



SEEA

SOUTHEAST ENERGY EFFICIENCY ALLIANCE

WEBINAR SERIES

UPDATE ON INCLUSIVE FINANCING PROGRAMS IN THE SOUTH

Part 2 of the SEEA Learning Circle Series

February 16, 2017

Growing interest in On-Bill has made these introductory sessions some of our best attended webinars.

Over 100 Registrants from Across the Country

- Utility managers
- Consumer advocates
- Utility commission staff
- State energy offices
- Community organizers
- Solution providers

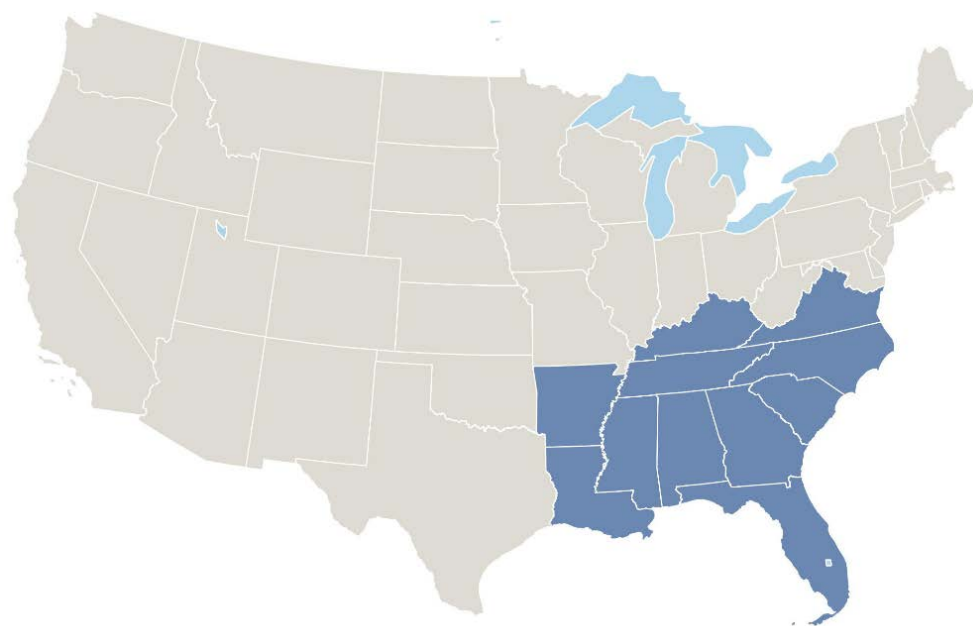
SEEA Serves the Southeast

Mission

The **Southeast Energy Efficiency Alliance (SEEA)** works to ensure people in the Southeast have the knowledge, resources, and opportunities to optimize energy use.

Vision

Energy efficiency is a primary driver of a prosperous, healthy and sustainable Southeast.



Work Areas:

Built Environment

State, Local & Utility Policy

Energy Equity

Energy Efficiency Finance



SEEA & Energy Efficiency Finance

EE Finance Activities

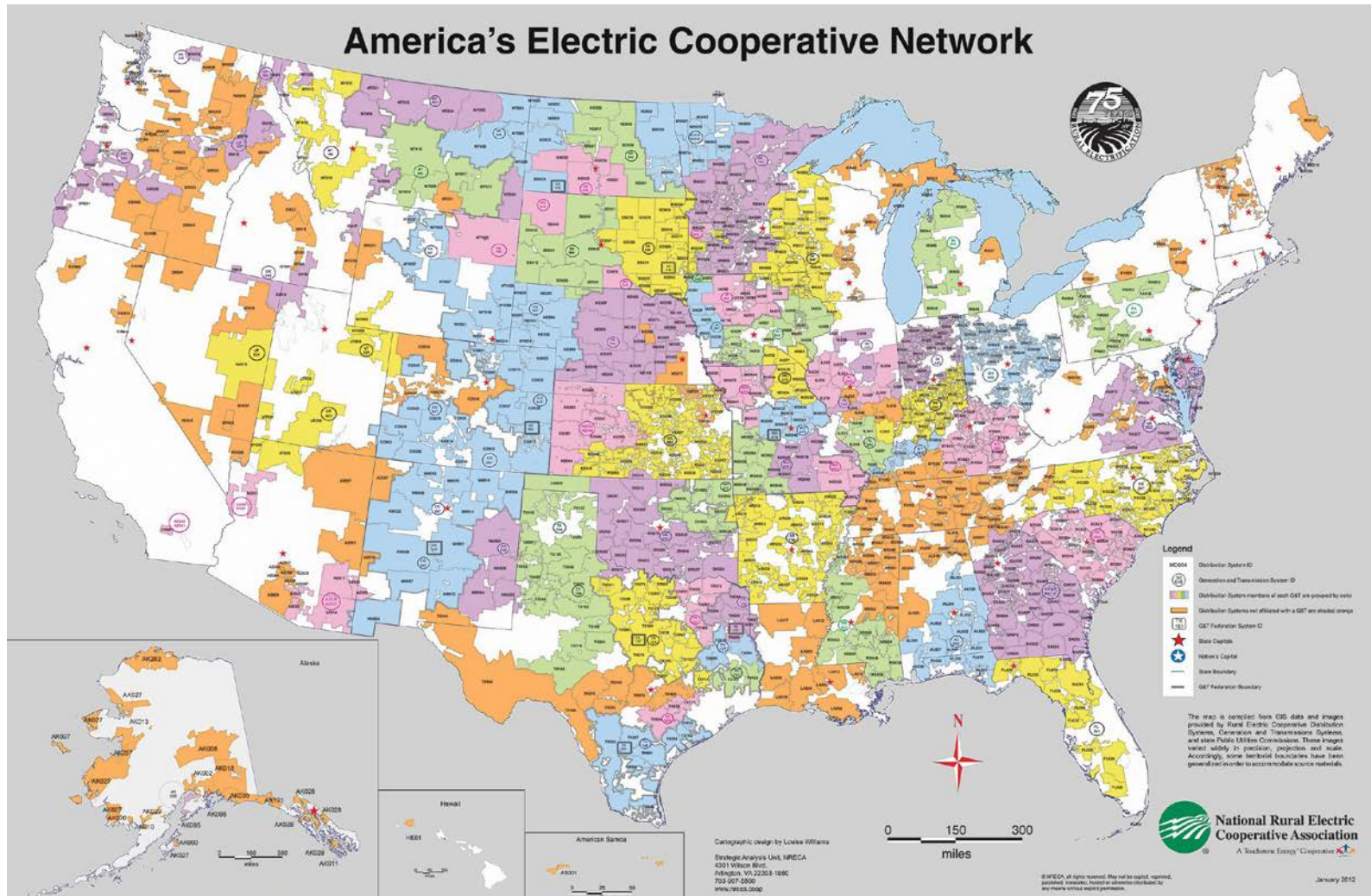
Work Area Goal

Expand the availability and accessibility of capital to make energy efficiency investments

- 2014 Arkansas Energy Office Statewide Financing Options Study
- 2014 Southeast Energy Efficiency Fund
- 2014 North Carolina On-Bill Working Group
- 2015 SEEA webinar with CEO of Roanoke Electric
- 2015 SEEA conference highlight: The Roanoke Center
- 2016 SEEA conference highlight: Ouachita Electric
- 2017 SEEA Learning Circle for Inclusive Financing

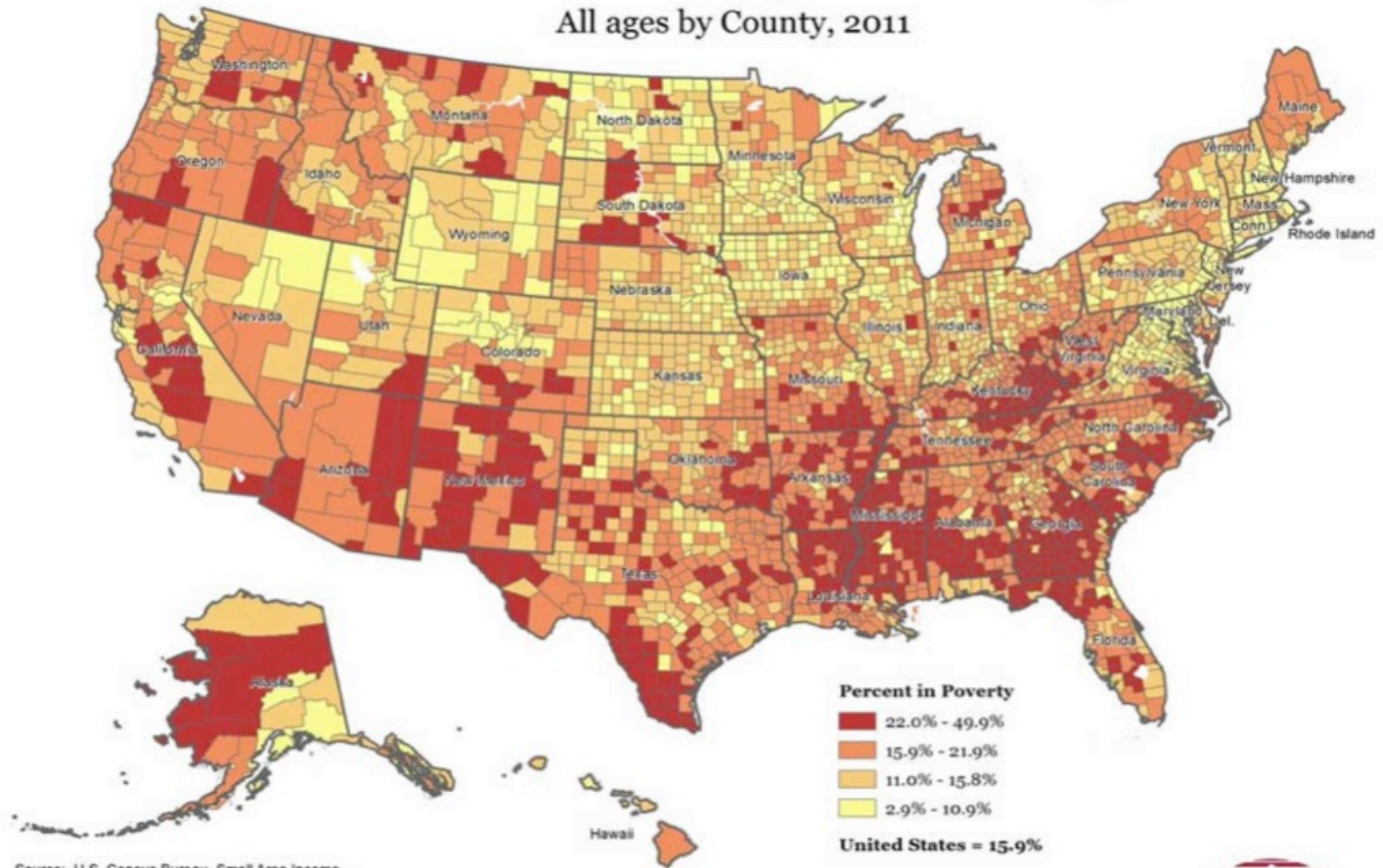
Solutions that works for *anyone* – regardless of income, credit score, or renter status – are better for *everyone*.

Why On-Bill Financing?



More than 90% of persistent poverty counties in the U.S. are served by electric cooperatives.

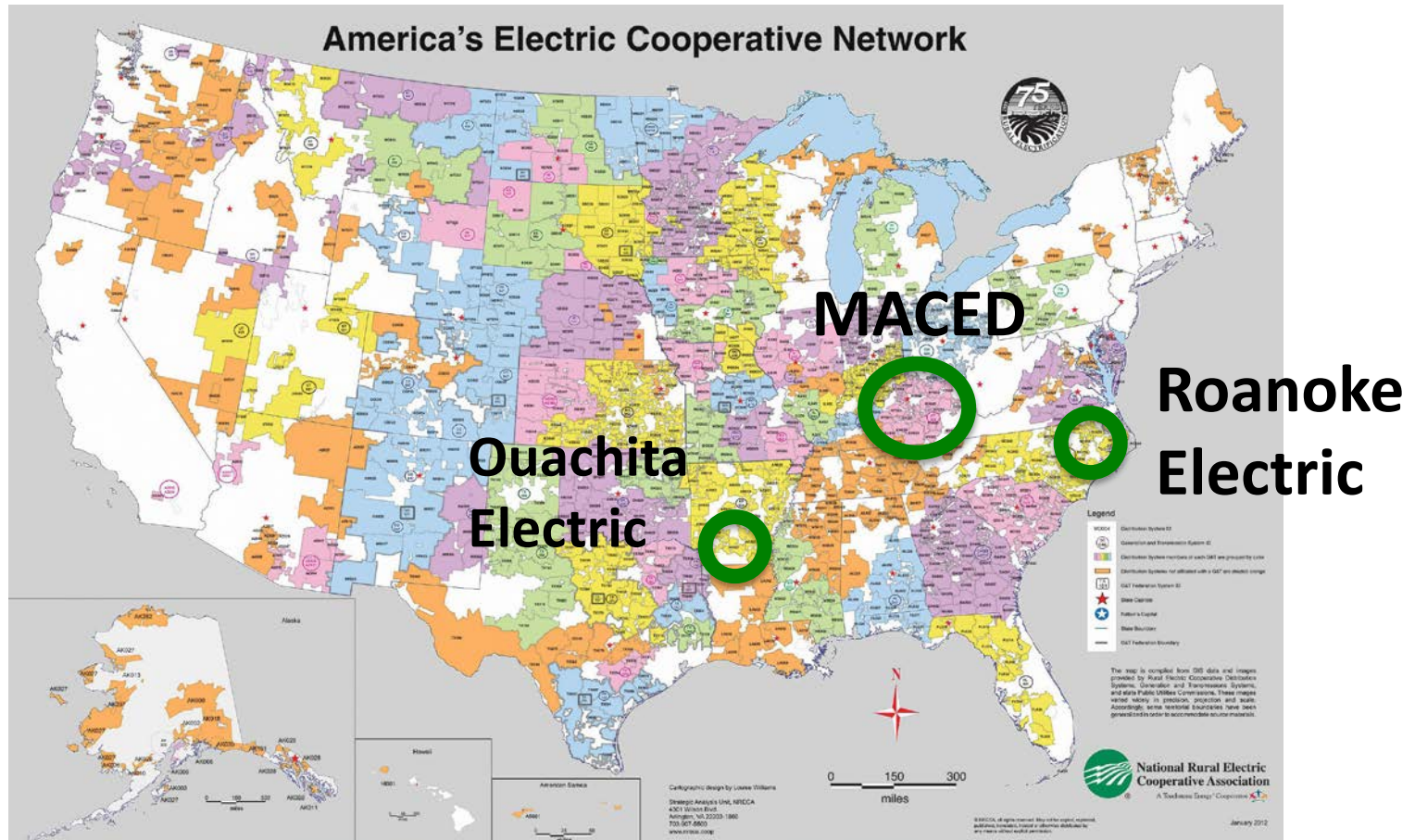
Estimated Percent of Population in Poverty All ages by County, 2011



Source: U.S. Census Bureau, Small Area Income & Poverty Estimates (SAIPE), 2011.

Note: Alaska and Hawaii not shown to scale.

Cooperative Leadership Matters



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



Chris Woolery
Program Manager
MACED



Marshall Cherry
Chief Operating Officer
Roanoke Electric



Tammy Agard
President, EEtility



Introduction to Inclusive Financing for Energy Efficiency

- How\$mart KY in Kentucky
- Upgrade to \$ave in North Carolina
- HELP PAYS in Arkansas
- More opportunities to learn



How\$martKY™

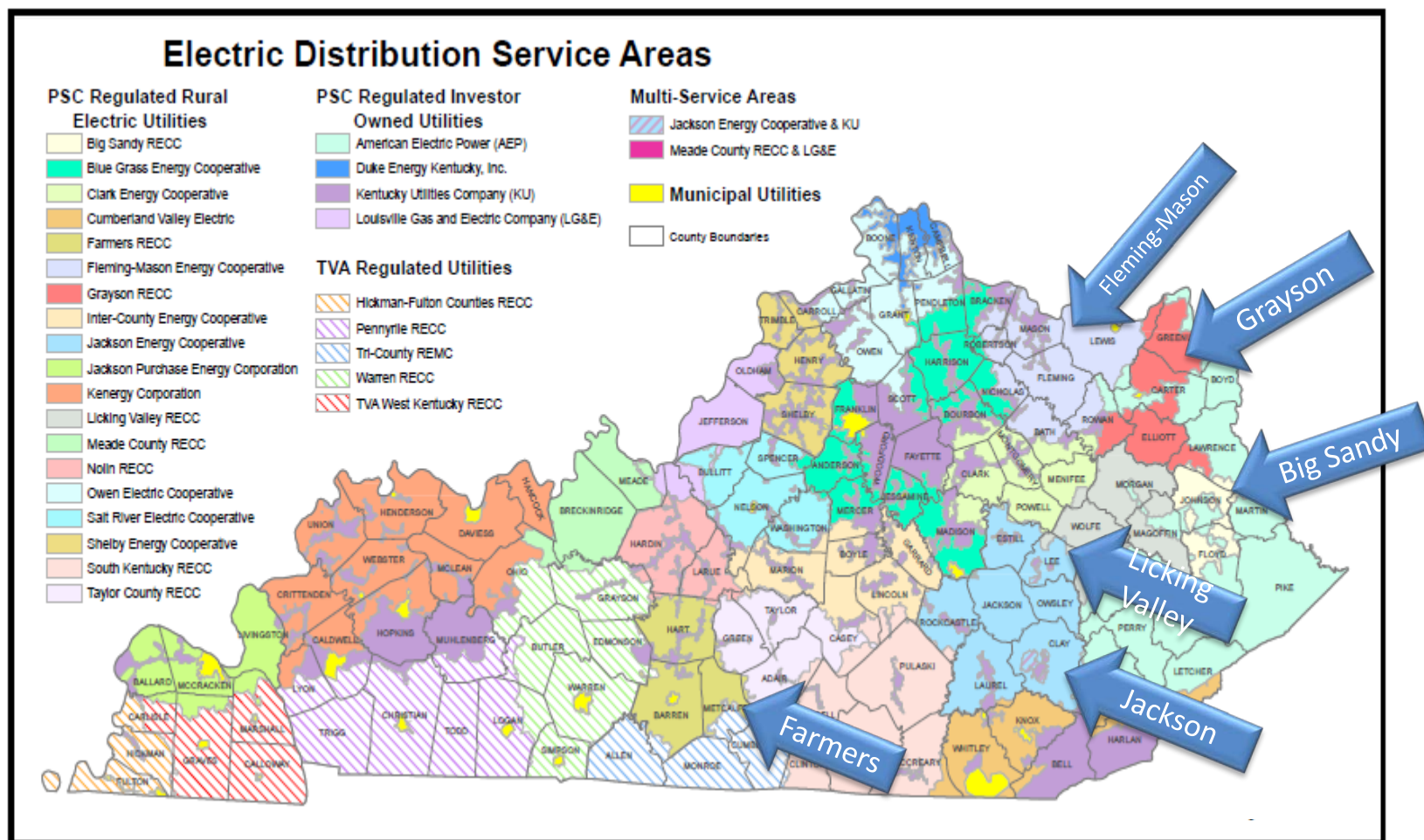
Energy Efficiency for Everyone

Prepared for Southeast Energy Efficiency Alliance session:
Update on Inclusive Financing Programs in the South
February 16, 2017

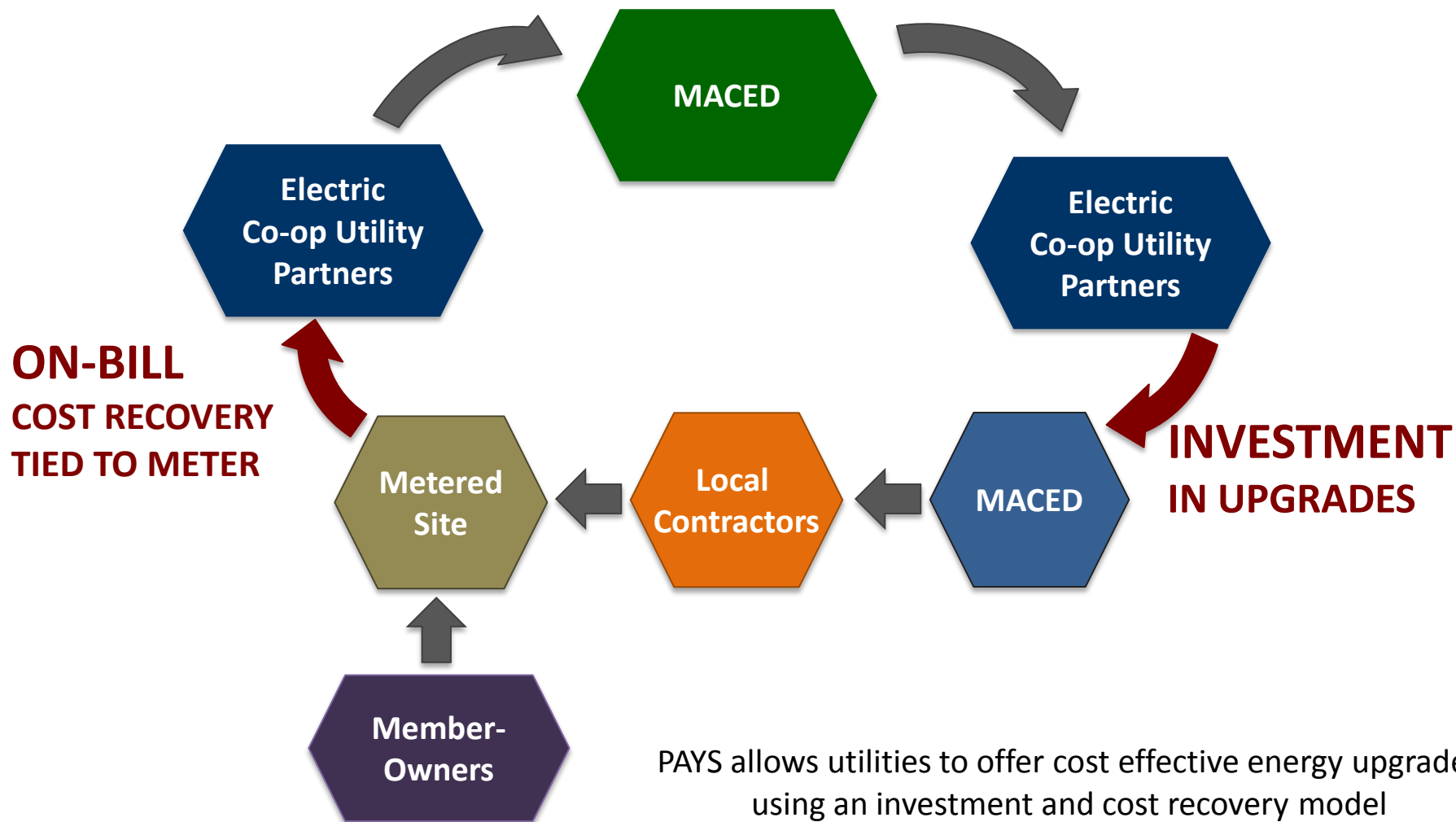


Introduction to MACED

- **MACED:** 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 financing 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 to 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.



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



PAYS allows utilities to offer cost effective energy upgrades using an investment and cost recovery model that benefits both the member and utility.

Based on the Pay As You Save® system developed by EEI.

How\$martKY's Timeline:

December 2010:
Kentucky's Public Service
Commission (KY PSC)
approved the tariff for
our pilot program after
an **18** month process.

August 2011:
The first H\$KY
retrofit is completed
in partnership with
Jackson Energy.

November 2012:
Three of the four
cooperative partners
filed with the PSC for
a permanent tariff.

August 2013:
KY PSC approved the
tariff for the permanent
program in **9** months.

August 2014:
Farmers RECC filed
tariff with the PSC.

January 2015:
KY PSC approves the
tariff in **6** months.

January 2015:
Licking Valley Rural
Electric filed tariff with
the PSC.

April 2015:
KY PSC approves the
tariff in **3** months.

February 2017:
How\$martKY
completes its 295th
retrofit to date.

How\$martKY: Eligible Rate Classes

Utility	Residential	Small Commercial	Large Commercial & Industrial
Fleming-Mason	✓	✓	
Jackson	✓	✓	
Farmers	✓		
Grayson	✓	✓	
Big Sandy	✓	✓	
Licking Valley	✓	✓	

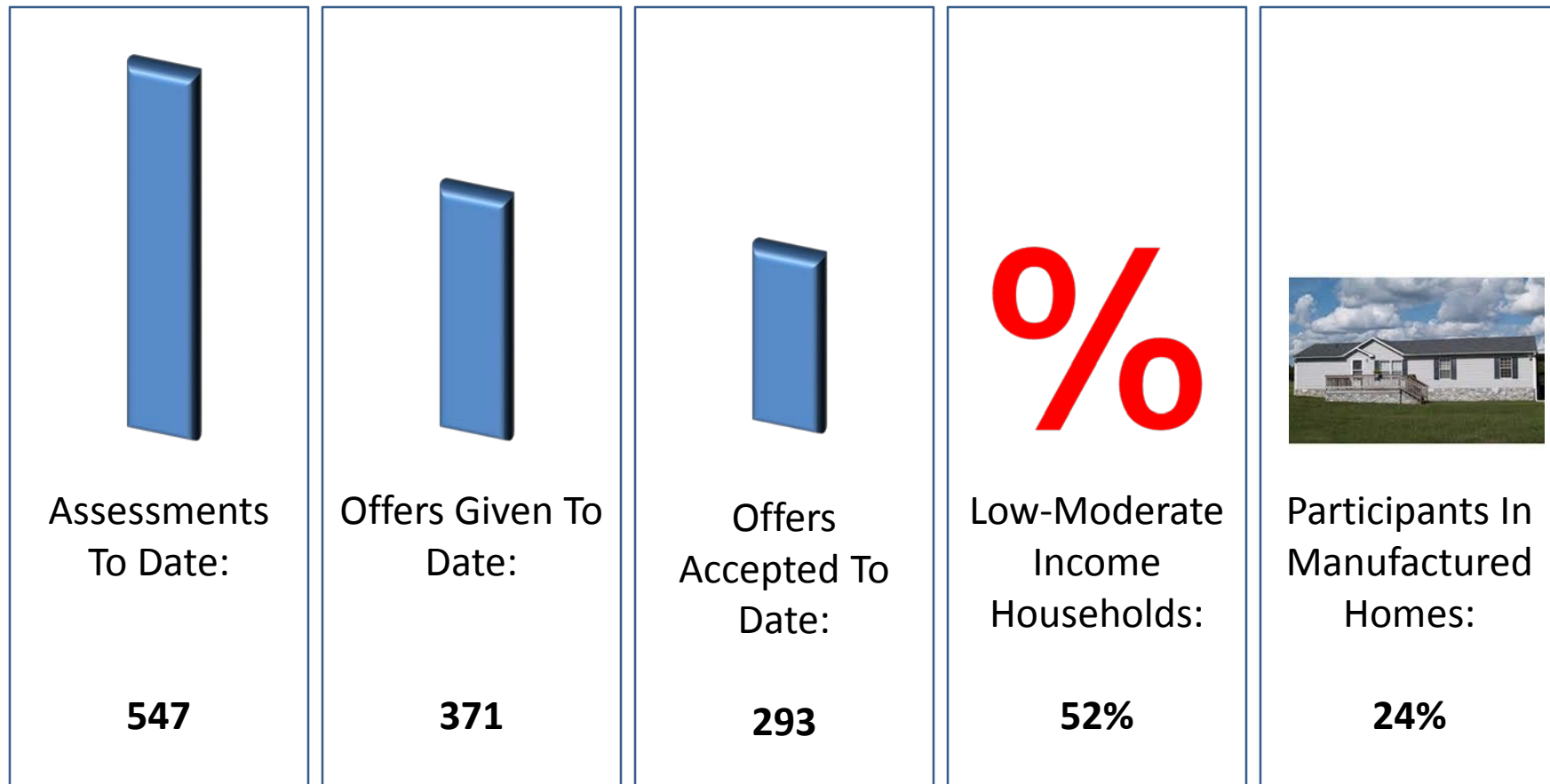
Renters: All cooperative partners allow renters in each rate class to participate, providing they have permission from the property owner.

Typical Improvements:

- Duct sealing
- Air sealing
- Insulation
- Programmable thermostats
- HVAC system replacement



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:



Average Job
Cost To Date:

\$7377



Average
Projected
Annual Electric
Savings:

5270 kWh



Average
Projected
Monthly
Savings:

\$50.32



Average
How\$martKY
Monthly
Charge:

\$39.24



Average
Monthly
Net Cash Flow
Per Job:

\$11.08

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

Key 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:** These investments generate benefits for partner utilities – and their wholesale supplier – and executives depend on us to help quantify that value.
- **Don't make assumptions:** Confirm everything!

Want More Information?

Chris Woolery
How\$martKY Program Coordinator
(859) 986-2373 or
(859) 621-4765
cwoolery@maced.org

Introduction to Inclusive Financing for Energy Efficiency

- How\$mart KY in Kentucky
- Upgrade to \$ave in North Carolina
- HELP PAYS in Arkansas
- More opportunities to learn



Upgrade to \$ave

financed through
USDA's Energy Efficiency &
Conservation Loan Program

Marshall Cherry, Chief Operating Officer
Roanoke Electric Cooperative

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@Roanoke_EC



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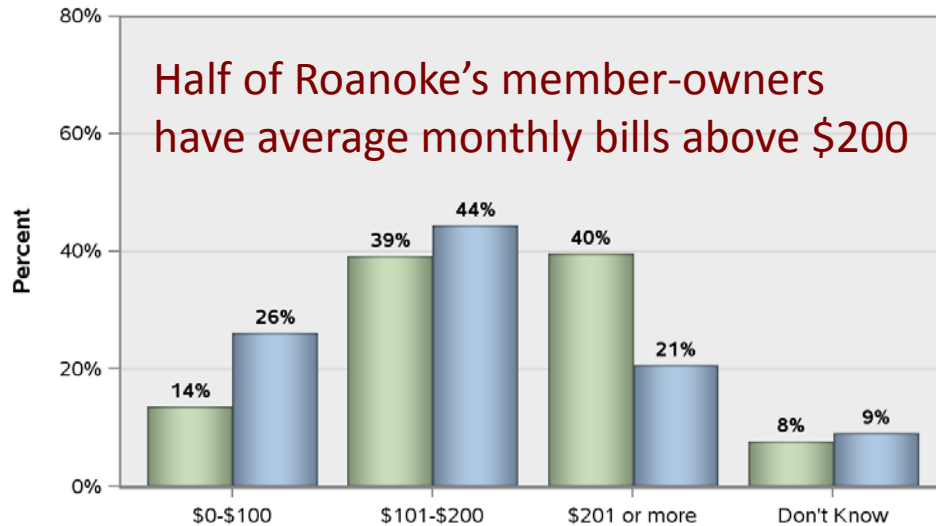
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Roanoke Electric Cooperative
Your Touchstone Energy® Partner

**Average Monthly Electric Bill
2015-2016 Cooperative Difference Survey**

■ Roanoke Electric ■ National Benchmark



Bill Size & Member-Owner Satisfaction

Even though Roanoke's rates are not out of line with the field, customer satisfaction is low among members with high bills.



	Roanoke EC		Quarterly Benchmark	
Avg. Monthly Bill Amount	Percent of Responses	Average Rating	Percent of Responses	Average Rating
TOTAL	100%	8.05	100%	8.72
\$100 or less	12%	9.21	25%	8.98
\$101 to \$200	28%	8.65	42%	8.80
\$201 or more	53%	7.37	22%	8.19
Don't Know	6%	8.87	9%	8.96

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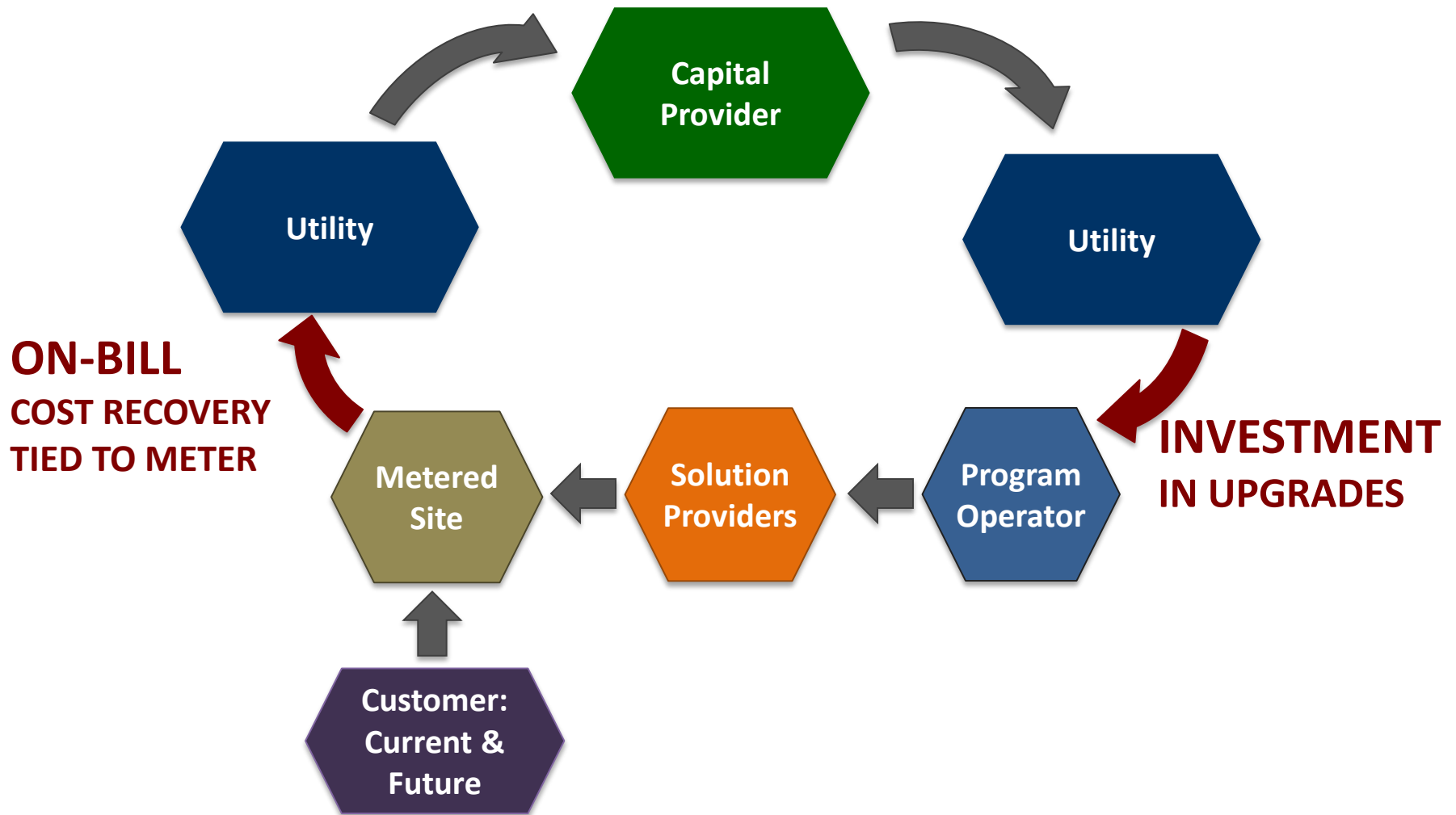


Roanoke Electric Cooperative
Your Touchstone Energy® Partner

Initial loan offer wasn't enough get to "Yes"...

- Even though we offered:
 - Cost effective upgrades for high consumption member-owners
 - On-bill financing
- Major barriers remained:
 - Creditworthiness
 - Renter eligibility
 - Members declining additional debt
- So, we sought a solution that would be *more inclusive* and generate *more value* for *more members*

Opt-In Tariffed Approach



Based on the Pay As You Save® system developed by EEI.

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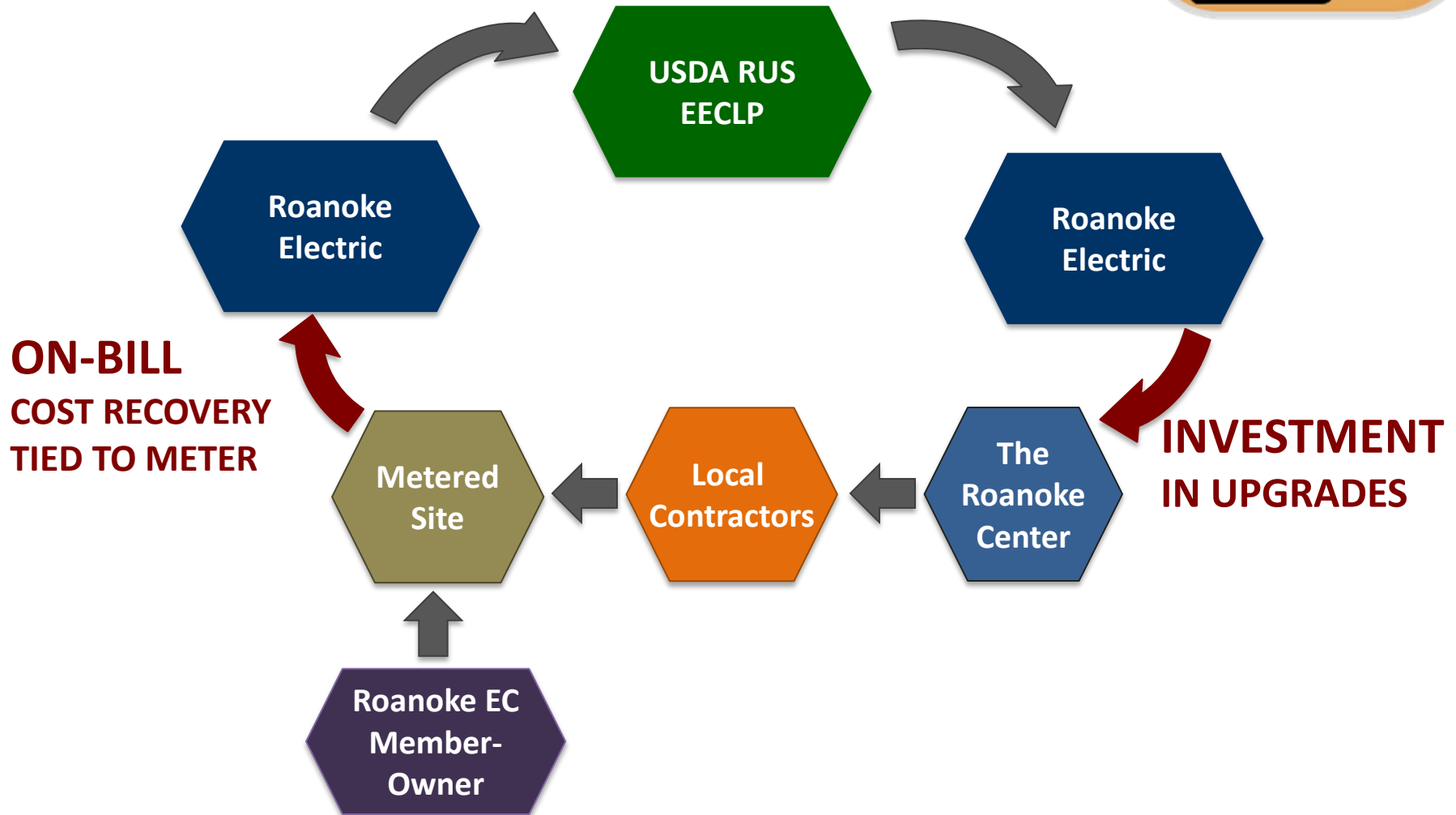
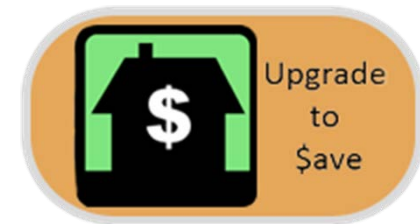


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Your Touchstone Energy® Partner

Upgrade to \$ave



Based on the Pay As You Save® system developed by EEI.

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Your Touchstone Energy® Partner

Summary of Investments for Initial Participants



Upgrade
to
\$ave

Sample of over 200 homes

Average cost of upgrades	\$7,200
Average buy-down for EE Credits *	\$325
Average monthly savings per site	\$80+
Average monthly tariff	~\$60
Average monthly savings for member	\$20+
% of estimated savings kept by member during cost recovery	25%

** Capped at the amount needed for investment to pencil out without a copayment*

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Roanoke Electric Cooperative
Your Touchstone Energy Partner

We are financing our investments with financing from the Energy Efficiency & Conservation Loan Program



EECLP

Roanoke Electric
Cooperative



PAYS®

Upgrade to \$ave
Using PAYS®



Up to **\$5 Billion**
available annually
at Treasury rates

\$6 Million
Investment
program

~\$7,000
in upgrades
per participant

Pay As You Save® and PAYS® are trademarks of Energy Efficiency Institute, Inc.

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Roanoke Electric Cooperative
Your Touchstone Energy® Partner

Source of Capital: EECLP

- USDA RUS - EECLP is our primary source of capital
 - Other co-op capital providers are also options
- \$6 million
 - Application and approval process: 90 days
 - Reimbursable basis: only owe what is used
 - Interest-only in first year
- Uses same processes as our other RUS loans

Results in first 18 months



Upgrade
to
\$ave

- \$1.5 million in new investment
- Better buildings
- Jobs and workforce development
- Lower wholesale demand costs for the utility
- Lower bills for the participants
- Higher customer satisfaction





Roanoke Electric Cooperative

A Touchstone Energy® Partner

P.O. Box 1326 * 518 NC 561 W
Ahoskie, NC 27910 * Aulander, NC 27805
(252) 209-2236 * (800) 433-2236

February 15, 2016

To Whom It May Concern,

This open letter updates the one offered to the field in 2015 regarding Roanoke EMC's *Upgrade to Save* program. In partnership with our local workforce, we are finding good investment opportunities that help our members lower their bills while also strengthening the financial position of our cooperative.

Our program implements an opt-in tariff for cost-effective investments in energy efficiency using the Pay As You Save® (PAYS®) system, which provides debt-free on-bill financing for members in good standing. The PAYS system reaches market segments that often face barriers to money-saving investments, such as renters, members with poor credit, and businesses with limited access to capital. Our board chose this approach after finding that (a) offering a lending program would not meet the interests of our members, and (b) an opt-in tariff assured our cooperative of high rates of cost recovery.

We appreciate the cooperatives that have shared their experiences with us, including leading cooperatives in Kansas and Kentucky that were among the first to offer tariffed on-bill programs. Drawing on the support of a Cooperative Agreement with USDA, we aim to join them in supporting the field by releasing at the NRECA Annual Meeting a *Decision Tool for Utility Managers*, which guides utility decision-makers through key considerations in approaching a tariffed on-bill program. To learn more about our approach and receive a copy of the *Decision Tool*, visit www.roanokeelectric.com/pays.

Our *Upgrade to Save* investments are financed through the Energy Efficiency & Conservation Loan Program (EECLP) offered by the Rural Utilities Service (RUS). The process to secure \$6 million spanned 90 days, and our EECLP business plan template is available by request to those who agree to some basic conditions that promote cooperation. To share insights from that experience, we have created a dedicated page on the Roanoke EMC website: www.roanokeelectric.com/usda-eeclp. This resource may also be helpful for cooperatives that use non-RUS financing. For example, CFC has financed the successful *HowSmart* program at Midwest Energy, catalyzing \$8 million in efficiency upgrade investments.

As part of our commitment to promote cooperation among cooperatives, Roanoke EMC is offering assistance to cooperatives that want to implement a similar investment program and source capital through EECLP. Thus far, cooperatives from several states have sought assistance, and we congratulate Ouachita Electric for receiving a unanimous decision from the Arkansas Public Service Commission approving its tariff. We welcome your inquiries of interest and look forward to being in touch.

Sincerely,

Curtis Wynn
President and CEO

With an open letter from our CEO,
Roanoke offered assistance
to cooperatives also interested in
inclusive financing.

To date, we have fielded requests from
more than two dozen utilities,
including investor-owned utilities.

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Your Touchstone Energy® Partner

Decision Tool for Utility Managers:

*Key considerations before investing in resource efficiency
and rooftop solar through a tariffed on-bill program*

January 2016

www.roanokeelectric.com/pays

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Your Touchstone Energy® Partner

Introduction to Inclusive Financing for Energy Efficiency

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Update on HELP PAYS[®]

Update on Inclusive Financing Programs in the South
A Series Hosted by Southeast Energy Efficiency Alliance

February 16, 2017

Tammy Agard
Co-Founder and CEO
EEtility



Our Timeline

- ▶ **2009:** EEtility co-founders operated the **Home Energy Affordability Loan Program** (“HEAL”) incubated by the Clinton Foundation.
- ▶ **2014:** We founded EEtility – Arkansas’ first “B” Corporation. (“B” Corps include societal and environmental “Benefit” in decision making.)
- ▶ **2015:** EEtility developed the **Home Energy Lending Program** “**H.E.L.P.**” now offered by 4 electric cooperative utilities.
- ▶ **2016:** We began operating **HELP PAYS**® for the first cooperative in Arkansas to offer inclusive financing.
- ▶ **2017:** EEtility will be providing program operator support services for the **Upgrade To \$ave** program alongside The Roanoke Center in North Carolina.

“93% of Persistent Poverty Counties in the U.S. overlap with Rural Electric Cooperative service territories.”

— National Rural Electric Cooperative Association

*If we can figure out how to make Energy Efficiency financing work for Rural Electric Cooperatives and their member-owners, many of whom live in persistent poverty, then we have figured out how Energy Efficiency financing can work for **everyone, anywhere in the country.***

• /

Ouachita Electric Cooperative

- Located in Southwest Arkansas Delta Region
- Average household median income of ~\$29K in their service area. (National average is ~\$52k and state average is ~\$42k.)
- 8500 meters, mostly Residential
- Housing stock between 50 and 100 years old
- ALL THE ABOVE = PERFECT INCUBATOR!

H.E.L.P. = On Bill LOAN Program

What worked:

- ▶ Arkansas Energy Office set up a Loan Loss Reserve
- ▶ Co-op utilities said “YES”
- ▶ Homeowners with good payment history could get basic weatherization upgrades with cash flow neutral payback terms
- ▶ Conversion rates were 70-80% where we found bill neutral opportunities
- ▶ Loans averaged \$3,100

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.)

Loans compared to Tariffed On-Bill

Attributes	Home Energy Lending Program (HELP)	HELP PAYS®
• Residential participants are eligible	✓	✓
• Renters are eligible		✓
• No credit score check – no debt to income ratios	✓	✓
• No upfront participant cost	✓	✓
• 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		✓
• Tariff runs with the meter and remains in effect for subsequent customer at that location until cost recovery is complete		✓
• Loss reserve provided by State Energy Office	✓	✓



Loans compared to Tariffed On-Bill

- September 2015: Ouachita Electric hires Meister Consult Group to analyze the business case.
- October 2015: Ouachita's board chooses to switch from making loans to making investments through a tariffed on-bill program based on the PAYS® system.
- December 2015: Ouachita files a **PAYS®** tariff with the Arkansas Public Service Commission (APSC).
- February 2016: The APSC decision is unanimous **-YES!**
- In April of 2016, only 7 months after making the business case, **HELP PAYS®** is launched.



Result: Immediate Surge in Investment

Comparing best 4 months of HELP: (Loan)
with first 4 months of HELP PAYS®: (Tariff)

- **Doubled customers** seeking assessments, and *more than a third* were multi-family (compared to 0 previously).
- Among customers receiving assessments, **100% opt-in for multi-family rental units**, and >80% for single family.
- **Doubled the scale of capital improvements** from an average of \$3000 to above \$6000 to get deeper energy savings (~30%).

Double customers X Double project size =
Quadrupled investment from \$225k to \$1 million.

Source: Preliminary Results of the
Ouachita Electric
HELP PAYS® Program, November 2016,
www.oecc.com



**Ouachita Electric
Cooperative**

2016 Performance Summary for HELP PAYS®



- ✓ Explosive growth: ~\$1.5 million investment in installed upgrades – more than triple the same period of prior year for the loan program.
- ✓ 100% of the multi-family housing tenants in the service area opted into the HELP PAYS tariff to accept the investment
- ✓ 110 new HVAC units installed, upgrades that were not eligible to be financed with prior loan program
- ✓ Nearly 2 KW of peak demand reduction for first 17 upgrades during summer peak (each worth ~\$300/year to the utility)
- ✓ 254 Sign-ups => 244 Assessments => 221 cost effective offers => 197 investments, reaching >2% of the market
- ✓ 20 jobs in the service area supported with new work

Key lessons learned:

- ✓ Quality assurance is critical, which means work quality is essential, and therefore, supporting workforce development is vital.
 - ✓ We found that engaging a handful of contractors that focused on performance was better than working with many contractors each with a handful of jobs.
- ✓ Re-test prior to authorizing payment (yes, this can be done cost effectively – a topic for a future session in the Learning Circle)
- ✓ Integrating EE education into the program helps participants achieve the energy savings.
- ✓ Never sacrifice real and lasting results for scale: DELIVER BOTH!!
 - ✓ Nothing will scale the program better or faster than real quantifiable results (and nothing will kill it faster than inaccurate savings predictions, sloppy work, and missed cost effective installations)
- ✓ Even though field experience shows low risk exposure, reserve funds are an effective way mitigate the perception of risk that a utility won't recover its costs.
- ✓ DON'T start with the loan and move to the tariff. Start with the tariff and stay with the tariff.

Thank you,
and we welcome inquiries



tagard@eetility.com (501) 351-5212 www.etility.com

Questions?

Introduction to Inclusive Financing for Energy Efficiency

- How\$mart KY in Kentucky
- Upgrade to \$ave in North Carolina
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- More opportunities to learn

Learning Circle Series for Inclusive Financing

- Starts with introductory sessions open to all:
Overview of the concept, and experience in the field
- Monthly installments thereafter cover a series of narrower topics in greater detail
- The Learning Circle is open to stakeholders who send SEEA a short description of their interest in applying what they learn about inclusive financing
- Access to technical assistance depends on having a project in mind and tuning in for one session each month.

Beyond the Basics: Learning Circle on Inclusive Financing

1. Introduction to Inclusive Financing for Energy Efficiency (today)
2. Update on Existing Programs (Feb 16th)
3. Consumer Protections in Inclusive Financing for Energy Efficiency
4. Due diligence with the *Decision Tool for Utility Managers*
5. Exploring Program Operator models
6. Establishing a Reserve Fund for tariffed on-bill EE programs
7. Sourcing capital for a Tariffed On-Bill investment program
8. Jobs: Workforce development in rapidly expanding EE markets

**Join the
Learning
Circle!**

SEEA Learning Circle for Inclusive Financing

Eligibility:

- Participants in the introductory sessions
- Articulation of a project that furthers your interests

Benefits:

- Opportunity to participate in advanced sessions
- Access to other Learning Circle participants
- Assistance with advancing your project

To participate:

- Send a brief description of your applied interests to wholmes@seealliance.org

Next Session:

Consumer Protections in Inclusive Financing for Energy Efficiency

Thursday, March 23rd, 2:00 p.m. - 3:00 p.m. EST

- Terms for cost effectiveness that include net savings
- Quality assurance and Measurement & Verification
- Interests of successor customers (renters or owners)
- Disconnection for non-payment
- Handling charge-offs due to unpaid bills by program participants

A large, light blue circular logo is centered on the page. It features several concentric, wavy lines that create a sense of motion or a stylized globe. The lines are of varying thickness and are arranged in a way that suggests a spiral or a series of overlapping waves.

www.SEEALLIANCE.org