

Partnering for Success: How TVA's Extreme Energy Makeovers Initiative Transformed the Lives of Limited-Income Residents in Rural Areas through Energy Efficiency

NEAUC Annual Conference June 2018

About TVA



Nation's largest public utility

Powers 9 million people and businesses through 154 local power companies

80,000 square miles covering 7 states

| 2

About EEM

- TVA-funded initiative to address energy affordability needs of limited-income families in 7 communities
- Targeted 25% electric energy savings at no cost to participants
- Homes \geq 20 years old
- Maximum spend of \$10.00 per square foot
- Community and participant education and outreach played a central role



EEM Project Locations



Impact Across the Valley

\$34.9 million in direct investment to local contractors and vendors

3,476 retrofits achieving 17.1 GWh in energy savings

24,590 measures installed



EEM By the Numbers

4.276M

Conditioned square feet improved through EEM retrofits

36%

Estimated deemed energy savings per household



Average yearly estimated perhousehold electricity savings

\$9.50

All-in cost per square foot

58

Average age of EEM home

12,000

Estimated number of people touched through community education and outreach efforts



Highlighted EEM Projects







Location: Eastern Mississippi (primarily Clay, Lowndes, Oktibbeha and Noxubee counties)

> **Combined Population:** ~139,600

Average Median Household Income: \$26,681 Location: Columbus, Mississippi

Population: ~23,000

Median Household Income: \$27,393 Location: Cleveland, Tennessee

Population: ~41,200

Median Household Income: \$30,098



| 7

4-County EEM Partners







Columbus EEM Partners





CLEAResult[®]



Cleveland EEM Partners





Your Hometown Connection Cleveland, Tennessee



CLEVELAND HOUSING AUTHORITY "SERVING BRADLEY COUNTY SINCE 1959"

CLEAResult[®]



United Way of the Ocoee Region



Outcomes

- 265 upgrades completed
- 47% average annual energy savings per home
- \$3M direct economic impact to local community

- 139 upgrades completed
- 39% average annual energy savings per home
- \$1.4M direct economic impact to local community

Light

- 413 upgrades completed
- 36% average annual energy savings per home
- \$4M direct economic impact to local community





Best Practices

- Local leaders were project champions
- "DIY" participant workshops on low cost measures
- One-on-one calling, home visits and a requirement checklist helped streamline recruitment

- Grassroots approach to recruitment with community center and church events
- Strategic contractor management
- Hands-on inhome participant training

Light

Incentivized educational workshops on low cost measures

•

- Door to door canvassing/ word-of-mouth marketing
- Strategic contractor management
- Hands-on inhome participant training

EXTREME ENERGY

MAKEOVERS.

Challenges

- Difficult to scale due to limited partners and property density
- Prevalence of gas or propane heated homes
- Exclusion of manufactured homes from participant pool
- Outreach to prospective participants

- Many homes in need of health and safety repairs to protect installed measures
- Prevalence of gas heated homes

Columbus ≚ Light Wate

- Age of homes led to difficulties with outdated wiring and electric panels
- Prevalence of gas heated homes
- Health and safety issues that made home evaluation and approval challenging

IMVACT CLEVELAND

ENERGY MAKEOVERS

Next Steps for TVA



Mobilize resources from diverse partners to launch 5 Home Uplift pilots

Support local initiatives to address energy affordability in the Tennessee Valley

Quantify the energy and non-energy benefits of weatherization

Our Takeaways

- Find partners early and leverage their strengths
- Get stakeholder input from the onset and continue exploring ways to engage them
- Be clear on partner roles and responsibilities
- Lead by setting the vision and direction (and then get out of the way) inspire innovative program design with minimal requirements





