



Strategies for Increasing Penetration  
of Envelope Upgrade Measures



## OVERVIEW

Building envelope upgrades – such as air sealing, duct sealing, insulation, and efficient windows and doors – are among the most cost-effective ways to reduce household energy use and improve comfort. In the Southeast, these upgrades typically reduce heating and cooling costs by 10–30%, while also lowering peak electricity demand and increasing household resilience during extreme weather.

## BARRIERS

Yet, widespread adoption remains constrained. Barriers include high upfront costs, especially for low- and middle-income households; low consumer awareness of benefits; technical challenges in multifamily and manufactured housing; and limited promotion from contractors who often focus on more visible improvements. Split incentives between landlords and tenants further reduce uptake, since those paying for upgrades are not always those receiving the energy savings.

## OPPORTUNITIES

To unlock the potential of envelope retrofits, coordinated action is required:

- Expand and align incentive programs at the federal, state, and utility levels, allowing homeowners to “stack” rebates and tax credits.
- Promote accessible, high-impact upgrades such as attic insulation and air sealing, which deliver strong savings at relatively low cost.
- Engage non-traditional contractors (roofing, siding, renovation firms) to integrate efficiency measures into common home improvement projects.
- Increase consumer outreach with simple, consistent messaging around savings, comfort, and resilience.

By investing in building envelope upgrades, legislators, funders, and utilities can reduce energy burdens, support housing affordability, and provide permanent load reduction to the regional grid. These measures deliver durable benefits to households, while advancing statewide and national energy policy goals.

## AT A GLANCE

### Project Goal

Identify opportunities to increase market transformation and deployment envelope retrofits

### Timeline

2024 - 2025

### Biggest Opportunity

Align incentives

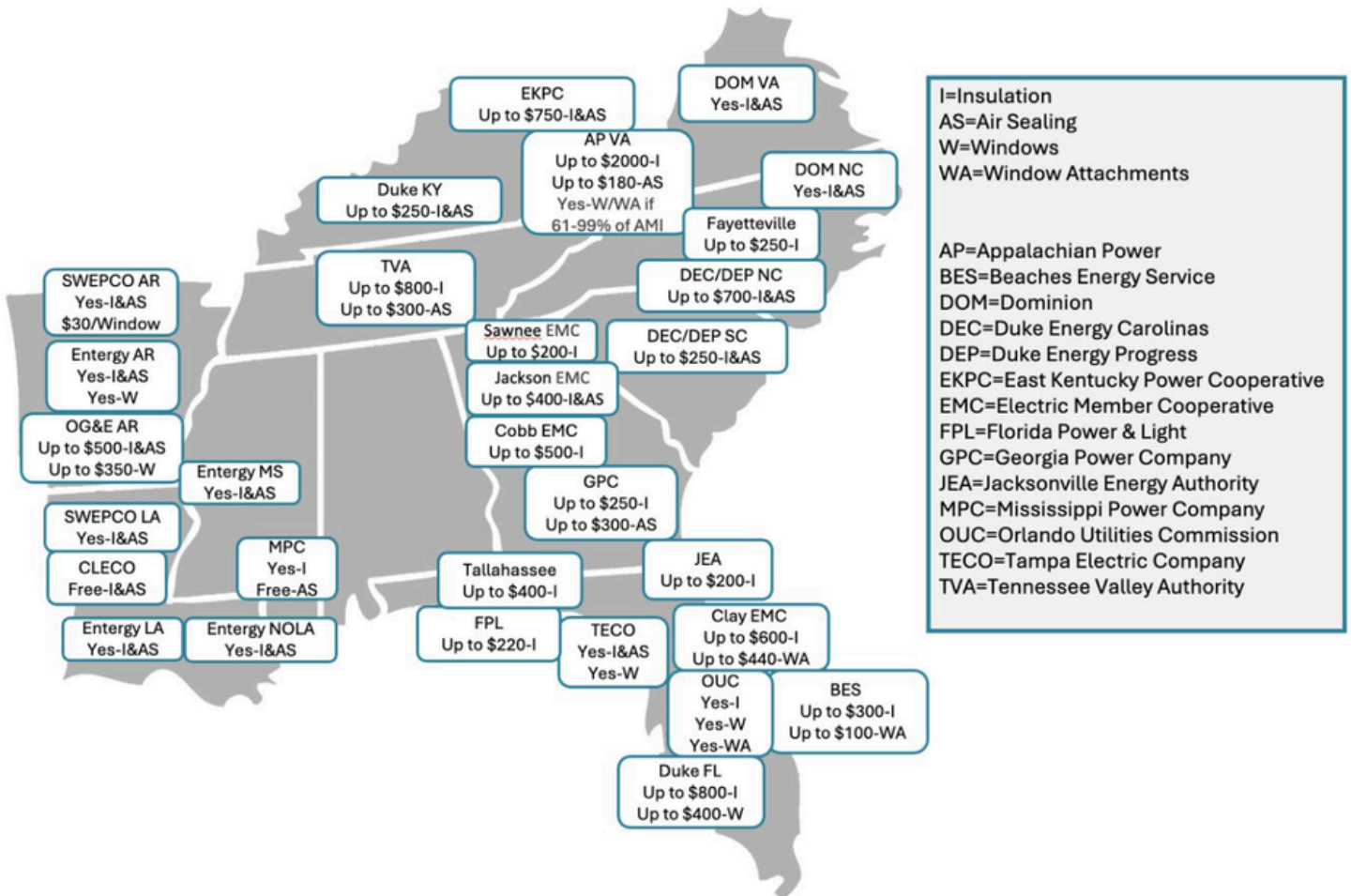
## PROJECT BACKGROUND

SEEA's Hybrid Electric Water Heating and Envelope Retrofit Opportunities (HERO) in the Southeast Project is specifically focused on hybrid electric water heating and envelope retrofit programs. In the first year of HERO, the intent was to complete an analysis of existing utility rebate offerings, identify the major barriers to uptake, and identify opportunities to improve market penetration of energy efficiency measures.

## ENVELOPE UPGRADE REBATES

## PROCESS

- SEEA used the following approach to capture this data:
- Conducted a landscape analysis of applicable rebate offerings from Investor Owned, Cooperative, and Municipal Utilities in the Southeast
- Interviewed members of each level of the supply chain including manufacturers, distributors, utilities, and contractors to capture perspectives on barriers to adoption and opportunities for enhancement
- Convened topic-specific strategic advisory committees



*Southeast Utility Rebates for Envelope Retrofit Measures*