

Case: Weatherization

Button-Up Weatherization

The Button-Up Weatherization Program offers Residential end-use members an incentive for reducing the heat loss of a home **using a variety of building shell measures, including insulation, air sealing, and ENERGY STAR windows.** Duct sealing is a separate case.

<u>Assumption</u>	<u>Source</u>
<p>Load Impacts Before Participant 10,500 kWh, 8.12 kW (coinc. with winter system peak), 2.47 kW (summer)</p> <p>Savings: 3,000 kWh 2.20 kW (winter), 0.95 kW (summer) After Participant 7,500 kWh, 5.92 kW (coinc. with winter system peak), 1.52 kW (summer)</p>	<p>Mix of Furnace/Central AC and air source heat pump weighted according to saturation in existing single family homes. 70% heat pump, 30% furnace/CAC.</p> <p>GDS kWh savings for a package of measures, weighted by electric heat technology. kW impacts based on planning load profile.</p> <p>Before participant net of savings</p>
<p>Lifetime of savings Discount rate for TRC and RIM Generation Capacity Cost - \$174.60 per kW-year (no escalation). 73% winter 27% summer. Avoided Electricity Energy Costs - PJM Market, AEP-Dayton hub, \$45.96 /MWh in 2025 Transmission Capacity Cost - OATT tariff \$ 35.76 per kW-year in 2025 Distribution Capacity Cost - \$ 4.93 per kW-year in 2025 Participant Costs \$ 3,125.. 2% esc. Tax credit (benefit): \$400</p>	<p>20 Years 5 percent per EKPC financial data; 3.5 % societal test from Mercatus Center report Avoided costs of a RICE unit. Updated escalators to match. Allocation is 73% winter 27% summer. Summer values based on PJM capacity performance market December 2023 with IHS Markit forecast, start year is 2024.</p> <p>based on December 26, 2023 ACES Forward prices for AEP_Dayton hub. \$45.96 /MWh in 2025. DSMore Scenario 9, 0.587 esc in 2025</p> <p>Network rate, 2023-24. 2.8 % escalation rate based on 10 yr PPI.. Applied to winter coincident peak.</p> <p>Basd on marginal cost of distribution. 2.8 % escalation rate based on 10 yr PPI. . Applied to winter coincident peak.</p> <p>GDS costs for measure bundle</p> <p>30% of measure cost less labor costs and utility subsidy , subject to a limit of \$1,200 per year</p>
<p>Administrative Cost EK \$5,756 (2025 value) fixed annual (2025-2039). 2% esc Co-op \$360 per new participant</p>	<p>Program admin - 2022 value of \$5,300 adjusted to 2025..</p> <p>Based on new program design. Average of air sealing and non-air sealing cost</p>
<p>Rate Schedule - Retail Median Residential Rate for Co-ops Cust chrg \$16.09, Energy Rate \$.088229 Rate Schedule - Wholesale East Kentucky E-2 rate.</p>	<p>Current rates in effect as of January 2024.. includes Environmental Surcharge and FAC</p> <p>Current rates in effect as of January 2024. includes Environmental Surcharge and FAC</p>
<p>Participation - 2025: 28. 2026-2039: 560 per year. 10% Free Riders</p>	<p>2025 - existing programs based on 2023 annual report. New programs - 0 (they begin in 2026).. 2026-2039 based on proposed new budget</p>
<p>Rebates Co-op to Participant \$ 1,000, 2% esc EK to Co-op \$1,480, 2% esc</p>	<p>Based on new program design Reimburse for rebate, 50% of admin costs, plus compensation for a share of net lost revenues.</p>