



## MEMORANDUM

**TO:** Low Income Consumer Advisory Task Force

**FROM:** Liz Jambor, Manager, DABI

**DATE:** 02/06/2015

**SUBJECT:** Best Practices in Providing Services to Low and Limited Income Citizens

As part of a sub-committee request, Chris Strand asked about best practices within the electric industry. Attached is a response and details from E Source (provides unbiased, objective research and advisory services to over 300 utilities and large energy users) regarding low and limited income weatherization programs.

Eleven examples are provided, ranging from free weatherization to rebate programs. While the programs vary, the customer base is consistently those at the lower income levels. The tables below summarize the common qualifications, funding sources, and programs from these examples. As you will read, some of the qualifications and program elements are similar to those at Austin Energy. The funding sources are more expansive than the program supported by AE and its customers.

The matrix below provides a summary of the programs in the attached examples.

Program	Qualification	Measures	% of Total Cost	Total Rebate Dollars	Funding Source
Decorah, IA - Home Energy Planning with Rebates	65-80% of area median income	free audit, air sealing, insulation, HVAC systems hot water, appliances, lighting	50%	up to \$5000	City
Decorah, IA - Direct Install	65-80% of area median income	blower door audit, CFL installation, faucet aerators, water heater pipe wrap, air and duct sealing	50%	up to \$100	City
New York State Energy Research and Development Agency - Assisted Home performance with Energy Star	80% of area median income	energy efficiency upgrades	50%	up to \$5000	State
New York State Energy Research and Development Agency - Assisted New York Energy Star Homes	80% of area median income	energy efficiency upgrades	-	up to \$3000, low interest financing	State, grants
Arkansas - Clinton Climate Initiative	Employed by companies participating in energy efficiency	energy efficiency upgrades	-	low interest finance	Employer endowments
Maryland Energy Administration	85% of area median income	energy efficiency upgrades	-	-	ARRA funding applied for by non profits, local government and homeowner associations
Berkeley, CA - Subsidized Moderate Income Retrofit Services	income or geographic location	energy efficiency upgrades	50-75%	\$250-4000	City, PG&E
San Diego, CA - Home energy Upgrade Program	up to 400% of poverty	energy efficiency upgrades	-	up to \$4500	City, State
Omaha and Lincoln, NE - reenergize: Low-Moderate Income Program	80% of area median income	energy efficiency upgrades		up to \$3000	City
Energy Trust of Oregon - Savings within Reach	based on income and number of residents in the home	attic/wall/floor insulation, heat pumps, gas furnaces, air sealing	-	-	State Trust
Arkansas Weatherization Program	anyone with "severely inefficient home"	weatherization measures	100%	-	State utilities
Boston, MA - Renew Boston	60-120% of state median income	insulation, air sealing	75%	up to \$2000	City

## **Summary of Programs**

### ***City of Decorah, Iowa***

Decorah provides 2 low-to-moderate income program offerings: Home Energy Planning with Rebates and Direct Install with Green Iowa AmeriCorps. All Decorah households with a total pre-tax annual income of less than 80% of area median income qualify for the moderate-income programs. For comparison, to qualify for low-income programs customers must have a pre-tax income of less than 65% of the area median.

Home Energy Planning with Rebates provides free audits and a 50% rebate, up to \$5,000, on recommended measures including air sealing, insulation, HVAC systems, hot water, appliances and lighting. Additionally, program administrators provide one-on-one assistance to help participants qualify for applicable utility rebates and/or assistance from other efficiency programs.

The Direct Install with Green Iowa AmeriCorps provides completely free weatherization services including, blower door audit, installation of CFLs, faucet aerators, showerheads, water heater pipe wrap, air sealing, duct sealing, vehicle and bike tire pressure check (to increase transportation efficiency), and they'll adjust or program thermostat settings for participants. In comparison, the "market rate" version of this program provides a free audit and 50% discount on all installed supplies, up to a maximum of \$100.

### ***Clinton Climate Initiative (CCI) - Arkansas***

We featured CCI's Home Energy Affordability Loan (HEAL) program in a recent E Source report HEAL Program: Employers Alleviate the Pain of Energy-Efficiency Financing. HEAL was designed to help low-to-moderate income families receive reasonable financing options to make energy-efficiency upgrades. The HEAL program allows individuals to finance home energy-efficiency improvements through funds endowed by their employer; employers underwrite the loans using money saved through their own energy-efficiency projects. Based on projected home energy savings, employees repay their loans via payroll deductions, and payment schedules typically span 6 to 36 months. HEAL has also developed a model whereby financial institutions such as credit unions serve as the lender when an employer, like a municipality or government-owned entity, isn't able to finance loans. The program is essentially an "energy-based employee benefits program" that is similar to a 401(k) or flexible spending account, and the Clinton Climate Initiative provides turnkey implementation for employers. And because employers can use nonfinancial factors such as seniority and employment history to determine loan-worthiness, an employer model increases loan opportunities for those with poor credit or those in the low- to moderate-income brackets.

Automatic payroll deductions help mitigate default risk, and employers can also set the participant qualifications, such as requiring that applicants be employed with the company for at least three years. Additionally, employers can choose to make the program available to a specific number of employees or to specific departments. Qualifying employees receive free home energy assessments, personal energy plans, access to utility rebates, and financing for energy-efficiency projects. CCI use AmeriCorps during program ramp up to provide the subsidized assessments and efficiency improvements.

CCI is actively looking to expand the program geographically and is seeking program partners; replications are to begin in eight additional states in 2013. A representative from HEAL will be speaking at E Source's upcoming Utility Marketing Conference, April 3-4 in San Diego.

### ***New York State Energy Research and Development Agency (NYSERDA)***

NYSERDA also offers two assistance programs for low-to-moderate-income households: Assisted Home Performance with ENERGY STAR and Assisted New York Energy Star Homes. Households with an income equal to or less than 80 percent of State or area median income (whichever is greater) are eligible for the programs.

Assisted Home Performance with ENERGY STAR provides a grant up to \$5,000 to pay up to 50 percent of energy efficiency projects. And owners of two-to-four unit residential buildings with income-eligible households can qualify for a grant up to \$10,000 per building. In comparison, NYSERDA's Home Performance with Energy Star (market rate program) offers a 10% cash-back incentive (up to \$3,000) and low-interest financing (on-bill or off-bill, at a rate of 3.49%).

Assisted New York Energy Star Homes provides a \$500 cash incentive to participants who build or gut-rehab a home to Energy Star standards. In comparison, NYSERDA's standard Energy Star Homes program provides technical and financial support to contractors and building owners, but it doesn't specify the incentives.

### ***Maryland Energy Administration (MEA)***

MEA utilizes ARRA funding for its EmPOWER Clean Energy Communities Low-to-Moderate Income Grant Program. Households must have an income that is 85% or less of the median income limit established for the County where the grant activities are occurring. Eligible non-profits, local governments, and home owner/condominium associations can apply for grant funding in order to execute energy efficiency projects that benefit low-to-moderate income Maryland households.

### ***City of San Diego, California***

California Center for Sustainable Energy and the City of San Diego offer the San Diego Home Energy Upgrade program. SDHEU's goal is to provide incentives for 2,000 residential energy efficiency upgrades that will produce average verifiable home energy savings of 15-20%, while providing significant workforce development opportunities. SDHEU matches the Energy Upgrade California statewide rebate with \$1,000 for a Basic Path upgrade and up to \$4,500 for an Advanced Path upgrade, up to but not exceeding full project cost if necessary. Household with in San Diego with incomes up to 400% of poverty level can qualify.

### ***Cities of Omaha and Lincoln, Nebraska***

Using ARRA funds, the cities of Omaha and Lincoln offer the reenergize: Low-Moderate Income program. Eligible households must have incomes that are less than 80% of the Area Median Income for Lincoln or Omaha. For a \$100 fee participants receive an energy audit and up to \$3,000 to implement the most cost-effective upgrades. In comparison, the Market rate program offers \$250 off the total energy evaluation process (pre and post); and for every percent of energy savings achieved, the program will offset customer costs by \$100. The minimum percentage of energy savings required by the program is 15%. So, if savings are 15% or greater, then customer could receive up to \$1,500 or more toward upgrade (up to half-off the total cost).

### ***City of Berkeley, California***

Through a partnership with Rising Sun Energy Center, the city of Berkeley offers Subsidized Moderate-Income Retrofit Services. Participants can qualify by income or by geographic location. Neighborhoods in South and West Berkeley (Neighborhood Strategy Areas) are automatically eligible for the Subsidized Energy Retrofit Program (unless the household meets the income guidelines for the Free (low-income) Weatherization Program).

Three service package options are offered:

Energy Audit Only: A thorough analysis of a home's energy use resulting in a written report. Total rebate offered: \$250.

Service Package Level 1: 5%-19% Energy Saving Work Requested with up to a 50% direct rebate on total project. Average rebate offered: \$2,600.

Service Package Level 2: 20% or more Energy Saving Work Requested with a 75% direct rebate on total project cost. Average rebate offered: \$4,000.

Specific amounts cannot be given for the incentives because of the variation of the scope of work to be performed from home to home. The incentive amount is given as a percentage of the total bid amount. Any incentives are taken directly off of the bill; thereby reducing immediate out of pocket costs. However, participants must be able to provide a \$200 security deposit refundable upon completion of the work.

PG&E partially funds subsidies for this program.

### ***Energy Trust of Oregon***

Residents in Oregon who heat their homes by Portland General Electric, Pacific Power, NW Natural or Cascade Natural Gas and who qualify under Energy Trust's Moderate Income Guidelines, can participate in Savings within Reach. The program offers increased incentives (compared to standard incentives) on attic, wall, and floor insulation, heat pumps, ductless heat pumps, gas furnaces, air sealing and provides free air leakage test. Incentives are deducted from the invoice to reduce out of pocket expenses.

### ***State of Arkansas Weatherization Program***

Arkansas's program is different from most state weatherization programs in that it doesn't base eligibility on income; instead the program is open to anyone with a "severely inefficient home" as defined by having at least three of the following:

1. Attic insulation equal to or less than R-30
2. Wall insulation equal to R-0
3. Floor insulation equal to R-0
4. Single pane windows with no storm windows attached
5. Non-working heating system or heating system less than 70% efficiency
6. Non-working cooling with Seasonal Energy Efficiency Rating (SEER) of 8 or less
7. Air infiltration problems identified through: a) visual inspection of ductwork, walls, floors, ceilings, doors, and windows; or b) a pre-blower door test

Qualified households receive a free audit and direct installation of free weatherization measures. Program costs are shared by the state's investor-owned utilities and, similar to low-income weatherization programs, AWP is administered by local community action agencies.

### ***Boston, Massachusetts***

Renew Boston provides no-cost home energy assessments and 75% off – up to \$2,000 – for insulation and air sealing. Renew Boston pays particular attention to coordination of energy-efficiency upgrades, walking participants through the various stages of implementing

efficiency upgrades. The program utilizes nearly 30 community outreach partners to get the word out about the program.

Additionally, Renew Boston works hard to help participants overcome pre-weatherization barriers such as moisture, mold, combustion dangers, and knob and tube wiring. According to a report from The Green Justice Coalition, *Recommendations on Pre-Weatherization and Tiered Incentives* (PDF), beginning in July 2011, the Renew Boston program began offering no cost pre-weatherization assistance options for households that earn between 60% and 120% of state median income. Once qualified through the income verification system, Renew Boston had a high completion rate from audit to weatherization. According to Next Step Living, the Renew Boston contractor, 44% of income qualified homes had at least one pre-weatherization barrier that prevented them from participating in weatherization. Renew Boston was able to remediate 42% of the pre-weatherization barriers for income qualified residents.

In October 2012, the Goodman Research Group published *Renew Boston Residential Energy Efficiency Program Evaluation Report*, which focuses heavily on understanding the decision-making process of participants and nonparticipants. There are myriad data points that may help understand the barriers to participation and I recommend pursuing the entire report. The following are a few findings from the evaluation that I found to be interesting (and in some cases, expected):

1. Word of mouth marketing *reached* the greatest number of households; however, no strategy produced statistically better *implementation* rates than community groups.
2. Regardless of household income, between 60% and 80% of households that implemented some or all of the recommendations from their Home Energy Assessment would not have moved forward with recommendations if rebates had not been available. For households at the low end (<40% of state median income) and at the high end (>139% of state median income), the impact of the rebates was less dramatic.
3. While rebates affect affordability, the interest-free loans had no impact on implementation rates for most households. Data indicated that while the zero percent financing rates may be valuable for about one-third of the residents, they provided little to no incentive for two-thirds of Boston residents. For households with a recommendation to replace their heating system, zero percent financing was important to about half of the households and depended very little on the household income level.