

# ENERGY EFFICIENCY HEALING

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**LET'S START WITH THE  
STORY OF MRS. BETTY  
SANDERS**



- Mrs. Sanders has lived in her house for 55 years
- Her home is approx. 1,200 sq ft, but her monthly electricity bill was always **\$450-500** per month!
- Her home had no insulation, and her HVAC unit was 38 years old

Groundswell's SOUL program provided: attic insulation, 2-ton heat pump & weatherstripping around doors, vents, and windows



*Illustrative photo*

Mrs. Sanders was projected to save approx 9,945 kWh annually and at least \$52/month.

She has reported that her bills have fallen by about half! (\$200)

***“[The program] helped my home feel a lot more comfortable and my utilities are a lot lower”***

-Betty Sanders, SOUL Participant

# LOW-INCOME HOUSEHOLDS PAY MORE FOR ENERGY

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- Low-income households spend a disproportionate share of their income on utility bills
- This is measured by “**energy burden**,” which is the % of gross household income spent on energy costs
- Nationwide, **energy burdens for low-income households are 3x as high** (at 8.6%) as for non-low-income households (source: US DOE)

# In some states, LMI households are spending up to 42% of their income on energy!

State Abbreviation	LMI Energy Burden	Non-LMI Energy Burden
AK	42.4%	24.5%
ME	40.4%	28.0%
VT	27.2%	19.3%
MS	26.7%	8.3%
HI	23.1%	6.4%
SC	22.0%	7.3%
AL	20.9%	7.2%
NC	19.8%	7.7%
NH	19.7%	16.8%
GA	19.4%	6.9%
RI	19.4%	16.0%

## 10 states with highest energy burdens

*Groundswell, Energy Impoverishment and Energy Insecurity in the United States*

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# WHAT DRIVES HIGH ENERGY BURDENS?

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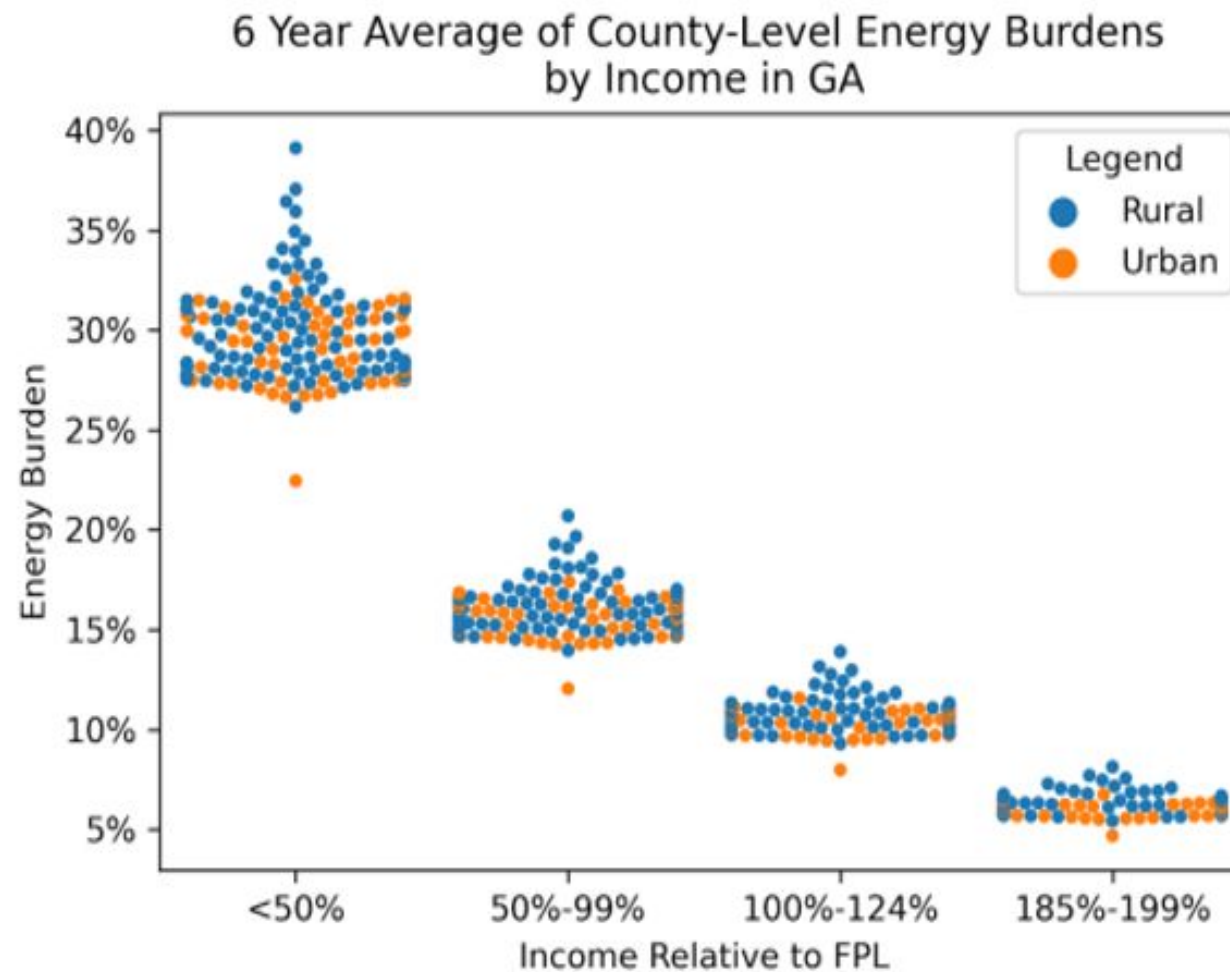
- High energy costs (\$/kWh)
- However, many of the states with high energy burdens (ex: GA, NC, AL, etc.) have lower energy rates than the nationwide average
- **Poor quality and energy inefficient housing** create large energy uses in the home, driving up utility bills



**RURAL AREAS HAVE THE  
HIGHEST ENERGY BURDENS,  
DUE TO POVERTY,  
UNEMPLOYMENT, AND OLDER  
SINGLE-FAMILY RENTAL  
HOUSING**

## Energy burdens in Georgia

### 6 Year Average of County-Level Energy Burdens by Income in Georgia

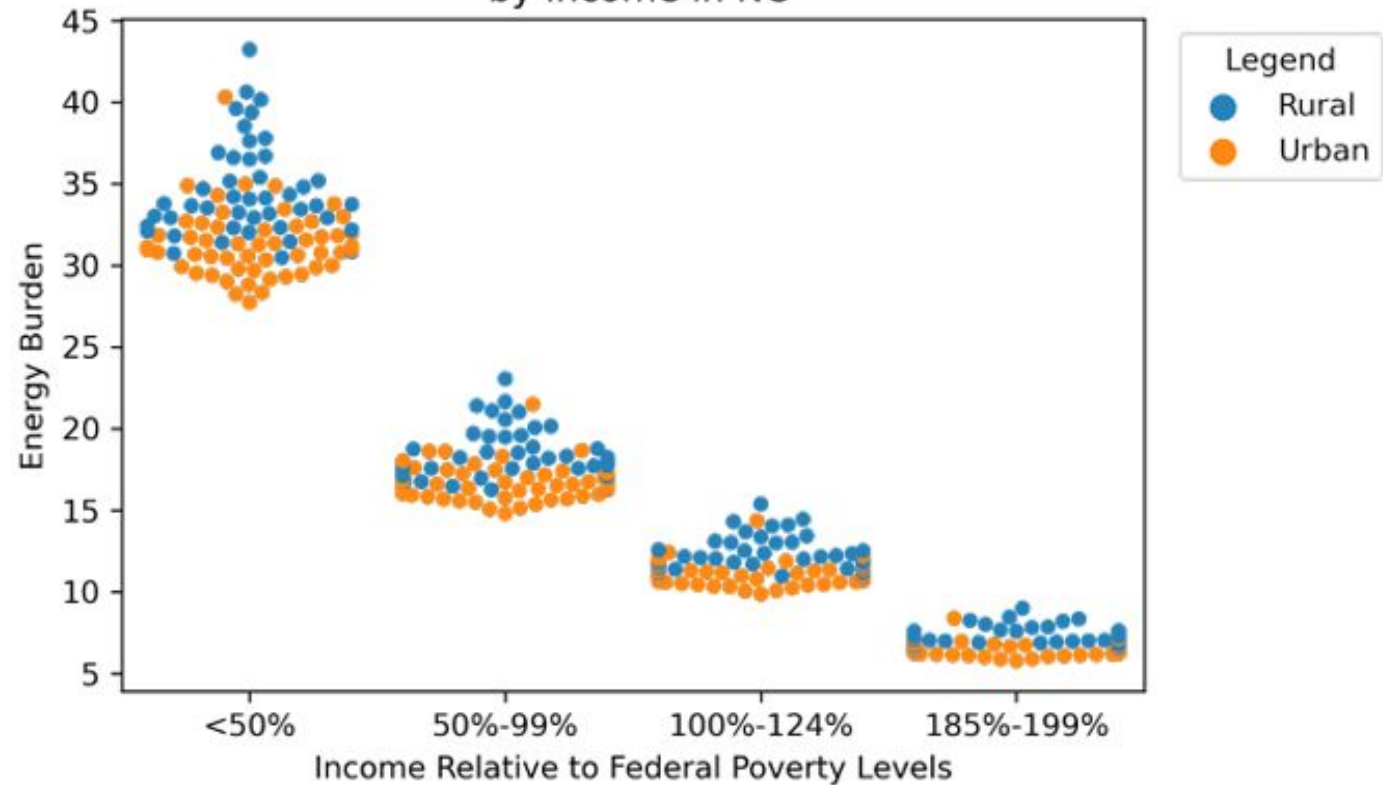


Source: Groundswell, Inc, Analyzing Rural Energy Burdens in Georgia

## Energy burdens in North Carolina

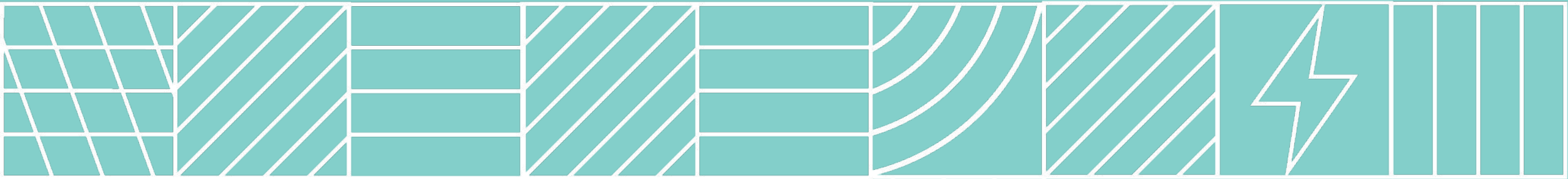
### 6 Year Average of County-Level Energy Burdens by Income in North Carolina

6 Year Average of County-Level Energy Burdens by Income in NC



Source: Groundswell, Inc, Analyzing Rural Energy Burdens in Georgia

# LEVERAGING ENERGY EFFICIENCY



- Old and/or energy inefficient homes lose energy in multiple ways
- Energy efficiency improvements can prevent energy loss and also reduce the amount of energy needed to keep a home comfortable
- By reducing energy use, utility bills fall, freeing up money for other critical uses



*Image adapted from: Power to Switch*

**FOR EVERY \$1 INVESTED IN  
WEATHERIZATION, \$1.72 ARE  
GENERATED IN ENERGY BENEFITS  
AND \$2.78 IN NON-ENERGY BENEFITS**

# BENEFITS OF ENERGY EFFICIENCY

## MEASURES

Insulation

HVAC

Duct sealing

Weatherstripping

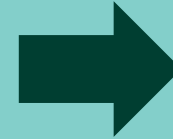


## EFFECTS

Comfortable temperature

Improved indoor air quality

Lower utility bills



## HEALTH BENEFITS

↓ Cold-related illness

↓ Hypertension

↓ Headaches

↓ Discomfort

↓ Stress

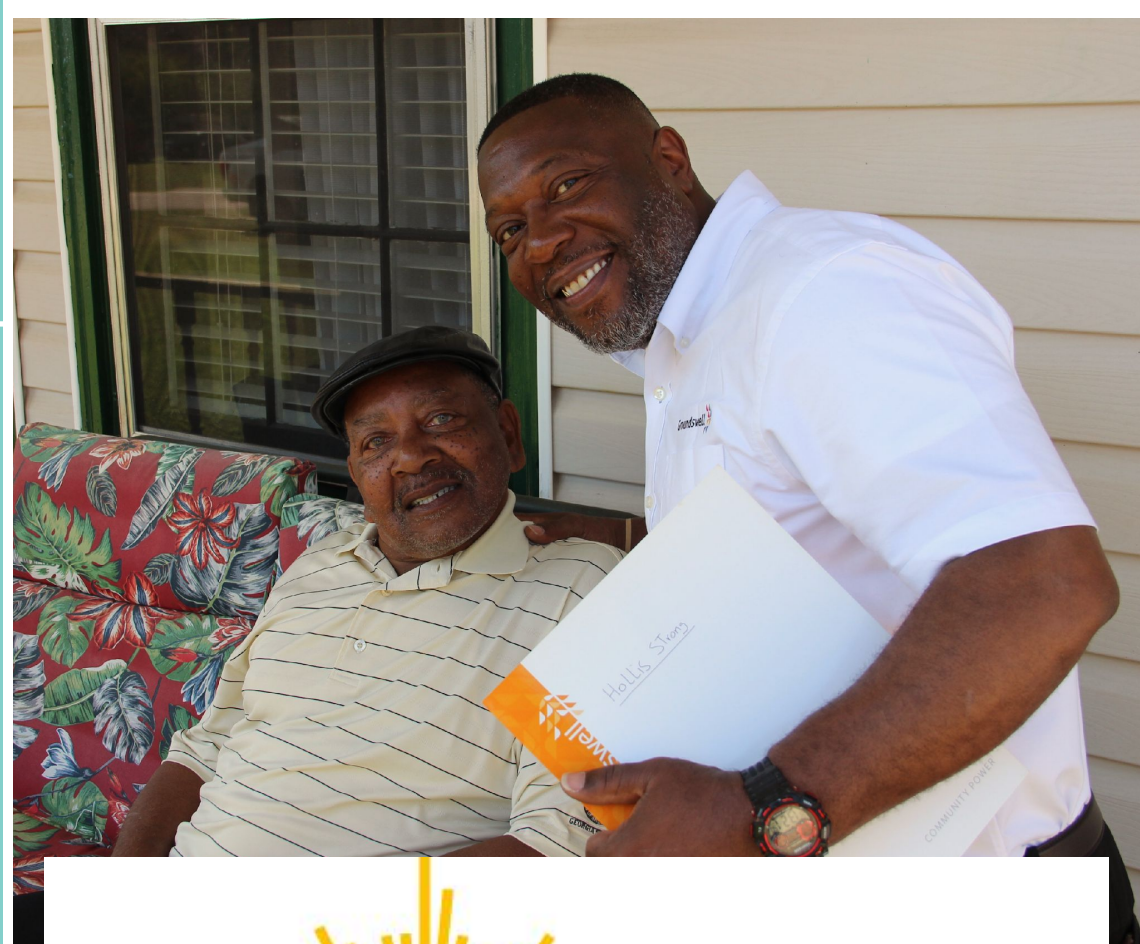
# SUSTAINABLE MODELS ENERGY EFFICIENCY





# SOUL

- Groundswell runs the SOUL (**Save On Utilities Long-term**) program, serving residents with high utility bills
- SOUL improves home energy efficiency and uses the resulting energy savings to reduce utility bills and pay for the cost of installations.
- SOUL is an inclusive energy efficiency program that enables participation by *all* residential customers, including low- and moderate-income customers

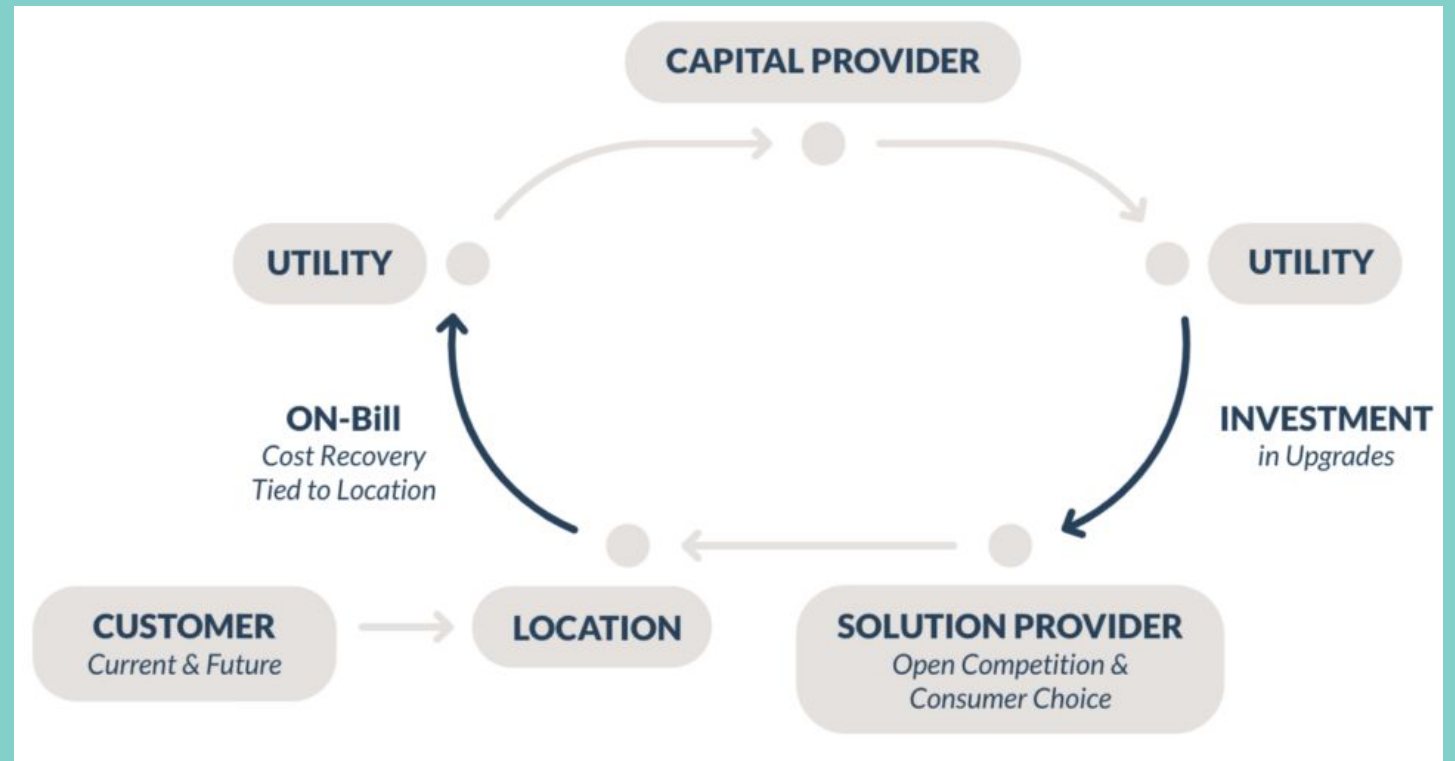


# SOUL MODEL: PAY-AS-YOU-SAVE

SOUL uses the **PAYS (Pay-As-You-Save)** system to finance energy efficiency upgrades.

In **PAYS** programs, residential energy efficiency upgrades are paid for with projected energy savings. Payments are made over time directly on the utility bill.

PAYS offers all utility customers the option to access cost effective energy upgrades using a proven investment and cost recovery model that benefits both the customer and the utility.



# Benefits of the PAYS Model

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- PAYS system **provides access** to EE upgrades to customers who often cannot access such programs due to lack of credit or high debt
- The PAYS system works as an **on-bill tariff** on the customer's utility bill = NO debt, NO lien
- **Savings** generated by the EE upgrades **are greater than the cost of the upgrades**
- The program works for both **renters and homeowners**, since the repayment obligation follows the meter

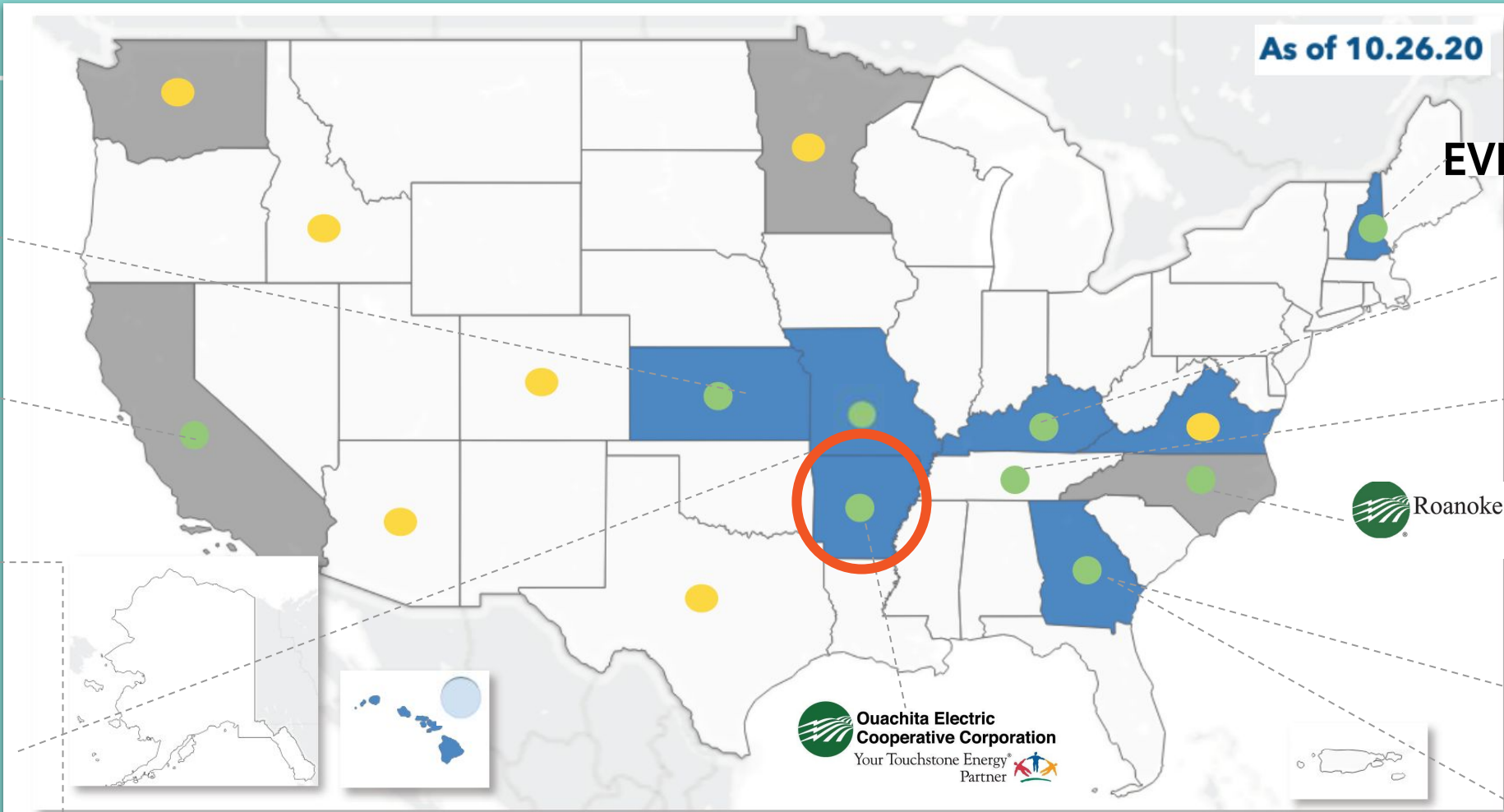


**PAY-AS-YOU-SAVE IS A PROVEN  
MODEL, WITH \$43 MILLION INVESTED  
BY 20 UTILITIES, COMPLETING  
UPGRADES AT OVER 5,400  
LOCATIONS AND ACHIEVING A 99.8%  
COST RECOVERY RATE**

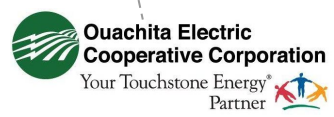
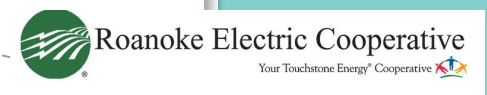
Source: [Energy Efficiency Institute, Inc – 2022 Status Update](#)

# UTILITIES THAT ARE DOING PAYS

As of 10.26.20



EVERSOURCE



- Regulatory or legislative precedent approving PAYS® or TOB
- Active PAYS® Programs
- Inactive PAYS® Programs
- Active regulatory or legislative process relating to PAYS® or TOB
- PAYS® or TOB program in due diligence



# **BRINGING EE TO RURAL AREAS**

# WORKING WITH EMC'S & MUNIS

- Rural areas have particularly high energy burdens
- SOUL is designed to serve rural electric coops and municipal utilities, which have an economic development mission

## 7 COOPERATIVE PRINCIPLES

### 1 VOLUNTARY AND OPEN MEMBERSHIP



Cooperatives are voluntary organizations open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination.

### 2 DEMOCRATIC MEMBER CONTROL



Cooperatives are democratic organizations controlled by their members, who actively participate in setting policies and making decisions. The elected representatives are accountable to the membership. In primary cooperatives, members have equal voting rights (one member, one vote), and cooperatives at other levels are organized in a democratic manner.

### 3 MEMBERS' ECONOMIC PARTICIPATION



Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of that capital is usually the common property of the cooperative. Members usually receive limited compensation, if any, on capital subscribed as a condition of membership. Members allocate surpluses for any or all of the following purposes: developing the cooperative, possibly by setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the cooperative; and supporting other activities approved by the membership.

### 4 AUTONOMY AND INDEPENDENCE



Cooperatives are autonomous, self help organizations controlled by their members. If they enter into agreements with other organizations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their cooperative autonomy.

### 5 EDUCATION, TRAINING AND INFORMATION



Cooperatives provide education and training for their members, elected representatives, managers and employees so that they can contribute effectively to the development of their cooperatives. They inform the general public, particularly young people and opinion leaders, about the nature and benefits of cooperation.

### 6 COOPERATION AMONG COOPERATIVES



Cooperatives serve their members most effectively and strengthen the cooperative movement by working together through local, national, regional and international structures.

### 7 CONCERN FOR COMMUNITY



While focusing on member needs, cooperatives work for the sustainable development of their communities through policies accepted by their members.

# SOUL BENEFITS PARTICIPANTS, THE UTILITY AND THE COMMUNITY

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## PARTICIPANTS

- Increased access to EE upgrades = lower electric bills and increased comfort & health

## UTILITY

- Lower operating costs created by decreases in peak demand
- Deferred investment in peak power
- Opportunity for improved customer satisfaction
- Preemptively meeting regulatory requirements

## COMMUNITY

- Investment in training, local jobs, and small businesses
- Improved quality of housing



# RESOURCES TO DEPLOY SOUL

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- **USDA Rural Energy Savings Program:** 0%, 20-year loans
  - Has provided over \$180M in financing to energy efficiency programs across 15 states
- **USDA Energy Efficiency and Loan Conservation Program:** low-interest (Treasury-rate) loans
  - Best for more mature programs
- **DOE Energy Efficiency & Conservation Block Grant:** available at the state, local, and Tribal government level
- Loans from Green Banks, CDFIs, PRIs
- Community development block grants
- New rebate programs from IRA

# ADDRESSING HOUSING QUALITY MUST BE PART OF THE STRATEGY



# MANY HOMES NEED REPAIRS BEFORE EE

- Groundswell's SOUL program currently operates in Troup County, GA
- To prioritize homes with the highest need, Groundswell first targeted homes in low-income zip codes with high energy usage
- Out of 100+ homes assessed, **53%** required repairs before being able to move forward with energy efficiency upgrades
- History of segregated housing and disinvestment in communities of color is creating impacts that are still seen today



# STRATEGIES TO ADDRESS HOUSING STOCK

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- Groundswell is leveraging funding from USDA and local philanthropic partners to address health and safety hazards in homes
- Updating housing standards and code enforcement is key to prevent homes from continuing to fall in states beyond repair
- Local coalition-building is needed to tackle the multiple issues that impact housing quality



*“I was in need of a lot of things that I knew about and some that I did not, this program saved my house and probably my life as well because I could have been in that kitchen and fell right through the floor.”*

**Ms. Patricia Cooper, SOUL Home Repairs participant**





*“I have been bed-ridden for 20 years, and the services the program provided made my home safer and more comfortable. My new shower access is perfect, I can get in much easier and my floors are not sagging and falling in anywhere.”*

**Mr. Jason Wade, SOUL Home Repairs participant**

# TAKEAWAYS

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- Energy efficiency programs can have significant impacts on the well-being of low-income residents
- However, to be able to serve low-income customers, programs must assess and address housing quality and policy issues that are creating huge energy losses and high bills
- Solving these problems requires working with partners and braiding different funding streams to address the need
- Lots of funding and affordable financing is out there to help = the time is ripe to launch energy efficiency programs!



# REACH OUT TO US AT:

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