

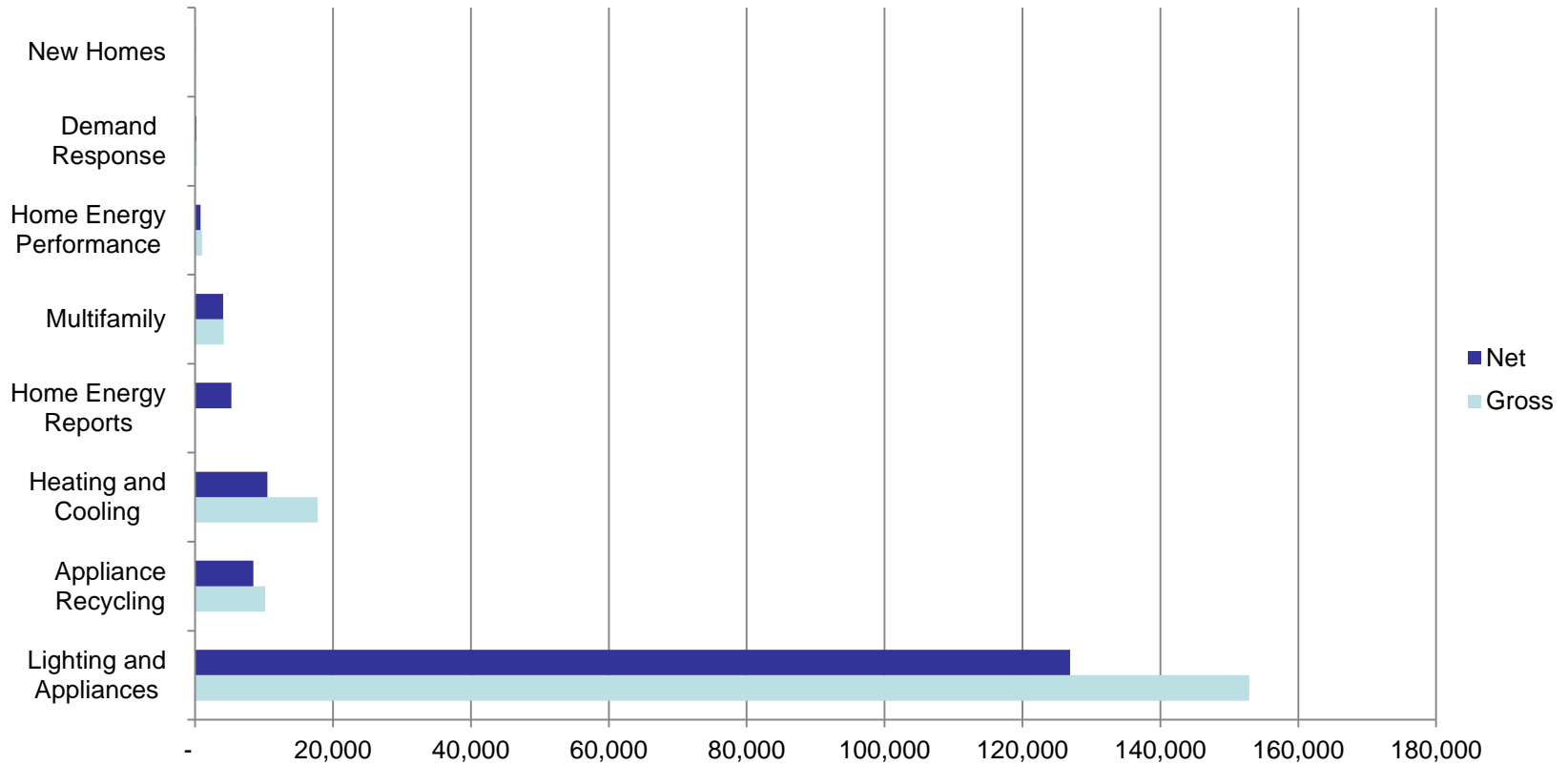
THE
CADMUS
GROUP, INC.

PY3 - Ameren Illinois Residential Evaluation

Draft Results

December 13, 2011

Program Results PY3



Program Results

Program	Gross Savings (MWh)	NTG	Net Savings (MWh)
Lighting and Appliances	152,878*	0.83	126,747
Appliance Recycling	10,188	0.83	8,121
Heating and Cooling	17,783	0.59	10,492
Home Energy Reports	N/A	N/A	5,239*
Multifamily	4,139	0.98	4,062
Home Energy Performance	1,010	0.77	780
Demand Response	238	0.77	183
New Homes	126	0.8	101
Total			155,725

**Excludes overlap with other programs

* Includes upfront savings from a portion of uninstalled bulbs, rather than carry-over from year to year.

Program Gross Realization

Program	Ex Ante (Gross MWh)	Actual (Gross MWh)	Realization Rate
Lighting and Appliances	149,643	152,878	102%
Appliance Recycling	11,160	10,188	91%
Heating and Cooling	29,210	17,783	61%
Home Energy Reports	*	5,399	
Multifamily	4,139	4,139	100%
Home Energy Performance	798	1,010	127%
Demand Response	234	238	1.02%
New Homes	*	126	
Total	195,184	191,761	98%

* Ex Ante Values Not Provided for Home Energy Reports and New Homes. These are excluded from the totals.

Evaluation Approach

Program	Gross Impact	Net Impacts	Process
Lighting and Appliances	PY3 Tracking Data Analysis- Lighting Engineering Analysis –Appliances	PY2 Results – Multistate Study and Supplier Interviews	Stakeholder Interviews
Appliance Recycling	PY2 Regression Model using PY3 Tracking Data	PY2 Results – Participant Survey	Stakeholder Interviews
Heating and Cooling	PY2 Results – Engineering Simulation Modeling Metering for GSHP	Participant Survey, Contractor Surveys	Participant Survey, Contractor Surveys, Stakeholder Interviews
Home Energy Reports	Billing Analysis: D-in-D model	Billing Analysis	Stakeholder Interviews

Evaluation Approach

Program	Gross Impact	Net Impacts	Process
Multifamily	Engineering Analysis – Updated DHW Savings, PY2 Results for Lighting	PY2 Results - Building Operator Survey	Stakeholder Interviews
Home Energy Performance	PY2 Results – Engineering Simulation Model with PY3 Tracking Database	PY2 Results – Secondary Research and Participant Survey	Stakeholder Interviews
Demand Response	PY2 Results from Participant Survey, Engineering Analysis with PY3 Tracking Database	PY2 Results – Ameren Illinois default estimate	None
New Homes	PY3 Tracking Database with Ameren Illinois default estimates	Not evaluated – default estimate	Stakeholder Interview



Lighting and Appliances

What
worked
well?

- Ameren Illinois managed its budget and achieved lighting sales goals by varying incentive levels and products offered over the year
- Increased variety of bulbs promoted to cover broader array of specialty bulbs

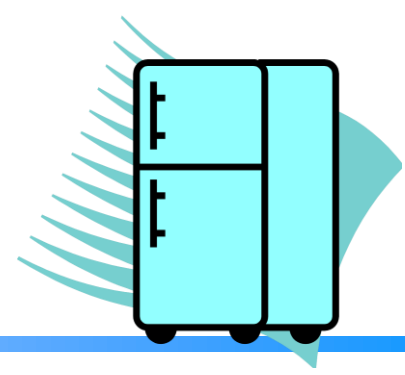
Lighting and Appliances



Recommendations

- Improve program evaluability
 - Include calculations and ex ante values in database
 - Provide size information for appliances
 - Encourage retailers to assist with surveys and other evaluation activities
- Promote bulb recycling

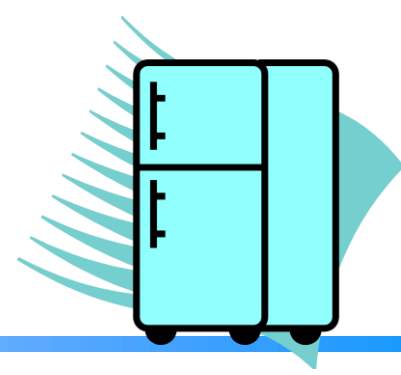
Appliance Recycling



What
worked
well?

- ARCA subcontractor highly regarded: only two customer complaints (regarding scheduling) over three years
- New marketing approaches being tested

Appliance Recycling



Challenges

- The need for constant marketing was noted as a challenge; efforts to use trade allies for marketing are underway

Heating and Cooling



What
worked
well?

- Program participation and savings increased from the previous year
- Contractors are recommending high-efficiency products more often, and selling them; even when they've dropped out of the program

Heating and Cooling



Recommendations

- Improve program evaluability
 - Update ex ante values with evaluation results
 - More baseline equipment information
- Restructure incentives to reduce freeridership



Home Energy Reports

What
worked
well?

- Customers are satisfied and are saving energy compared to control group
- Very few complaints and opt-outs



Home Energy Reports

Recommendations

- Scrub recipient list to eliminate inappropriate participants (e.g., those on life support)
- Treatment and control groups should be chosen by “independent” evaluator to ensure independent savings estimates

Multifamily



What
worked
well?

- Program participation and savings have grown steadily over three years

Multifamily



Recommendations

- Increase program marketing
- Add custom measures

Home Energy Performance



What
worked
well?

- Significant increase in shell measure installations (about five times)
- Recruited more trade allies
- Leave-behind reports were improved; new software was implemented

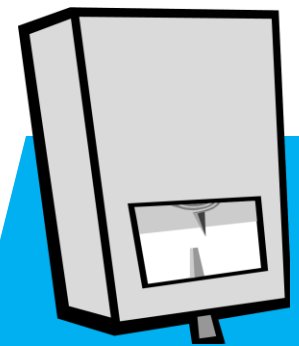
Home Energy Performance



Recommendations

- Improve program evaluability
 - Integrate new software with tracking database
- Make it easier for HEP allies to participate
 - BPI training is a barrier
 - Track audits performed by allies

Demand Response



- Process evaluation not conducted in PY3
- No new participants were allowed in PY3 because Ameren Illinois does not need capacity for the near future

New Homes



What
worked
well?

- Participation has increased since PY2
- Program allies and raters have increased in number

New Homes



Challenges

- Poor housing market
- Historical incentive structure was one incentive for all tier levels; Ameren Illinois is restructuring to pay increasing incentives with increasing efficiency