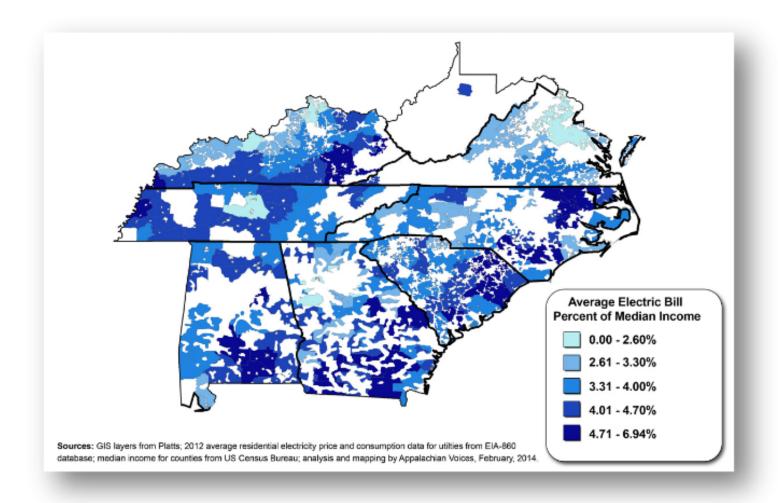
Source: Equality of Opportunity Project, Harvard University and UC-Berkeley; www.equality-of-opportunity.org.



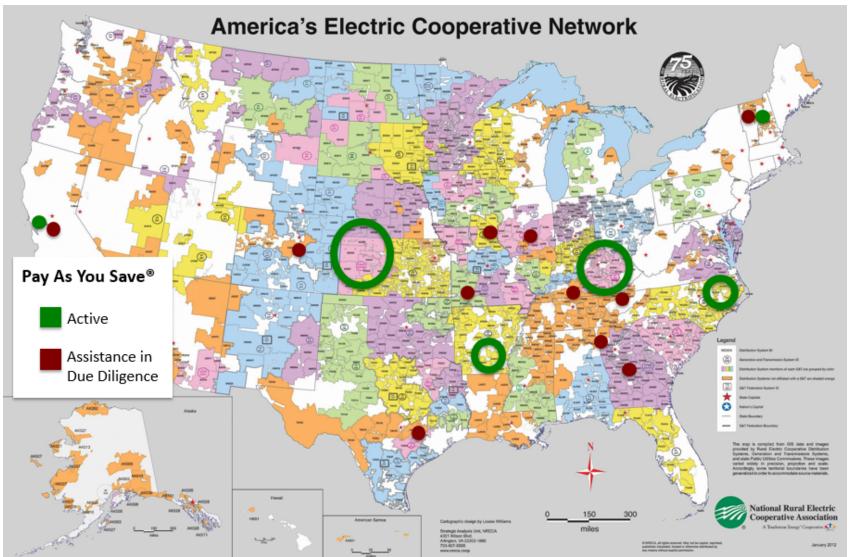


Why How\$martKY[™]?

Figure 1: Electricity cost burden for rural electric cooperatives in the Southeast



Cooperative Leadership Matters



Rural communities are leading the way on inclusive financing, and are offering assistance.

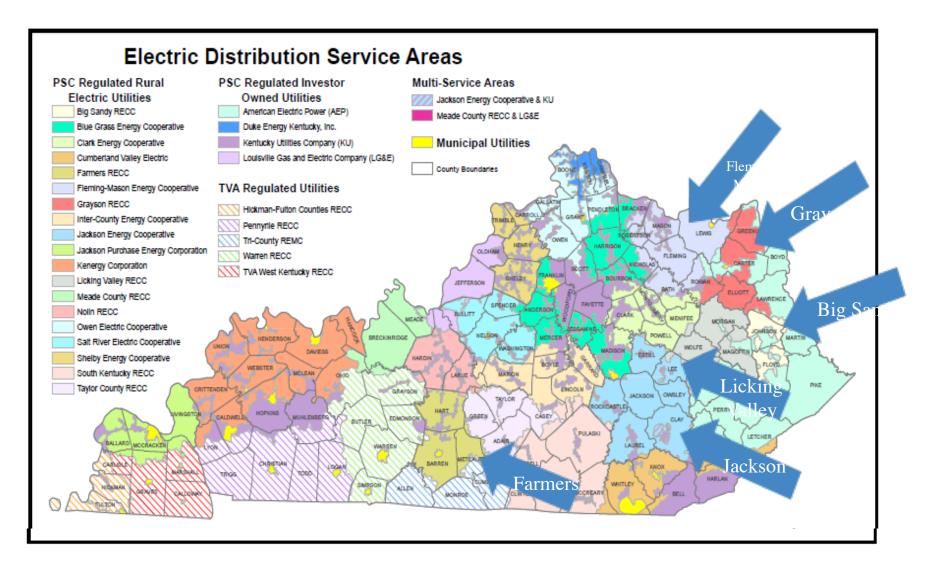




Why On-Bill Financing? More Reasons:

- Economic Development: Direct spending to contractors and the indirect impacts of net cash flows that can be spent in the community.
- Jobs: Employment that pays well, has meaning and impact, and can't be outsourced. Ripple effects support secondary and tertiary jobs in these communities as well.
- Affordable housing and wealth building: Helps folks stay in their homes and build wealth through because retrofitted homes are more durable and valuable.
- **Increased tax bases:** Homes that are worth more bring in more property taxes.
- **Healthier environments:** Efficiency retrofits are proven to lead to healthier homes and reduced health care costs especially for low income households.
- Energy, capacity, and costs: Pay-As-You-Save programs have a reported default rate of less than .01% and are helping regional utilities lower their wholesale electric bills.

6 Electric Cooperatives Offer How\$martKY™

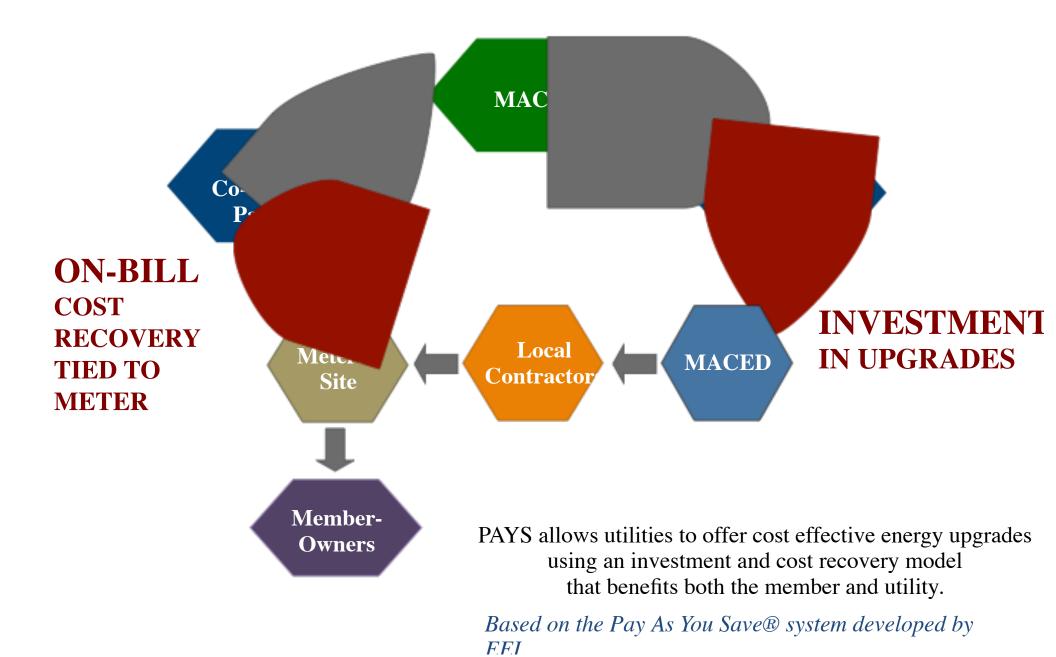


To our knowledge, How\$martKY is the first on-bill program ever offered by each of our co-op partners.









What's the difference between OBR and Ouachita's H.E.L.P. = On Bill COAN Program (OBR)

What worked:

- Arkansas Energy Office set up a Loan Loss Reserve
- Co-op utilities said "YES"
- <u>Homeowners</u> with good payment history could get basic weatherization upgrades with cash flow neutral payback

What didn't:

- Single Family renters were left out
- Multi Family renters were left out
- Mobile homes were left out
- HVAC financing was not an option (Even with the LLR, risk perceived to be too high.)
- Peak Demand savings for the Coop (when HVAC included) were left on the table. (For Ouachita Electric, that generates \$300 per year per participant in avoided costs.)

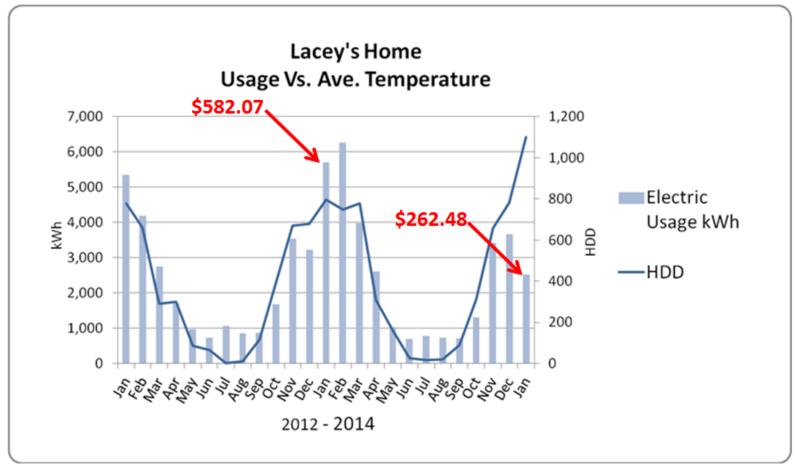
Ouachita: Loans (OBR) vs. Tariffed On-Bill (PAYS)

Attributes	Home Energy Lending Program (HELP)	HELP PAYS®	
• Residential participants are eligible	\checkmark	1	
• Renters are eligible		\checkmark	
• No credit score check – no debt to income ratios	✓	\checkmark	
No upfront participant cost	\checkmark	 ✓ 	
• Estimated savings <u>must exceed</u> cost recovery charges by 20%		~	
• Participant signs a loan or promissory note for a debt obligation	✓	•	
• Participant accepts an opt-in utility tariff (NOT a debt) tied to meter		~	
• Cost recovery is through a fixed charge on the utility bill	✓	~	
100% on-site QC for payment authorization	✓	 ✓ 	
Participant accepts tariff with disconnection for non-payment		~	
• Payments end if upgrade fails and is not repaired		\checkmark	





Energy Efficiency in Action:

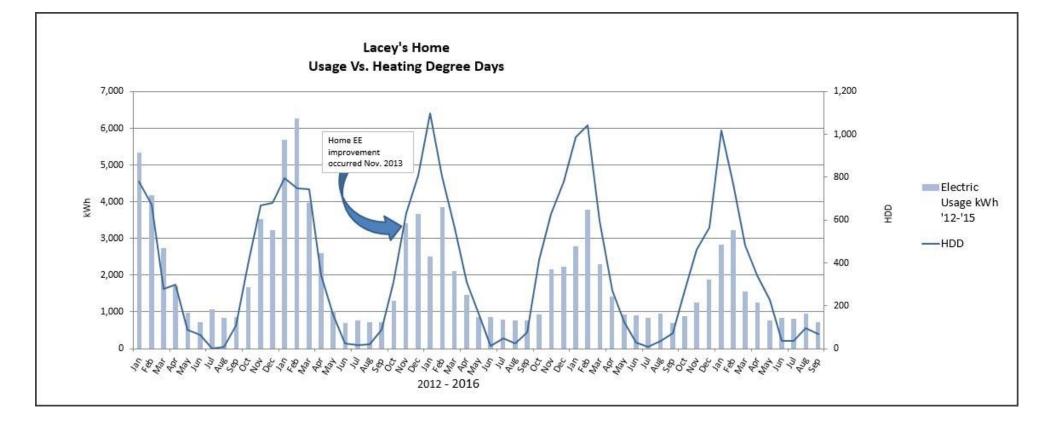


January Energy Consumption	2013 kWh	2014 kWh	% Increase
Benham Overall	808,800	1,152,000	42%
Lacev Griffev	5.693	2.519	-56%





Energy Efficiency in Action:



Sometimes the effects of EE retrofits grow over time, due to increased awareness and an appetite for even more savings.





Key program stats:

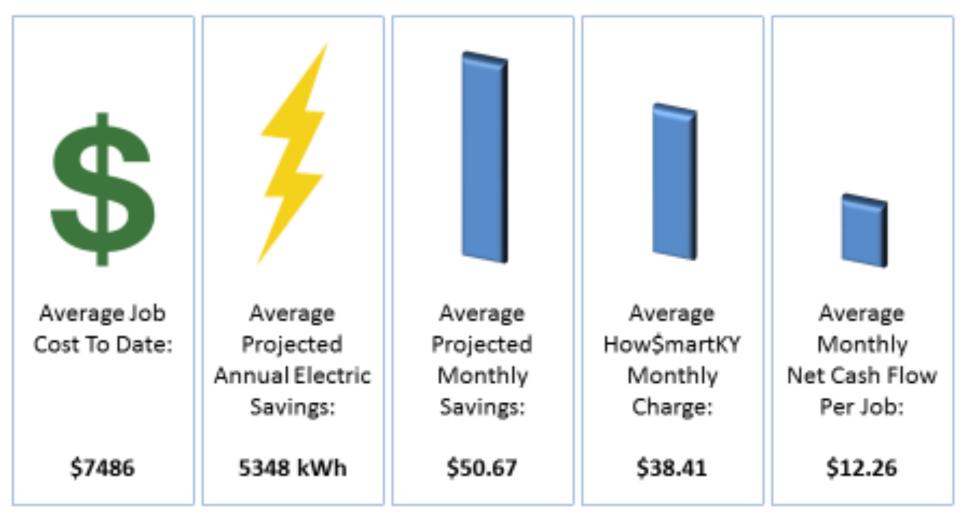


The majority of our assessments result in an investment (nearly 80% accept the offer), and a majority of those investments are in low- and moderate-income households.





Key program stats:



Utility cost recovery is above 99.9%. Zero disconnections for non-payment.





More General Lessons Learned:

Relationships are key: Communication and trust are the most important ingredients in MACED's recipe for success.

Partner with others: Any person or organization that understands the need for these programs is a potential partner or advocate for our program. Think outside the utility/government/NGO box.

Find champions: Identify (or try to develop) at least one champion for your program in every single partner organization.

Learn from others: Don't try to create every wheel from scratch. Find others that are doing similar work and identify best practices that have already been established.

Build the business case: Our program generates benefits for partner utilities – and their wholesale supplier - but the executives don't necessarily see it unless we help quantify it.

Don't make assumptions: Confirm everything!





What's Next for How\$martKY?









Want More Information?

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