Entergy Solutions

Quick Start Energy Efficiency

Annual Report Program Year 10
January 2024–December 2024

Entergy Louisiana, LLC
Service Area

LPSC Docket No. R-31106

Prepared by:

APTIM

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1.0 Executive summary

Pursuant to LPSC General Order No. R-31106 (“EE General Order”), Entergy Louisiana, LLC (“ELL”), is providing this report for the tenth program year of Quick Start Energy Efficiency programs implemented in the Entergy Louisiana, LLC (“ELL”) service area between January 1, 2024, and December 31, 2024 (“PY10”.) The report includes the following sections:

- A narrative overview containing program descriptions, activity, kWh savings, and participation.
- Appendix A - Marketing materials created in connection with the programs.
- Appendix B - Evaluation, Measurement and Verification (EM&V) overview.
- Appendix C - Workbook detailing program budget, costs, savings, and cost-benefit analysis. To provide information as required by the EE General Order, the Arkansas Public Service Commission (“APSC”) Standardized Annual Report Packet (“SARP”) workbook was utilized.

Entergy Solutions Louisiana offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The Program portfolio has steadily expanded since 2018, including the launch of successful Manufactured Homes, Agriculture Solutions, New Construction, Higher Education, and Small Commercial Income Qualified pilot programs.

In 2024, Entergy Solutions won three Hermes Awards for excellence in marketing:

- Strategic Marketing Promotions Campaign GOLD winner
  - Commercial and Industrial “Early Bird Bonus” 2023 Campaign
- Electronic Media TV ad 2023 GOLD winner
  - Small Business TV commercial
- Print Media Publications Honorable Mention winner
  - Program viewbook

Additionally, National Theatre for Children, the School Kits and Education program implementer, won AESP’s 2025 Energy Award for Marketing & Customer Experience – Residential. By using dynamic, targeted outreach methods coupled with creative engagement strategies in the 2024 program year, NTC extended the access of energy efficiency kit school programs into communities throughout Louisiana, including traditionally hard-to-reach areas. NTC’s programs aimed to increase customer engagement and mobilize young people to save energy and money in their homes. By extending and specifying outreach beyond public elementary schools into community-based organizations, Girl Scout troops, STEM summer camps, charter, private, and middle schools, connecting to community-specific ambassadors and building energy efficiency champions at the ground level, NTC increased customer engagement to save 2,481.78 MWh and reduce 257.71 kW for two partner utilities: Entergy Solutions and Energy Smart for Entergy New Orleans.

To ensure success in current and future programs, APTIM has engaged several Disadvantaged Business Enterprise (DBE) subcontractors that have extensive experience in energy efficiency programs to assist in implementing the program, including:

- ILSI Engineering.
- Legacy Professional Services.
- Melara Enterprises.

- Green Coast Enterprises.
- National Theatre for Children.

Customer Testimonials

The program receives great feedback and high praise from customers who participate and complete energy saving upgrades to their home or business. In 2024, Entergy Solutions received a tremendous amount of positive feedback and testimonials from our valued customers. These highlights serve as a testament to our commitment to providing reliable and innovative energy solutions. We are thrilled to share some of these highlights to showcase the positive impact the program makes for our customers and the communities in which we serve.

"At McNeese State University, we are committed to advancing sustainability, efficiency, and fiscal responsibility while maintaining a high-quality learning environment for our students. The Central Chilled Water Plant Optimization project, in partnership with Entergy and Trane, represents a significant step toward reducing our energy footprint and operating costs. By improving the efficiency of our chiller plant, we are not only enhancing campus operations but also reinforcing our role as a responsible steward of resources. The projected savings of up to $90,000 annually underscore the importance of strategic investments in infrastructure that benefit both the university and the community. This initiative reflects our ongoing dedication to innovation and operational excellence at McNeese."
Dr. Wade Rousse, President, McNeese State University

Nicholls is benefiting from the building automation system upgrade performed through the Entergy Solutions program. I am ecstatic that we will save approximately 888,000 kWh annually, and we are grateful to Entergy and the Entergy Solutions program for assisting in making the campus more energy-efficient and sustainable. Nicholls State University looks forward to continuing its partnership with Entergy as we work together to foster a brighter, more sustainable future for Nicholls State University and the surrounding communities."
Dr. Jay Clune, President of Nicholls State University

"These HVAC upgrades are an example of how cost saving and sustainability can go hand in hand. By investing in digital controls and optimizing our energy use, we're not only achieving cost savings, but also making a positive impact on the environment."

Emory Ficklin, BASF HVAC Refrigeration Specialist

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As shown in Table 1.1 below, ELL achieved the following results in PY10.

Table 1.1

	Goal	Achieved	Percentage
Energy savings (kWh)	91,090,327	79,456,750	87%
Energy savings (kW)	N/A	11,959	N/A

Energy efficiency improvements completed in PY10 saved over 91,090 MWh of electricity, hitting 87% of the portfolio's overall savings target. Substantial effort was put into scaling programs, poising them for the achievement of similar targets in future years. For all programs, the Total Resource Cost ("TRC") ratio for PY10 is 1.71. Program by program TRC results are shown in Table 3.1. Another standardized cost effectiveness ratio, the Program Administrator Cost Test ("PACT") was calculated at 1.41.

Residential programs served 27,234 participants[1] in PY10. Commercial programs completed 462 projects and had 468 participants.

All five Louisiana Public Service Commission Districts were served by the seven residential and two commercial programs. The five LPSC district budgets are based upon Entergy Louisiana's customers pay-in information. The percentages used also accounted for the difference in commercial and residential pay-in totals.

Table 1.2 breaks out the total evaluated energy savings shown above in Table 1.1 for each program in the portfolio.

[2] Participant totals are defined on the "Evaluated Savings" tab on the SARP document in Appendix C. Each program has its own definition.

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Table 1.2

Program name	Energy savings (MWh)	% of goal attained
A/C Solutions	7,084	90%
Home Performance with ENERGY Star	7,979	95%
Income Qualified Solutions	9,859	114%
Manufactured Homes Program	3,764	74%
Multifamily Solutions	6,931	97%
Retail Lighting & Appliances	9,458	135%
School Kits & Education	1,828	101%
Large C&I Solutions	24,689	66%
Small Commercial Solutions	7,865	103%
Total	**79,457**	**87%**

Table 1.3 demonstrates that program costs for each class were in line with the budgetary requirements in Section VI of LPSC General Order No. R-31106.

Table 1.3

Portfolio Sector	PY10 budget ($)	PY10 actual ($)	% of budget	% of 2012 retail revenues
Residential	$10,199,280	$9,818,085	96%	0.52%
Non-residential	$8,300,720	$7,982,735	96%	0.42%
Total	**$18,500,000**	**$17,800,820**	**96%**	**0.94%**

Table 1.4, below, breaks out the total amounts in Table 1.3 to show the amounts spent on each program in the ELL portfolio during PY10. Incentive costs paid to customers and non-incentive costs incurred in administering the programs throughout the service area are reflected separately.

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Table 1.4

Program name	Incentive cost budget	Incentive cost actual	% of incentive budget expended	Non-incentive cost budget	Non-incentive cost actual	% of non-incentive budget expended
A/C Solutions	$ 1,012,825	$ 863,790	85%	$ 289,061	$ 265,021	92%
Home Performance with ENERGY STAR*	$ 1,100,000	$ 1,149,256	104%	$ 444,814	$ 423,965	95%
Income Qualified Solutions	$ 1,980,063	$ 2,267,845	115%	$ 1,191,897	$ 1,155,705	97%
Manufactured Homes	$ 911,063	$ 705,481	77%	$ 262,737	$ 241,734	92%
Multifamily Solutions	$ 1,117,512	$ 802,293	72%	$ 289,478	$ 271,154	94%
Retail Lighting & Appliances	$ 1,200,000	$ 1,099,992	92%	$ 131,314	$ 120,513	92%
School Kits & Education	$ 297,913	$ 282,500	95%	$ 172,521	$ 168,835	98%
Large C&I Solutions	$ 3,660,018	$ 3,149,204	86%	$ 2,529,921	$ 2,355,887	93%
Small Commercial Solutions	$ 1,319,834	$ 1,503,597	114%	$ 989,030	$ 974,046	98%
Total	$ 12,599,228	$ 11,823,959	94%	$ 6,300,772	$ 5,976,861	95%

In PY10 of the Quick Start programs:

- 94% of the incentive dollars were expended.
- Both the residential and commercial portfolios met cost-benefit requirements by achieving a ratio greater than 1.0 under the Total Resource Cost ("TRC") test.
- While both the Residential and Commercial Program Portfolios achieved a TRC over 1.0, the TRC calculations were lower than in previous years. This is attributable to Program designs based on ELL's 2023 Avoided Costs. ELL's Avoided Cost decreased from $0.0619905/kwh in Q1-2024 to $0.0276802/kwh. The updated Avoided Cost was used in PY10's cost benefit analyses.
    - Residential Program Portfolio TRC – 2.52.
    - Commercial Program Portfolio TRC – 1.11.
        - The Small Commercial Solutions program, excluding projects in the Income Qualified Pilot subprogram, showed program costs that outweighed the avoided costs, leading to a TRC benefit-to-cost ratio of 0.96. The Small Commercial Income Qualified Pilot projects on their own had a TRC of 0.39.

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Figure 1.0 below displays the 2024 completed projects within Entergy's service area, by PSC district.

Figure 1.0

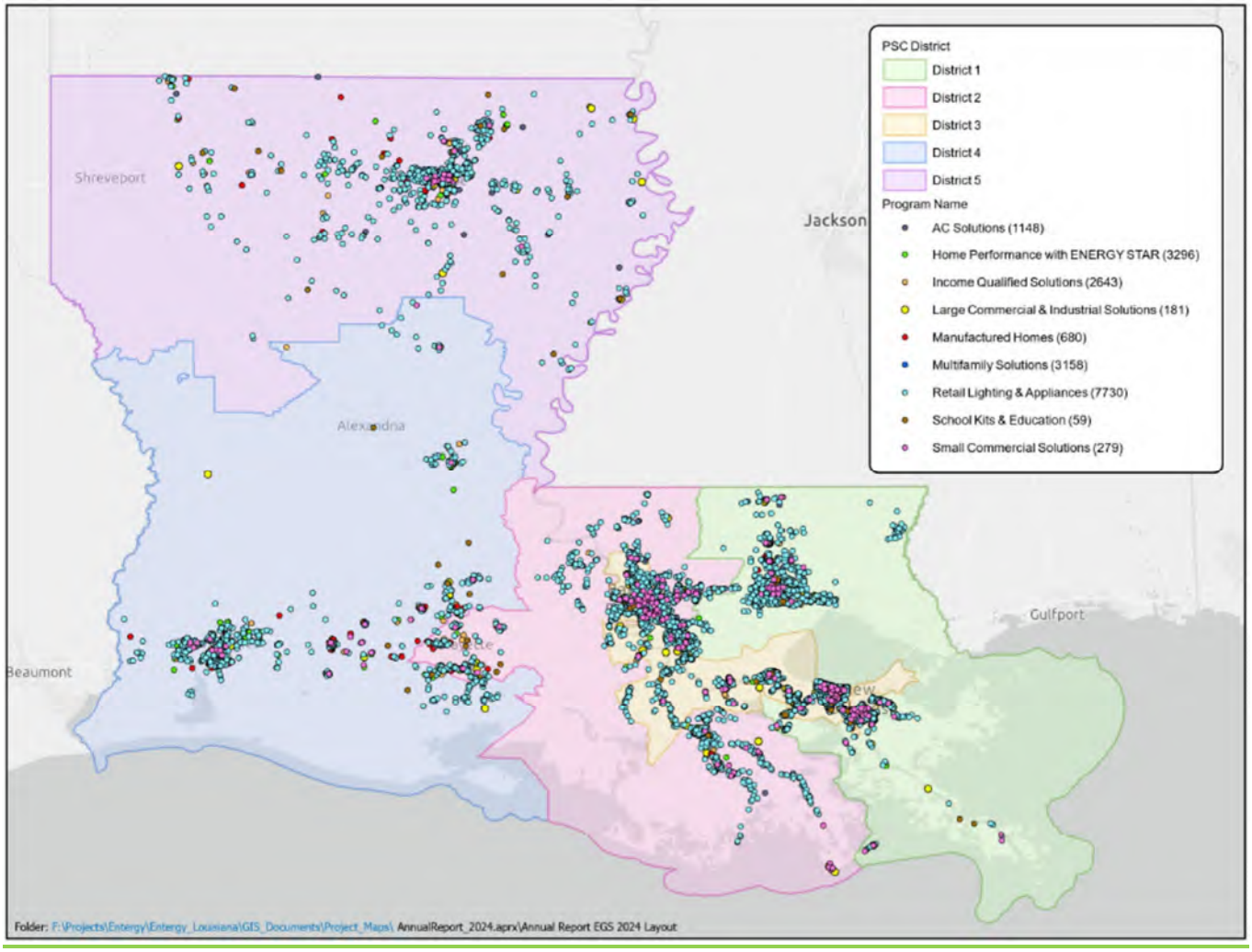

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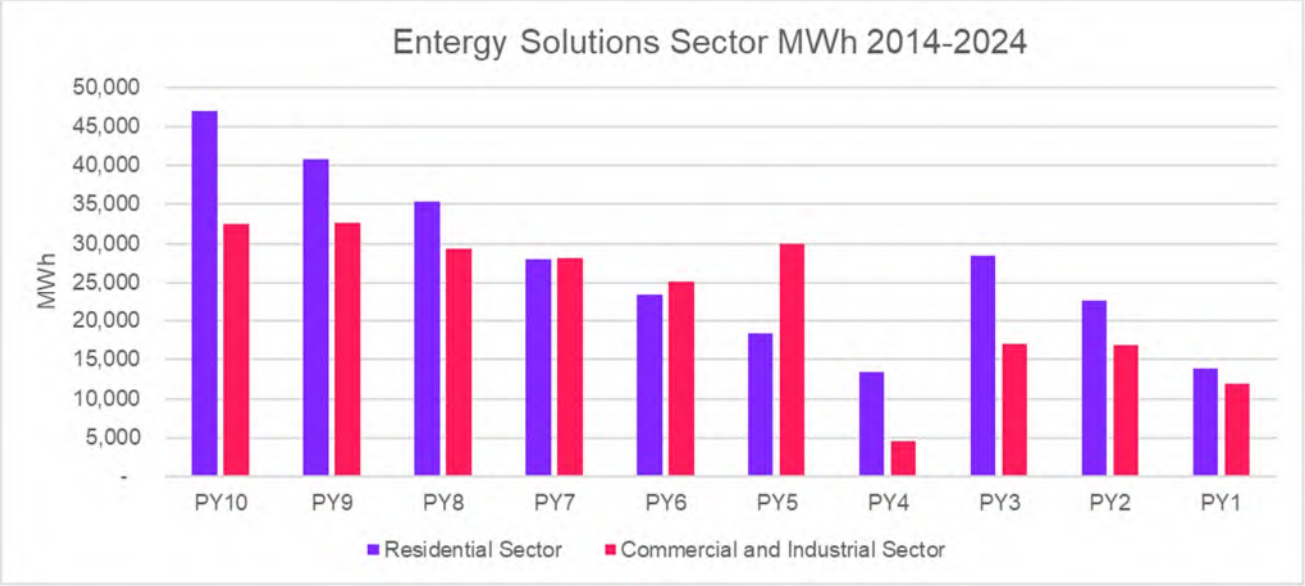
Figure 1.1 illustrates the expansive growth of the Entergy Solutions programs, particularly in PY9 and PY10, as the programs reach the maximum budget allowed in the Quick Start Energy Efficiency Rules. Entergy Solutions has saved 499,132 annual MWh and 7,336,776 lifetime MWh since inception.

Figure 1.1



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2.0 Portfolio Programs

2.1 A/C Solutions

2.1.1 Program description

The A/C Solutions offering provides residential customers with a more comprehensive set of options to help lower the energy consumption associated with keeping their homes cool and comfortable during the summer months. Customers with functioning air conditioning can improve the efficiency of their units with the help of a comprehensive air conditioning tune-up or replacement. The A/C Solutions Program is a great fit for homes not in need of envelope improvements. The most impactful A/C Solutions measure customers are eligible to receive is duct sealing. A/C Solutions is a great program for busy homeowners and families because of the a la carte services offered and the ability to complete most projects in one visit. Participants also qualify for one smart thermostat rebate per HVAC unit. HVAC replacement rebates are available when purchasing new equipment is necessary. Due to the streamlined suite of measures and scheduling ownership, this offering is extremely attractive and a great fit for our trade ally network.

2.1.2 Program highlights

- Reached 90% of goal, achieved 7,083,623 kWh.
- Achieved 1,627 kW reduction.
- 1,146 participants.
- TRC – 4.90.
- Average kWh per home: 6,308

2.1.3 Program budget, savings and measures

Table 2.1

A/C Solutions												
	Incentive Cost			Energy savings (kWh)			Demand savings (kW)			Participants		
Program year	Budget	Actual	%	Planned	Evaluated	%	Planned	Evaluated	%	Planned	Actual	%
PY1	$555,153	$531,416	96%	2,289,863	2,663,891	116%	859	790	92%	1,707	1,231	72%
PY2	$734,511	$609,278	83%	3,352,933	4,304,525	128%	1,270	994	78%	2,539	1,857	73%
PY3	$970,288	$831,500	86%	4,179,195	5,879,037	141%	1,450	1,461	101%	2,571	2,324	90%
PY4	$463,725	$520,940	112%	1,680,577	3,223,932	192%	N/A	663	N/A	1,617	609	38%
PY5	$528,693	$533,139	101%	1,680,577	3,452,513	205%	N/A	842	N/A	1,617	1,515	94%
PY6	$888,718	$890,618	100%	3,768,891	4,624,511	123%	N/A	1,589	N/A	3,627	1,733	48%
PY7	$888,718	$908,629	102%	1,303,402	6,378,723	489%	N/A	1,441	N/A	3,082	1,698	55%
PY8	$1,190,655	$1,130,955	95%	4,315,510	6,696,343	155%	N/A	2,272	N/A	4,152	2,431	59%
PY9	$1,344,303	$1,345,596	100%	4,949,526	7,912,924	160%	N/A	1,852	N/A	4,763	3,020	63%
PY10	$1,012,825	$863,790	85%	7,843,506	7,083,623	90%	N/A	1,627	N/A	1,243	1,146	92%

PY1-PY9 were previously reported as Legacy ELL and Legacy EGSL.

*The above referenced results for Program Years 1-3 are for the previously implemented Residential Solutions Program, which included all multifamily properties.

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2.1.4 Program events and training

A complete list of all trainings can be found in Appendix C – SARP, under the External Training tab.

2.1.5 Planned or proposed changes to program and budget

The total incentive budget for Program Year 11 ("PY11") does not change. No other changes are planned.

2.2 Home Performance with ENERGY STAR®

2.2.1 Program description

The Home Performance with ENERGY STAR® ("HPwES") program offering will achieve long term, significantly cost-effective electric savings using local auditors and contractors who will help residential customers analyze their energy use and identify opportunities to improve efficiency, install low-cost energy-saving measures, and identify and implement more comprehensive home efficiency projects. The offering includes a comprehensive home energy assessment which may also recommend follow-up measures to be completed by trade ally contractors. The home energy assessment includes a walk-through inspection and direct installation of low-cost measures such as high-efficiency showerheads and water aerators. The home energy assessment may recommend additional energy-efficiency follow-up measures to achieve deeper savings in the home. Follow-up measures, completed by an Entergy Solutions trade ally, focus on sealing of the home's air ducts, increasing the home's R-value with attic insulation, increasing HVAC efficiency with a tune-up and reducing the home's air infiltration rate with air sealing. These four measures were identified and selected because of their cost effectiveness when considering the kWh saved, measure life and level of incentives paid.
Residential new construction measures are offered under the HPwES program. Measure offerings use building code as comparative baseline.

2.2.2 Program highlights

- Reached 95% of goal, achieved 7,979,381 kWh savings.
- Achieved 1,703 kW reduction.
- 2,304 total participants.
- TRC – 4.98.
- Total home energy assessments: 984.
- Average kWh per customer HPwES: 5,426.
- Average kWh per customer New Construction: 1,558.

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2.2.3 Program budget, savings and measures

Table 2.2

Home Performance with ENERGY STAR®												
	Incentive Cost			Energy savings (kWh)			Demand savings (kW)			Participants		
Program year	Budget	Actual	%	Planned	Evaluated	%	Planned	Evaluated	%	Planned	Actual	%
PY1	$1,343,876	$1,219,841	91%	3,739,081	5,185,756	139%	1,074	1,110	103%	16,840	3,305	20%
PY2	$1,496,598	$1,347,209	90%	4,462,046	9,512,650	213%	1,266	2,592	205%	20,597	2,607	13%
PY3	$1,979,886	$1,842,079	93%	6,572,564	13,327,325	203%	1,740	3,854	221%	20,227	3,626	18%
PY4	$980,827	$433,909	44%	2,207,537	350,890	16%	N/A	43	N/A	5,500	11,408	207%
PY5	$1,468,092	$890,167	61%	2,207,537	2,854,017	129%	N/A	597	N/A	5,500	9,913	180%
PY6	$1,054,472	$957,487	91%	3,415,005	3,413,856	100%	N/A	816	N/A	8,508	4,527	53%
PY7	$1,054,472	$1,152,089	109%	3,597,050	5,685,795	158%	N/A	1,056	N/A	8,962	942	11%
PY8	$1,273,522	$1,193,729	94%	4,255,983	5,853,450	138%	N/A	1,320	N/A	10,604	1,194	11%
PY9	$1,558,690	$1,332,910	86%	5,287,784	6,769,854	128%	N/A	1,524	N/A	13,175	8,493	64%
PY10	$1,100,000	$1,149,256	104%	8,435,882	7,979,381	95%	N/A	1,704	N/A	2,513	2,304	92%

PY1-PY9 were previously reported as Legacy ELL and Legacy EGSL.

*The above referenced results for Program Years 1-3 are for the previously implemented Residential Solutions Program, which included all multifamily properties.

2.2.4 Program events and training

A complete list of all trainings can be found in Appendix C – SARP, under the External Training tab.

2.2.5 Planned or proposed changes to program and budget

The Home Performance with ENERGY STAR® program will make several updates to streamline customer and trade ally participation in the program, including sending automated email notifications with trade ally contact information. Annual incentive budget will remain the same as PY10.

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2.3 Income-Qualified Solutions

2.3.1 Program description

The Income-Qualified Solutions ("IQS") program is designed to offer income qualifying customers a program delivered assessment and no-cost energy efficient projects ranging from direct installation items to comprehensive follow-up measures. This program is available to ELL residential customers with household incomes at or below 200% of the federal poverty level and follows the Low-Income Home Energy Assistance Program (LIHEAP) income eligibility guidelines. Eligible no-cost direct installation items include smart thermostats, hot water pipe insulation, advanced power strips, faucet aerators and low-flow shower heads. Comprehensive follow-up measures consist of air infiltration reductions, duct efficiency improvements, air conditioning tune-ups, and ceiling insulation where assessments reveal need.

The Program provides measures at no cost to participants to help overcome the financial barrier to improving the energy efficiency in their home. Income Qualified Solutions has helped Entergy Louisiana strengthen its commitment to help families out of poverty and empower customers by controlling their energy usage and saving money.

2.3.2 Program highlights

- Reached 114% of goal, achieved 9,859,197 kWh.
- Achieved 1,889 kW reduction.
- 1,294 participants.
- TRC – 2.35.
- Total Assessments: 834.
- Total kWh average (per home): 5,966.

2.3.3 Program budget, savings and measures

Table 2.3

Income Qualified Solutions												
	Incentive Cost			Energy savings (kWh)			Demand savings (kW)			Participants		
Program year	Budget	Actual	%	Planned	Evaluated	%	Planned	Evaluated	%	Planned	Actual	%
PY1	$561,239	$505,359	90%	511,439	970,327	190%	169	155	92%	1,409	313	22%
PY2	$604,117	$497,584	82%	847,076	1,496,786	177%	214	343	160%	1,861	533	29%
PY3	$685,686	$617,169	90%	1,113,145	2,158,806	194%	288	479	166%	1,995	623	31%
PY4	$393,473	$266,006	68%	526,940	183,812	35%	N/A	27	N/A	750	4,848	646%
PY5	$506,211	$656,923	130%	526,940	1,147,393	218%	N/A	285	N/A	750	1,672	223%
PY6	$599,549	$564,407	94%	857,576	1,128,055	132%	N/A	293	N/A	1,221	1,320	108%
PY7	$599,549	$717,603	120%	1,145,750	1,516,483	132%	N/A	472	N/A	1,632	425	26%
PY8	$883,869	$919,885	104%	1,715,963	2,148,419	125%	N/A	662	N/A	2,443	720	29%
PY9	$1,056,211	$1,265,870	120%	2,091,472	3,395,415	162%	N/A	792	N/A	2,977	3,982	134%
PY10	$1,980,063	$2,267,845	115%	8,646,190	9,859,197	114%	N/A	2,282	N/A	1,173	1,294	110%

PY1-PY9 were previously reported as Legacy ELL and Legacy EGSL.

*The above referenced results for Program Years 1-3 are for the previously implemented Residential Solutions Program, which included all multifamily properties.

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2.3.4 Training and events

A comprehensive list of trainings can be found in Appendix C – SARP, under the External Training tab.

2.3.5 Planned or proposed changes to program and budget

The program incentive budget will increase by approximately 9%, accounting for the removal of the Income Qualified Retail Lighting Pilot.

2.4 Manufactured Homes program

2.4.1 Program description

Manufactured home electric consumption is often equivalent or greater, per square foot, when compared to standard construction homes. Though there are no income qualifications necessary to participate, many participating customers are low income. The program offers a vast catalog of measures to improve the efficiency of the home. Technicians perform a whole-home assessment followed by the implementation of standard measures offered to residential dwellings including duct sealing, air sealing, A/C tune-up and direct install items. A bonus measure is offered in either ceiling insulation or the application of a cool roof coating to keep heat infiltration to a minimum during Louisiana's extensive cooling season.

2.4.2 Program highlights

- Reached 74% of goal, achieved 3,843,507 kWh savings.
- Achieved 588 kW reduction.
- 678 participants.
- TRC – 3.42.

2.4.3 Program budget, savings and measures

Table 2.4

Manufactured Homes Program												
	Incentive Cost			Energy savings (kWh)			Demand savings (kW)			Participants		
Program year	Budget	Actual	%	Planned	Evaluated	%	Planned	Evaluated	%	Planned	Actual	%
PY4	$377,027	$165,647	44%	918,446	2,105	0%	N/A	0.34	N/A	30	89	297%
PY5	$564,020	$555,263	98%	918,446	1,709,806	186%	N/A	278	N/A	30	694	2313%
PY6	$757,864	$761,730	101%	1,939,777	3,273,143	169%	N/A	1,133	N/A	66	1,227	1859%
PY7	$757,707	$767,059	101%	2,197,725	3,208,231	146%	N/A	465	N/A	74	349	472%
PY8	$916,055	$886,336	97%	2,589,909	3,679,020	142%	N/A	630	N/A	87	476	547%
PY9	$1,200,409	$1,113,955	93%	3,454,269	5,092,329	147%	N/A	796	N/A	113	3,183	2817%
PY10	$911,063	$705,481	77%	5,067,053	3,763,887	74%	N/A	583	N/A	894	678	76%

PY1-PY9 were previously reported as Legacy ELL and Legacy EGSL.

Overall Program spend and evaluated savings were largely in line with PY9 results. The program hit 74% of its kWh target due to a few impactful factors. Trade allies in northern Louisiana struggled to identify manufactured home parks and some of the high-producing trade allies of years past found themselves participating in multiple residential programs, resulting in reduced capacity for the Manufactured Homes program. To combat similar outcomes in PY11, the program is bringing in additional trade allies and conducting Manufactured Homes-focused outreach efforts to drive customer leads.

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2.4.4 Training and events

A comprehensive list of trainings can be found in Appendix C – SARP, under the External Training tab.

2.4.5 Planned or proposed changes to program and budget

The Manufactured Homes program will open to serve standalone homes, where previously the program focused exclusively on parks and communities.

2.5 Multifamily Solutions program

2.5.1 Program description

The Multifamily Solutions program serves multifamily buildings with five or more units under roof and offers the benefits of energy efficiency to property owners and residents. Energy Advisors perform a walk-through inspection to identify needs within the complex while direct installation water conservation devices, advanced power strips, and smart thermostats provide immediate energy savings. Once other upgrade opportunities are identified, trade allies are assigned to complete applicable follow-up measures including air sealing, duct sealing, air condenser tune-ups, and insulation. The Program is designed to raise multifamily customers' awareness of the benefits of high-efficiency products, provide education regarding energy usage within their homes and present savings opportunities.

Properties Impacted

- 5 East (formerly Place du Plantier).
- Bastrop Apartments.
- Copper Ridge.
- Iota Manor.
- Magnolia Trace.
- Marksville Housing Authority.
- Mid-City Gardens.
- New Chateau.
- Town & Country.

2.5.2 Program highlights

- Reached 97% of goal, achieved 6,930,411 kWh.
- Achieved 959 kW reduction.
- TRC – 5.34.
- kWh average per property: 770,045.

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2.5.3 Program budget, savings and measures

Table 2.5

Multifamily Solutions												
	Incentive Cost			Energy savings (kWh)			Demand savings (kW)			Participants		
Program year	Budget	Actual	%	Planned	Evaluated	%	Planned	Evaluated	%	Planned	Actual	%
PY4	$483,208	$330,923	68%	1,645,258	1,105,617	67%	N/A	163	N/A	2,040	14,689	720%
PY5	$619,260	$667,072	108%	1,645,258	1,560,917	95%	N/A	287	N/A	2,040	2,446	120%
PY6	$639,060	$354,655	55%	1,523,786	775,848	51%	N/A	113	N/A	1,889	1,304	69%
PY7	$639,060	$465,727	73%	1,576,235	1,891,956	120%	N/A	310	N/A	1,954	7	0%
PY8	$668,009	$622,248	93%	1,686,397	2,486,968	147%	N/A	468	N/A	2,091	16	1%
PY9	$712,184	$647,858	91%	1,824,327	3,544,484	194%	N/A	523	N/A	2,262	1,537	68%
PY10	$1,117,512	$802,293	72%	7,158,147	6,931,109	97%	N/A	988	N/A	16	16	100%

PY1-PY9 were previously reported as Legacy ELL and Legacy EGSL.

*Number of participating complexes.

2.5.4 Training and events

A comprehensive list of trainings can be found in Appendix C – SARP, under the External Training tab.

2.5.5 Planned or proposed changes to program and budget

There are no planned changes to the program or budget for PY11.

2.6 Retail Lighting & Appliances

2.6.1 Program description

The Retail Lighting and Appliances program is a residential retail program that increases awareness and sales of efficient lighting and appliances to customers. The Program promotes the purchase of energy-efficient lighting, air purifiers, dehumidifiers, window air conditioners, pool pumps, refrigerators, heat pump water heaters, smart thermostats, and offers a variety of discounted ENERGY STAR® qualified products. Customers receive point-of-purchase ("POP") discounts for LED lighting (in income-qualified territories only), air purifiers, dehumidifiers, and window air conditioners at select participating retailers where the incentive has been applied to qualified products upstream. In PY10 participating stores included Dollar Tree, Home Depot, Lowe's, and Walmart.

Customers can also participate in this program by submitting a mail-in rebate or shopping on the Entergy Solutions Online Marketplace ("OLM"). Direct-to-customer rebates on ENERGY STAR® qualified products are available through mail-in or online rebate forms located on the Entergy Solutions website. The Online Marketplace is an online store that can be accessed through the Entergy Solutions Louisiana website or directly at https://entergysolutionsla-marketplace.com/. Products offered in the Online Marketplace include advanced power strips, air purifiers, smart thermostats, water-saving aerators, low-flow showerheads, pipe insulation, and LED bulbs. In retail stores and other mass marketing channels, promotional materials, signage and displays help to drive consumer awareness and generate consumer demand.

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Dollar Tree, Home Depot, Lowe's, and Walmart were participating retailers.

- 35% of kWh savings - retail stores.
- 58% of kWh savings - online marketplace.
- 7% of kWh savings - mail-in rebates.

2.6.2 Program highlights

- Reached 135% of goal, achieved 89,458,087 kWh.
- Achieved 501 kW.
- 45 stores participated.
- TRC – 1.04.

2.6.3 Program budget, savings and measures

Table 2.6

Retail Lighting & Appliance												
	Incentive Cost			Energy savings (kWh)			Demand savings (kW)			Participants		
Program year	Budget	Actual	%	Planned	Evaluated	%	Planned	Evaluated	%	Planned	Actual	%
PY1	$806,079	$714,917	89%	4,326,101	5,006,482	116%	1,044	1,101	105%	244,763	73,703	30%
PY2	$991,636	$807,528	81%	5,895,653	7,257,859	123%	1,477	1,227	83%	332,965	88,373	27%
PY3	$995,287	$930,962	94%	5,872,139	7,155,477	122%	1,456	1,430	98%	333,504	103,305	31%
PY4	$632,880	$640,529	101%	5,646,313	8,116,905	144%	N/A	1,319	N/A	233,000	85,126	37%
PY5	$653,084	$789,040	121%	5,646,313	6,446,982	114%	N/A	1,373	N/A	233,000	85,212	37%
PY6	$897,885	$998,316	111%	7,032,458	8,695,446	124%	N/A	1,080	N/A	290,200	119,942	41%
PY7	$897,885	$840,338	94%	6,267,225	7,750,877	124%	N/A	1,037	N/A	258,622	60,042	23%
PY8	$912,378	$921,291	101%	7,295,648	12,941,220	177%	N/A	1,970	N/A	301,061	66,351	22%
PY9	$992,609	$997,970	101%	8,098,821	12,276,359	152%	N/A	2,004	N/A	334,205	29,519*	9%
PY10	$1,200,000	$1,099,992	92%	7,012,258	9,458,087	135%	N/A	502	N/A	21,248	10,496*	49%

PY1-PY9 were previously reported as Legacy ELL and Legacy EGSL.

*PY9 and PY10 Participant values are a combination of unique accounts and actual product purchases.

*The above referenced results for Program Years 1-3 are for the previously implemented Residential Solutions Program, which included all multifamily properties.

2.6.4 Events and training

A comprehensive list of trainings can be found in Appendix C – SARP, under the External Training tab.

2.6.5 Planned or proposed changes to program and budget

Incentive amounts for mail-in rebates will be adjusted on air purifiers, refrigerators, and smart thermostats to keep the program cost-effective while encouraging higher participation in PY11. Instant discounts on advanced power strips and air purifiers will be offered at select Dollar Tree and independent retailers. The online marketplace will offer steep discounts on all smart thermostats during the summer months.

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2.7 School Kits & Education

2.7.1 Program description

The School Kit & Education offering targets 6th-8th grade school age students across the state, to deliver an engaging live event, bilingual printed educational student-parent handbooks, and digital lessons and activities about energy efficiency concepts. Students are sent home with an energy efficiency starter kit and a home energy survey with installation data is returned to their classroom teacher, who then returns the completed surveys to the Entergy Solutions National Theatre for Children ("NTC") team. Energy efficiency education materials and kits align with Louisiana Student Standards for Science.

In PY10, 11,300 energy-saver kits were allocated to 59 schools and educational sites in ELL territory. The NTC team participated in 68 performances that were viewed by 452 educators and 11,300 middle school students. Program educators delivered in-person lessons to 1,091 students and 35 classrooms. Virtual live lessons and classroom teacher-led lesson plans were delivered and made available to all participating schools.

The Entergy Solutions extended the access of energy efficiency kit school programs into communities throughout Louisiana, including traditionally hard-to-reach areas. The School Kit & Education offering aimed to increase customer engagement and mobilize young people to save energy and money in their homes. By extending and specifying outreach beyond public elementary schools into community-based organizations, Girl Scout troops, STEM summer camps, charter, private, and middle schools, connecting to community-specific ambassadors and building energy efficiency champions at the ground level, NTC increased customer engagement to save 1,817,675.00 kWh and reduce 177 kW during PY10.

2.7.2 Program highlights

- Reached 101% of goal, achieved 1,828,340 kWh.
- Achieved 177 kW reduction.
- 11,300 school kits were distributed.
- 56% of participating schools are in LMI neighborhoods
- 502 home energy surveys completed and returned for evaluation
- 68 events.
- 11 participating summer camps.
- 3 participating Girl Scout events.
- TRC – 1.12.

Throughout the span of our outreach efforts, repetition and grit were key. To make the goals of successfully enrolling 59 sites and distributing 11,300 energy-saving kits, the outreach plan totaled:

- 575 individual phone calls made.
- 1,889 emails sent.
- 389 mailings delivered.
- 8 teacher/administrator outreach presentations given.
- 4 separate scripts for the kick-off events created.

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The specificity, flexibility and rigor of outreach required to meaningfully connect with stakeholders is how it became possible for students to lower the energy use within their homes - whether they be owned, rented, multi-family, rural, suburban or urban.

Qualitative results include strong relationships built on behalf of the utilities running the energy efficiency programs. Some quotes from our participating educators include:

> *"The actors made it very easy for the students to understand energy conservation and how to save energy at home and school."*
>
> *"The parents were finally able to participate with feedback from their children about how they benefited from the home kits."*
>
> *"This was a huge win for our summer STEM kids. They will always remember this and hopefully come back next year wanting to learn more ways to save energy."*

Schools and sites visited

School Name	# Kit	City
Boys & Girls Club Of Central Louisiana	72	Alexandria
Crowley Middle School	48	Crowley
David Thibodaux Stem Magnet Academy	216	Lafeyette
Girl Scouts Louisiana East	96	Gonzales
Kidwind Camp	288	Monroe
Leonville Elementary School	648	Leonville
North Central High School	264	Washington
North Vermilion Middle School	72	Maurice
Opelousas Junior High School	408	Opelousas
Paul Breaux Middle School	336	Lafeyette
Plaisance Middle School	216	Opelousas
Rene A Rost Middle School	432	Kaplan
St Martinville Junior High School	360	Martinville
St Martinville Primary School	504	Martinville
Tangipahoa Parish School District - Virtual Learning Option	96	Independence
Allen Ellender School	240	Marrero
Arcadia High School	144	Arcadia
Beekman Charter School	264	Bastrop
Belle Rose Middle School	96	Belle Rose
Boothville-Venice Elementary School	48	Buras
Briarfield Academy	72	Lake Providence
Calvin High School	96	Calvin
Church Point Middle School	288	Church Point
Concordia Lutheran School	96	Marrero

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Delhi Charter School	168	Delhi
Delta Charter School	144	Ferriday
Delta Elementary School	120	Mer Rouge
Downsville Community Charter School	120	Downsville
Elearning Academy	96	Thibodaux
Emmett Gilbert School Of Excellence	264	Avondale
Fort Necessity School	192	Fort Necessity
Glenbrook School	120	Minden
Haynesville Jr./Sr. High School	144	Haynesville
Independence Leadership Academy	144	Independence
J. B. Martin Middle School	456	Paradis
Kentwood High Magnet School	120	Kentwood
La House Research And Education Center	48	Baton Rouge
Loranger Middle School	480	Loranger
Mater Dolorosa Catholic School	48	Independence
Morehouse Elementary School	96	Bastrop
Mt Olive Christian School	48	Athens
Ponchatoula Junior High School	696	Ponchatoula
Sallie Humble Elementary School	192	Monroe
Shalom Lkt Academy	24	LaPlace
Southeastern Louisiana University Lab School	96	Hammond
South Plaquemines High School	120	Buras
St Ann Catholic School	168	Metairie
St Christopher School	72	Metairie
St Cletus Elementary School	120	Gretna
St Edward The Confessor School	72	Metairie
St Joan Of Arc Catholic School	96	La Place
St Martin's Episcopal School	96	Metairie
St Rita School	72	Harahan
Sterlington Middle School	432	Sterlington
Tensas High School	72	St. Joseph
Tom Benson School	216	Kenner
Trafton Academy At Hammond	96	Hammond
University Laboratory School	384	Baton Rouge
West St John Elementary School	72	Edgard

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2.7.3 Program budget, savings and measures

Table 2.7

School Kits & Education												
	Incentive Cost			Energy savings (kWh)			Demand savings (kW)			Participants		
Program year	Budget	Actual	%	Planned	Evaluated	%	Planned	Evaluated	%	Planned	Actual	%
PY4	$267,810	$214,817	80%	567,899	374,152	66%	N/A	52	N/A	1,500	13,500	900%
PY5	$308,521	$302,848	98%	567,899	1,183,979	208%	N/A	157	N/A	1,500	4,125	275%
PY6	$323,822	$330,271	102%	1,260,627	1,410,874	112%	N/A	199	N/A	3,546	4,620	130%
PY7	$323,822	$285,566	88%	1,313,550	1,506,700	115%	N/A	212	N/A	3,417	4,936	144%
PY8	$389,994	$336,876	86%	1,417,655	1,615,337	114%	N/A	328	N/A	3,704	5,772	156%
PY9	$442,795	$373,463	84%	1,564,708	1,738,248	111%	N/A	253	N/A	4,142	6,274	151%
PY10	$297,913	$282,500	95%	1,818,675	1,828,340	101%	N/A	237	N/A	11,240	11,300	101%

PY1-PY9 were previously reported as Legacy ELL and Legacy EGSL.

2.7.4 Training and events

NTC administered 68 educational events for schools and camps in Louisiana on behalf of Entergy Solutions.

Performance Date	All Times	School Name	School Address
5/15/2024	9:00 AM, 10:30 AM, 12 PM, 1:30 PM, 3:00 PM	STEM Spectacular	Performance at Bourgeois Hall, 255 Cajundome Blvd, Lafayette, LA 70506
7/17/2024	9:30 AM, 11:00AM, 2:00 pm	Boys & Girls Club of Central Louisiana	1801 Sylvester Drive Alexandria, LA, 71301
7/18/2024	9:30 AM, 11:00AM, 2:00 pm	Kidwind Camp	708 University Avenue Monroe, LA, 71209
7/20/2024	10:00 AM, 11:30AM, 2:00PM	Girl Scouts Louisiana East	3005 W Cabela's Parkway, Suite J Gonzales, LA, 70737
10/21/2024	9:00 AM	Arcadia High School	967 Daniel St, Arcadia, LA 71001
10/21/2024	1:25 PM	Glenbrook School	1674 Country Club Cir, Minden, LA 71055
10/21/2024	Digital Access	Church Point Middle School	340 W Martin Luther King Dr, Church Point, LA 70525
10/21/2024	Digital Access	Shalom LKT Academy	1910 Longwood Court, LaPlace, LA 70068
10/22/2024	9:00 AM	Mt Olive Christian School	15349 Hwy 9, Athens, LA 71003
10/22/2024	1:30 PM	Morehouse Elementary School	1001 West Madison Avenue, Bastrop, LA 71220
10/23/2024	9:00 AM	Beekman Charter School	15190 AM Baker Road, Bastrop, LA 71220
10/23/2024	2:30 PM	Downsville Community Charter School	4787 Highway 151, Downsville, LA 71234
10/24/2024	2:45 PM	Haynesville Jr./Sr. High School	9930 Highway 79, Haynesville, LA 71038
10/25/2024	1:00 PM	Delta Elementary School	7661 Mer Rouge/Collinston Road, Mer Rouge, LA 71261
10/28/2024	8:15 AM, 9:00 AM	Sallie Humble Elementary School	3800 Westminister Avenue, Monroe, LA 71201
10/28/2024	1:00 PM, 2:00 PM	Sterlington Middle School	230 Keystone Rd, Sterlington, LA 71280

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10/29/2024	9:00 AM	Briarfield Academy	301 Riddle Ln, Lake Providence, LA 71261
10/30/2024	9:30 AM	Delhi Charter School	6840 Hwy 17, Delhi, LA 71232
10/30/2024	2:00 PM	Fort Necessity School	10630 Highway 562, Fort Necessity, LA 71243
10/31/2024	1:00 PM	Tensas High School	720 Plank Road, St. Joseph, LA 71366
10/31/2024	1:00 PM	Delta Charter School	300 Lynwood Drive, Ferriday, LA 71334
11/1/2024	1:30 PM	Calvin High School	223 Second St, Calvin, LA 71410
11/4/2024	9:15 AM	Kentwood High Magnet School	603 9th St, Kentwood, LA 70444
11/4/2024	1:55 PM	Mater Dolorosa Catholic School	509 Pine St, Indel
11/5/2024	9:00 AM	Trafton Academy at Hammond	47342 N Cherry St, Hammond, LA 70401
11/5/2024	1:00 PM	Southeastern Louisiana University Lab School	1200 North General Pershing, Hammond, LA 70402
11/6/2024	8:30 AM	West St John Elementary School	2555 Highway 18, Edgard, LA 70049
11/6/2024	1:10 PM	University Laboratory School	45 Dalrymple Drive, Baton Rouge, LA 70803
11/7/2024	9:00 AM	St Martin's Episcopal School	225 Green Acres Rd, Metairie, LA 70003
11/7/2024	1:30 PM, 2:15 PM	St Joan Of Arc Catholic School	412 Fir St, La Place, LA 70068
11/8/2024	9:15 AM	La House Research and Education Center	3622 Gourrier Ave, Baton Rouge, LA 70820
11/8/2024	1:00 PM, 2:15 PM	Belle Rose Middle School	7177 Hwy 1, Belle Rose, LA 70341
11/11/2024	9:00 AM	St Ann Catholic School	4921 Meadowdale St, Metairie, LA 70006
11/12/2024	9:00 AM	Ponchatoula Junior High School	315 East Oak Street, Ponchatoula, LA 70454
11/12/2024	2:00 PM	St Edward The Confessor School	4901 W Metairie Ave, Metairie, LA 70001
11/13/2024	8:40 AM, 9:35 AM, 10:20 AM	St Christopher School	3900 Derbigny St, Metairie, LA 70001
11/13/2024	9:15 AM	Tom Benson School	3315 Maine Ave, Kenner, LA 70065
11/14/2024	1:00 PM	Concordia Lutheran School	6700B Westbank Expy, Marrero, LA 70072
11/14/2024	9:20 AM; 10:10 AM	Allen Ellender School	4501 East Ames Blvd, Marrero, LA 70072
11/15/2024	8:30 AM	St Rita School	194 Ravan Ave, Harahan, LA 70123
11/15 2024	1:00 PM, 1:45 PM	St Cletus Elementary School	3610 Claire Ave, Gretna, LA 70053
11/18/2024	2:15 PM	Boothville-Venice Elementary School	1 Oiler Dr, Buras, LA 70041
11/19/2024	1:00 PM	South Plaquemines High School	34121 Highway 23, Buras, LA 70041
11/19/2024	8:00 AM	Emmett Gilbert School of Excellence	435 South Jamie Boulevard, Avondale, LA 70094
11/20/2024	9:40 AM	eLearning Academy	806 N Arcadia Rd, Thibodaux, LA 70301
11/21/2024	8:00 AM, 8:50 AM, 9:40 AM	Loranger Middle School	54123 Allman Street, Loranger, LA 70446

11/21/2024	1:30 PM	Independence Leadership Academy	221 Tiger Avenue, Independence, LA 70443
11/22/2024	9:00 AM	J. B. Martin Middle School	434 South Street, Paradis, LA 70080

2.7.5 Planned or proposed changes to program and budget

NTC will continue to implement the program for PY11 with the program materials and approach of PY10. The timeline of outreach has been updated to reach more summer sites.

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2.8 Residential Training

2.8.1 Program description

Entergy Solutions delivered residential training to participating trade ally contractors including whole home weatherization technicians, building analysts, energy auditors, and insulation specialists. The training program and curriculum is designed to develop and increase the community's residential contractor base by providing training opportunities, market engagement opportunities and assistance completing program-related documentation. In PY10 the residential training budget was $6,698 and 100% of the budget dollars were expended. The trade ally liaison was hired in May 2024 to manage TA Trainings.

The training goal is to help trade allies improve their existing skillset and energy-efficiency knowledge resulting in larger savings goals, increased visibility of the program and increased customer satisfaction.

Trainings offered:

- May 20, 2024: **Trade Ally Sales Training (Residential and Commercial).**
  - Hosted by the LSU Professional Sales Institute, Greg Accardo, professional sales advisor, and Nawar Chaker, associate professor.
  - The Executive Center, 250 S Foster Dr. Baton Rouge, LA 70806.
  - 9:00 a.m. – 12:00 p.m.
  - Topic: Sales strategies for energy efficiency. Creating customer a base.
  - This training is for commercial and residential trade allies.
  - This training is a partnership between ENO and ELL with 2 different locations and times.
  - The cost of the training is $5,000 for the Baton Rouge training.
- Nov 13, 2024: **Trade Ally Digital Literacy Training**
  - Location: New Orleans Career Center. 1331 Kerlerec St. New Orleans, LA 70119.
  - Presented by Thrive New Orleans. Virtual and In-Person option.
  - Topic: Increasing knowledge of cloud base technology, storing and uploading documents, Microsoft vs Google platforms.
  - Participation was over 10 people.

2.8.2 Training and events

A comprehensive list of trainings can be found in Appendix C – SARP, under the External Training tab.

2.8.3 Planned or proposed changes to program and budget

Entergy Solutions will continue to engage with industry professionals to provide additional training opportunities to the trade ally network in PY11.

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2.9 Large Commercial & Industrial (LC&I) Solutions

2.9.1 Program description

The Large Commercial & Industrial Solutions program ("LC&I") serves customer accounts with an average peak demand of 100 kW or greater and who did not opt-out of participation during the Quick Start phase.

The LC&I program contributes project development support in many ways while steering customers toward energy-efficient decisions. The program provides professional services with education and facility assessments to identify savings opportunities. The program demonstrates expected savings results and payback periods. Incentive funds increase the affordability of proposed projects making them more likely to receive approval. Projects may be incentivized up to 100% of the total cost. The program connects customers with a network of trade ally contractors to complete upgrades.

The LC&I program offers a suite of prescriptive measure incentives. These consist of standard facilities upgrades across the most common building types. Prescriptive measures have predetermined savings and incentive amounts as verified by program staff. There are little to no additional calculations needed to receive funds for these measures compared to custom measures. Proposed equipment must meet minimum efficiencies and qualifications.

The program incentivizes custom measures but requires energy-savings calculations that account for site-specific equipment and scenarios. The program provides workbooks and may assist in generating these calculations. Pre-approval of funds is required before purchasing equipment or beginning work in nearly all situations.

Higher Education Pilot program description:

The Higher Education pilot program completed two building automation system upgrades at Southeastern Louisiana University in LPSC District #1. BAS upgrades were completed in Building B as well as the Music Building and combined the projects received a total of $122,774 in incentives which covered the full cost of the project. Entergy Solutions, with permission from the program evaluator, was able to claim 40% of the estimated savings in PY10 and the remaining 60% will be claimed in PY11.

The Entergy Solutions team also completed a project with Nicholls State University in LPSC District #2 that included the installation of a variable frequency drive and scheduling of the existing building automation system that controls the HVAC systems in the library and the gym. The $143,816 incentive for this project went directly to the trade ally, Johnson Controls, which resulted in zero out of pocket cost to the customer.

The Higher Education pilot project team engaged with Baton Rouge Community College in LPSC District #3. The customer was ultimately unable to move forward with this project during PY10 so Entergy Solutions outreach staff will revisit this project with Baton Rouge Community College in PY11.

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The Higher Education pilot project completed in LPSC District #4 was a central water plant optimization project at McNeese State University with a total estimated energy savings of 1,626,000 kWh. Green Coast Enterprises facilitated the implementation of the project, and the customer received a total Entergy Solutions incentive of $146,210 (total associated project cost was $248,900). This project was also separated into two phases with 40% of the estimated savings, or 628,000 kWh, contributing to the PY10 pipeline.

Higher Education pilot program funds were awarded to the University of Louisiana Monroe in LPSC District #5 to complete a building automation system upgrade to reschedule the HVAC usage in the Activity Center, Hannah Hall and the library. Prior to the implementation of this project the HVAC schedule was set to run 24/7 in all buildings and this project adjusted those schedules to only run from 6am-11pm. This new HVAC schedule resulted in an estimated savings of approximately 1,385,518 kWh of which 551,928.8 kWh was claimed in PY10. The contractor that implemented this work was Control Systems and Service LLC and the full incentive of $139,916 was paid to the contractor which resulted in no out of pocket cost to the University of Louisiana Monroe.

Commercial New Construction program description:

The New Construction program provides incentives for customers who install equipment above baseline energy code. The program covers ground-up construction, gut-rehab, and additions to existing facilities.

The Entergy Solutions team will assist with energy-savings calculations and recommendations as early in the project as requested. Applications for funding are accepted up to 60 days after substantial completion of these projects.

Agriculture Solutions program description:

The Agriculture Solutions program offers special measures to agriculture-related facilities. The Entergy Solutions team has installed incentives and created workbooks to assist in lowering energy usage with this largely untapped sector. The team attends agriculture-specific events, performs special outreach, and works with trade allies who serve ag clients.

The Entergy Solutions team facilitated the implementation of two Agricultural Solutions projects in PY10. The first project was at Lafourche Sugars and included the addition of three variable frequency drives on several 300 horsepower motors as well as the installation of five exhaust fans to remove excess heat from the upper floors of the factory. This project resulted in 752,406 kWh in energy savings and the customer received an incentive totaling $37,620 with a total project cost was $87,238.

The second Agricultural Solutions project completed in PY10 was at Raceland Raw Sugars and included the addition of a variable frequency drive on a water pump motor. The new VFD resulted in increased efficiency on the pump motor and achieved 149,115 kWh in savings. Raceland Raw Sugars received the Entergy Solutions incentive for this project which came to a total of $21,323.50 which reduced the out-of-pocket cost to the customer to less than $2,000.

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2.9.2 Program highlights

- Reached 66% of goal, achieved 24,688,990 kWh.
- Achieved 3,241.4 kW reduction.
- 182 LC&I projects completed.
- TRC – 1.22

2.9.3 Program budget, savings and measures

Table 2.9

Large C&I Solutions												
	Incentive Cost			Energy savings (kWh)			Demand savings (kW)			Participants		
Program year	Budget	Actual	%	Planned	Evaluated	%	Planned	Evaluated	%	Planned	Actual	%
PY1	$1,808,305	$1,638,468	91%	8,342,994	9,108,491	109%	1685	1313	78%	20,168	128	1%
PY2	$2,037,103	$1,869,927	92%	11,615,685	12,927,687	111%	1,885	1,553	82%	25,538	316	1%
PY3	$2,036,604	$1,884,893	93%	11,541,894	12,481,366	108%	2,161	1,796	83%	27,411	218	1%
PY4	$1,816,810	$855,887	47%	12,077,519	2,854,937	24%	N/A	184	N/A	55,147	12,068	22%
PY5	$2,792,138	$2,527,235	91%	12,077,519	21,794,282	180%	N/A	3,837	N/A	55,147	181*	0.33%
PY6	$2,333,259	$2,279,717	98%	15,828,766	16,745,963	106%	N/A	2,728	N/A	72,275	111*	0.15%
PY7	$2,333,260	$2,358,743	101%	16,161,700	19,084,321	118%	N/A	2,875	N/A	73,795	113*	0.15%
PY8	$3,014,451	$2,461,826	82%	20,312,006	20,143,823	99%	N/A	2,496	N/A	92,745	109*	0.12%
PY9	$3,442,430	$3,281,379	95%	23,672,725	25,154,215	106%	N/A	2,737	N/A	108,091	608*	0.56%
PY10	$3,660,018	$3,149,204	86%	37,482,934	24,688,990	66%	N/A	3,241	N/A	239	179	75%

PY1-PY9 were previously reported as Legacy ELL and Legacy EGSL.

* Number of projects completed.

*The above referenced results for Program Years 1-3 are for the previously implemented Residential Solutions Program, which included all multifamily properties.

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2.9.4 Training and events

A comprehensive list of trainings can be found in Appendix C – SARP, under the External Training tab.

2.10 Small Commercial Solutions

2.10.1 Program description

The Small Commercial Solutions ("SCS") program provides small businesses with average peak demand under 100 kw the opportunity to achieve kWh savings through prescriptive and custom projects. The SCS program is designed to assist with the first cost market barrier unique to small businesses that commonly prevents the purchase of energy-efficient equipment. The program also provides trade allies and small business owners with energy-efficiency information and develops awareness of energy and non-energy benefits. Customers participating in the program install energy-efficient equipment and technology that yields verifiable savings through both prescriptive and custom incentive options. The rates for SCS are higher than LC&I rates, coinciding with their respective electric rates. For PY10, the program has updated the incentive cap from $25,000 to $30,000 per account.

Small Commercial Income-Qualified Pilot

In December of PY9, the program implemented a soft launch of the Small Commercial Income-Qualified Pilot. This pilot was fully launched across both EGSL and ELL in PY10, covering 100% of the project cost up to $30,000. This allows the program to cover incentives, materials, labor, and miscellaneous charges. Eight municipalities were selected to solicit customers in 2025 in White Castle, Grand Isle, Convent, Gramercy, Lutcher, Hammond, Amite, and Chalmette. To qualify, small businesses must be in a disadvantaged community according to the Climate and Economic Justice Screening Tool.

- Claimed energy savings: 516,871 kWh.
- Claimed demand reduction: 129.38 kW.
- Incentives: $360,337.11

Small Business Direct Install

The Small Business Direct Install (SBDI) program is designed to encourage energy-saving projects involving the installation of new, high-efficiency equipment or systems. The offering includes a comprehensive small business energy assessment which may also recommend follow-up measures to be completed by trade ally contractors. The small energy assessment includes a walk-through inspection and direct installation of low-cost measures such as LED lighting, thermostats, and high-efficiency water aerators.

The large coverage area of the territory led to a shortage of technicians available for installation. With few projects being completed the pilot program will be discontinued in PY11.

- Claimed energy savings: 225,067 kWh.
- Claimed demand reduction: 57.36 kW.
- Incentives: $74,185.55

Entergy Solutions

Small Commercial Program highlights

- Reached 103% of goal,
- Achieved 7,864,744 kWh.
- Achieved 793.9 kW reduction.
- 280 Small Commercial projects completed.
- TRC – 0.88

2.10.3 Program budget, savings and measures

Table 2.10

Small Commercial Solutions												
	Incentive Cost			Energy savings (kWh)			Demand savings (kW)			Participants		
Program year	Budget	Actual	%	Planned	Evaluated	%	Planned	Evaluated	%	Planned	Actual	%
PY1	$873,751	$790,792	91%	3,068,620	2,875,813	94%	559	492	88%	10,612	1,543	15%
PY2	$1,044,313	$951,489	91%	4,328,080	3,926,349	91%	779	447	57%	13,750	1,129	8%
PY3	$1,043,633	$947,379	91%	4,316,306	4,511,523	105%	771	726	94%	13,798	1,179	9%
PY4	$1,132,139	$717,652	63%	4,939,572	1,656,682	34%	N/A	306	N/A	14,937	17,284	116%
PY5	$1,531,784	$1,624,540	106%	4,939,572	8,150,518	165%	N/A	1,618	N/A	14,937	306*	2%
PY6	$1,853,324	$1,619,070	87%	8,372,787	8,395,399	100%	N/A	1,392	N/A	25,319	467*	2%
PY7	$1,853,325	$1,631,480	88%	8,541,000	9,059,399	106%	N/A	1,539	N/A	25,827	1,039*	4%
PY8	$2,132,587	$1,849,737	87%	10,079,625	9,271,088	92%	N/A	2,128	N/A	30,481	5,047	17%
PY9	$2,503,811	$1,760,475	70%	11,987,527	5,198,909	43%	N/A	613	N/A	36,250	507*	1%
PY10	$1,319,834	$1,503,597	114%	7,625,682	7,864,744	103%	N/A	794	N/A	229	277	121%

PY1-PY9 were previously reported as Legacy ELL and Legacy EGSL.

*Number of projects completed.

*The above referenced results for Program Years 1-3 are for the previously implemented Residential Solutions Program, which included all multifamily properties.

Entergy Solutions

2.10.4 Training and events

A comprehensive list of trainings can be found in Appendix C – SARP, under the External Training tab.

2.11 Commercial Training

2.11.1 Program description

Entergy Solutions delivered commercial training to participating trade ally contractors and commercial customers including facility and plant engineers, operations & maintenance staff and facility managers. Entergy Solutions co-sponsored training with Energy Smart New Orleans to reduce costs and maximize training participation. In PY10 the commercial training budget was $6,500 and 100% of the budget dollars were expended. The trade ally liaison was hired in May 2024 to manage TA Trainings.

Trainings offered:

- May 20, 2024: Trade Ally Sales Training (Residential and Commercial)**.**
    - Hosted by the LSU Professional Sales Institute, Greg Accardo, professional sales advisor, and Nawar Chaker, associate professor.
    - The Executive Center, 250 S Foster Dr. Baton Rouge, LA 70806.
    - 9:00 a.m. – 12:00 p.m.
    - Topic: Sales strategies for energy efficiency. Creating customer a base.
    - This training is for commercial and residential trade allies.
    - This training is a partnership between ENO and ELL with 2 different locations and times.
    - The cost of the training is $5,000 for the Baton Rouge training.

2.11.2 Training

A comprehensive list of trainings can be found in Appendix C – SARP, under the External Training tab.

2.11.3 Planned or proposed changes to program and budget

In PY11, the program will again engage with industry professionals to provide additional training opportunities to the trade ally network.

3.0 Evaluation, Measurement & Verification (“EM&V”)

3.1 Overview

Entergy Solutions began PY10 with ADM as the evaluator, however mid-year the contract was terminated and Tetra Tech was selected as the evaluator for the ELL Quick Start Programs. Appendix B contains a detailed description of the evaluation protocol and an evaluation report for each program in the portfolio. That report includes:

- Program descriptions.
- Summary of measures and expected savings.
- Savings and calculation methodology.

Entergy Solutions

- Verified savings, with realization rates for both demands and savings.
- Review of program processes.
- Program staff interviews.
- Participating contractor interviews.
- Customer interviews.
- Recommendations.

3.2 Program evaluation

Tetra Tech used standardized practices to review programs and did not require any special EM&V processes to qualify results prior to reporting. Details of the evaluation methodology utilized for each program are provided in the opening section of the individual program evaluation report.

An overview of the TRC Cost/Benefit Test results is shown below in Table 3.1. More detailed information can be found in Appendices B and C.

Table 3.1

Program name	Annualized energy savings (kWh)	Total TRC costs	Total TRC benefits	Total Net benefits	TRC ratio
A/C Solutions	7,083,623	$543,683	$2,665,768	$2,122,085	4.90
Home Performance with ENERGY STAR	7,979,381	$583,336	$2,902,320	$2,318,984	4.98
Income-Qualified	9,859,197	$1,539,645	$3,611,179	$2,071,534	2.35
Manufactured Homes Program	3,763,887	$386,406	$1,323,115	$936,710	3.42
Multifamily Solutions	6,931,109	$420,818	$2,247,550	$1,826,731	5.34
Retail Lighting & Appliances	9,458,087	$2,259,452	$2,354,698	$95,246	1.04
School Kits & Education	1,828,340	$451,335	$505,537	$54,201	1.12
Large C&I Solutions	24,688,990	$5,828,253	$7,114,499	$1,286,245	1.22
Small Commercial Solutions	7,864,744	$2,688,368	$2,357,010	($331,358)	0.88
Total	**79,457,358**	**$14,701,298**	**$25,081,676**	**$10,380,378**	**1.68**
Residential programs – portfolio	**46,903,624**	**$6,184,676**	**$15,610,168**	**$9,425,491**	**2.52**
Commercial programs – portfolio	**32,553,735**	**$8,516,622**	**$9,471,509**	**$954,887**	**1.11**

Entergy Solutions

Marketing Appendix

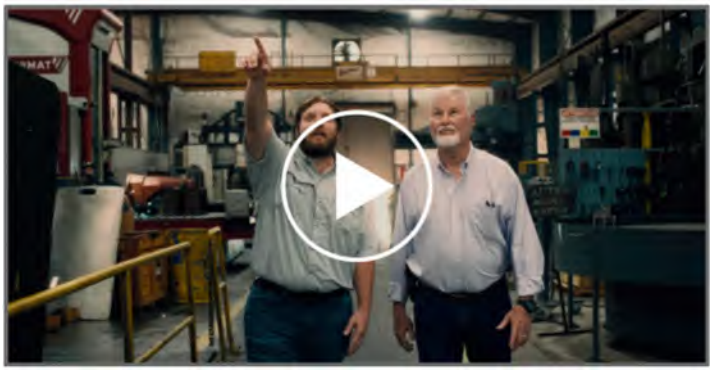
PY10

Awards

Hermes Creative Awards
Gold Winner

Electronic Media / Social Media / Interactive Media | Video | 178. TV Ad

Small Business TV ad

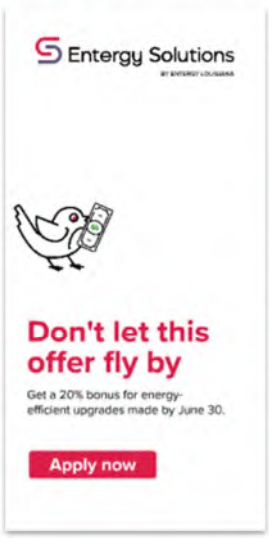


Hermes Creative Awards
Gold Winner

Strategic Campaigns | Marketing | 301c. Marketing/Promotion Campaign
Large Commercial Early Bird Bonus

DIGITAL PAID MEDIA — COMMERCIAL & INDUSTRIAL

DIGITAL AUDIO: TOP PLATFORMS	DIGITAL DISPLAY: TOP WEBSITES & MOBILE APPS
Spotify	AOL.com
iHeart Mobile	KNOE.com
Audiomack	USAToday.com
Audacy	CNN.com
Spreaker	HuffingtonPost.com



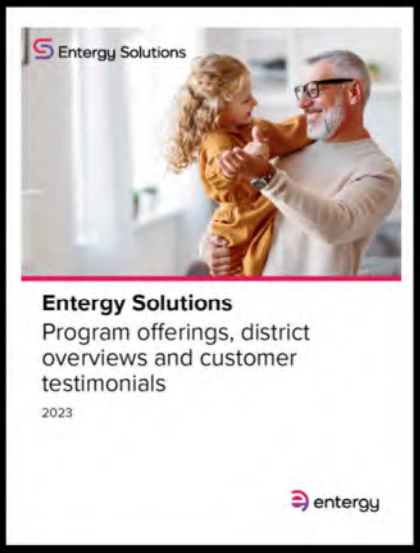
DIGITAL PAID MEDIA — COMMERCIAL & INDUSTRIAL

PERFORMANCE FIRST DIGITAL EARLY BIRD BONUS				
TACTIC	**IMPRESSIONS**	**REACH**	**CLICKS**	**CTR**
Digital Display	375,044	57,834	930	0.33%
Paid Social Media	60,291	23,178	2,278	3.78%
Digital Audio	105,162	15,933	63	0.06%

*Between April and May 31, Spears Group's tactics drove **2,300+ users** to the C&I landing page.*

Hermes Creative Awards
Honorable Mention

Entergy Solutions Viewbook



Entergy Solutions offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program offers upgrades to both residential homeowners and businesses as well as an online marketplace for energy efficient products. The comprehensive collateral viewbook showcases the recently rebranded collateral as well as photography that was commissioned for the rebrand. The viewbook includes: program applications, leave behinds, rebate forms, door hangers, customer testimonials, district savings infographics, and more - all of which were newly designed pieces in 2023.

The booklet complements the Entergy brand showcasing bold simplicity using imagery as a storytelling device to reinforce purpose and emotional connections, icons to represent simple objects and ideas, all the while, using white and white space as a foundation of the brands visual system.

Commercial and Industrial

Agriculture Solutions

Grow Your Bottom Line Campaign
Paid Media

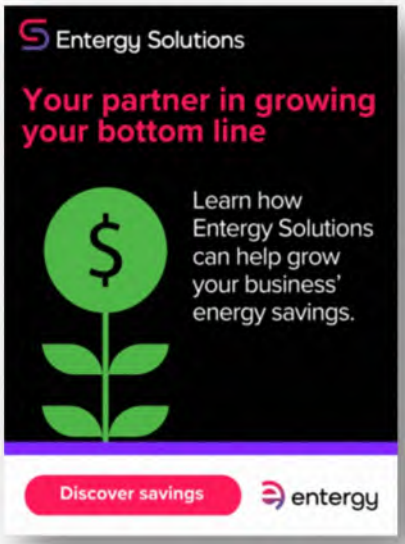
May 1 – August 19

Digital Ads				
Tactics	**Impressions**	**Reach**	**Clicks**	**CTR**
Local News Site Banner Ads *(May 1 – 31)*	203,967	-	96	.07%
The Daily Voice Newsletter Banner Ad *(May 1 – August 19)*	-	5,000	100	-

Radio Ads		
Tactic	**Spots**	**# of Stations**
Radio :30 Ad Spots *(June 1 – 30)*	10 spots per week per station	21

Radio Stations:

KANE — 1240 AM: New Iberia, LA, KAPB — 97.7 FM: Marksville, LA, KASO — 1240 AM: Minden, LA, KCLF — 1500 AM: New Roads, LA, KDBH — 97.3 FM: Natchitoches, LA, KEUN — 1490 AM: Eunice, LA, KFNV — 107.1 FM: Ferriday/Vidalia, LA, KGGM — 93.9 FM: Delhi, LA, KJAE — 93.5 FM: Leesville, LA, KJNA — 102.7 FM: Jena, LA, KJVC — 92.7 FM: Mansfield, LA, KLIL — 92.1 FM: Moreauville, LA, KMAR — 95.9 FM: Winnsboro, LA, KMLB — 540 AM: Monroe, LA, KMBS — 1310 AM: West Monroe, LA, KOGM — 107.1 FM: Opelousas, LA, KSIG — 1450 AM: Crowley, LA, KTIB — 640 AM: Thibodaux, LA, KTKC — 92.9 FM: Springhill, LA, KVPI — 92.5FM: Ville Platte, LA, KWCL — 96.7 FM: Oak Grove, LA



AG RADIO 30-SECOND SCRIPT

[Upbeat music playing throughout]

Don
[energetic and engaging tone]
Did you know upgrading to energy-efficient equipment can save farmers thirty percent or more on electricity costs?

Entergy Solutions is here to help grow your bottom line by offering cash incentives for energy-saving upgrades to your farm or agribusiness. The Agriculture Program offers energy-saving upgrades tailored to your specific needs.

Lower your energy use, reduce expenses, and operate in a more comfortable and efficient environment. Visit Entergy Solutions LA dot com today and start saving. That's Entergy Solutions LA dot com.

Entergy Solutions: your partner in growing your bottom line.

[Music fades out]

MERYL KENNEDY AG RADIO 30-SECOND SCRIPT

[Upbeat music playing throughout]

Meryl
[Confident and warm tone]
Hi, I'm Meryl Kennedy, CEO and Founder of 4Sisters Rice. We recently took advantage of Entergy Solutions' lighting and refrigeration upgrade incentives at our facilities. Since completing the upgrades, we've seen a decrease in operating costs, significant cost savings to our monthly electricity bill, and improved efficiency on our farms.

Entergy Solutions provides cash incentives to Entergy Louisiana customers for energy-saving upgrades to your farm or agribusiness to help you save money and energy now and into the future.

Discover how Entergy Solutions can help your business thrive, as they did mine. Visit Entergy Solutions LA dot com today.

Entergy Solutions: your partner in growing your bottom line.

[Music fades out]

Meryl Kennedy Ag Radio 30-Second Spot v2 (1).wav

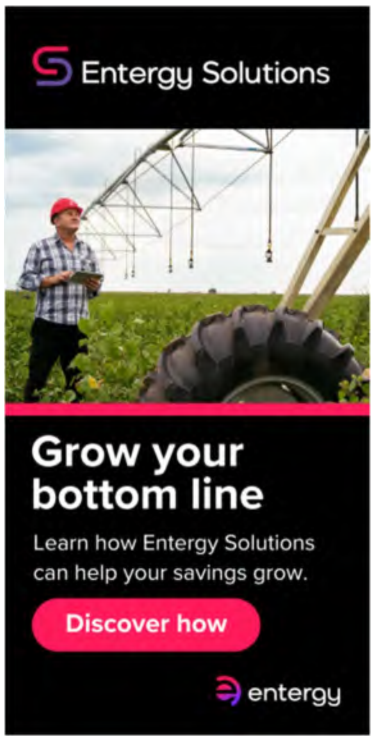
Digital Ads:

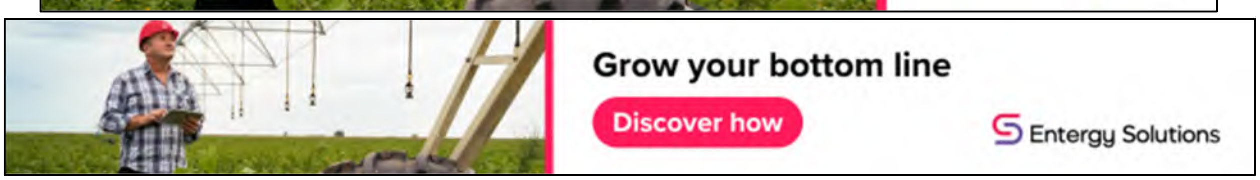
1. Local News Site Banner ad: We placed banner ads in a network of (29) local news websites across Louisiana in the ELL territory.

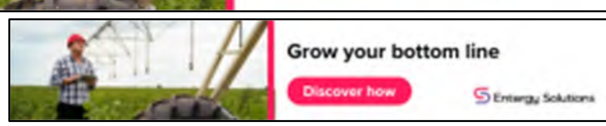
2. The Daily Voice Newsletter: We placed a banner ad in The Daily Voice, the Louisiana agriculture e-newsletter.

Radio Ads:

1. Radio Spots: We produced two :30 second ad spots to air on 21 stations in the ELL territory. The Meryl Kennedy Rice testimonial - "Grow Your Bottom Line" became a multi-channeled campaign after its radio debut.





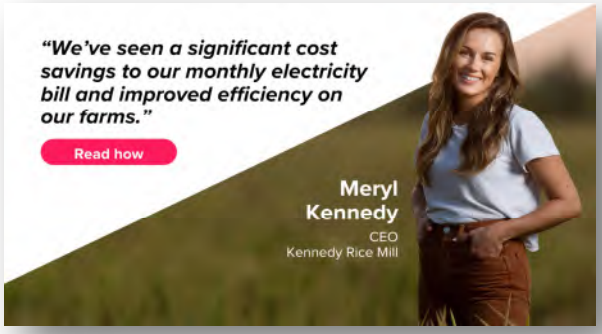


Kennedy Rice Campaign

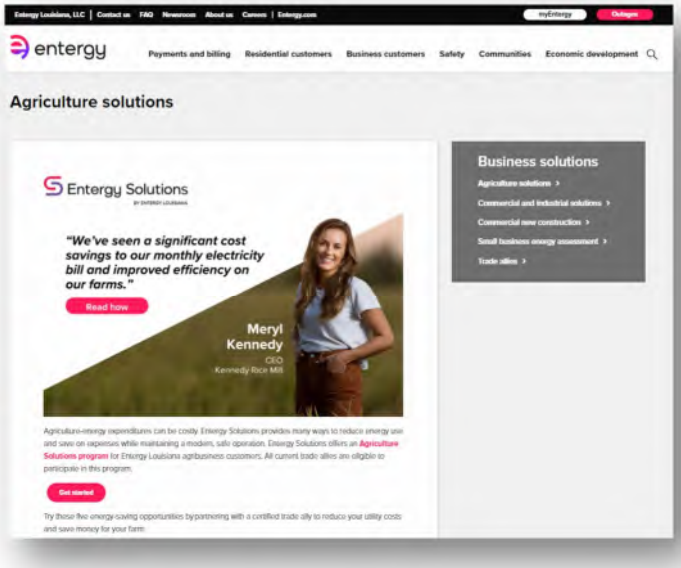
Owned Media

Website: Hero Image

The Kennedy Rice hero image was designed to align with the media campaign driving Entergy customers to the AG web page to learn more about the case study. The image lives on the Agriculture Solutions page as a hero image: https://www.entergy-louisiana.com/energy-efficiency-program/agriculture/.



Website: Dedicated section to Kennedy Rice project



Case Study

Kennedy Rice

$12,000
in incentives

Estimated
84,000 kWh
saved annually

Estimated
$12,500
saved annually

Kennedy Rice — Mer Rouge, LA

Project summary: Kennedy Rice is a family-owned business, founded in 1964. The company specializes in providing high-quality rice products and are known for their commitment and dedication to preserving traditional rice varieties with a focus on eco-friendly farming methods. Kennedy Rice ensures that their products are not only delicious but also contribute to a healthier and more sustainable food system. With a strong mission, the company was a natural fit for the Entergy Solutions program. Together, Kennedy Rice completed a number of energy-efficient upgrades to their farming facilities that have not only saved energy and money but help provide a more sustainable and eco-friendly product to consumers.

Challenge: Develop a cost-effective lighting upgrade. Install an efficient cold-storage area.

The Entergy Solution: LED lighting was selected to replace metal halide and fluorescent fixtures. LEDs consume less electricity, provide better light quality and last longer than older lighting technology. A high efficiency chiller was selected for the cold-storage area. The chiller will provide years of efficient service. Entergy Solutions provided cash incentives toward the efficient LED lighting and chiller purchases.

"We recently took advantage of Entergy Solutions' lighting and refrigeration upgrade incentives at our facilities. Since completing the upgrades, we've seen a decrease in operating costs, significant cost savings to our monthly electricity bill and improved efficiency on our farms."

Meryl Kennedy, CEO of Kennedy Rice Mill

Ready to save energy and money? Contact Entergy Solutions today to speak with an energy advisor about available incentives. Call **844-829-1300**, visit **entergysolutionsla.com** or email **info@entergysolutionsla.com** for more information.

entergy

Paid Media

August 19–December 6

Digital Ads				
Tactics	**Impressions**	**Reach**	**Clicks**	**CTR**
The Daily Voice Newsletter Banner Ad *(August 19 – October 29)*	-	5,000	206	-

Sponsored Video Segment		
Tactic	**Impressions / Views / Reach**	**# of Stations / Placements**
This Week in Louisiana Agriculture TV programming *(November 8)*	Played once across network that air the TWILA program	16
YouTube *(November 8 – December 6)*	828 impressions / 62 views / N/A reach	-
Facebook *(November 11 – December 6)*	N/A impressions / 525 views / 559 reach	-

TWILA

Shreveport
KPXJ CW 21 in HD
Kenner
K-TV 76 The Kenner Channel
St. Bernard Parish
Check Local Listings
Jefferson
JPTV
Lake Charles
KVHP FOX29
Gonzales
REV Channel 4
Alexandria
KALB-TV 5 in HD
St. Tammany Parish
Access St. Tammany
Channel 10 in HD

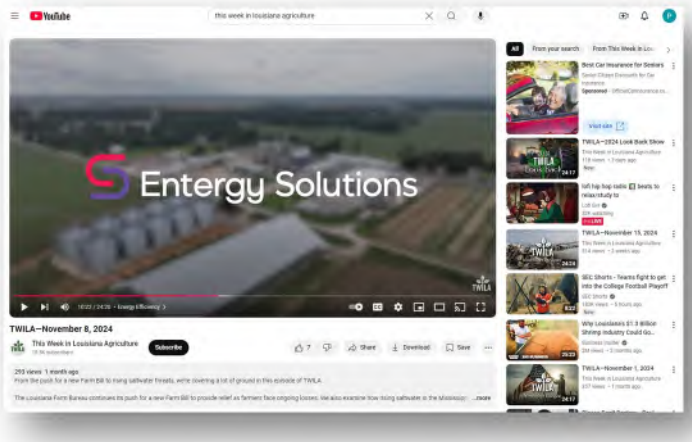
Nationwide
RFD-TV
Mt. Hermon Web-TV
Watch anytime under
"Farm & Wildlife Programs"
Baton Rouge
WAFB
Monroe
KNOE-TV 8 in HD
Opelousas
KDCG-TV 22 in HD
Hammond
Southeastern Channel 13
Terrebonne Parish
TPTV
Lafayette
KATC-TV in HD

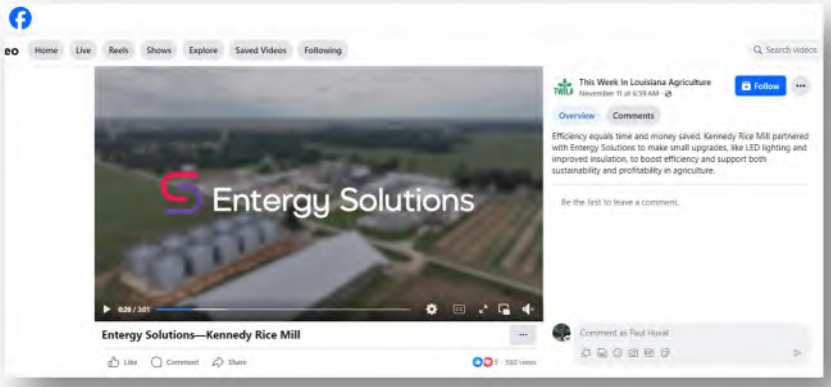
Digital Ads:

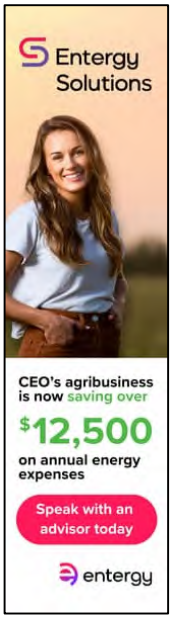
1. The Daily Voice Newsletter: We placed a banner ad in The Daily Voice, the Louisiana agriculture news e-newsletter.

Sponsored Video Segment:

1. TV programming: This Week In Louisiana Agriculture (TWILA) featured the interview with Meryl Kennedy discussing the impact of the Entergy Solutions Program on her operations.
2. YouTube: TWILA published the program on their YouTube channel on November 8th.
    - *The screenshot to the right was taken on Dec 9th. The analytics on the previous page were officially provided by TWILA on Dec 6th.*
3. Facebook: TWILA published the stand-alone segment to their Facebook page on Nov 11th and the full program on Nov 8th.







Kennedy Rice Video Commercial

Entergy Solutions PKG (3).mp4	Entergy Solutions Slate Ending (2).mp4

Shareable Content

Louisiana agriculture benefits from energy-saving upgrades to enhance sustainability and reduce costs

Farming in Louisiana is more than just a livelihood; it's the backbone of local communities and a vital part of the state's economy. In this spirit, Kennedy Rice Mill, a prominent figure in Louisiana's rice production, has taken steps to improve both their energy efficiency and environmental impact by participating in the Entergy Solutions agribusiness program.

Founded in 1964, Kennedy Rice Mill has been a cornerstone of Louisiana agriculture, known for producing high-quality rice products that support local farmers and the economy. With a commitment to sustainable farming methods, Kennedy Rice Mill recently faced two major challenges crucial to maintaining the health and viability of their farming operations: upgrading lighting across their fields and installing a new cold-storage area.

Recognizing the importance of energy efficiency for both cost savings and reducing strain on natural resources, Kennedy Rice Mill embraced the Agriculture Solutions program offered by Entergy Solutions Louisiana. The program provided $12,000 in incentives to make energy-efficient improvements on the farm. These upgrades included LED lighting to replace older, less efficient fixtures. LEDs consume less electricity, provide better light quality for farm operations and last longer, reducing costs in the long run. Additionally, Entergy Solutions helped the farm acquire a high efficiency chiller for the cold-storage area, which supports the preservation of rice during post-harvest. This chiller uses advanced technology to enhance temperature control, increase reliability, reduce maintenance costs and lower carbon emissions.

These innovations reflect the growing shift in Louisiana's agriculture sector toward sustainable and economically viable farming practices. "Since completing the upgrades, we've seen a decrease in operating costs, significant cost savings to our monthly electricity bill and improved efficiency on our farms," said Meryl Kennedy, CEO of Kennedy Rice Mill.

The new equipment is expected to save approximately 84,000 kWh annually, translating to about $12,500 in yearly savings for the farm. Beyond financial benefits, the reduction in energy consumption helps lessen the strain on the local power grid, contributing to the overall sustainability of Louisiana's agriculture industry.

Agricultural businesses across Louisiana can benefit from similar energy-saving opportunities. Entergy Solutions' Agriculture Solutions program provides guidance, incentives and assistance for farms to make energy-efficient upgrades. With a straightforward process involving project identification, document submission and a review period, Louisiana farmers can take advantage of these benefits with ease. Local energy advisors from Entergy Solutions are also available to assist throughout each step.

For more information on how Louisiana agribusinesses can participate, visit Entergy Louisiana's agriculture energy efficiency program.

Newsletter Image

Paid Media: District 4

Targeting Results:

1. Top 10 locations by clicks:

Location	Impressions	Clicks	CTR
Baton Rouge, Louisiana	6,382	17	0.27%
Lafayette, Louisiana	13,995	16	0.11%
New Iberia, Louisiana	7,414	14	0.19%
Lake Charles, Louisiana	9,072	8	0.09%
Hammond, Louisiana	6,802	7	0.10%
Denham Springs, Louisiana	4,569	6	0.13%
Ponchatoula, Louisiana	2,901	6	0.21%
Opelousas, Louisiana	5,258	5	0.10%
Marrero, Louisiana	4,606	4	0.09%
Sulphur, Louisiana	2,941	4	0.14%

2. Top 10 audience segments by clicks:

Targeting Element	Impressions	Clicks	CTR
Demographics > Occupation > Business Owner	36,194	39	0.11%
B2B > Company Size > Medium to Large (501 - 1000 Employees)	27,822	31	0.11%
B2B > Company Size > XLarge (5001+ Employees)	33,245	26	0.08%
Data Alliance > Health & Wellness > Decision Makers > Medical Facilities & Professionals > Hospitals	26,808	22	0.08%
Business & Professional > Decision Makers > Manufacturing	10,036	14	0.14%
Audience Profiles > B2B Data - Industry > Manufacturing	10,132	7	0.07%
Business > Executives by Industry > Manufacturing > Industrial & Commercial Machinery	3,162	7	0.22%
B2B > Company Size > Large (1001-5000 Employees)	9,172	4	0.04%
Adstra > Business > Professionals by Industry > Manufacturing: Industrial & Commercial Machinery	5,683	4	0.07%
Audience Profiles > B2B Data - Industry > Construction > Contractors	4,328	4	0.09%

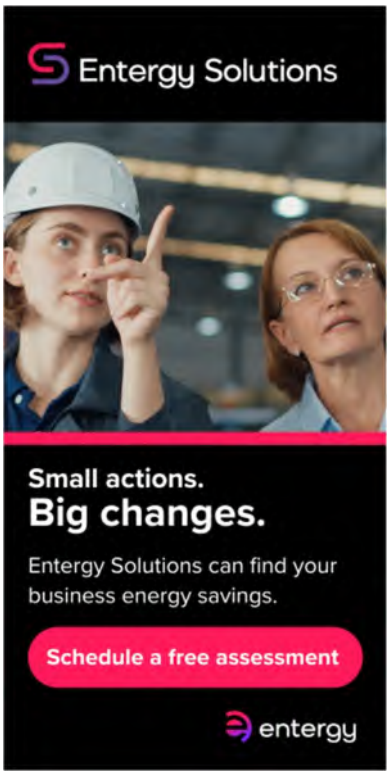
Commercial & Industrial

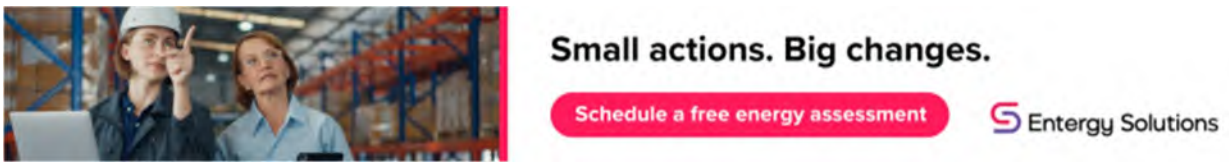
"Small Actions. Big changes" campaign

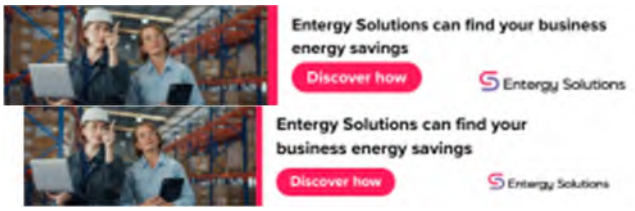
April 1-22, May 1-31

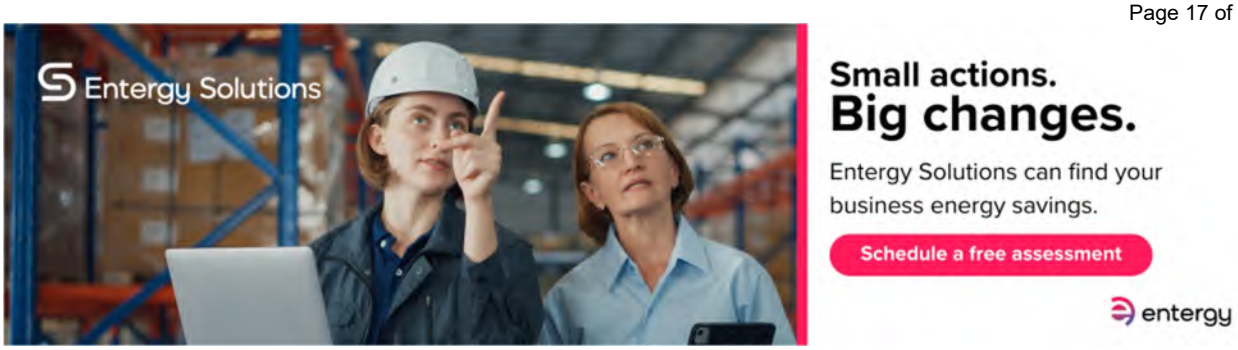
Paid Media

Digital Ads			
Tactics	**Impressions**	**Clicks**	**CTR**
Local News Site Banner Ads *(April 1 – 22, May 1 - 31)*	583,911	405	.07%









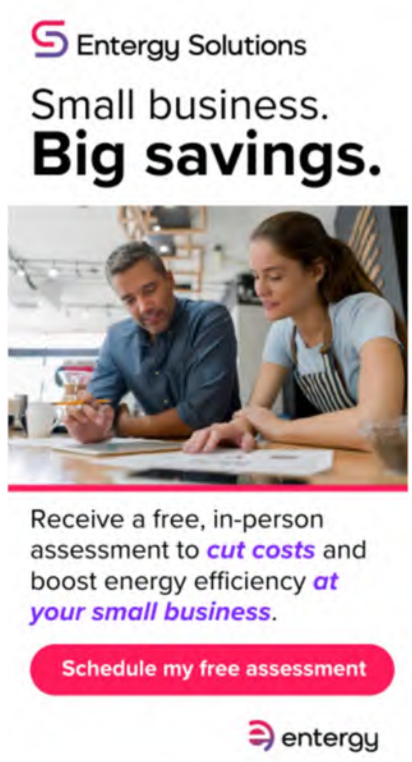
- The ads were placed on a network of (29) local news sites in the ELL territory.
    - We paused the C&I message briefly for the Earth Day promotion.

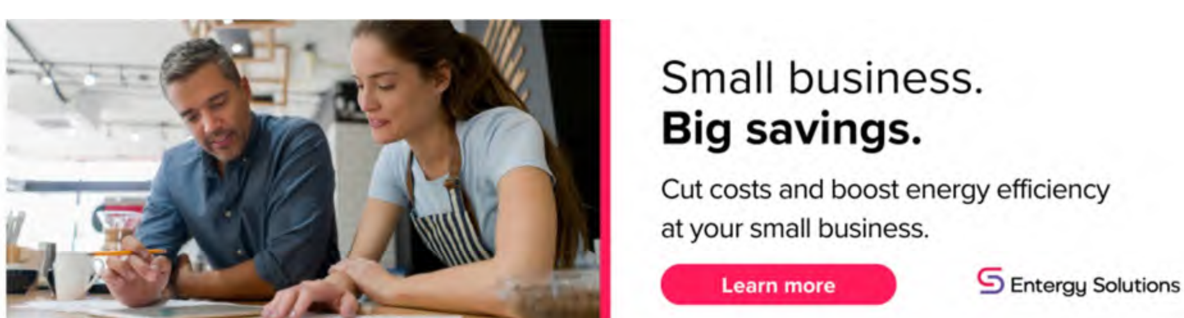
“Small Business. Big Savings” Campaign

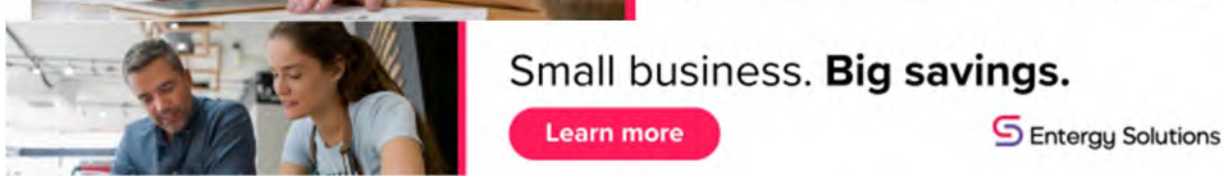
May 1-31, 2024

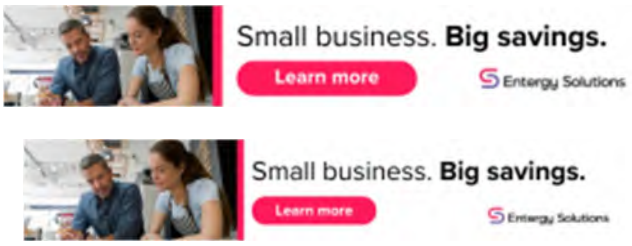
Paid Media

Digital Ads			
	Impressions	Clicks	CTR
	203,967	141	.07%









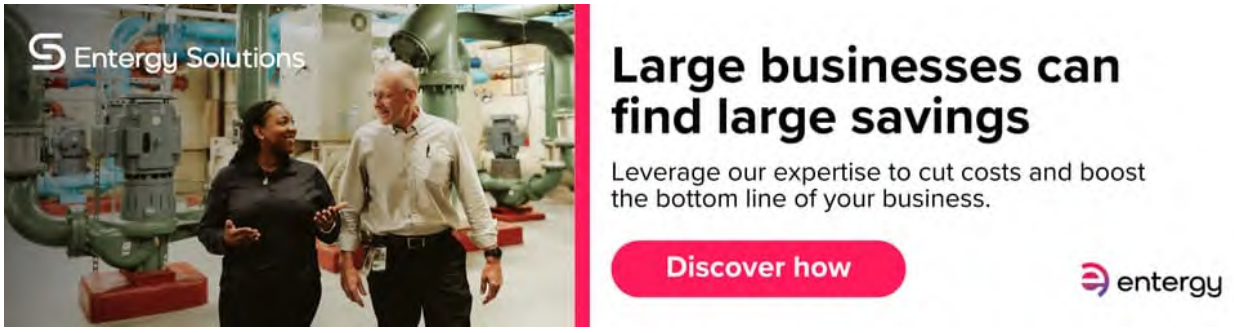
- The ads were placed on a network of (29) local news sites in the ELL territory rotating with the Small Actions. Big Changes.
- We added the message Small Business Big Savings to the campaign to target small to mid-size businesses.

Large Businesses Can Find Large Savings Campaign

June 1-July 31

Paid Media

Digital Ads			
Tactics	**Impressions**	**Clicks**	**CTR**
Local News Site Banner Ads *(June 1 - 30)*	153,458	58	.04%
Dominant Display A/B Test *(July 1 – 31)*	29,636	68	.23%



Local News Site Banner ads

- The ads were placed on a network of (29) local news sites across the ELL territory.
- In June, we targeted the Monroe and Lake Charles DMA to generate C&I leads, we allocated a heavy share of impressions on the top news sites in these markets. The Monroe area engaged with the message more than Lake Charles.

Dominant Display A/B Test

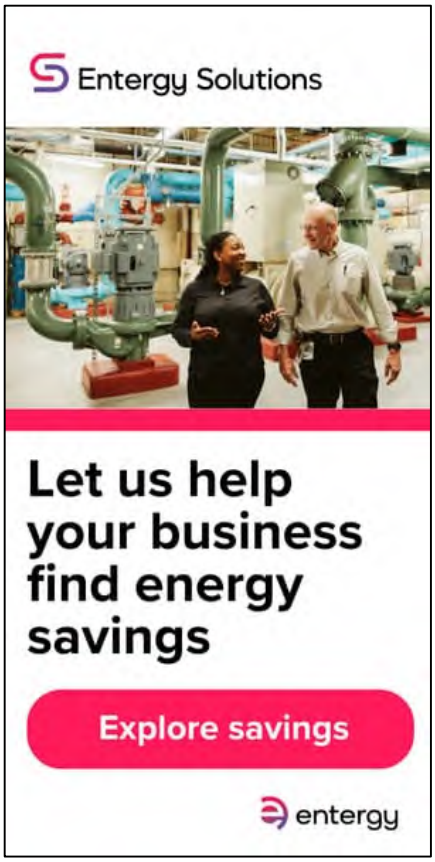
- Large business produced a higher click through rate than general business by 9.5%.

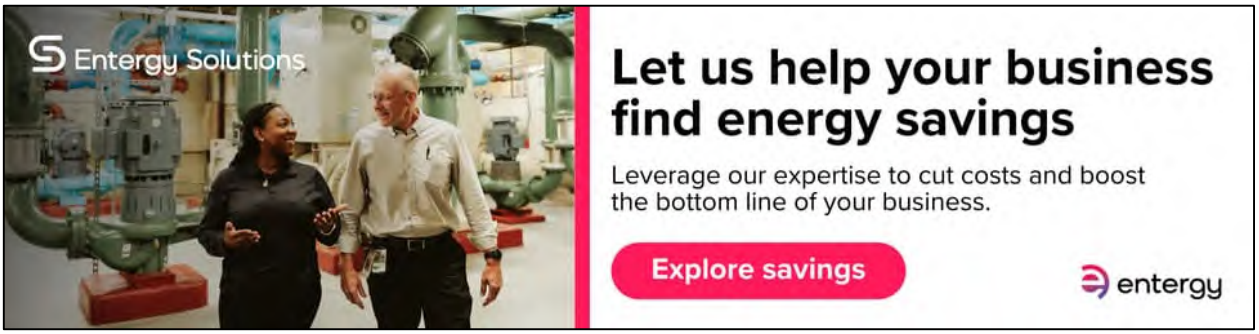
"Let Us Help Your Business Find Energy Savings" Campaign

June 1-July 31

Paid Media

Digital Ads			
Tactics	**Impressions**	**Clicks**	**CTR**
Local News Site Banner Ads *(June 1 - 30)*	153,458	58	.04%
Dominant Display A/B Test *(July 1 – 31)*	29,511	63	.21%





Local News Site Banner ads

- These ads were placed on a network of (29) local news sites across the ELL territory.
- In June, we targeted the Monroe and Lake Charles DMA to generate C&I leads, we allocated a heavy share of impressions on the top news sites in these markets. The Monroe area engaged more with the message than Lake Charles.

Dominant Display A/B test

- The general business message had a lower click through rate than the large business ads by 9%.

C&I A/B Test Targeting

Targeting Results:

1. Top 10 locations by clicks:

Location	Impressions	Clicks	CTR
Baton Rouge, Louisiana	9,274	22	0.24%
Lafayette, Louisiana	4,037	15	0.37%
Thibodaux, Louisiana	1,778	10	0.56%
Houma, Louisiana	2,369	7	0.30%
Lake Charles, Louisiana	2,097	7	0.33%
West Monroe, Louisiana	1,386	5	0.36%
Westwego, Louisiana	411	5	1.22%
Breaux Bridge, Louisiana	395	5	1.27%
Monroe, Louisiana	1,803	3	0.17%
Kenner, Louisiana	1,297	3	0.23%

2. Top 10 audience segments by clicks:

Targeting Element	Impressions	Clicks	CTR
Demographics > Occupation > Business Owner	15,475	28	0.18%
B2B > Company Size > Medium to Large (501 - 1000 Employees)	11,203	21	0.19%
Data Alliance > Health & Wellness > Decision Makers > Medical Facilities & Professionals > Hospitals	9,245	16	0.17%
Business & Professional > Decision Makers > Manufacturing	7,833	14	0.18%
B2B > Company Size > XLarge (5001+ Employees)	6,319	13	0.21%
Business > Executives by Industry > Manufacturing > Industrial & Commercial Machinery	4,009	12	0.30%
B2B > Company Size > Large (1001-5000 Employees)	2,502	5	0.20%
Data Alliance > Travel > Decision Makers > Accommodations > Type > Hotel & Motel	3,726	4	0.11%
B2B > Company > Function > Industry, Occupation or Career > Construction > Trade Contractors > Other Specialty Trade Contractors	1,289	4	0.31%
Business > Executive by Function > Engineering > Industrial & Mechanical	940	3	0.32%

C&I Client Testimonials

September 1-October 31

Digital Ads				
Tactics	**Impressions**	**Clicks**	**CTR**	**Video Completion Rate**
1012 Industry Report banner ads ***(September 1 – October 31)***	**31,375**	**25**	**.08%**	**-**
Dominant Display ***(September 3 – October 31)***	**245,238**	**278**	**.11%**	**-**
Pre-roll Video Ads ***(October 2 – October 31)***	**101,967**	**107**	**.1%**	**34.3%**

1012 Industry Report

- 1012 Industry Weekly is an e-newsletter reporting on industrial news across the 1012 corridor from Houston, Texas to New Orleans, Louisiana.
- The testimonial creative was rotated on Industry Weekly's e-newsletter sent to 5,000 industrial executives per week.

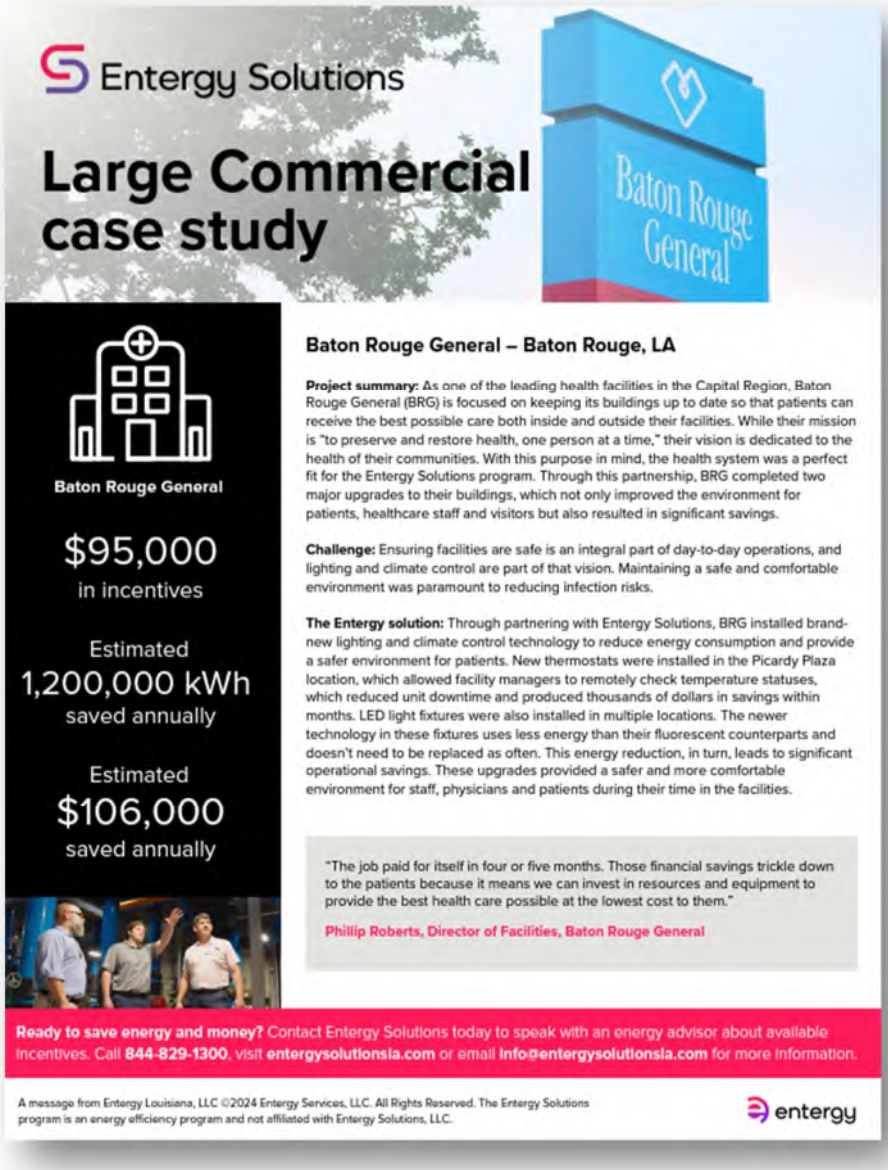
Dominant Display

- District 2,3, and 4 were identified as geographical areas we wanted to target for C&I leads.
  - Kennedy Rice Testimonial deployed in the LPSC District 4
  - Baton Rouge General Hospital deployed to the LPSC Districts 2 & 3

Pre-Roll Video

- We deployed the Baton Rouge General video in the ELL territory after its proven success on George's Media in the Greater Baton Rouge and Acadiana areas.

Baton Rouge General Campaign
Owned Media
Case Study



Paid Media


Entergy Solutions
Baton Rouge General
Now saving over
$100K
annually
on energy expenses
Speak with an advisor today
entergy


Entergy Solutions
Baton Rouge General
EMERGENCY
Now saving over
$100K
annually
on energy expenses
Speak with an advisor today
entergy


Entergy Solutions
Baton Rouge General
EMERGENCY
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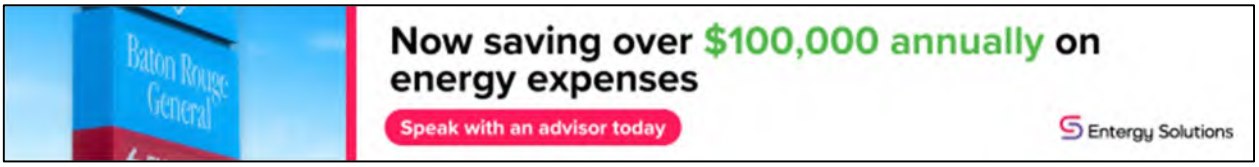
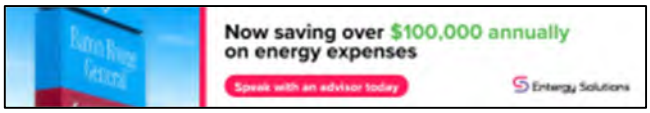
entergy


Baton Rouge General
Now saving over $100,000 annually on energy expenses
Speak with an advisor today
Entergy Solutions


Now saving over $100,000 annually
on energy expenses
Entergy Solutions


Now saving over $100,000 annually
on energy expenses
Entergy Solutions

Targeting Results:

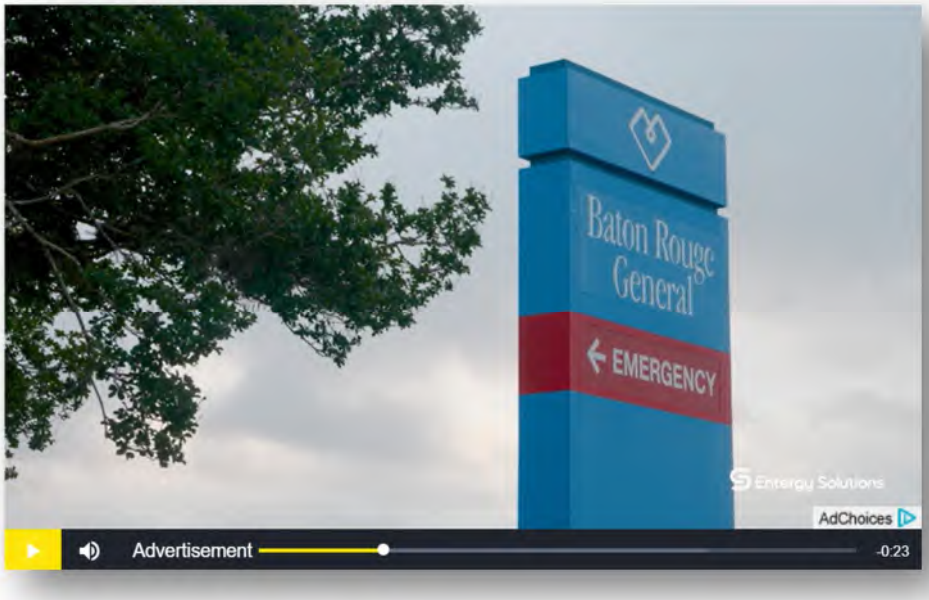
1. Top 10 locations by clicks:

Location	Impressions	Clicks	CTR
Baton Rouge, Louisiana	16,565	21	0.13%
Lafayette, Louisiana	13,605	15	0.11%
Houma, Louisiana	4,083	7	0.17%
Lake Charles, Louisiana	3,911	5	0.13%
New Iberia, Louisiana	3,823	5	0.13%
Metairie, Louisiana	5,544	4	0.07%
Kenner, Louisiana	3,003	4	0.13%
Broussard, Louisiana	1,442	4	0.28%
Breaux Bridge, Louisiana	1,380	4	0.29%
Monroe, Louisiana	3,227	3	0.09%

2. Top 10 audience segments by clicks:

Targeting Element	Impressions	Clicks	CTR
Demographics > Occupation > Business Owner	37,118	44	0.12%
B2B > Company Size > XLarge (5001+ Employees)	34,117	40	0.12%
Data Alliance > Health & Wellness > Decision Makers > Medical Facilities & Professionals > Hospitals	29,272	40	0.14%
B2B > Company Size > Medium to Large (501 - 1000 Employees)	29,569	33	0.11%
Business & Professional > Decision Makers > Manufacturing	9,266	18	0.19%
Audience Profiles > B2B Data - Industry > Manufacturing	7,893	13	0.16%
Business > Executives by Industry > Manufacturing > Industrial & Commercial Machinery	2,603	7	0.27%
B2B > Company Size > Large (1001-5000 Employees)	9,812	5	0.05%
B2B > Business Decision Makers > Construction / Engineering	5,000	5	0.10%
B2B > Business Decision Makers > Agriculture / Manufacturing	1,472	5	0.34%

Paid Media – Pre-Roll



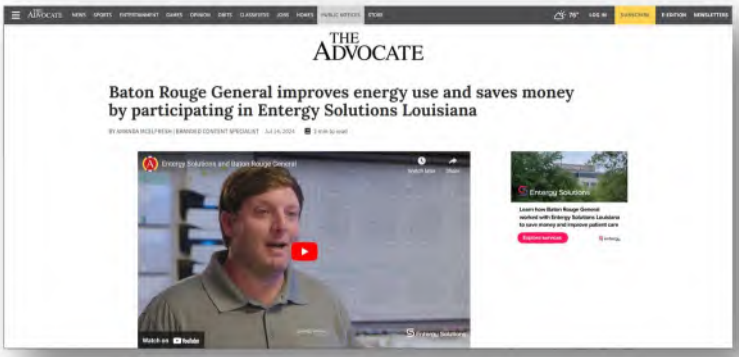
Targeting Results:

1. Top 10 locations by clicks:

Location	Impressions	Clicks	CTR
Baton Rouge, Louisiana	15,485	13	0.08%
Lafayette, Louisiana	8,270	9	0.11%
Metairie, Louisiana	5,394	7	0.13%
Maringouin, Louisiana	1,162	5	0.43%
Denham Springs, Louisiana	2,608	4	0.15%
New Iberia, Louisiana	1,661	4	0.24%
Hammond, Louisiana	2,690	3	0.11%
Kenner, Louisiana	2,488	3	0.12%
Prairieville, Louisiana	2,300	3	0.13%
Ponchatoula, Louisiana	1,103	3	0.27%

Baton Rouge General – George's Media Package

July 14-October 7



Acadiana Advocate
July 14

Baton Rouge Advocate
July 14

Ascension Advocate
July 17

Livingston Advocate
July 17

Zachary Advocate
July 17

theadvocate.com 24 Hour High Impact Reveal w/ :30 video

July 16, 2024

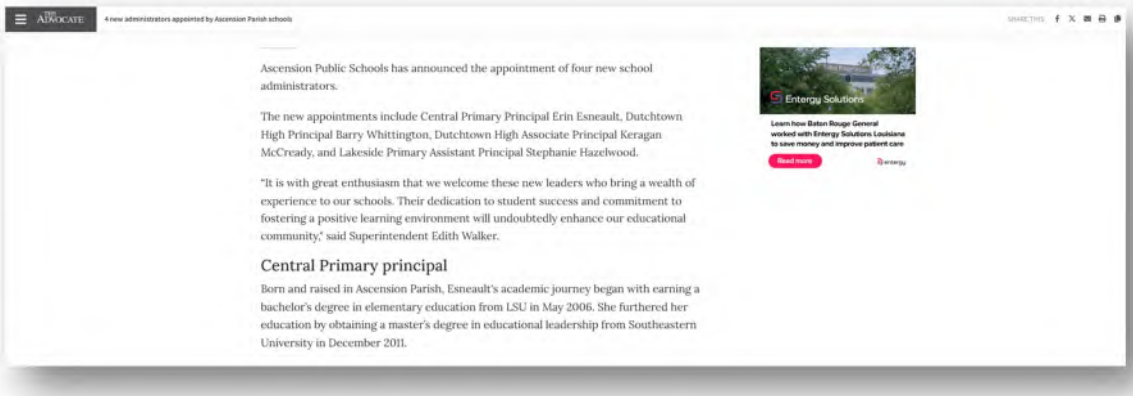
August 22, 2024

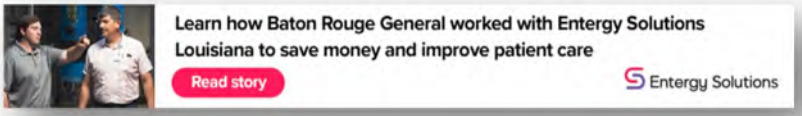
August 25, 2024

Baton Rouge General Video Commercial

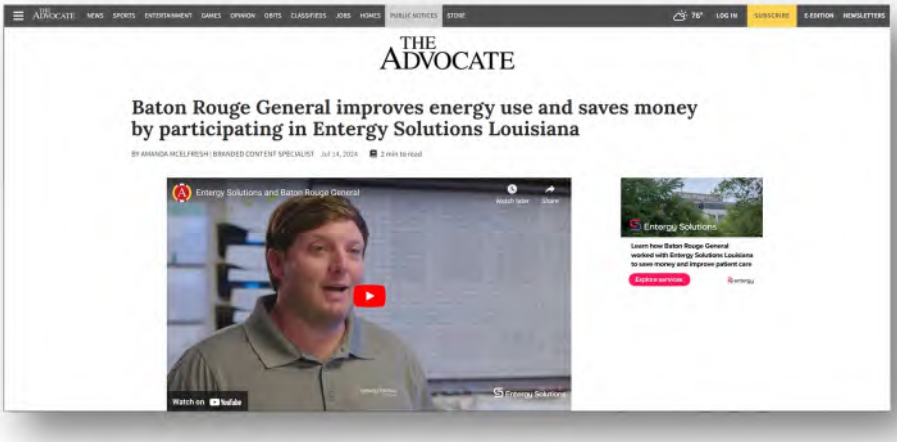
Theadvocate.com Banner Ads

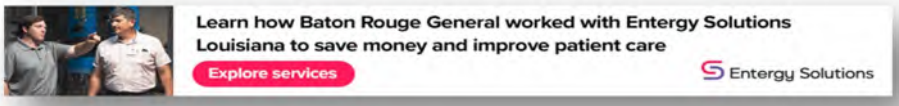
Article Promotion Ads





Ads Directing to Entergy Solutions Website





Cobranded Email

October 7, 2024

Campaign Summary

Name: Entergy Energy Smart Melara - Email - October 7, 2024

From/Brand:	Entergy Solutions Louisiana		
Headline:	Is Your Facility Maximizing Energy Efficiency?		
Broadcast Date:	10/07/2024		
Audience:	50,000	**ID:**	2171447
Views:	8,282	**Clicks:**	877
View %:	16.56%	**Click %:**	1.75%

Campaign Creative

CAMPAIGN STATS

Views | 16.56 % *Total Views 8,282*

Clicks | 1.75 % *Total Clicks 877*

CTVR | 10.59 %

Clicks by Device

Desktop	45.15%	396
Mobile	54.85%	481

CLICKS BY WEB BROWSER

560	Chrome	94	Edge	63	Firefox	144	Safari	16	Other

LINK SUMMARY

Index	Link URL	Clicks	%
1	https://www.entergy-louisiana.com/energy-efficiency-program/?utm_source=tadv&utm_medium=email&utm_campaign=brg	127	14.48%
2	https://www.theadvocate.com/sponsored/baton_rouge/entergy_solutions_louisiana/baton-rouge-general-improves-energy-use-and-saves-money-by-participating-in-entergy-solutions-louisiana/article_c289a810-2346-11ef-86bc-57e39f83c8a6.html?utm_source=tadv&utm_medium=email&utm_campaign=brg	402	45.84%
3	https://www.theadvocate.com/sponsored/baton_rouge/entergy_solutions_louisiana/baton-rouge-general-improves-energy-use-and-saves-money-by-participating-in-entergy-solutions-louisiana/article_c289a810-2346-11ef-86bc-57e39f83c8a6.html?utm_source=tadv&utm_medium=email&utm_campaign=brg	41	4.68%
4	https://www.theadvocate.com/sponsored/baton_rouge/entergy_solutions_louisiana/baton-rouge-general-improves-energy-use-and-saves-money-by-participating-in-entergy-solutions-louisiana/article_c289a810-2346-11ef-86bc-57e39f83c8a6.html?utm_source=tadv&utm_medium=email&utm_campaign=brg	154	17.56%
5	https://www.theadvocate.com/sponsored/baton_rouge/entergy_solutions_louisiana/baton-rouge-general-improves-energy-use-and-saves-money-by-participating-in-entergy-solutions-louisiana/article_c289a810-2346-11ef-86bc-57e39f83c8a6.html?utm_source=tadv&utm_medium=email&utm_campaign=brg	121	13.80%
6	https://www.entergysolutionsla.com/?utm_source=tadv&utm_medium=email&utm_campaign=brg	18	2.05%
7	https://www.entergy-louisiana.com/energy-efficiency-program/?utm_source=tadv&utm_medium=email&utm_campaign=brg	14	1.60%
		877	

Media Package Paid Media Results

Digital Ads

Tactics	Impressions	Clicks	CTR	Engagements
Theadvocate.com directed to BRG article banner ads *(July 14 – August 14)*	100,947	144	.14%	N/A
Theadvocate.com directed to Entergy Solutions banner ads *(July 14 – August 14)*	9,041	29	.32%	N/A
Theadvocate.com 24-hour high impact reveal w/ :30 video *(July 16, August 22 & 25)*	76,459	331	.43%	N/A
The Advocate Facebook article promotion *(posted July 16)*	55,032	3,090	5.61%	1,312
The Advocate co-branded email *(deployed October 7)*	8,282	877	1.75%	N/A

Sponsored Content

Tactics	Digital Reads / Print Circulation
Digital sponsored article w/ video testimonial *(published July 14)*	2,420 digital reads
Print article w/ quarter page ad in the Baton Rouge & Acadiana Advocate *(published July 14)*	27,157 print circulation + 23 QR code scans to article
Print article in Ascension, Livingston, & Zachary Advocate *(Published July 17)*	31,683 print circulation

Commercial Case Studies

BASF

BASF

$100,000
in incentives

Estimated
1,244,150 kWh
saved annually

Estimated
$82,736
saved annually

entergy

BASF – Geismar, LA

Project summary: BASF Geismar's Main Administration Building had obsolete pneumatic control systems that were unreliable and unable to effectively regulate static pressure which led to areas of inconsistent temperature, including hot and cold spots. The mechanical HVAC equipment operated continuously (24/7) to maintain the building at the desired temperature. The pneumatic controls lacked the capability to reduce system output during unoccupied periods.

Challenge: BASF Geismar administration building mechanical equipment was running 24/7. By reducing the operation time of this equipment, energy usage has been reduced significantly.

The Entergy Solution: Bernhard completed a controls system retrofit to upgrade the pneumatic infrastructure to Direct Digital Controls (DDC) for a chiller, one Variable Frequency Driver (VFD), two pumps, three exhaust fans, five Air Handler Units (AHU) for the AHU and eight Variable Air Volume (VAV) boxes with electric reheat. All this equipment (which used to run 24/7) is now scheduled to run from 5 a.m. to 7 p.m., Monday through Friday. BASF can now monitor airflow and building status through the control system's human interface. This capability enables assessment of the building from both airflow and static pressure viewpoints. As a result, problem areas can be identified and repairs performed before issues escalate.

"These HVAC upgrades are an example of how cost saving and sustainability can go hand in hand. By investing in digital controls and optimizing our energy use, we're not only achieving cost savings, but also making a positive impact on the environment."

Emory Ficklin
BASF HVAC Refrigeration Specialist

Ready to save energy and money? Contact Entergy Solutions today to speak with an energy advisor about available incentives. Call **844-829-1300**, visit **entergysolutionsla.com** or email **info@entergysolutionsla.com** for more information.

Baton Rouge General

Entergy Solutions

Large Commercial case study

Baton Rouge General

$95,000
in incentives

Estimated
1,200,000 kWh
saved annually

Estimated
$106,000
saved annually

Baton Rouge General – Baton Rouge, LA

Project summary: As one of the leading health facilities in the Capital Region, Baton Rouge General (BRG) is focused on keeping its buildings up to date so that patients can receive the best possible care both inside and outside their facilities. While their mission is "to preserve and restore health, one person at a time," their vision is dedicated to the health of their communities. With this purpose in mind, the health system was a perfect fit for the Entergy Solutions program. Through this partnership, BRG completed two major upgrades to their buildings, which not only improved the environment for patients, healthcare staff and visitors but also resulted in significant savings.

Challenge: Ensuring facilities are safe is an integral part of day-to-day operations, and lighting and climate control are part of that vision. Maintaining a safe and comfortable environment was paramount to reducing infection risks.

The Entergy solution: Through partnering with Entergy Solutions, BRG installed brand-new lighting and climate control technology to reduce energy consumption and provide a safer environment for patients. New thermostats were installed in the Picardy Plaza location, which allowed facility managers to remotely check temperature statuses, which reduced unit downtime and produced thousands of dollars in savings within months. LED light fixtures were also installed in multiple locations. The newer technology in these fixtures uses less energy than their fluorescent counterparts and doesn't need to be replaced as often. This energy reduction, in turn, leads to significant operational savings. These upgrades provided a safer and more comfortable environment for staff, physicians and patients during their time in the facilities.

"The job paid for itself in four or five months. Those financial savings trickle down to the patients because it means we can invest in resources and equipment to provide the best health care possible at the lowest cost to them."

Phillip Roberts, Director of Facilities, Baton Rouge General

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Grambling Case Study

Higher education case study

GRAMBLING STATE UNIVERSITY

$100,000
in incentives

Estimated
2,194,000 kWh
saved annually

Estimated
$165,000
saved annually

entergy

Grambling State University — Grambling, LA

Project Summary: Grambling State University (GSU) is a historically black, public institution that offers undergraduate and graduate programs. Entergy Solutions worked with GSU in 2022-23 and provided cash incentives toward air conditioning upgrades in seven buildings.

Challenge: Aging chillers and a failing building automation system caused increased maintenance attention. Uncomfortable conditions are the result of unreliable equipment.

The Entergy Solution: Grambling State University teamed up with its award-winning Entergy Solutions trade ally, CMC Corporate Solutions, to provide new Daiken chillers and a Distech building automation system commissioned in this multi-year project. CMC used the latest technologies that will deliver efficient cooling over the lifetime of the equipment.

"This project resulted in a better educational environment for the entire GSU community. The faculty and students will enjoy improved indoor air quality with lowered energy usage. And students can focus on their studies, not on being uncomfortable."

Dillon Teal, Sr. Energy Advisor, Entergy Solutions

About Entergy Solutions

Entergy Solutions is a program that gives incentives to Entergy Louisiana customers to perform energy-saving upgrades in their facilities. The program offers many ways to decrease energy use and save on expenses while maintaining a modern, safe operation.

Save energy and money through upgrades such as:

- HVAC equipment and controls
- Refrigeration systems
- Lighting systems
- Compressed air systems
- Motors and pumps
- Building automation systems

Ready to save energy and money? Contact Entergy Solutions today to speak with an energy advisor about available incentives. Call 844-829-1300, visit entergysolutionsla.com or email info@entergysolutionsla.com.

Kennedy Rice

Kennedy Rice

$12,000
in incentives

Estimated
84,000 kWh
saved annually

Estimated
$12,500
saved annually

Kennedy Rice — Mer Rouge, LA

Project summary: Kennedy Rice is a family-owned business, founded in 1964. The company specializes in providing high-quality rice products and are known for their commitment and dedication to preserving traditional rice varieties with a focus on eco-friendly farming methods. Kennedy Rice ensures that their products are not only delicious but also contribute to a healthier and more sustainable food system. With a strong mission, the company was a natural fit for the Entergy Solutions program. Together, Kennedy Rice completed a number of energy-efficient upgrades to their farming facilities that have not only saved energy and money but help provide a more sustainable and eco-friendly product to consumers.

Challenge: Develop a cost-effective lighting upgrade. Install an efficient cold-storage area.

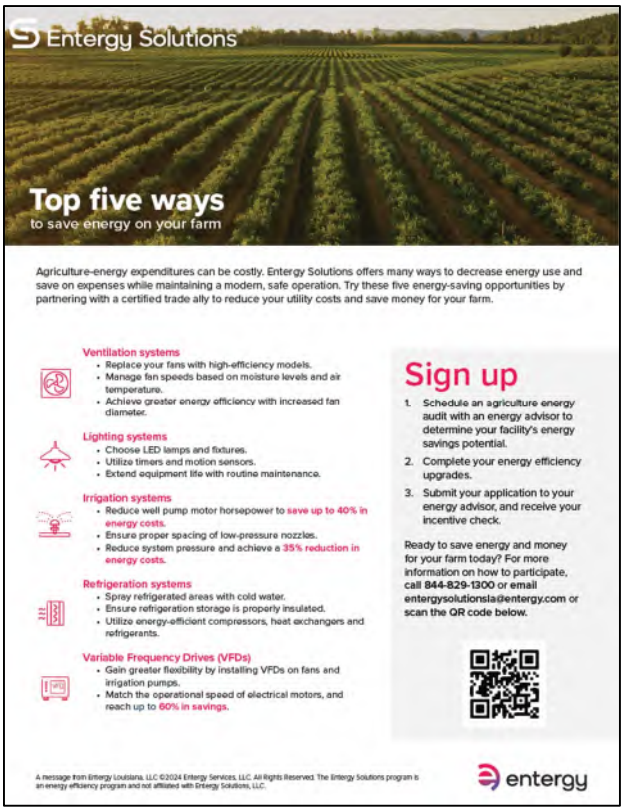
The Entergy Solution: LED lighting was selected to replace metal halide and fluorescent fixtures. LEDs consume less electricity, provide better light quality and last longer than older lighting technology. A high efficiency chiller was selected for the cold-storage area. The chiller will provide years of efficient service. Entergy Solutions provided cash incentives toward the efficient LED lighting and chiller purchases.

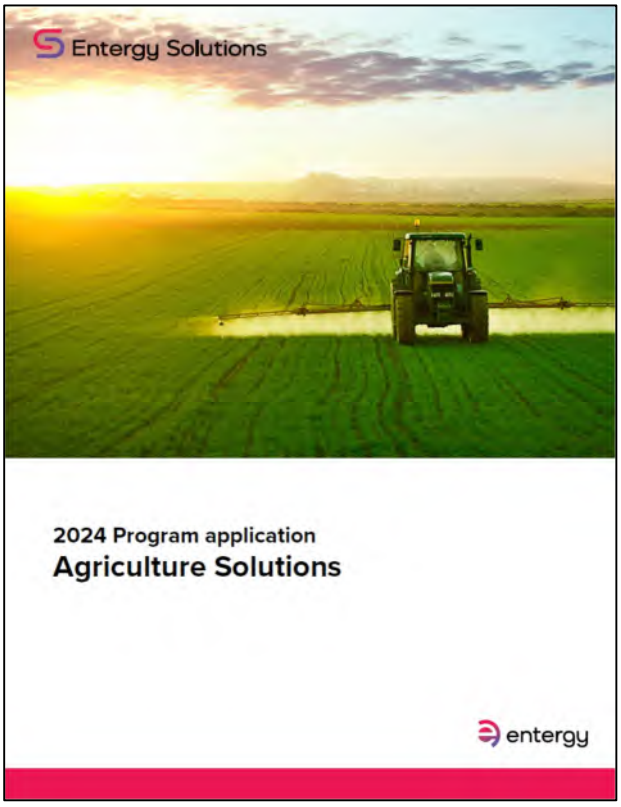
"We recently took advantage of Entergy Solutions' lighting and refrigeration upgrade incentives at our facilities. Since completing the upgrades, we've seen a decrease in operating costs, significant cost savings to our monthly electricity bill and improved efficiency on our farms."

Meryl Kennedy, CEO of Kennedy Rice Mill

Ready to save energy and money? Contact Entergy Solutions today to speak with an energy advisor about available incentives. Call **844-829-1300**, visit **entergysolutionsla.com** or email **info@entergysolutionsla.com** for more information.

Commercial Collateral
Agriculture





Commercial & Industrial

Entergy Solutions

Commercial & Industrial Solutions prescriptive incentives

Prescriptive incentives are paid a standard rate for qualifying equipment. If equipment is not included on this prescriptive incentive list, the project will be processed as a custom incentive. Complete application package and program pre-approval are still required for prescriptive projects. Visit **entergysolutionsla.com** for the prescriptive incentive calculator.

Incentive rates

As of January 1, 2024 (may change at program's discretion).

Prescriptive incentive rates	Small commercial	Large commercial
HVAC*		
A/C unit, <5.4 tons (12.3 EER/14.5 SEER2 min. efficiency)	$18 per ton	$17 per ton
A/C unit, 5.4-11.24 tons (12.2 EER/14.8 SEER min. efficiency)	$45 per ton	$42 per ton
A/C unit, 11.25-19.99 tons (12.2 EER/14.8 SEER)	$70 per ton	$66 per ton
A/C unit, ≥20 tons (10.8 EER/ 13.5 SEER)	$46 per ton	$43 per ton
Heat pump, <5.4 tons (12.3 EER/ 14.5 SEER2/8.0 HSPF2 min. efficiency)	$45 per ton	$42 per ton
Heat pump, 5.4-11.24 tons (11.3 EER/ 14.5 SEER/12.0 HSPF)	$32 per ton	$30 per ton
Heat pump, 11.25-19.99 tons (10.9 EER/ 14.0 SEER/12.0 HSPF)	$39 per ton	$37 per ton
Heat pump, ≥20 tons (10.3 EER/ 13.0 SEER/12.0 HSPF)	$69 per ton	$64 per ton
Guest room energy management controls	$90 per room	$80 per room
HVAC tune-up – commercial (A/C and heat pump units)	$225-$2,500 per unit	$225-$2,500 per unit
HVAC tune-up – commercial chillers	$9-15 per ton	$5-9 per ton
Duct sealing	$0.70 per CFM reduced	$0.65 per CFM reduced
Air-cooled chiller <150 tons (min. eff. 1.18 kW/ton full load & 0.76 kW/ton IPLV)	$67 per ton	$63 per ton
Air-cooled chiller ≥150 tons (min. eff. 1.18 kW/ton full load & 0.75 kW/ton IPLV)	$65 per ton	$61 per ton
Water-cooled screw/scroll chiller <75 tons (min. eff. 0.74 kW/ton full load & 0.50 kW/ton IPLV)	$43 per ton	$41 per ton
Water-cooled screw/scroll chiller 75-149 tons (min. eff. 0.71 kW/ton full load & 0.49 kW/ton IPLV)	$42 per ton	$39 per ton
Water-cooled screw/scroll chiller 150-299 tons (min. eff. 0.65 kW/ton full load & 0.44 kW/ton IPLV)	$47 per ton	$44 per ton
Water-cooled screw/scroll chiller ≥300 tons (min. eff. 0.57 kW/ton full load & 0.41 kW/ton IPLV)	$43 per ton	$41 per ton
Water-cooled centrifugal <300 tons (min. eff. 0.6 kW/ton full load & 0.40 kW/ton IPLV)	$66 per ton	$61 per ton
Water-cooled centrifugal 300-599 tons (min. eff. 0.55 kW/ton full load & 0.39 kW/ton IPLV)	$56 per ton	$53 per ton
Water-cooled centrifugal ≥600 tons (min. eff. 0.55 kW/ton full load & 0.38 kW/ton IPLV)	$53 per ton	$50 per ton
ECM evaporator fan (HVAC)	$57 per fan	$53 per fan
Food service/retail/refrigeration		
Evaporator fan controls (refrigeration)	$65 per fan	$60 per fan
Anti-sweat heaters (refrigeration)	$40 per linear ft.	$35 per linear ft.
ECM evaporator fan (refrigeration)	$133 per fan	$125 per fan
Night cover (refrigeration)	$20 per linear ft.	$20 per linear ft.
Solid door reach-ins (refrigeration)	$65 per unit	$60 per unit
Strip curtains (refrigeration)	$12 per sq. ft.	$10 per sq. ft.
Commercial kitchen**		
Commercial dishwasher – ENERGY STAR® – under counter	$418 per unit	$392 per unit
Commercial dishwasher – ENERGY STAR® – stationary single tank door	$1991 per unit	$1866 per unit
Commercial dishwasher – ENERGY STAR® – pots, pans and utensils	$367 per unit	$344 per unit
Commercial dishwasher – ENERGY STAR® – single-tank conveyor	$1679 per unit	$1574 per unit
Commercial dishwasher – ENERGY STAR® – multiple-tank conveyor	$3097 per unit	$2903 per unit
Commercial ice maker – ENERGY STAR®	$91 per unit	$85 per unit
Convection commercial oven – ENERGY STAR®	$309 per unit	$290 per unit
Combination commercial oven <15 pan – ENERGY STAR®	$1840 per unit	$1725 per unit
Combination commercial oven ≥15 pan – ENERGY STAR®	$2967 per unit	$2781 per unit
Commercial steam cooker – ENERGY STAR®	$3400 per unit	$3188 per unit
Water fixtures		
Pre-rinse spray valve – electric water heating only	$52 per spray valve	$49 per spray valve
Faucet aerator 1.5 gpm – electric water heating only	$13 per aerator	$12 per aerator
Showerhead 1.75 gpm – electric water heating only	$5 per showerhead	$4 per showerhead

*HVAC equipment requires an AHRI reference number or documentation from the AHRI Manual to verify the required efficiency level for all central air systems and heat pumps.
**Commercial kitchen equipment must be electric and listed on the ENERGY STAR® qualified product list.

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Bill Insert

Entergy Solutions

Large Business

Turn efficiency into profit: Get rewarded for energy-saving upgrades with cash incentives.

Eligible upgrades include:

- Building automation systems.
- Commercial kitchen equipment.
- Compressed air systems.
- HVAC equipment and controls.
- Lighting and lighting controls.
- Motors and pumps.
- Refrigeration.
- Warehouse sector.
- Other available customized solutions.

It's easy to participate—get started today.
Call **844-829-1300**, visit **entergysolutionsla.com** or **scan the QR code**, and an energy advisor will contact you.

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Entergy Solutions

Agriculture Solutions

Grow your bottom line, and learn how we can help grow your farm's energy savings.

Eligible upgrades include:

- Ventilation systems.
- Lighting systems.
- Irrigation systems.
- Refrigeration systems.
- Variable Frequency Drives (VFDs).

Schedule an agriculture energy assessment today.
Call **844-829-1300**, visit **entergysolutionsla.com** or **scan the QR code**, and an energy advisor will contact you.

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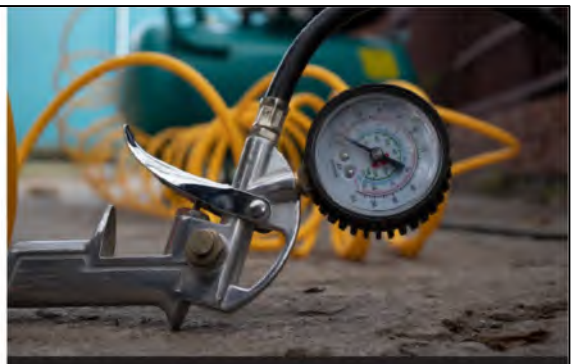
Compressed Air

Entergy Solutions

Compressed Air

The Entergy Solutions Compressed Air offering provides cash incentives for qualifying customers to identify and repair leaks, generating substantial energy and cost savings for Entergy Louisiana commercial customers.



Required documentation

- Completed application/program calculator.
- Customer utility bill.
- Project proposal/estimate.
- W9 for incentive payee.
- Photos of the compressor nameplate(s).

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Participating trade allies

Entergy Solutions has a network of qualified trade allies to assist you with identifying and implementing your energy-saving upgrades and applying for Entergy Solutions' incentives. Contact a trade ally to get started today.

- **Compressed Air Systems**
  Clint Cormier (337-224-7631)
- **Compressed Air Technologies**
  Shawn Wood (888-898-3445)
- **Industrial Supply and Service**
  Jason Randolph (318-519-4462)
- **Ingersoll-Rand Industrial U.S.**
  Kate Mialaret (504-202-0937)
- **Motion Industries**
  Brandon Pourciau (985-247-1915)
- **Prexus International**
  Mony Gneple (331-201-8996)
- **Quality Compressed Air Services**
  Marc McCulley (225-975-6430)

For more information about this and other Entergy Solutions offerings, visit **entergysolutionsla.com**, email **entergysolutionsla@entergy.com**, call **844-829-1300** or scan the **QR code** for more information.

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HVAC

Entergy Solutions

Commercial HVAC tune-up overview

Before you apply

Verify customer eligibility

- All commercial customers that receive electric service from Entergy Louisiana, LLC are eligible to receive tune-up incentives.
- Individual A/C and heat pump units are eligible for tune-up incentives once every 10 years if a refrigerant charge adjustment (RCA) is performed and once every 3 years if there is no RCA performed; or once every five years for chiller tune-ups.

Submit your application

Email your application and all supporting documentation to entergysolutionsla@entergy.com. Please retain a copy of the application for your records.

A/C tune-up rates

Minimum capacity (tons)	Tune-up incentive - per unit	
	with RCA	without RCA
A/C tune-up (1.5 to 3.5 tons)	$49	$19
A/C tune-up (3.6 to 5.0 tons)	$85	$33
A/C tune-up (5.1 to 10 tons)	$149	$62
A/C tune-up (10.1 to 15 tons)	$248	$106
A/C tune-up (15.1 to 25 tons)	$397	$169
A/C tune-up (25.1 to 30 tons)	$545	$256
A/C tune-up (30.1 to 50 tons)	$792	$372
A/C tune-up (50.1 to 80 tons)	$1,287	$604
A/C tune-up (80.1+ tons)	$1,583	$743

Heat pump tune-up rates

Minimum capacity (tons)	Tune-up incentive - per unit	
	with RCA	without RCA
Heat pump tune-up (1.5 to 3.5 tons)	$60	$24
Heat pump tune-up (3.6 to 5.0 tons)	$104	$41
Heat pump tune-up (5.1 to 10 tons)	$182	$73
Heat pump tune-up (10.1 to 15 tons)	$303	$126
Heat pump tune-up (15.1 to 25 tons)	$484	$202
Heat pump tune-up (25.1 to 30 tons)	$665	$306
Heat pump tune-up (30.1 to 50 tons)	$967	$445
Heat pump tune-up (50.1 to 80 tons)	$1,571	$772
Heat pump tune-up (80.1+ tons)	$1,932	$888

Chiller tune-up rates

Chiller tune-up measure	Incentive per ton Large C&I	Incentive per ton Small C&I
Tune-up of air-cooled chiller	$9	$15
Tune-up of water-cooled chiller (reciprocating, rotary screw, scroll)	$5	$9
Tune-up of water-cooled chiller (centrifugal)	$5	$9

For more information about commercial HVAC tune-ups and other Entergy Solutions offerings, visit entergysolutionsla.com, email entergysolutionsla@entergy.com, call 844-829-1300 or scan the QR code for more information.

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New Construction

Entergy Solutions

New Construction guidelines

The Entergy Solutions New Construction offering provides incentives for qualifying projects to adopt and implement energy-efficient design and construction that goes beyond the design baseline. In order to qualify, applications must be submitted within 60 days after construction is completed.

Project eligibility

- New building/ground-up construction.
- Addition or expansion of an existing building.
- Gut rehabs that include replacement of all electrical systems, including HVAC, lighting or process equipment.
- "Warm Shell" projects, where the building envelope, central mechanical system and core lighting systems are included in the design and construction, but future buildout work or tenant improvements are permitted separately.

Baseline determination

The baseline will be established by identifying the highest baseline from the following:

- Local energy or building code at time of project initiation.
- Baseline for state-owned buildings is 30% improvement vs. Louisiana building code at time of project initiation.
- Current design if building design is complete at the time of project initiation.

The Entergy Solutions team will have the discretion to determine the building design baseline for any situation that does not fall into one of these categories.

New Construction guidelines and application process

1. Apply: Customer[1] submits application, including building design drawings (mechanical and electrical) and equipment specification sheets, within 60 days of construction being completed.
2. Set baseline: Program determines design baseline for calculating energy savings and incentives.[2]
3. Receive: At the conclusion of the review of the application and scope of work, a letter will be provided detailing the approved applicable incentives.
4. Review: Program performs post-installation engineering review after submittal of the required completion documents[3] such as a signed project completion notice and final invoices.
5. Receive: Payment Incentives[4] will be paid upon receipt of certificate of occupancy.

[1]Customers must adhere to the incentive process and requirements based on incentive offering requirements.
[2]Incentives are available for eligible equipment purchased and/or installed after January 1, 2024.
[3]The final incentive application and completion documents must be submitted within 60 days of construction completion, or December 31, 2024, whichever is sooner.
[4]Incentives will be capped according to their incentive measure type and at no more than measure cost.

Incentive offering details

Prescriptive

- Prescriptive incentives are paid a predefined amount per unit based on deemed energy efficiency savings.
- Incentives are capped at the incremental measure cost.

Interior and exterior lighting

- Lighting incentives are available for installed lighting power density (LPD) that consumes lower watts per square foot than the maximum wattage allowed.
- Projects must reduce the lighting power density by at least 10% from the baseline.
- Projects can receive an incentive of $0.08-$0.11 per kWh saved compared to the baseline.
- Incentives are capped at the incremental measure cost.

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Entergy Solutions

Commercial New Construction incentives

As of Jan. 1, 2024 (May change at program's discretion)

Measure	Requirements	Small C&I	Large C&I	Unit
Lighting				
Lighting power density	• Applicable to both interior and exterior lighting. • Lighting power density savings must exceed 10% of code allowance.	$0.11	$0.08	per kWh saved below code
HVAC				
A/C unit (<5.42 tons) – Min. efficiency of 12.3 EER/15.5 SEER2	Must be AHRI certified.	$18	$17	per ton
A/C unit (5.42-11.24 tons) – Min. efficiency 12.2 EER/14.8 SEER		$45	$42	per ton
A/C unit (11.25-19.9 tons) – Min. efficiency 12.2 EER/14.8 SEER		$70	$66	per ton
A/C unit (≥20 tons) – Min. efficiency 10.8 EER/13.5 SEER		$46	$43	per ton
Heat pump (<5.42 tons) – Min. efficiency 12.3 EER/14.5 SEER2/8.0 HSPF2		$45	$42	per ton
Heat pump (5.42-11.24 tons) – Min. efficiency 11.3 EER/14.5 SEER2/12.0 HSPF		$32	$30	per ton
Heat pump (11.25-19.9 tons) – Min. efficiency 10.9 EER/14.0 SEER/12.0 HSPF		$39	$37	per ton
Heat pump (≥20 tons) – Min. efficiency 10.3 EER/13.0 SEER/12.0 HSPF		$69	$64	per ton
Guest room energy management controls	• Must utilize occupancy sensor to control guestroom PTAC or PTHP. • Must set back thermostat setting by a minimum of 5°F.	$94	$89	per room
Air-cooled chiller <150 tons (min. eff. of 1.18 kW/ton full load and 0.76 kW/ton IPLV)	Must be AHRI certified.	$67	$63	per ton
Air-cooled chiller ≥150 tons (min. eff. of 1.18 kW/ton full load and 0.75 kW/ton IPLV)		$65	$61	per ton
Water-cooled screw/scroll chiller <75 tons (min. eff. of 0.74 kW/ton full load and 0.50 kW/ton IPLV)		$43	$41	per ton
Water-cooled screw/scroll chiller ≥75 and <150 tons (min. eff. of 0.71 kW/ton full load and 0.49 kW/ton IPLV)		$42	$39	per ton
Water-cooled screw/scroll chiller ≥150 tons and <300 tons (min. eff. of 0.65 kW/ton full load and 0.44 kW/ton IPLV)		$47	$44	per ton
Water-cooled screw/scroll chiller ≥300 tons (min. eff. of 0.57 kW/ton full load and 0.41 kW/ton IPLV)		$43	$41	per ton
Water-cooled centrifugal <300 tons (min. eff. of 0.60 kW/ton full load and 0.40 kW/ton IPLV)		$66	$61	per ton
Water-cooled centrifugal ≥300 and <600 tons (min. eff. of 0.55 kW/ton full load and 0.38 kW/ton IPLV)		$56	$53	per ton
Water-cooled centrifugal ≥600 tons (min. eff. of 0.55 kW/ton full load and 0.38 kW/ton IPLV)		$53	$50	per ton
ECM motors (HVAC)	Applicable only to HVAC supply and return air fans.	$57	$53	per fan

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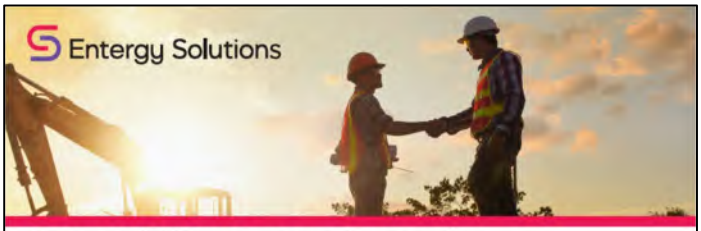

Commercial New Construction overview

The Entergy Solutions New Construction offering provides incentives for qualifying projects to adopt and implement energy-efficient design and construction that go beyond the design baseline. In order to qualify, applications must be submitted within 60 days after construction is completed.

Project eligibility

- New building/ground-up construction.
- Addition or expansion of an existing building.
- Gut rehabs that include replacement of all electrical systems, including HVAC, lighting or process equipment.
- "Warm Shell" projects, where the building envelope, central mechanical system and core lighting systems are included in the design and construction, but future buildout work or tenant improvements are permitted separately.

Baseline determination

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- Local energy or building code at time of project initiation.
- Baseline for state-owned buildings is 30% improvement vs. Louisiana building code at time of project initiation.
- Current design if building design is complete at the time of project initiation.

The Entergy Solutions team will have the discretion to determine the building design baseline for any situation that does not fall into one of these categories.

Incentive offerings

Prescriptive incentives

↓

Measures with deemed energy efficiency savings and incentives.

Interior and exterior lighting incentives

↓

Based on the proposed system's lighting power density compared to the maximum wattage allowed by code.

Contact Entergy Solutions to find a participating trade ally. Visit entergysolutionsla.com, email entergysolutionsla@entergy.com or call 844-829-1300.

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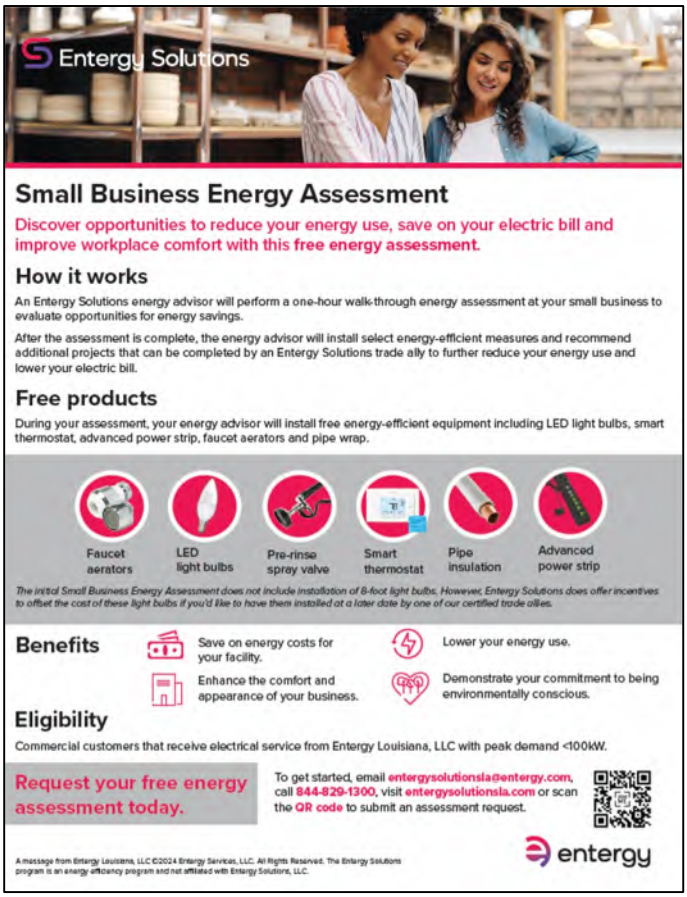
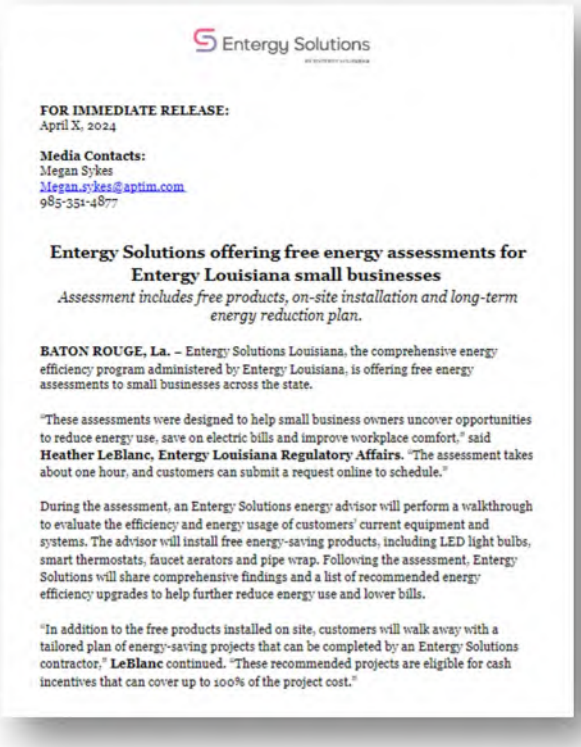
Small Business



Door hanger

Press Release

April 9, 2024



Entergy Solutions

FOR IMMEDIATE RELEASE:
April X, 2024

Media Contacts:
Megan Sykes
Megan.sykes@aptim.com
985-351-4877

Entergy Solutions offering free energy assessments for Entergy Louisiana small businesses

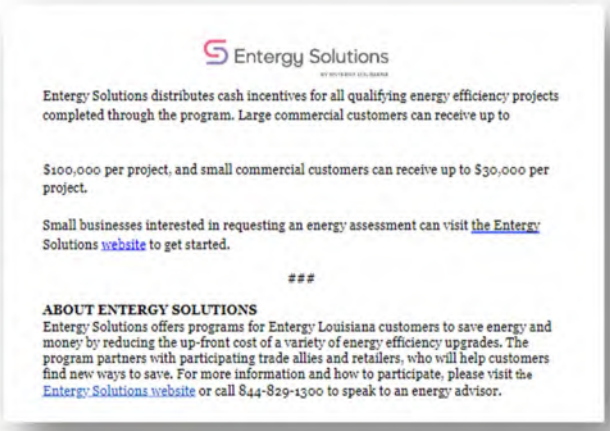
Assessment includes free products, on-site installation and long-term energy reduction plan.

BATON ROUGE, La. – Entergy Solutions Louisiana, the comprehensive energy efficiency program administered by Entergy Louisiana, is offering free energy assessments to small businesses across the state.

"These assessments were designed to help small business owners uncover opportunities to reduce energy use, save on electric bills and improve workplace comfort," said **Heather LeBlanc, Entergy Louisiana Regulatory Affairs**. "The assessment takes about one hour, and customers can submit a request online to schedule."

During the assessment, an Entergy Solutions energy advisor will perform a walkthrough to evaluate the efficiency and energy usage of customers' current equipment and systems. The advisor will install free energy-saving products, including LED light bulbs, smart thermostats, faucet aerators and pipe wrap. Following the assessment, Entergy Solutions will share comprehensive findings and a list of recommended energy efficiency upgrades to help further reduce energy use and lower bills.

"In addition to the free products installed on site, customers will walk away with a tailored plan of energy-saving projects that can be completed by an Entergy Solutions contractor," **LeBlanc** continued. "These recommended projects are eligible for cash incentives that can cover up to 100% of the project cost."



Entergy Solutions

Entergy Solutions distributes cash incentives for all qualifying energy efficiency projects completed through the program. Large commercial customers can receive up to

$100,000 per project, and small commercial customers can receive up to $30,000 per project.

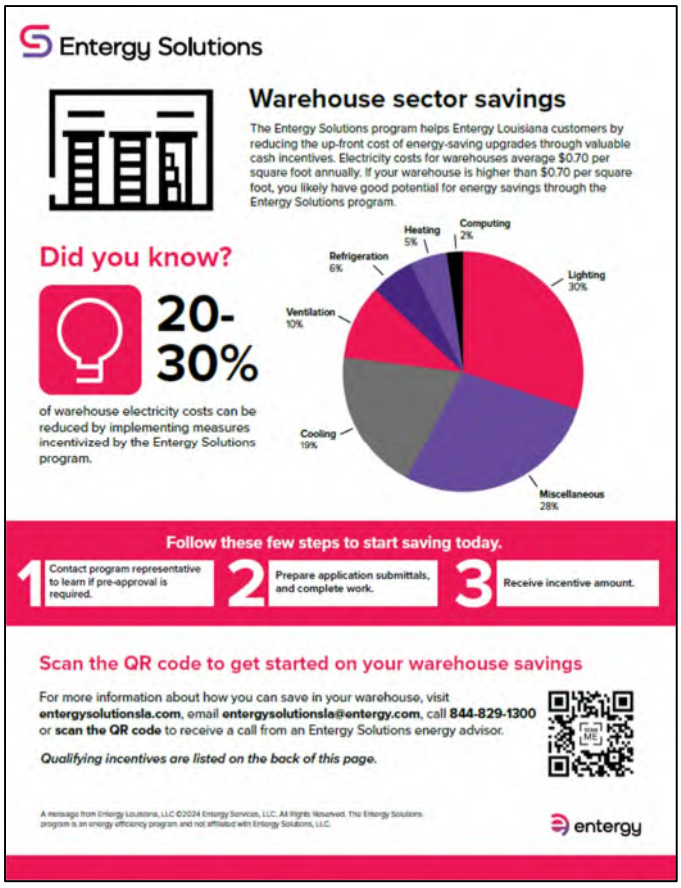
Small businesses interested in requesting an energy assessment can visit the Entergy Solutions website to get started.

###

ABOUT ENTERGY SOLUTIONS
Entergy Solutions offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program partners with participating trade allies and retailers, who will help customers find new ways to save. For more information and how to participate, please visit the Entergy Solutions website or call 844-829-1300 to speak to an energy advisor.

- Sent to Over 147 Media Outlets
- 41% Open Rate

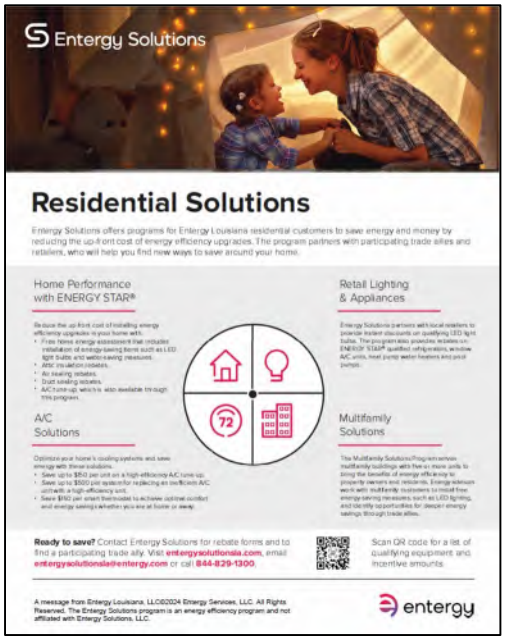
Sector Sheets
Warehouse Sector



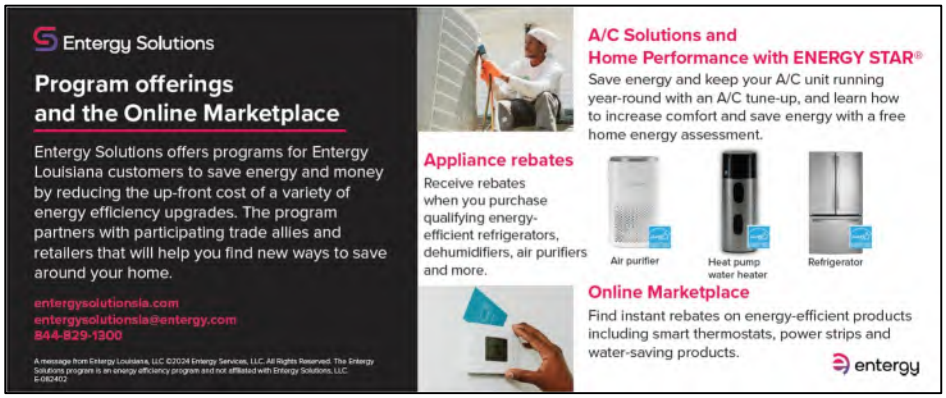
Residential Solutions

General Program
General Residential Collateral

Residential Overview



Residential Bill Insert



Measures and Incentives Overview

Entergy Solutions

2024 Measures and incentives list

Multifamily Solutions incentive rates

Measure	Incentive per unit	Unit	Requirements*
Ceiling insulation (R38)-electric heat (electric strip or furnace)	$ 0.60	Sq. ft.	Starting R-value must be R-0 to R-4. New insulation level must reach R-38.
Ceiling insulation (R38)-electric heat (electric strip or furnace)	$ 0.50	Sq. ft.	Starting R-value must be R-5 to R-8. New insulation level must reach R-38.
Ceiling insulation (R38)-electric heat (heat pump)	$ 0.30	Sq. ft.	Starting R-value must be R-0 to R-4. New insulation level must reach R-38.
Ceiling insulation (R38)-electric heat (heat pump)	$ 0.20	Sq. ft.	Starting R-value must be R-5 to R-8. New insulation level must reach R-38.
Ceiling insulation (R38)-gas heat	$ 0.20	Sq. ft.	Starting R-value must be R-0 to R-4. New insulation level must reach R-38.
Ceiling insulation (R38)-gas heat	$ 0.10	Sq. ft.	Starting R-value must be R-5 to R-8. New insulation level must reach R-38.
Level 1 A/C or heat pump tune-up (no refrigerant charge)	$ 100.00	Tune-up	Limit one tune-up every two years. System must be at least six months old.
Level 2 A/C or heat pump tune-up (refrigerant charge)	$ 150.00	Tune-up	Limit one tune-up every two years. System must be at least six months old.
Air sealing	$ 0.30	CFM50	Must be 10% reduction and not below minimum ventilation rate (MVR).
Duct sealing-electric heat	$ 1.50	CFM25	Must be 25% reduction from cap.
Duct sealing-gas heat	$ 0.75	CFM25	Must be 25% reduction from cap.

Additional requirements may apply and will be found on the program rebate form or in Clipboard/Navigator.

Income-Qualified Weatherization incentive rates

Measure	Incentive per unit	Unit	Requirements*
Ceiling insulation (R38)-electric heat	$ 1.10	Sq. ft.	Starting R-value must be R-0 to R-8. New insulation level must reach R-38.
Ceiling insulation (R38)-gas heat	$ 1.10	Sq. ft.	Starting R-value must be R-0 to R-8. New insulation level must reach R-38.
Level 1 A/C or heat pump tune-up (no refrigerant charge)	$ 100.00	Tune-up	Limit one tune-up every two years. System must be at least six months old.
Level 2 A/C or heat pump tune-up (refrigerant charge)	$ 150.00	Tune-up	Limit one tune-up every two years. System must be at least six months old.
Air sealing	$ 0.40	CFM50	Must be 10% reduction and not below minimum ventilation rate (MVR).
Duct sealing-electric heat	$ 2.50	CFM25	Must be 25% reduction from cap.
Duct sealing-gas heat	$ 2.50	CFM25	Must be 25% reduction from cap.

Additional requirements may apply and will be found on the program rebate form or in Clipboard/Navigator.

Home Performance with ENERGY STAR® incentive rates

Measure	Incentive per unit	Unit	Requirements*
1.0 GPM bathroom aerator	$ 5.00	Each	Limit 2 per home. Gas water heat not eligible.
1.5 GPM handheld showerhead	$ 25.00	Each	Limit 2 per home. Gas water heat not eligible.
1.5 GPM kitchen aerator	$ 5.00	Each	Limit 2 per home. Gas water heat not eligible.
1.5 GPM showerhead	$ 15.00	Each	Limit 2 per home. Gas water heat not eligible.
Water heater pipe wrap	$ 2.00	Linear foot	Limit 10 feet. Must be installed from water heater source outward. Gas water heat not eligible.
Tier 2 advanced power strip (entertainment center)	$ 50.00	Each	Limit 1 per home.
Tier 2 advanced power strip (office)	$ 50.00	Each	Limit 1 per home.
Smart thermostat	$ 150.00	Each	Must replace a non-programmable thermostat. Rebate is for models on qualified product list only.
Energy assessment	$ 150.00	Each	Must be conducted by a BPI certified staff member. Limit one per customer every five years.
Ceiling insulation (R38)-electric heat (electric strip or furnace)	$ 0.60	Sq. ft.	Starting R-value must be R-0 to R-4. New insulation level must reach R-38.
Ceiling insulation (R38)-electric heat (electric strip or furnace)	$ 0.50	Sq. ft.	Starting R-value must be R-5 to R-8. New insulation level must reach R-38.
Ceiling insulation (R38)-electric heat (heat pump)	$ 0.30	Sq. ft.	Starting R-value must be R-0 to R-4. New insulation level must reach R-38.
Ceiling insulation (R38)-electric heat (heat pump)	$ 0.20	Sq. ft.	Starting R-value must be R-5 to R-8. New insulation level must reach R-38.
Ceiling insulation (R38)-gas heat	$ 0.20	Sq. ft.	Starting R-value must be R-0 to R-4. New insulation level must reach R-38.
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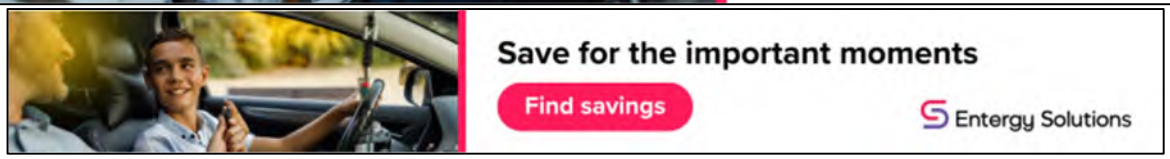
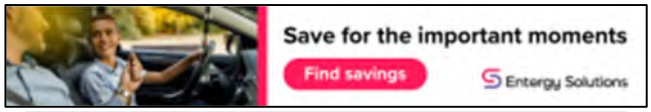
Level 1 A/C or heat pump tune-up (no refrigerant charge)	$ 100.00	Tune-up	Limit one tune-up every two years. System must be at least six months old.
Level 2 A/C or heat pump tune-up (refrigerant charge)	$ 150.00	Tune-up	Limit one tune-up every two years. System must be at least six months old.
Air sealing-electric heat (electric strip or furnace)	$ 0.30	CFM50	Must be 10% reduction and not below minimum ventilation rate (MVR).
Air sealing-electric heat (heat pump)	$ 0.25	CFM50	Must be 10% reduction and not below minimum ventilation rate (MVR).
Air sealing-gas heat	$ 0.15	CFM50	Must be 10% reduction and not below minimum ventilation rate (MVR).
Duct sealing-electric heat (heat pump)	$ 2.00	CFM25	Must be 25% reduction from test-in value.
Duct sealing-electric heat (electric strip or furnace)	$ 2.00	CFM25	Must be 25% reduction from test-in value.
Duct sealing-gas heat	$ 1.00	CFM25	Must be 25% reduction from test-in value.

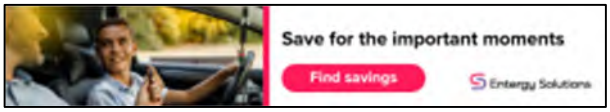
Additional requirements may apply and will be found on the program rebate form or in Clipboard/Navigator.

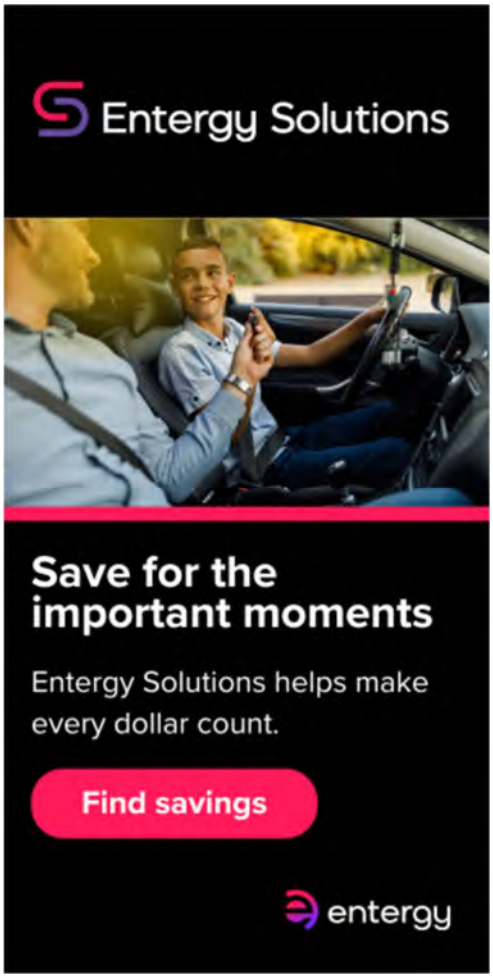
Paid Media

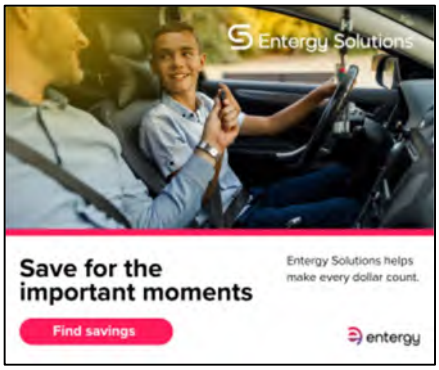
Save for the Important Moments Campaign



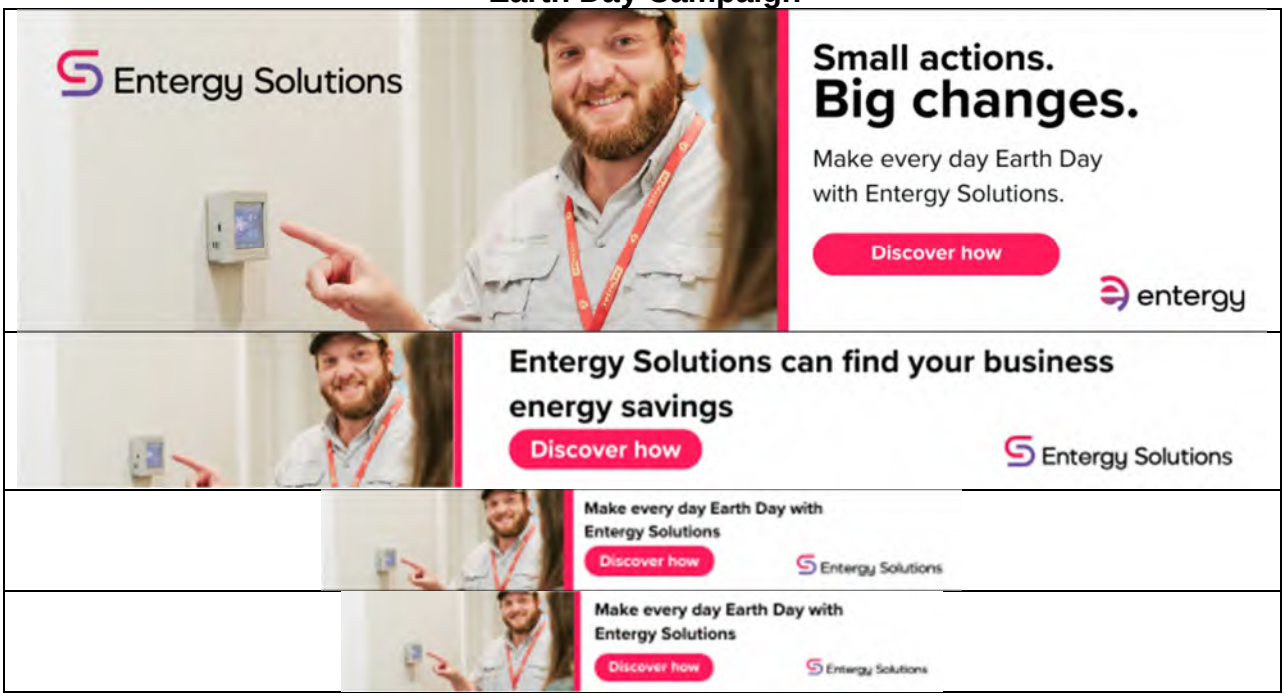


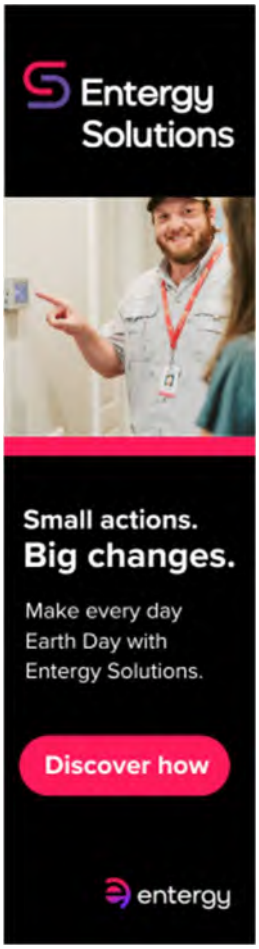


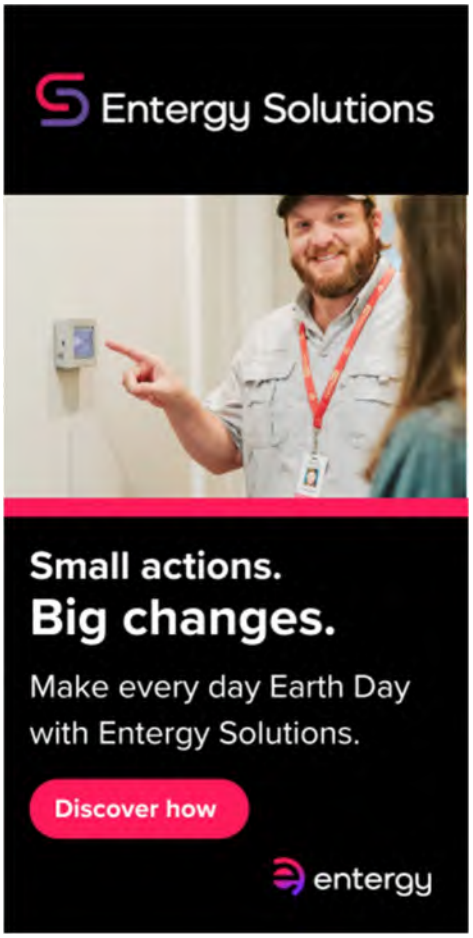




Earth Day Campaign







Press Release 5/24/24

Entergy Solutions

FOR IMMEDIATE RELEASE:
May 24, 2023

Media Contact:
Megan Sykes
Megan.sykes@aptim.com
985-351-4877

Entergy Solutions joins Our Daily Bread to serve Hammond community

HAMMOND, La. – Entergy Solutions, an energy efficiency program open to all Entergy Louisiana customers, partnered with Our Daily Bread Food Bank of Tangipahoa Parish on Thursday, May 23, to support low-income and disadvantaged residents in the Hammond area.

Entergy Solutions distributed nearly 400 energy savings kits while dozens of community volunteers served hundreds of free hot meals during lunch on Thursday at Our Daily Bread located at 1006 West Coleman Ave.

Thursday's event allowed the Food Bank to not only feed a large turnout, but also provide education on energy savings. Entergy reps talked to residents about Entergy Solutions' programs and how the programs provide energy efficiency to save money on utility bills. Attendees were pleased to hear that the program is no cost for those who are income-qualified; many had questions on how the program would reduce their bills and asked if they could bring additional energy savings kits to families and friends in other households.

"Seeing our program at work within the community is rewarding and a positive way to impact our customers," said Heather LeBlanc, Entergy Louisiana regulatory affairs manager, "Thank you to Our Daily Bread of Hammond for hosting our team, and we look forward to a continued partnership and service to the area."

Between May 28 and June 7, Entergy Solution aims to sign up over one-hundred income-qualified residents in the Hammond area for a free home energy assessment. Currently, there are 50 appointments still available for the two-week timeframe. Free

Entergy Solutions

energy efficiency upgrades may include attic insulation, air sealing measures, replacement of lightbulbs, and more. The Hammond community as a whole is not excluded from participating in the Weatherization program and other Entergy Solutions programs- these programs are open to all Entergy Louisiana customers until program funds are exhausted. Residential Entergy Louisiana customers can call 844-829-1300 for more information about Entergy Solutions and how to participate or visit entergysolutionsla.com.

###

Photos are included in the email as an attachment. Photography credit: Three Twenty Studio.

Photo 1 ***Entergy & Food Bank Group Photo*** **(names of people left to right)**
Alejandro Martinez, Entergy Solutions, Senior Energy Advisor
Heather LeBlanc, Entergy Louisiana, Regulatory Affairs
Ann Becker, Entergy Services, Senior Manager, Corporate Sustainability
Jana Ragsdale, Entergy Solutions, Project Analyst
Joy Najolia, Our Daily Bread, Receptionist
Mia Reeves, Our Daily Bread, Development Manager
John Hair, Our Daily Bread, Executive Director
Lori Lea, Our Daily Bread, Senior Manager
Elsie Kuczynski, Entergy Solutions, Senior Program Manager
Robin Mangum, Entergy Solutions, Marketing & Events
Gloria Figueroa, Entergy Solutions, Project Specialist

Photo 2 ***Entergy Reps Working*** **(names of people left to right)**
Heather LeBlanc, Entergy Louisiana, Regulatory Affairs
Ann Becker, Entergy Services, Senior Manager, Corporate Sustainability

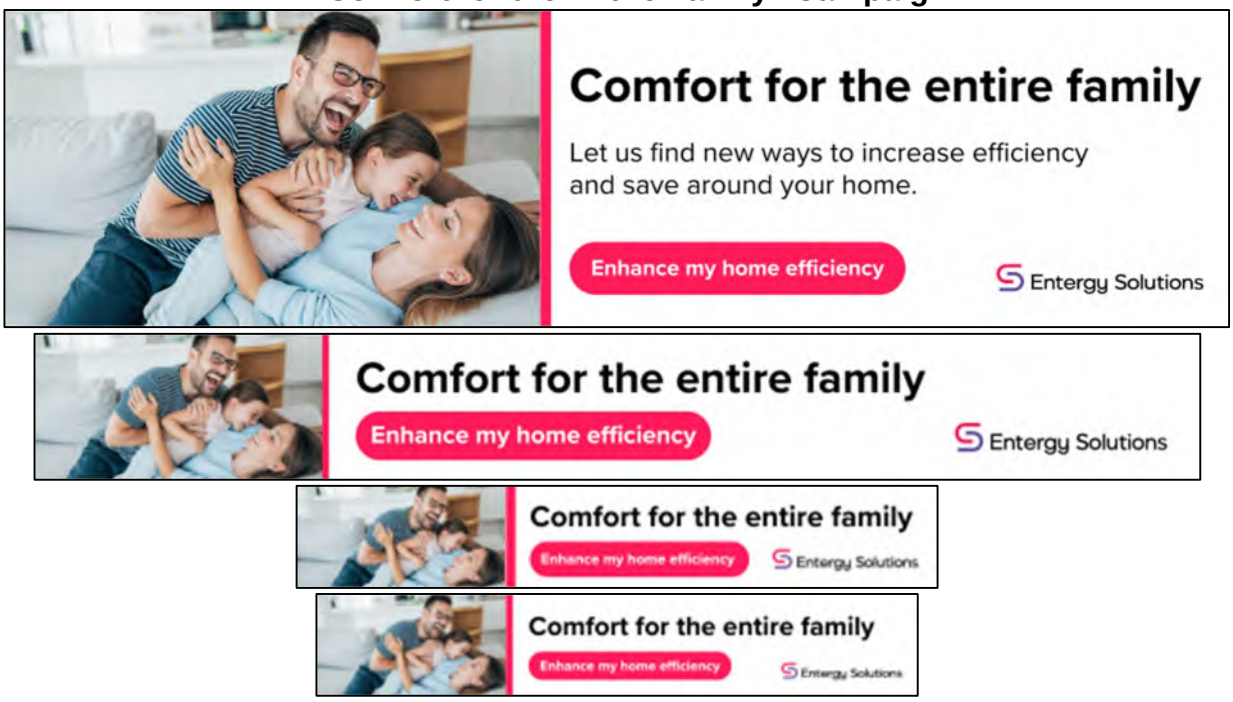
Photo 3 ***Entergy Reps with Attendees*** **(names of people left to right)**
Heather LeBlanc, Entergy Louisiana, Regulatory Affairs
Ann Becker, Entergy Services, Senior Manager, Corporate Sustainability
Mary Williams, Community Volunteer, Entergy Louisiana Customer
Gwen Guy, Community Volunteer, Entergy Louisiana Customer

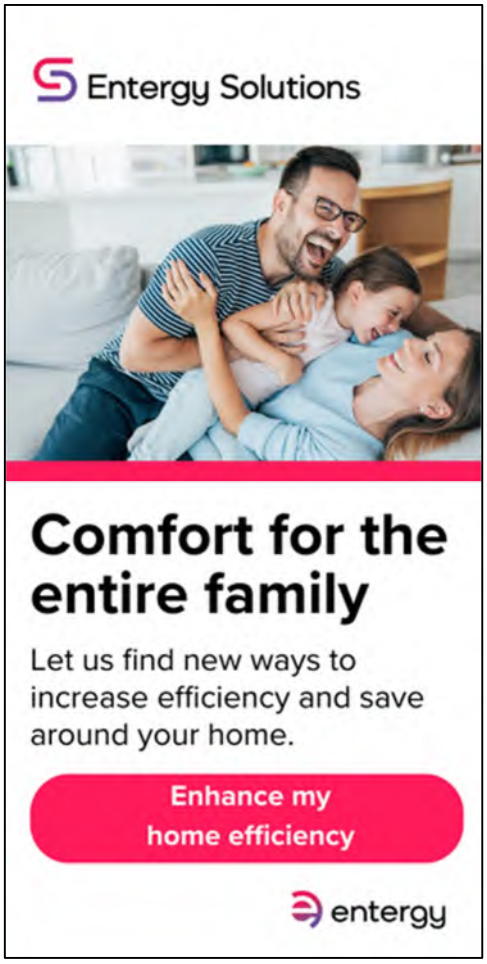
ABOUT ENTERGY SOLUTIONS
Entergy Solutions offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program partners with participating trade allies and retailers, who will help customers

Entergy Solutions

find new ways to save. For more information and how to participate, visit entergysolutionsla.com or call 844-829-1300 to speak to an energy advisor.

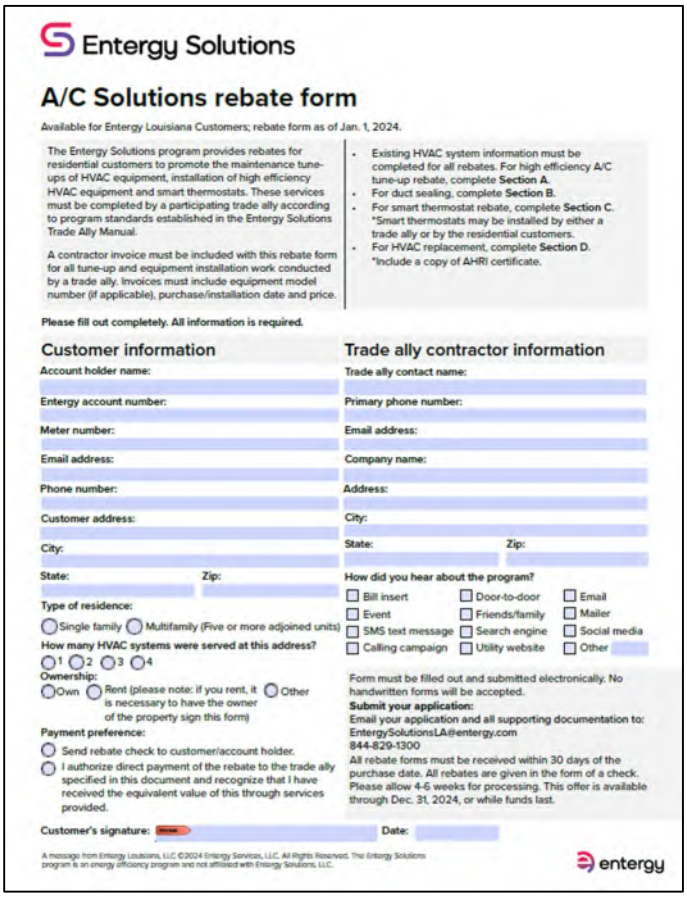
"Comfort for the Entire Family" Campaign





A/C Solutions Collateral

Rebate Form



Entergy Solutions

A/C Solutions rebate form

Available for Entergy Louisiana Customers; rebate form as of Jan. 1, 2024.

The Entergy Solutions program provides rebates for residential customers to promote the maintenance tune-ups of HVAC equipment, installation of high efficiency HVAC equipment and smart thermostats. These services must be completed by a participating trade ally according to program standards established in the Entergy Solutions Trade Ally Manual.

A contractor invoice must be included with this rebate form for all tune-up and equipment installation work conducted by a trade ally. Invoices must include equipment model number (if applicable), purchase/installation date and price.

- Existing HVAC system information must be completed for all rebates. For high efficiency A/C tune-up rebate, complete **Section A**.
- For duct sealing, complete **Section B**.
- For smart thermostat rebate, complete **Section C**. *Smart thermostats may be installed by either a trade ally or by the residential customers.
- For HVAC replacement, complete **Section D**. *Include a copy of AHRI certificate.

Please fill out completely. All information is required.

Customer information

Account holder name:

Entergy account number:

Meter number:

Email address:

Phone number:

Customer address:

City:

State: **Zip:**

Type of residence:

◯ Single family ◯ Multifamily (Five or more adjoined units)

How many HVAC systems were served at this address?

◯ 1 ◯ 2 ◯ 3 ◯ 4

Ownership:

◯ Own ◯ Rent (please note: if you rent, it is necessary to have the owner of the property sign this form) ◯ Other

Payment preference:

◯ Send rebate check to customer/account holder.

◯ I authorize direct payment of the rebate to the trade ally specified in this document and recognize that I have received the equivalent value of this through services provided.

Trade ally contractor information

Trade ally contact name:

Primary phone number:

Email address:

Company name:

Address:

City:

State: **Zip:**

How did you hear about the program?

☐ Bill insert ☐ Door-to-door ☐ Email
☐ Event ☐ Friends/family ☐ Mailer
☐ SMS text message ☐ Search engine ☐ Social media
☐ Calling campaign ☐ Utility website ☐ Other

Form must be filled out and submitted electronically. No handwritten forms will be accepted.

Submit your application:
Email your application and all supporting documentation to:
EntergySolutionsLA@entergy.com
844-829-1300

All rebate forms must be received within 30 days of the purchase date. All rebates are given in the form of a check. Please allow 4-6 weeks for processing. This offer is available through Dec. 31, 2024, or while funds last.

Customer's signature: **Date:**

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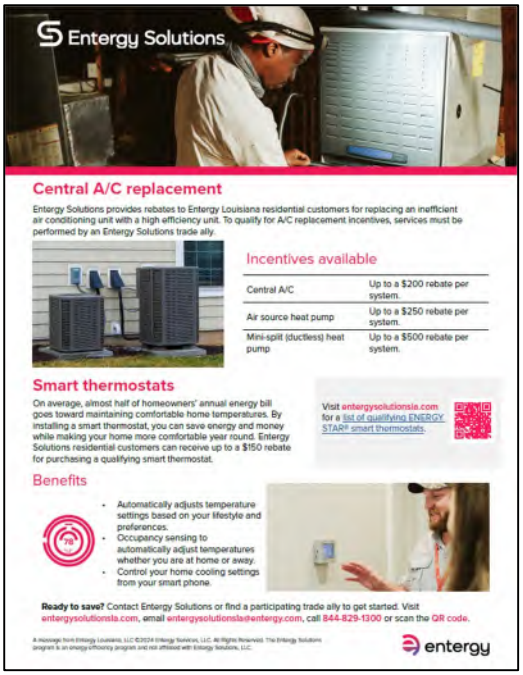
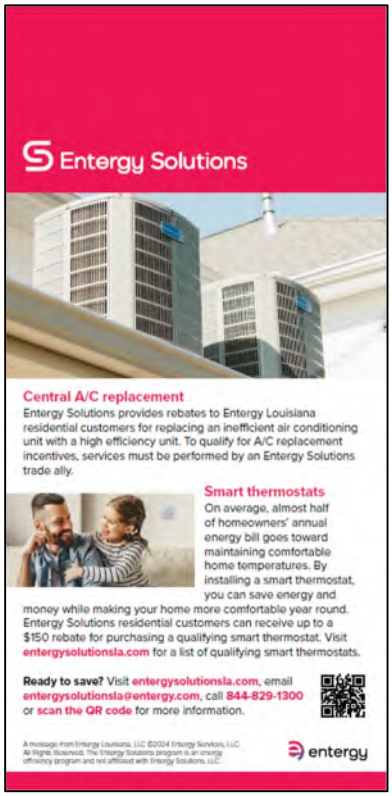
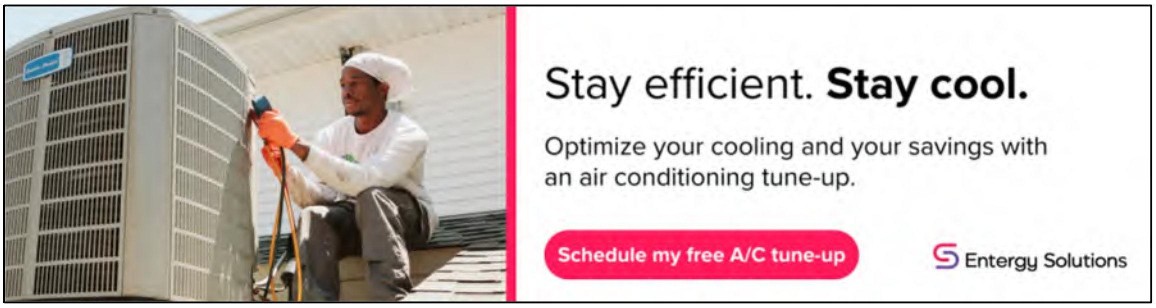
Overview

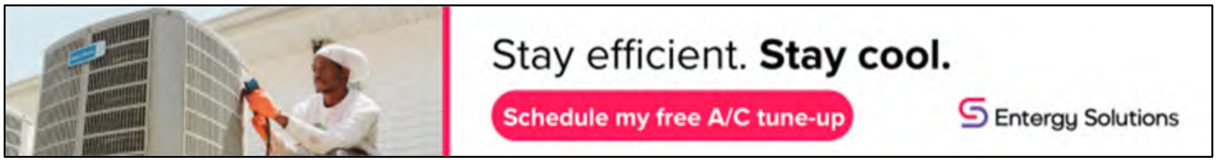


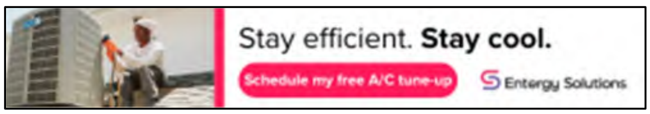
Door Hanger

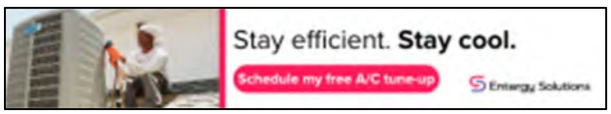


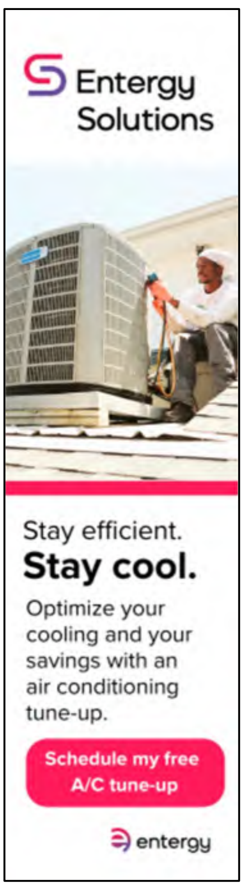
“Stay Efficient. Stay Cool.” Digital Ads

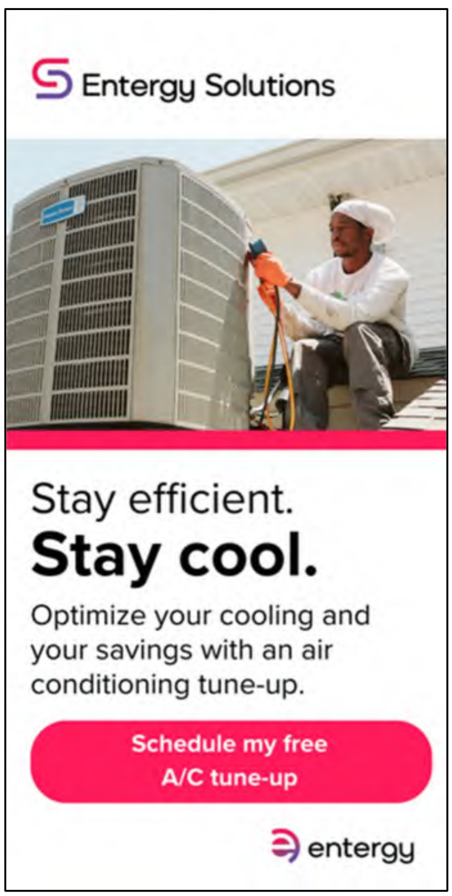












Earned Media

July 3, 2024

Circuit Article

Insights > Keep your cool this summer with an A/C tune-up

Keep your cool this summer with an A/C tune-up

BY: LOUISIANA EDITORIAL TEAM

07/03/2024

Warmer temperatures in Louisiana mean two things – cool treats and air conditioning. While the debate may never be settled on whether ice cream or popsicles are the best summer treat, there's no denying that an efficient air conditioner is a must. One way to keep your system running its best is through regular tune-ups.

Thanks to an instant rebate of up to $150, servicing your system is more affordable now than ever before. In fact, an A/C tune-up can optimize the cooling output and efficiency of your air conditioning unit by up to 30%. Services must be performed by a registered trade ally contractor to be eligible for rebates. Terms and conditions may apply.

With an A/C tune-up, you can also:

- Lower your monthly energy usage.
- Deliver a cooler indoor environment.
- Provide better humidity control.
- Obtain better indoor air quality.

During the A/C tune-up, your trusted trade ally partner will:

- Clean the condenser coil.
- Clean the evaporator coil.
- Measure and adjust the airflow.
- Measure and, if applicable, adjust the refrigerant.
- Change the customer provided air filter.

If your system is beyond the point of seeing the benefits from a tune-up, it may be time to replace it. Don't worry, Entergy Solutions is also here to help with central air conditioner replacement rebates of up to $500.

More ways to turn up your savings

Contact a trusted trade ally to perform your air conditioner tune-up to take advantage of the instant rebate or call **844-829-1300** for one of our customer service agents to help get you connected with a trade ally in your area.

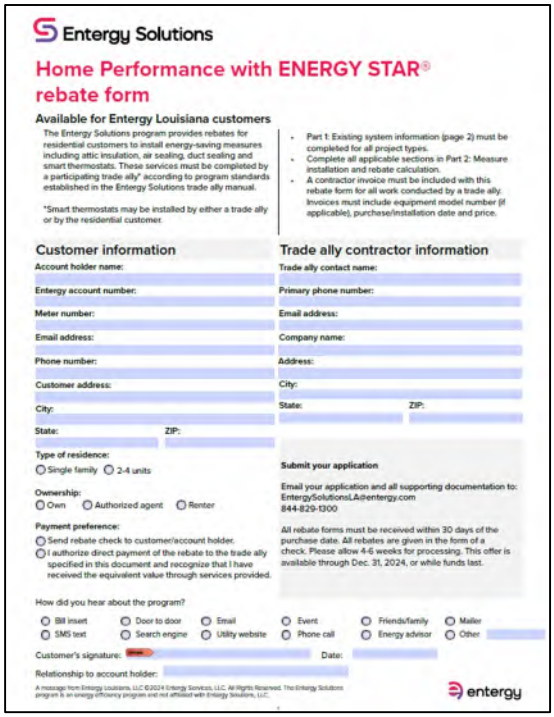
To learn more about Entergy Solutions and the other opportunities to save energy, call **844-829-1300**, **email entergysolutionsla@entergy.com** or visit **entergysolutionsla.com**.

Keep your cool this summer with an A/C tune-up

Home Performance with ENERGY STAR®

Collateral

Rebate Form



Entergy Solutions

Home Performance with ENERGY STAR® rebate form

Available for Entergy Louisiana customers

The Entergy Solutions program provides rebates for residential customers to install energy-saving measures including attic insulation, air sealing, duct sealing and smart thermostats. These services must be completed by a participating trade ally* according to program standards established in the Entergy Solutions trade ally manual.

*Smart thermostats may be installed by either a trade ally or by the residential customer.

- Part 1: Existing system information (page 2) must be completed for all project types.
- Complete all applicable sections in Part 2: Measure installation and rebate calculation.
- A contractor invoice must be included with this rebate form for all work conducted by a trade ally. Invoices must include equipment model number (if applicable), purchase/installation date and price.

Customer information

Account holder name:
Entergy account number:
Meter number:
Email address:
Phone number:
Customer address:
City:
State: ZIP:
Type of residence: Single family 2-4 units
Ownership: Own Authorized agent Renter
Payment preference:
Send rebate check to customer/account holder.
I authorize direct payment of the rebate to the trade ally specified in this document and recognize that I have received the equivalent value through services provided.

Trade ally contractor information

Trade ally contact name:
Primary phone number:
Email address:
Company name:
Address:
City:
State: ZIP:

Submit your application

Email your application and all supporting documentation to: EntergySolutionsLA@entergy.com
844-829-1300

All rebate forms must be received within 30 days of the purchase date. All rebates are given in the form of a check. Please allow 4-6 weeks for processing. This offer is available through Dec. 31, 2024, or while funds last.

How did you hear about the program?
Bill insert Door to door Email Event Friends/family Mailer
SMS text Search engine Utility website Phone call Energy advisor Other

Customer's signature: Date:
Relationship to account holder:

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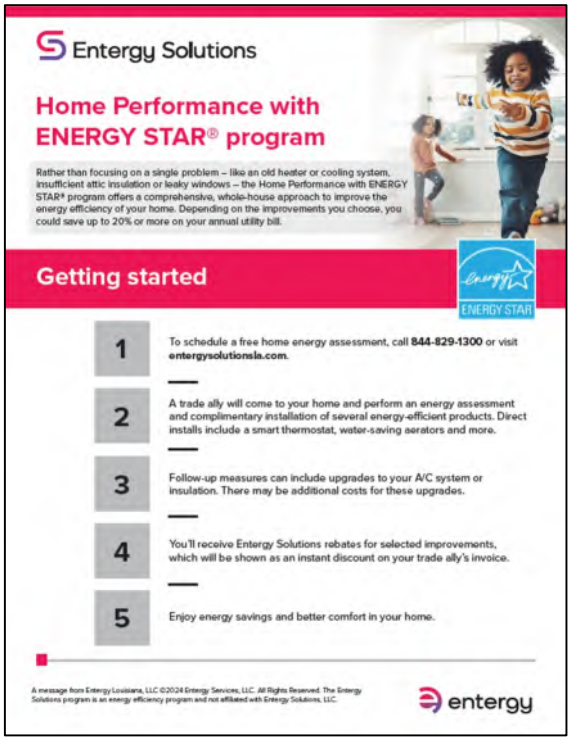
Overview



Entergy Solutions

Home Performance with ENERGY STAR® program

Rather than focusing on a single problem – like an old heater or cooling system, insufficient attic insulation or leaky windows – the Home Performance with ENERGY STAR® program offers a comprehensive, whole-house approach to improve the energy efficiency of your home. Depending on the improvements you choose, you could save up to 20% or more on your annual utility bill.

Getting started

1. To schedule a free home energy assessment, call **844-829-1300** or visit **entergysolutionsla.com**.
2. A trade ally will come to your home and perform an energy assessment and complimentary installation of several energy-efficient products. Direct installs include a smart thermostat, water-saving aerators and more.
3. Follow-up measures can include upgrades to your A/C system or insulation. There may be additional costs for these upgrades.
4. You'll receive Entergy Solutions rebates for selected improvements, which will be shown as an instant discount on your trade ally's invoice.
5. Enjoy energy savings and better comfort in your home.

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Energy-efficient upgrades

Our trained registered trade allies work with you to achieve savings and comfort by recommending various energy efficiency upgrades for your home.

Below are examples of upgrades that may be installed based on your home assessment.

Energy-saving smart thermostat. | Energy-efficient, water-saving showerhead. | Other services and products to seal your home and make it more efficient.

Below are the rebate offers for each energy-saving improvement:

Measure	Rebate amount
Attic insulation	Up to $.40 per square foot, based upon heating fuel source.
Air infiltration sealing	Average $250 per home for 650 CFM50 reduction.
Duct sealing	Average $400 per home for 200 CFM25 reduction for electric heated home and average $200 per home for 200 CFM25 reduction for gas heated home.
Smart thermostat	Up to $100.

Ready to save? Visit entergysolutionsla.com, email entergysolutionsla@entergy.com, call 844-829-1300 or scan the QR code to get started.

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Leave Behind

Entergy Solutions 844-829-1300 | entergysolutionsla.com | entergysolutionsla@entergy.com

Work completed by:

Trade ally: _____

Phone number: _____

Date: _____

Entergy Solutions program offerings:

Ceiling insulation (R38)
Up to 15% of a home's heating and cooling energy can be lost through the ceiling of your home. When installed correctly, attic insulation has one of the fastest paybacks of any energy efficiency investment you can make. Existing insulation levels must be at or below R-8 to qualify.

Level 1 or level 2 A/C tune-up
Air conditioning units accumulate wear and tear over the course of operation, which adds up to a less efficient system and higher energy costs. Luckily, an A/C tune-up can help get ahead of any issues and keep your A/C system running smoothly on the hottest days.

Residential air sealing
Air leaks in your home allow conditioned air to escape and outside air to infiltrate your home. By maintaining a tight building envelope and reducing the amount of air exchange, you minimize the cost and energy needed to condition your home. Your home could benefit from sealing leaky doors, pipe penetrations and other areas where air infiltration is present.

Duct sealing
HVAC systems cannot be energy efficient if there are leaks and poor connections in the duct work. Proper duct sealing will help make your home more comfortable and your HVAC system more efficient.

Entergy Solutions offerings:

	Eligible upgrades	Upgrades completed today
Ceiling insulation	☐	☐
Residential air sealing	☐	☐
Level 1 A/C tune-up	☐	☐
Level 2 A/C tune-up	☐	☐
Duct sealing	☐	☐

What you need to schedule next with your trade ally:

Scan the QR code to find more energy-saving products offered through Entergy Solutions:

Appliance rebates | Light bulbs | Online marketplace

Recommended completion date: _____

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English

Entergy Solutions 844-829-1300 | entergysolutionsla.com | entergysolutionsla@entergy.com

Trabajo completado:

Aliado comercial: _____

Número de teléfono: _____

Fecha: _____

Ofertas del programa Entergy Solutions:

Aislamiento de cielorraso:
Hasta un 15% de la energía utilizada para la calefacción y refrigeración de una casa se puede perder a través del cielorraso. El aislamiento térmico, instalado correctamente, ofrece el retorno más rápido en la inversión de eficiencia energética que se puede realizar. Para calificar, los niveles de aislamiento térmico existentes deben ser iguales o inferiores a R-8.

Puesta a punto del aire acondicionado de nivel 1 o nivel 2:
Las unidades de aire acondicionado se desgastan con el tiempo, lo que resulta en un sistema menos eficiente e incrementa los costos de energía. Afortunadamente, una puesta a punto del aire acondicionado puede mejorar este proceso y mantener su sistema funcionando sin problemas, incluso en los días más calurosos.

Sellado de aire residencial:
Las fugas de aire en su casa permiten que el aire acondicionado se escape y que el aire exterior se filtre. Manteniendo la envoltura de la casa hermética y reduciendo la cantidad de intercambio de aire, se minimiza el costo y la energía necesarios para acondicionar su hogar. Su hogar se podría beneficiarse del sellado de puertas con fugas, penetraciones de tuberías y otras áreas de filtración de aire.

Sellado de conductos:
Los sistemas de aire acondicionado no pueden ser energéticamente eficientes si existen fugas y conexiones deficientes en los conductos. Un sellado adecuado de los conductos ayudará a que su hogar sea más cómodo y su sistema de aire acondicionado más eficiente.

Ofertas de Entergy Solutions:

	Categorías elegibles	Actualizaciones completadas hoy
Aislamiento de cielorraso	☐	☐
Sellado de aire residencial	☐	☐
Puesta a punto de aire acondicionado de nivel 1	☐	☐
Puesta a punto de aire acondicionado de nivel 2	☐	☐
Sellado de conductos	☐	☐

Lo que necesita programar a continuación con su aliado comercial:

Escanee el código QR para encontrar más productos de ahorro de energía ofrecidos por Entergy Solutions:

Reembolsos para electro-domésticos | Bombillas de luz | Mercado en línea

Fecha recomendada de finalización: _____

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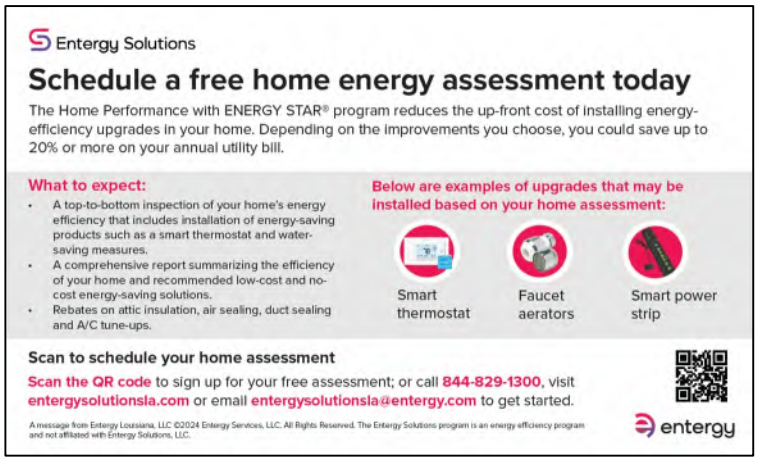
Spanish

Outreach Kit Insert



Entergy Solutions

Schedule a free home energy assessment today

The Home Performance with ENERGY STAR® program reduces the up-front cost of installing energy-efficiency upgrades in your home. Depending on the improvements you choose, you could save up to 20% or more on your annual utility bill.

What to expect:

- A top-to-bottom inspection of your home's energy efficiency that includes installation of energy-saving products such as a smart thermostat and water-saving measures.
- A comprehensive report summarizing the efficiency of your home and recommended low-cost and no-cost energy-saving solutions.
- Rebates on attic insulation, air sealing, duct sealing and A/C tune-ups.

Below are examples of upgrades that may be installed based on your home assessment:

Smart thermostat | Faucet aerators | Smart power strip

Scan to schedule your home assessment

Scan the QR code to sign up for your free assessment; or call **844-829-1300**, visit **entergysolutionsla.com** or email **entergysolutionsla@entergy.com** to get started.

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Entergy Solutions

Schedule a free home energy assessment today

844-829-1300

www.entergysolutionsla.com

entergysolutionsla@entergy.com

SCAN ME

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Clipboard Report

Entergy Solutions

Entergy Solutions Home Performance with ENERGY STAR® Offering

MONICA STEVENS
1200 E MAIN ST, Jonesborough, LA 71251
913-660-6413

Prepared By:
Daniel Franklin
www.entergy-louisiana.com/ee/home_performance
844-829-1300
9/27/2023

ENERGY STAR

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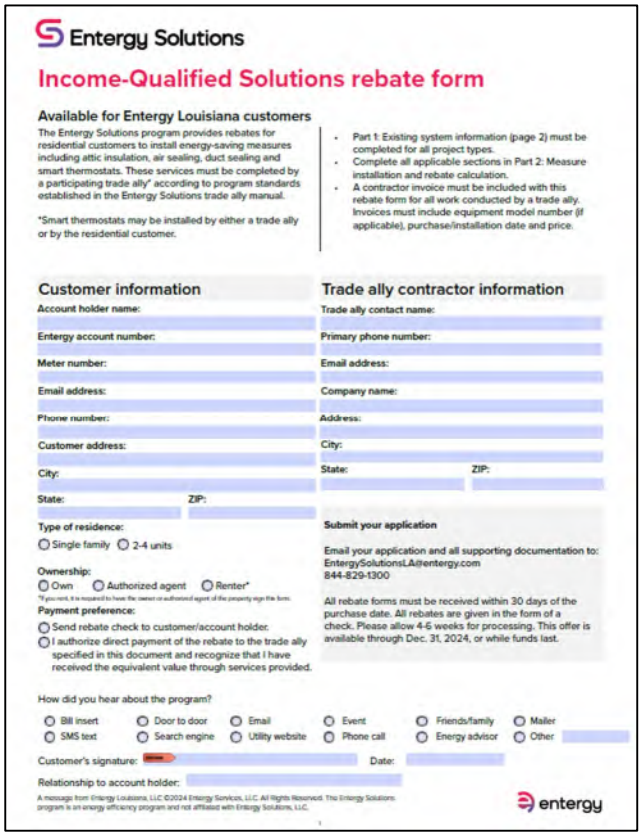
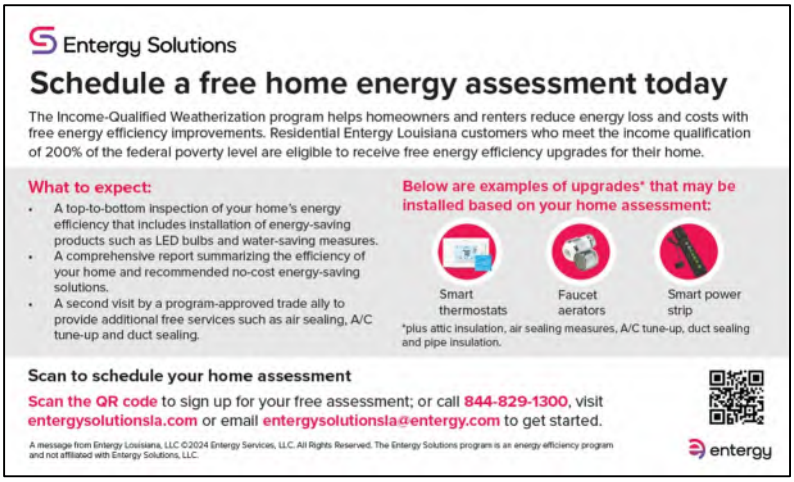
Income-Qualified Weatherization Collateral

Overview

Rebate Form



Kit Insert


Entergy Solutions
Schedule a free home energy assessment today
The Income-Qualified Weatherization program helps homeowners and renters reduce energy loss and costs with free energy efficiency improvements. Residential Entergy Louisiana customers who meet the income qualification of 200% of the federal poverty level are eligible to receive free energy efficiency upgrades for their home.
What to expect:
A top-to-bottom inspection of your home's energy efficiency that includes installation of energy-saving products such as LED bulbs and water-saving measures.
A comprehensive report summarizing the efficiency of your home and recommended no-cost energy-saving solutions.
A second visit by a program-approved trade ally to provide additional free services such as air sealing, A/C tune-up and duct sealing.
Below are examples of upgrades* that may be installed based on your home assessment:
Smart thermostats
Faucet aerators
Smart power strip
*plus attic insulation, air sealing measures, A/C tune-up, duct sealing and pipe insulation.
Scan to schedule your home assessment
Scan the QR code to sign up for your free assessment; or call 844-829-1300, visit entergysolutionsla.com or email entergysolutionsla@entergy.com to get started.
A message from Entergy Louisiana, LLC ©2024 Entergy Services, LLC. All Rights Reserved. The Entergy Solutions program is an energy efficiency program and not affiliated with Entergy Solutions, LLC.
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Entergy Solutions
Schedule a free home energy assessment today
844-829-1300
www.entergysolutionsla.com
entergysolutionsla@entergy.com
SCAN ME
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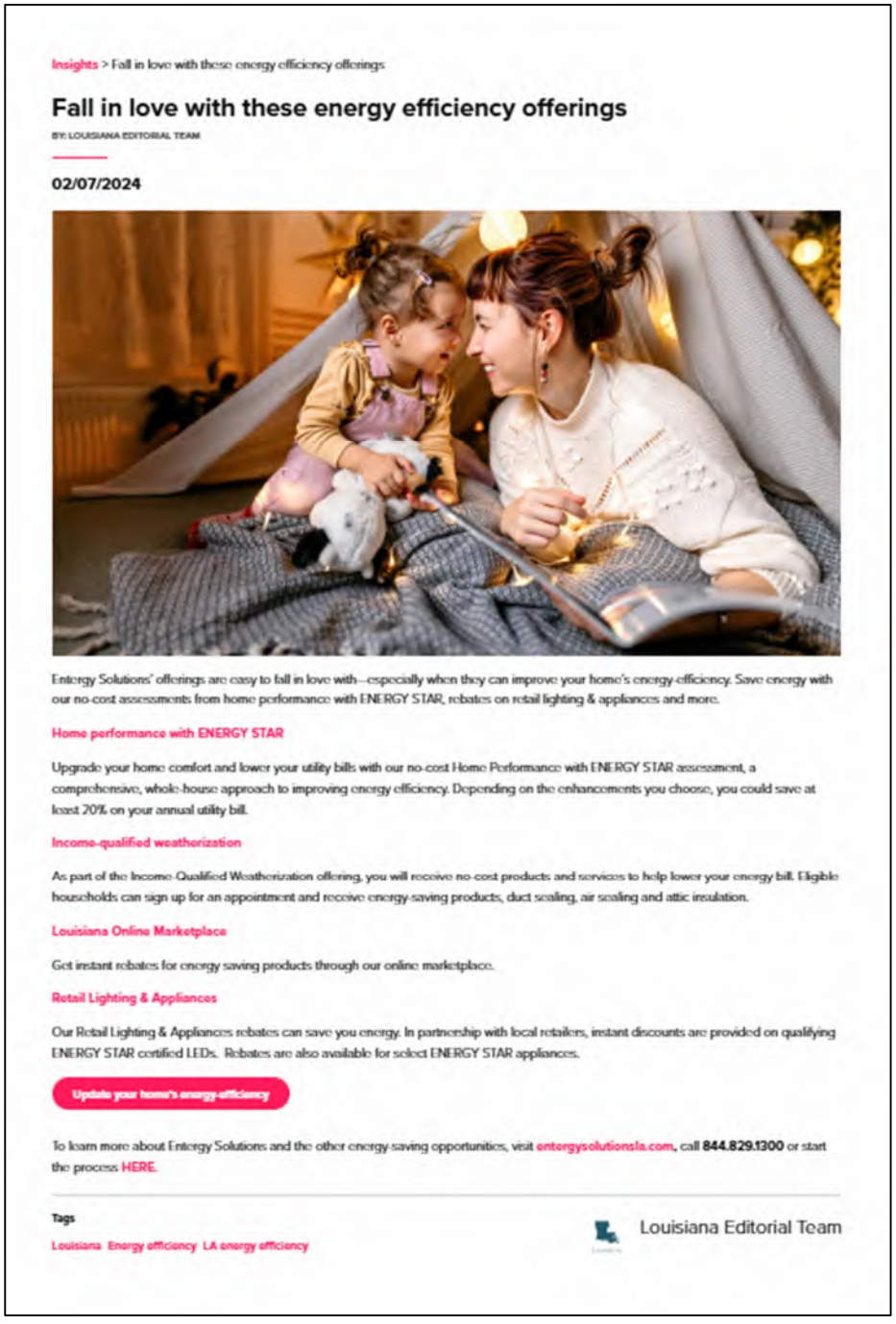
Earned Media

Circuit Article
February 7, 2024



Insights > Fall in love with these energy efficiency offerings

Fall in love with these energy efficiency offerings

BY: LOUISIANA EDITORIAL TEAM

02/07/2024

Entergy Solutions' offerings are easy to fall in love with—especially when they can improve your home's energy-efficiency. Save energy with our no-cost assessments from home performance with ENERGY STAR, rebates on retail lighting & appliances and more.

Home performance with ENERGY STAR

Upgrade your home comfort and lower your utility bills with our no-cost Home Performance with ENERGY STAR assessment, a comprehensive, whole-house approach to improving energy efficiency. Depending on the enhancements you choose, you could save at least 20% on your annual utility bill.

Income-qualified weatherization

As part of the Income-Qualified Weatherization offering, you will receive no-cost products and services to help lower your energy bill. Eligible households can sign up for an appointment and receive energy-saving products, duct sealing, air sealing and attic insulation.

Louisiana Online Marketplace

Get instant rebates for energy saving products through our online marketplace.

Retail Lighting & Appliances

Our Retail Lighting & Appliances rebates can save you energy. In partnership with local retailers, instant discounts are provided on qualifying ENERGY STAR certified LEDs. Rebates are also available for select ENERGY STAR appliances.

Update your home's energy-efficiency

To learn more about Entergy Solutions and the other energy-saving opportunities, visit entergysolutionsla.com, call **844.829.1300** or start the process HERE.

Tags

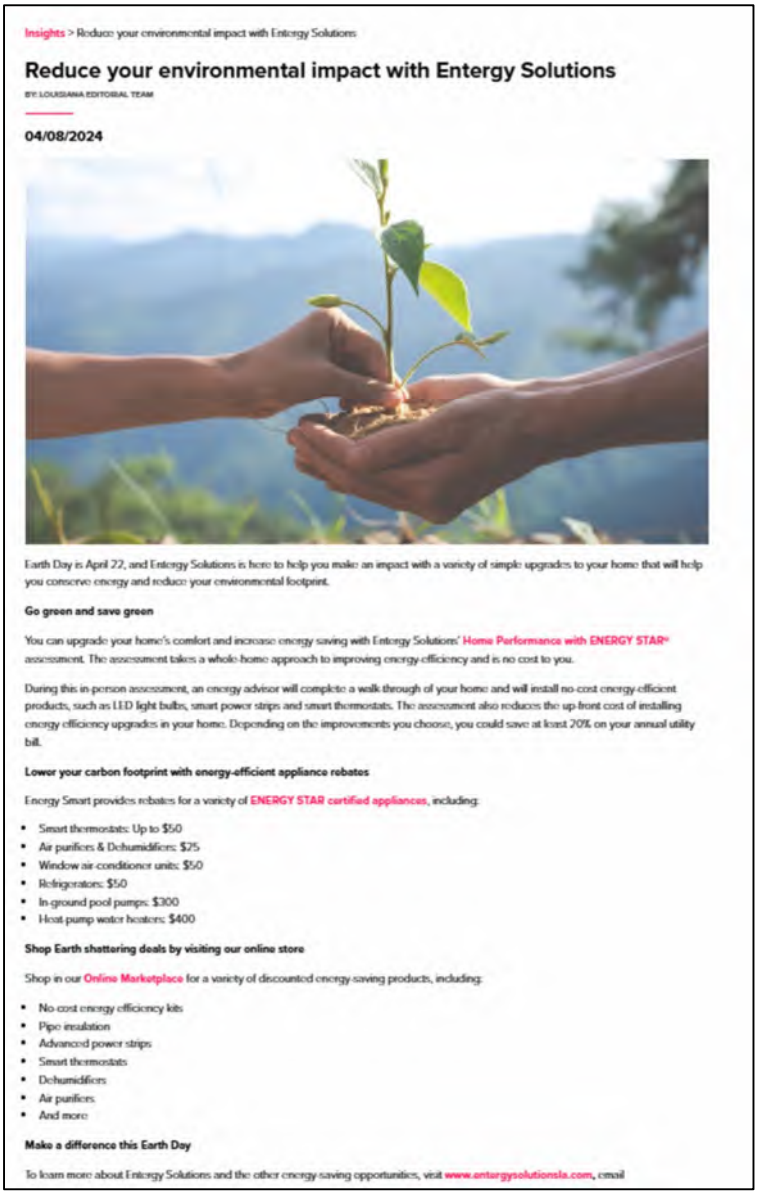
Louisiana Energy efficiency LA energy efficiency

Louisiana Editorial Team

[Fall in love with these energy efficiency offerings]

Circuit Article

April 4, 2024



Insights > Reduce your environmental impact with Entergy Solutions

Reduce your environmental impact with Entergy Solutions

BY: LOUISIANA EDITORIAL TEAM

04/08/2024

Earth Day is April 22, and Entergy Solutions is here to help you make an impact with a variety of simple upgrades to your home that will help you conserve energy and reduce your environmental footprint.

Go green and save green

You can upgrade your home's comfort and increase energy saving with Entergy Solutions' **Home Performance with ENERGY STAR®** assessment. The assessment takes a whole-home approach to improving energy efficiency and is no cost to you.

During this in-person assessment, an energy advisor will complete a walk through of your home and will install no-cost energy-efficient products, such as LED light bulbs, smart power strips and smart thermostats. The assessment also reduces the up-front cost of installing energy efficiency upgrades in your home. Depending on the improvements you choose, you could save at least 20% on your annual utility bill.

Lower your carbon footprint with energy-efficient appliance rebates

Energy Smart provides rebates for a variety of **ENERGY STAR certified appliances**, including:

- Smart thermostats: Up to $50
- Air purifiers & Dehumidifiers: $75
- Window air conditioner units: $50
- Refrigerators: $50
- In-ground pool pumps: $300
- Heat-pump water heaters: $400

Shop Earth shattering deals by visiting our online store

Shop in our **Online Marketplace** for a variety of discounted energy-saving products, including:

- No-cost energy efficiency kits
- Pipe insulation
- Advanced power strips
- Smart thermostats
- Dehumidifiers
- Air purifiers
- And more

Make a difference this Earth Day

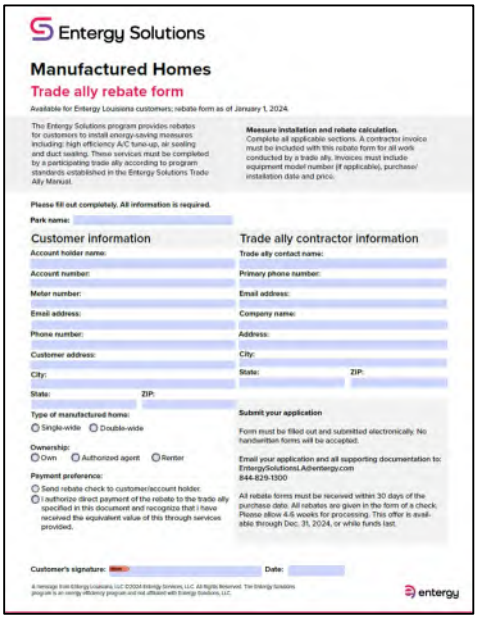
To learn more about Entergy Solutions and the other energy-saving opportunities, visit **www.entergysolutionsla.com**, email

[Reduce your environmental impact with Entergy Solutions]

Manufactured Homes

Collateral

Rebate Form



Entergy Solutions

Manufactured Homes

Trade ally rebate form

Available for Entergy Louisiana customers; rebate form as of January 1, 2024.

The Entergy Solutions program provides rebates for customers to install energy-saving measures including: high efficiency A/C tune-up, air sealing and duct sealing. These services must be completed by a participating trade ally according to program standards established in the Entergy Solutions Trade Ally Manual.

Measure installation and rebate calculation. Complete all applicable sections. A contractor invoice must be included with this rebate form for all work conducted by a trade ally. Invoices must include equipment model number (if applicable), purchase/installation date and price.

Please fill out completely. All information is required.

Park name:

Customer information

Account holder name:
Account number:
Meter number:
Email address:
Phone number:
Customer address:
City:
State: **ZIP:**

Type of manufactured home:
Single-wide Double-wide

Ownership:
Own Authorized agent Renter

Payment preference:
Send rebate check to customer/account holder.
I authorize direct payment of the rebate to the trade ally specified in this document and recognize that I have received the equivalent value of this through services provided.

Trade ally contractor information

Trade ally contact name:
Primary phone number:
Email address:
Company name:
Address:
City:
State: **ZIP:**

Submit your application

Form must be filled out and submitted electronically. No handwritten forms will be accepted.

Email your application and all supporting documentation to: EntergySolutionsLA@entergy.com
844-829-1300

All rebate forms must be received within 30 days of the purchase date. All rebates are given in the form of a check. Please allow 4-6 weeks for processing. This offer is available through Dec. 31, 2024, or while funds last.

Customer's signature: **Date:**

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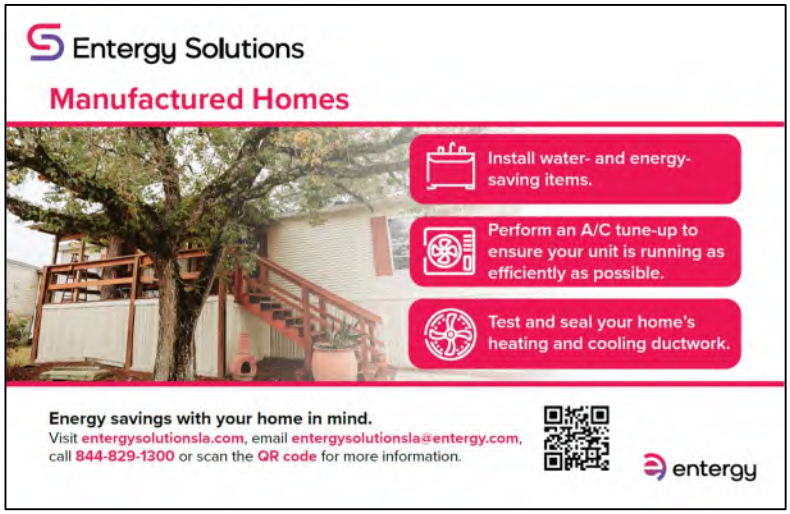
Leave Behind



Entergy Solutions

Manufactured Homes

Install water- and energy-saving items.

Perform an A/C tune-up to ensure your unit is running as efficiently as possible.

Test and seal your home's heating and cooling ductwork.

Energy savings with your home in mind.
Visit entergysolutionsla.com, email entergysolutionsla@entergy.com, call 844-829-1300 or scan the QR code for more information.

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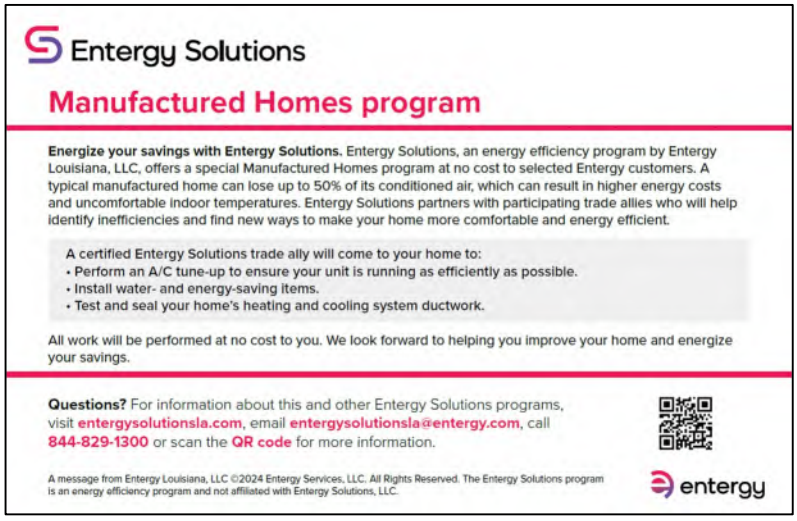

Entergy Solutions

Manufactured Homes program

Energize your savings with Entergy Solutions. Entergy Solutions, an energy efficiency program by Entergy Louisiana, LLC, offers a special Manufactured Homes program at no cost to selected Entergy customers. A typical manufactured home can lose up to 50% of its conditioned air, which can result in higher energy costs and uncomfortable indoor temperatures. Entergy Solutions partners with participating trade allies who will help identify inefficiencies and find new ways to make your home more comfortable and energy efficient.

A certified Entergy Solutions trade ally will come to your home to:
- Perform an A/C tune-up to ensure your unit is running as efficiently as possible.
- Install water- and energy-saving items.
- Test and seal your home's heating and cooling system ductwork.

All work will be performed at no cost to you. We look forward to helping you improve your home and energize your savings.

Questions? For information about this and other Entergy Solutions programs, visit entergysolutionsla.com, email entergysolutionsla@entergy.com, call 844-829-1300 or scan the QR code for more information.

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Assessment Form

Entergy Solutions

Manufactured Homes

Assessment form

Account #: Application date:

Client name: Assessors:

Client address: Assessment date:

Parish: Client ID:

Day phone:

Contact name:

Type:
- ○ Applicant of record
- ○ Landlord/owner 1
- ○ Landlord/owner 2
- ○ Other contact

Relation:

Phone number:

Dwelling type:
- ○ Site built
- ○ Multifamily
- ○ Mobile home
- ○ Shelter
- ○ Duplex
- ○ Other

Ownership:
- ○ Owner
- ○ Renter
- ○ Other

Number of occupants:

Ethnicity:

Client language:

Occupants:
- ☐ Seniors (65 and older)
- ☐ Kids (17 and under)

Disability: ○ Yes ○ No

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Multifamily Solutions

Collateral
Overview

Direct Install Agreement

Leave Behind

Entergy Solutions

Multifamily Solutions

Technicians from the Multifamily Solutions offering will be in your building on _____.

You'll receive complimentary installation of energy-saving products, such as:

Kitchen aerators ☐ ___

Bathroom aerators ☐ ___

Water-saving showerheads ☐ ___

Smart thermostats ☐ ___

Pipe insulation ☐ ___

Smart power strip ☐ ___

Energy-saving products installed are dependent upon Entergy account type and eligibility. Actual products installed may differ from the images shown. Measures are determined based on the environment, overall efficiency and product availability. Products may not be installed in each unit depending on utility eligibility and existing baselines.

Questions? Contact Entergy Solutions about these upgrades or the Multifamily program. Visit entergysolutionsla.com, email entergysolutionsla@entergy.com or call 844-829-1300.

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Property Owner Permission Form

Entergy Solutions

Multifamily Solutions

Property owner permission form

Your residential rental building(s) or unit(s) is (are) under consideration to receive weatherization-related services in connection with Entergy Solutions weatherization program being implemented by a program affiliated contractor on behalf of Entergy Solutions, LLC "Entergy." At the bottom of this page is a section entitled, "Permission to enter premises." By providing all of the information requested in the section and submitting a copy of it to the program affiliated contractor, you hereby give Entergy and the program affiliated contractor, as well as their employees and contractors, permission to enter your residential rental building(s)/unit(s) (including both the inside and outside of such) in order to perform energy audits, collect eligibility documentation from your tenants, complete the necessary applications, and if the application is approved, to perform or provide weatherization-related services and follow-up inspection(s).

Before any such work begins on your building(s) or unit(s), you will be required to sign this property owner permission form. Please be aware that only residential units may be weatherized. Meeting rooms, game rooms, laundry rooms, maintenance rooms, daycare centers, office areas or commercial business areas, and non-residential facilities are not eligible for weatherization services. The estimated value for the weatherization-related services for each affected building will be based on an energy audit that is performed on each individual unit within such building.

After weatherization-related services have been provided, Entergy or its implementer, program affiliated contractor, may conduct (or arrange for one of its designated contractors to conduct) a quality control inspection to ensure that all of the weatherization-related services approved by Entergy were completed in accordance with the standards set forth by it. It is your responsibility to assist Entergy, its employees and contractors in gaining entrance to, and having reasonable access in and around, your property.

Property owner agrees that in consideration of its participation in the program and receipt of free products, Entergy will not be responsible in contract, tort or otherwise for any losses or damages of any kind incurred, arising out of or related to this program. The program affiliated contractor shall not be responsible for any loss or damage incurred unless it is caused solely due to program affiliated contractor's gross negligence or willful misconduct. Property owner agrees that under no circumstances will Entergy or program affiliated contractor be responsible for any indirect, consequential, incidental or speculative damages. No action under this agreement may be commenced more than 60 days after the incident giving rise to such cause of action has occurred. The undersigned has read and understands the above and has authority to sign this agreement as or on behalf of the owner of the above identified property.

Permission to enter premises

I, _____, as property owner/landlord/authorized agent for building(s) located at _____ have read and understand the above, have reviewed the program information, and hereby grant permission for representatives of Entergy, including APTIM and program affiliated contractor, to enter these premises for the purposes of conducting energy audits and collecting eligibility documentation from the residents, including applications, and to perform the weatherization work. I am aware that program information exists at entergysolutionsla.com and that I can call 844-829-1300 for additional information.

Property owner/landlord/agency signature

Title

Date

Customer signature

Customer name

Date

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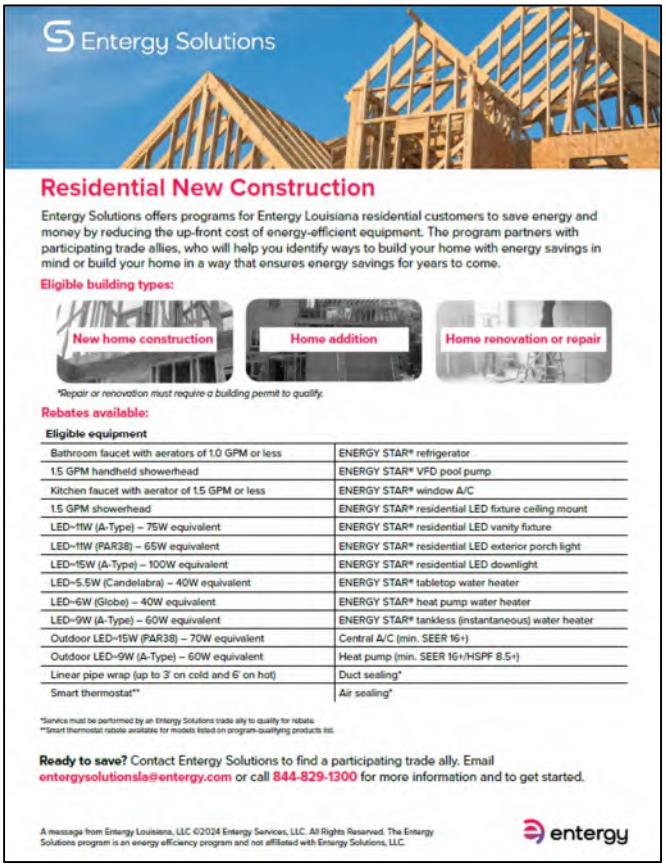
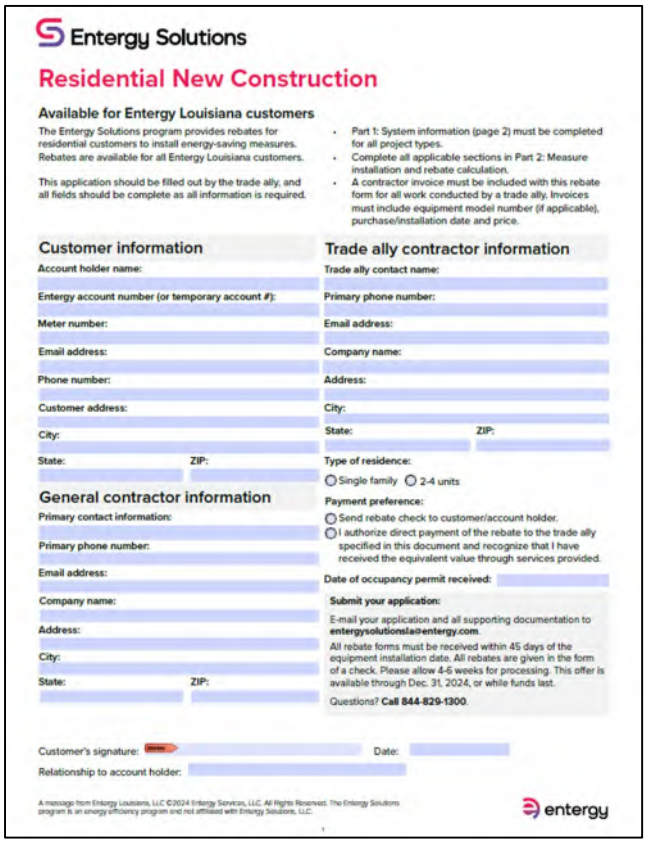
New Construction

Collateral
Overview



Rebate Form



Retail Lighting & Appliances

Collateral

POP Rebate Forms 6x9

Air purifier


Entergy Solutions

Get a $25 rebate

Entergy Solutions air purifier rebate

Fill out this form, and mail it, along with a copy of your dated sales receipt to the address listed on the back or email to entergysolutions@entergy.com. Limit four rebates per customer per year. See reverse side for complete terms and conditions. The air purifier must be ENERGY STAR® qualified to receive a rebate. *Entergy customers who reside in Orleans Parish are not eligible for Entergy Solutions Louisiana Program offerings. If you reside in Orleans Parish, please visit energysmartnola.com for rebate offers in your area.*

Receive a **$25 rebate** on ENERGY STAR® qualified air purifiers

To search for qualified products and to verify eligibility, scan the QR code or go to energystar.gov/products.

Ready to save? Contact Entergy Solutions to get started. Visit entergysolutionsla.com, email entergysolutionsla@entergy.com or call 844-829-1300.

Residential electric customer information

Please fill out front and back completely. All information is required.

Purchaser's name:
Phone number:
Email:
Installation address:
City: State: ZIP:
Purchaser's address:
City: State: ZIP:
Type of residence:
☐Single family (detached) ☐Single family (attached)
☐Multifamily (5 or more units) ☐Other:
Ownership: ☐Own ☐Rent Entergy customer? ☐Yes ☐No
Entergy account number:

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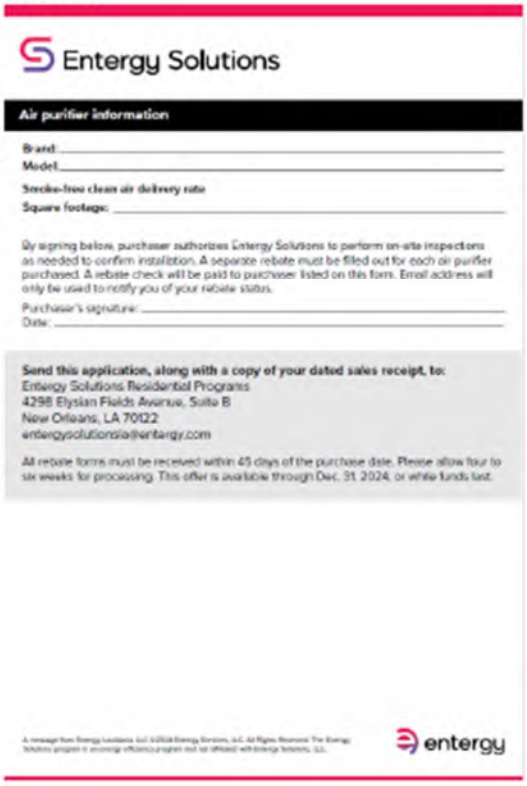
Entergy Solutions

Air purifier information

Brand:
Model:
Smoke-free clean air delivery rate
Square footage:

By signing below, purchaser authorizes Entergy Solutions to perform on-site inspections as needed to confirm installation. A separate rebate must be filled out for each air purifier purchased. A rebate check will be paid to purchaser listed on this form. Email address will only be used to notify you of your rebate status.

Purchaser's signature:
Date:

Send this application, along with a copy of your dated sales receipt, to:
Entergy Solutions Residential Programs
4298 Elysian Fields Avenue, Suite B
New Orleans, LA 70122
entergysolutionsla@entergy.com

All rebate forms must be received within 45 days of the purchase date. Please allow four to six weeks for processing. This offer is available through Dec. 31, 2024, or while funds last.

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Dehumidifier


Entergy Solutions

Get a $25 rebate

Entergy Solutions dehumidifier

Receive a **$25 rebate** on ENERGY STAR® qualified dehumidifiers

Residential electric customer information

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Entergy Solutions

Dehumidifier information

Make:
Model:
Capacity (pints):
How is the residence currently heated and cooled? (Check all that apply)
Heat
☐Gas heated ☐Electrically heated ☐Heat pump system ☐Unknown
Cool
☐Air conditioned (central or room A/C) ☐No air conditioning

By signing below, purchaser authorizes Entergy Solutions to perform on-site inspections as needed to confirm installation. A separate rebate must be filled out for each dehumidifier purchased. A rebate check will be paid to purchaser listed on this form. Email address will only be used to notify you of your rebate status.

Purchaser's signature:
Date:

Send this application, along with a copy of your dated sales receipt, to:
Entergy Solutions Residential Programs
4298 Elysian Fields Avenue, Suite B
New Orleans, LA 70122
entergysolutionsla@entergy.com

All rebate forms must be received within 45 days of the purchase date. Please allow four to six weeks for processing. This offer is available through Dec. 31, 2024, or while funds last.

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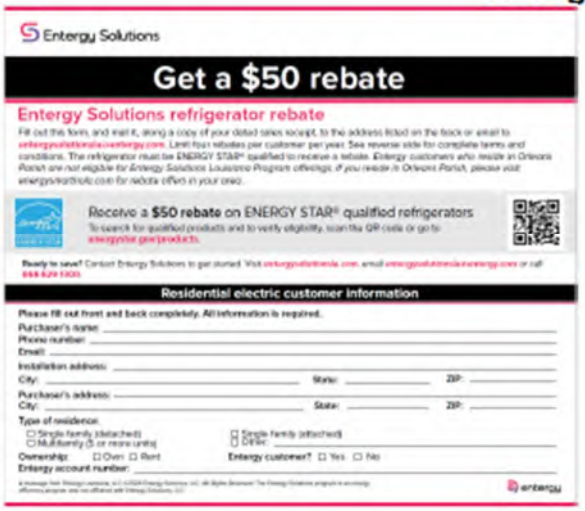
Pool Pump Pads

Refrigerator



Entergy Solutions

Get a $50 rebate

Entergy Solutions refrigerator rebate

Fill out this form, and mail it, along a copy of your dated sales receipt, to the address listed on the back or email to entergysolutionsla@entergy.com. Limit four rebates per customer per year. See reverse side for complete terms and conditions. The refrigerator must be ENERGY STAR® qualified to receive a rebate. Entergy customers who reside in Orleans Parish are not eligible for Entergy Solutions Louisiana Program offerings. If you reside in Orleans Parish, please visit energysmartnola.com for rebate offers in your area.

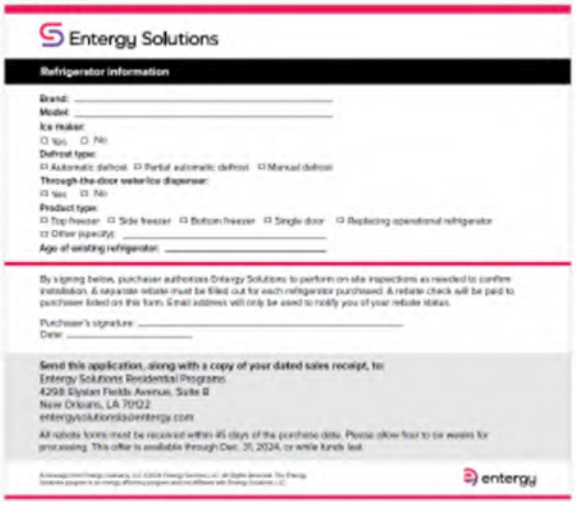
Receive a **$50 rebate** on ENERGY STAR® qualified refrigerators
To search for qualified products and to verify eligibility, scan the QR code or go to energystar.gov/products.

Ready to save? Contact Entergy Solutions to get started. Visit entergysolutionsla.com, email entergysolutionsla@entergy.com or call 844.629.1300.

Residential electric customer information

Please fill out front and back completely. All information is required.

Purchaser's name: _____
Phone number: _____
Email: _____
Installation address: _____
City: _____ State: _____ ZIP: _____
Purchaser's address: _____
City: _____ State: _____ ZIP: _____
Type of residence:
☐ Single family (detached) ☐ Single family (attached)
☐ Multifamily (5 or more units) ☐ Other: _____
Ownership: ☐ Own ☐ Rent Entergy customer? ☐ Yes ☐ No
Entergy account number: _____



Entergy Solutions

Refrigerator information

Brand: _____
Model: _____
Ice maker:
☐ Yes ☐ No
Defrost type:
☐ Automatic defrost ☐ Partial automatic defrost ☐ Manual defrost
Through-the-door water/ice dispenser:
☐ Yes ☐ No
Product type:
☐ Top freezer ☐ Side freezer ☐ Bottom freezer ☐ Single door ☐ Replacing operational refrigerator
☐ Other (specify): _____
Age of existing refrigerator: _____

By signing below, purchaser authorizes Entergy Solutions to perform on-site inspections as needed to confirm installation. A separate rebate must be filled out for each refrigerator purchased. A rebate check will be paid to purchaser listed on this form. Email address will only be used to notify you of your rebate status.

Purchaser's signature: _____
Date: _____

Send this application, along with a copy of your dated sales receipt, to:
Entergy Solutions Residential Programs
4298 Elysian Fields Avenue, Suite B
New Orleans, LA 70122
entergysolutionsla@entergy.com

All rebate forms must be received within 45 days of the purchase date. Please allow four to six weeks for processing. This offer is available through Dec. 31, 2024, or while funds last.

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Smart thermostat

Entergy Solutions

Receive up to $50 on smart thermostat rebate

Complete the information below and mail to the address listed below along with a copy of your dated sales receipt, or email this form and your receipt to entergysolutionsla@entergy.com. Limit two rebates per customer account. This rebate offer cannot be used toward purchases from the Entergy Solutions Online Marketplace. Complete terms and conditions are included below. Entergy customers who reside in Orleans Parish are not eligible for Entergy Solutions Louisiana Program offerings. If you reside in Orleans Parish, please visit energysmartnola.com for rebate offers in your area.

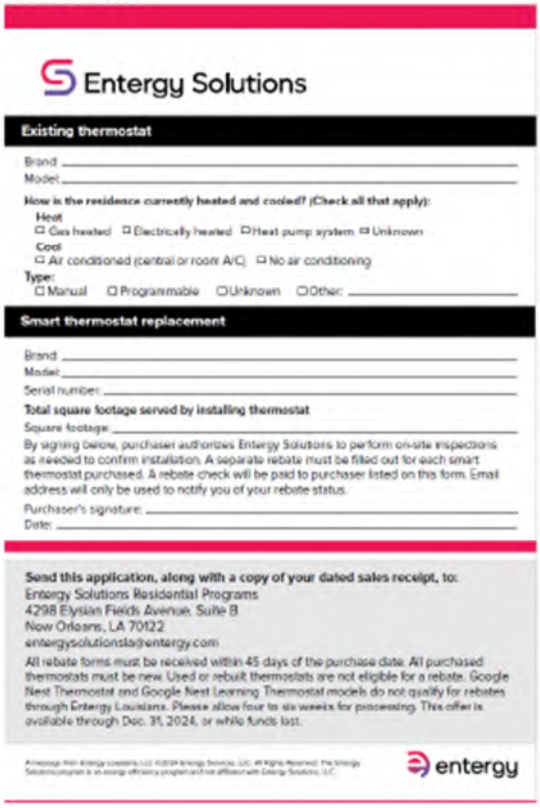
Receive up to **$50 rebate** on ENERGY STAR® qualified smart thermostats. Rebate amount cannot exceed the actual cost of the thermostat.

Entergy Solutions residential electric customer information

Please fill out front and back completely. All information is required.

Purchaser's name: _____
Phone number: _____
Email: _____
Installation address: _____
City: _____ State: _____ ZIP: _____
Type of residence:
☐ Single family (detached) ☐ Single family (attached)
☐ Multifamily (5 or more units) ☐ Other: _____
Ownership:
☐ Own ☐ Rent
Entergy customer?
☐ Yes ☐ No
Entergy account number: _____

entergy



Entergy Solutions

Existing thermostat

Brand: _____
Model: _____
How is the residence currently heated and cooled? (Check all that apply):
Heat
☐ Gas heated ☐ Electrically heated ☐ Heat pump system ☐ Unknown
Cool
☐ Air conditioned (central or room A/C) ☐ No air conditioning
Type:
☐ Manual ☐ Programmable ☐ Unknown ☐ Other: _____

Smart thermostat replacement

Brand: _____
Model: _____
Serial number: _____
Total square footage served by installing thermostat
Square footage: _____
By signing below, purchaser authorizes Entergy Solutions to perform on-site inspections as needed to confirm installation. A separate rebate must be filled out for each smart thermostat purchased. A rebate check will be paid to purchaser listed on this form. Email address will only be used to notify you of your rebate status.
Purchaser's signature: _____
Date: _____

Send this application, along with a copy of your dated sales receipt, to:
Entergy Solutions Residential Programs
4298 Elysian Fields Avenue, Suite B
New Orleans, LA 70122
entergysolutionsla@entergy.com
All rebate forms must be received within 45 days of the purchase date. All purchased thermostats must be new. Used or rebuilt thermostats are not eligible for a rebate. Google Nest Thermostat and Google Nest Learning Thermostat models do not qualify for rebates through Entergy Louisiana. Please allow four to six weeks for processing. This offer is available through Dec. 31, 2024, or while funds last.

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Pool pump pads

Entergy Solutions

Get a $300 rebate

Entergy Solutions in-ground pool pump rebate

Fill out the reverse side of this form, and mail to the address listed on the back along with a copy of your dated sales receipt or email to entergysolutionsla@entergy.com. Limit four rebates per customer per year. See reverse side for complete terms and conditions. The in-ground pool pump must be ENERGY STAR® qualified to receive a rebate. Entergy customers who reside in Orleans Parish are not eligible for Entergy Solutions Louisiana Program offerings. If you reside in Orleans Parish, please visit energysmartnola.com for rebate offers in your area.

$300 rebate on ENERGY STAR® qualified in-ground pool pump

To search for qualified products and to verify eligibility, scan the QR code or go to energystar.gov/products.

Ready to save? Contact Entergy Solutions to get started. Visit entergysolutionsla.com, email entergysolutionsla@entergy.com or call 844-829-1300.

Available for Entergy Louisiana customers

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Entergy Solutions residential electric customer information

Please fill out completely. All information is required.

Purchaser's name: _____ Daytime phone: _____ Email: _____

Installation address: _____ City: _____ State: _____ ZIP: _____

Purchaser's address: _____ City: _____ State: _____ ZIP: _____

Type of residence: ☐ Single family (detached) ☐ Single family (attached) ☐ Multifamily (5 or more units) ☐ Other: _____

Ownership: ☐ Own ☐ Rent Entergy customer: ☐ Yes ☐ No Entergy account number: _____

Pool pump information: Brand: _____ Model: _____

Pool pump horsepower: _____ Type of pump: ☐ Two-speed ☐ Variable speed Approx. hours of operating per day in filtering mode: _____

Age of replaced pump: _____ Estimate of pool square footage: _____ Approx. hours of operating per day in cleaning mode: _____

By signing below, purchaser authorizes Entergy Solutions to perform on-site inspections as needed to confirm installation. A separate rebate must be filed out for each pool pump purchased. A rebate check will be paid to purchaser listed on this form. Email address will only be used to notify you of your rebate status.

Purchaser's signature: _____ Date: _____

SEND THIS APPLICATION ALONG WITH A COPY OF YOUR DATED SALES RECEIPT TO:
Entergy Solutions Residential Programs
4298 Elysian Fields Avenue, Suite B
New Orleans, LA 70122
entergysolutionsla@entergy.com

All rebate forms must be received within 45 days of the purchase date. Please allow four to six weeks for processing. This offer is available through Dec. 31, 2024, or while funds last.

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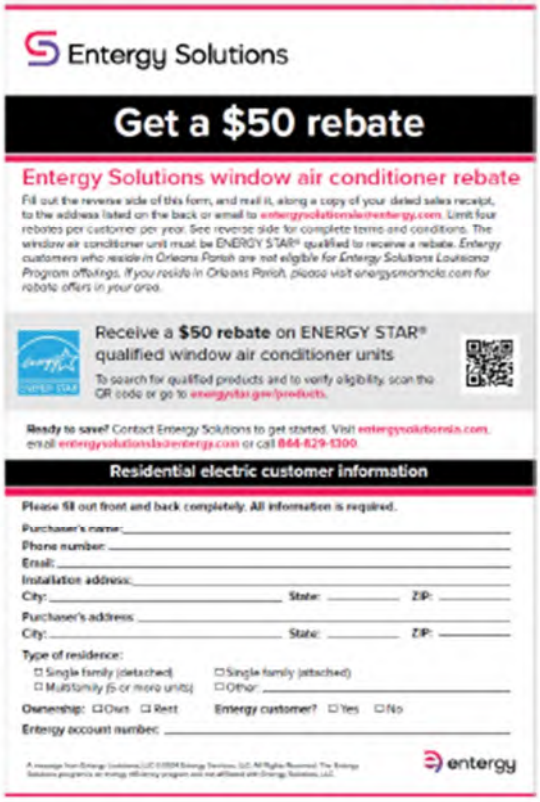
entergy

Window A/C



Entergy Solutions

Get a $50 rebate

Entergy Solutions window air conditioner rebate

Fill out the reverse side of this form, and mail it, along a copy of your dated sales receipt, to the address listed on the back or email to entergysolutionsla@entergy.com. Limit four rebates per customer per year. See reverse side for complete terms and conditions. The window air conditioner unit must be ENERGY STAR® qualified to receive a rebate. *Entergy customers who reside in Orleans Parish are not eligible for Entergy Solutions Louisiana Program offerings. If you reside in Orleans Parish, please visit energysmartnola.com for rebate offers in your area.*

Receive a **$50 rebate** on ENERGY STAR® qualified window air conditioner units

To search for qualified products and to verify eligibility, scan the QR code or go to energystar.gov/products.

Ready to save? Contact Entergy Solutions to get started. Visit entergysolutionsla.com, email entergysolutionsla@entergy.com or call 844-829-1300.

Residential electric customer information

Please fill out front and back completely. All information is required.

Purchaser's name: _____

Phone number: _____

Email: _____

Installation address: _____

City: _____ State: _____ ZIP: _____

Purchaser's address: _____

City: _____ State: _____ ZIP: _____

Type of residence:

☐ Single family (detached) ☐ Single family (attached)
☐ Multifamily (5 or more units) ☐ Other: _____

Ownership: ☐ Own ☐ Rent Entergy customer? ☐ Yes ☐ No

Entergy account number: _____

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Entergy Solutions

Window air conditioner information

Brand: _____

Model: _____

Cooling capacity: _____ (Btu/hr)

Is system reverse cycle:
☐ Yes ☐ No

Louvered sides:
☐ Yes ☐ No

CEER: _____

Unit installation:
☐ Window ☐ Wall

By signing below, purchaser authorizes Entergy Solutions to perform on-site inspections as needed to confirm installation. A separate rebate must be filled out for each window air conditioner purchased. A rebate check will be paid to purchaser listed on this form. Email address will only be used to notify you of your rebate status.

Purchaser's signature: _____

Date: _____

Send this application, along with a copy of your dated sales receipt, to:
Entergy Solutions Residential Programs
4298 Elysian Fields Avenue, Suite B
New Orleans, LA 70122
entergysolutionsla@entergy.com

All rebate forms must be received within 45 days of the purchase date. Please allow four to six weeks for processing. This offer is available through Dec. 31, 2024, or while funds last.

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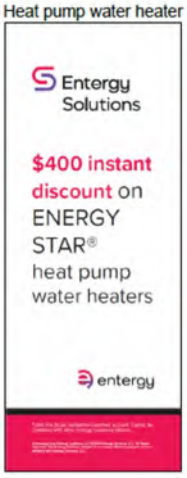
Vertical Beam Sign_5x14

Window A/C

Air Purifier

Dehumidifier

Heat pump water heater

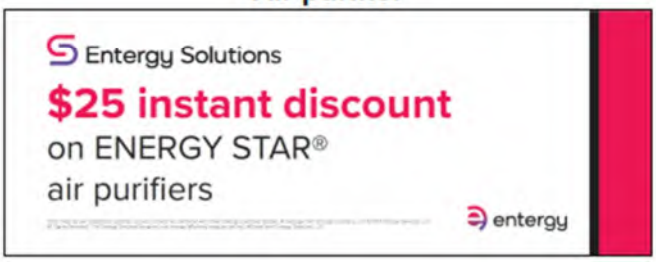


Lighting

Horizontal Beam Sign_14x5

Window A/C

Air purifier

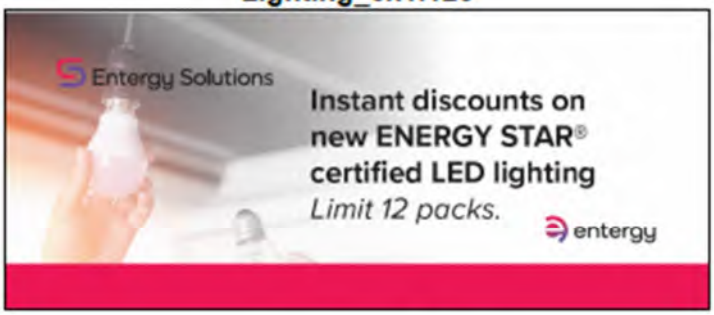


Dehumidifier

Heat pump water heater

Medium labels

Lighting_3x1.125



Lighting_10x8

Peg tags_1.75x3.25

Window A/C

Air purifier

Dehumidifier

Heat pump water heater

Lighting

Take home piece_6x9

Qualifying Product List

Entergy Solutions

Smart thermostat qualifying product list

Manufacturer	Model name	Model number
Alarm.com	Alarm.com Smart Thermostat	B36-T10*
Alarm.com	Alarm.com Plus Smart Thermostat	ADC-T3000
Alarm.com	Alarm.com Plus Smart Thermostat w/ HD Color Touchscreen	ADC-T40K-HD
Alarm.com	Alarm.com Smart Thermostat HQ	ADC-T40K-HQ*
American Standard	Gold 824 Control	Gold 824
Aprilaire	Wi-Fi Thermostat with IAQ	S86WMUPR
Arize	AST1100	AST1100
Bosch	BCC100	BCC100
Braeburn	BlueLink Smart Wi-Fi Universal Touchscreen Thermostat	7320
Braeburn	BlueLink Smart Wi-Fi Universal Thermostat	7205, 7300, 7305
Carrier	Carrier Cor Wi-Fi Thermostat	TP-WEM01-A
Ecobee	ecobee3, ecobee3 Lite	EB-STATE3*
Ecobee	ecobee4	EB-STATE4*
Ecobee	ecobee SmartThermostat with Voice Control	EB-STATE5*
Ecobee	Smart Thermostat Enhanced	EB-STATE6L*
Ecobee	Smart Thermostat Premium	EB-STATE6*
EcoFactor	Simple Wi-Fi Thermostat	simple S100*
Emerson	Sensi Smart Thermostat	ST55*, 1F87U-42WF*
Emerson	Sensi Touch Smart Thermostat	ST75*, 1F95U-42WF*
Emerson	Sensi Touch 2 Smart Thermostat	ST76
Emerson	Sensi Lite	ST25
GE	Cync Smart Thermostat	CTHMCAPPEKB1*, 93129958
Greenlite	G2 Wi-Fi Enabled Thermostat	G2
Honeywell Home	Amazon Smart Thermostat	S6ED3R
Honeywell Home	T5 Wi-Fi Thermostat	RCHT861*WF*
Honeywell Home	T6 Pro Wi-Fi Programmable Thermostat	TH6220WF*, TH6320WF2*, TH6320ZW*
Honeywell Home	T9 Smart Thermostat	RCHT9*10WF*
Honeywell Home	T10 Pro Smart Thermostat	THX*WF*
Honeywell Home	WF Thermostat	RTH6580
Honeywell Home	Wi-Fi Smart Color Thermostat	RTH9585WF*, RTH9580WF*, RET97*
Honeywell Home	Wi-Fi Vision PRO 8000	TH8321WF*
Honeywell Home	Wi-Fi Thermostat 9000	TH9320WF*
Honeywell Home	RedLINK Prestige	THX9421R*

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Earned Media

Circuit Article

April 29, 2024

Insights > Improve your air for a healthy life

Improve your air for a healthy life

BY: LOUISIANA EDITORIAL TEAM

04/29/2024

As the days get longer and the sun feels warmer, it is important to appreciate nature and reflect on the impact our energy use has on the world. May is Clean Air Month, and it is the perfect time to invest in your home and your health. Entergy Solutions Louisiana has offerings to help improve your home's health and comfort and reduce your carbon footprint.

Improve the quality of indoor air

Entergy Soutions provides rebates for a variety of new ENERGY STAR® certified products including: **central air conditioners** (up to $500), **dehumidifiers** ($25) and **air purifiers** ($25).

Shop air improvement and energy saving deals by visiting our online store

Shop in our **Online Marketplace** for a variety of discounted energy-saving products, including:

- No-cost energy efficiency kits
- Pipe insulation
- Advanced power strips
- Smart thermostats
- Dehumidifiers
- Air purifiers
- And more

Reduce pollutants

Using an air purifier can reduce airborne bacteria and dust particles, helping to keep you and your family healthier.

Humidity control

Using a dehumidifier can reduce humidity and excess moisture, limiting the risk of bacteria and mold growth in your home.

Ultimate comfort

An **A/C Tune-Up** helps to make sure your air conditioner continues running smoothly, so you stay cool and comfortable throughout our hot Louisiana summer.

- Improves the efficiency of your unit by 30%, which reduces your monthly bill.
- Increases the life span and reliability of the unit.
- Allows for a cooler indoor environment with better humidity control.
- Includes instant rebate of up to $150 to make it more affordable.

Schedule your A/C Tune-Up with a trusted trade ally today

Improve your air for a healthy life | Entergy Newsroom

Circuit Article

June 13, 2024

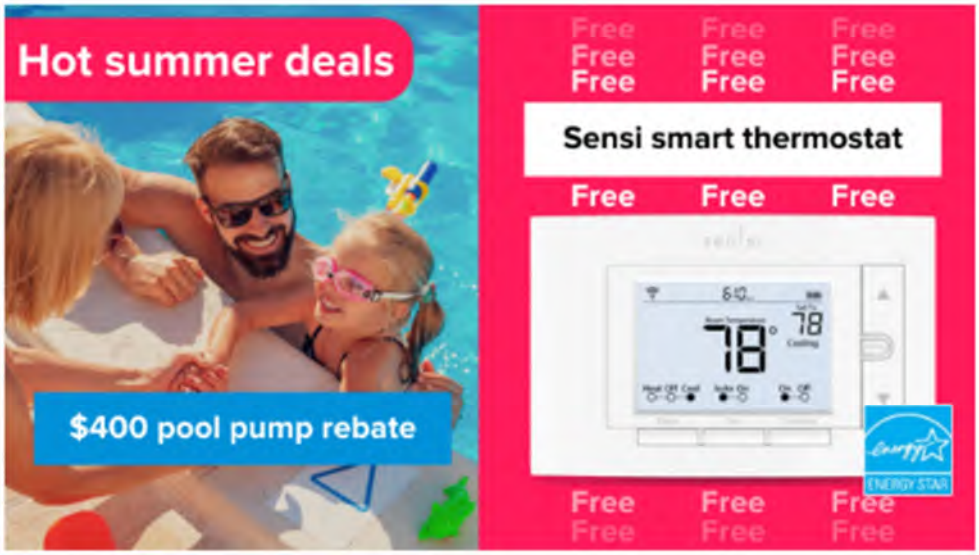
Insights > Jump into summer energy savings

Jump into summer energy savings

BY: LOUISIANA EDITORIAL TEAM

06/13/2024

Entergy Solutions



Take the Summer Savings Plunge

Old, inefficient pool pumps can be costly and use a lot of energy. Beat the summer heat with a cool pool by upgrading to an ENERGY STAR® certified pool pump. A new, efficient in-ground pool pump can use 18 percent less energy than a standard pool pump and can save more than $300 in energy bill costs annually.*

Make your upgrade more affordable with an Entergy Solutions Rebate. Eligible ENERGY STAR certified pool pumps can receive rebates of up to $400.

Shop and save even more this summer with these energy-saving products

Entergy Solutions is offering all Entergy Louisiana residential account holders the opportunity to save this summer with a FREE sensi smart thermostat. Claim yours today by visiting the online marketplace. Hurry, this hot deal won't last long and is available only while supplies last.

Embrace your most energy-efficient life

To learn more about Entergy Solutions and the other energy-saving opportunities, visit **entergysolutionsla.com**, **email** entergysolutionsla@entergy.com or call **844-829-1300**.

Tags

Louisiana Energy efficiency Energy Smart ENERGY STAR
LA energy efficiency

Louisiana Editorial Team

Online Marketplace
Earth Day Campaign
Earned Media

Circuit Article

April 8, 2024

Insights > Reduce your environmental impact with Entergy Solutions

Reduce your environmental impact with Entergy Solutions

BY: LOUISIANA EDITORIAL TEAM

04/08/2024

Earth Day is April 22, and Entergy Solutions is here to help you make an impact with a variety of simple upgrades to your home that will help you conserve energy and reduce your environmental footprint.

Go green and save green

You can upgrade your home's comfort and increase energy saving with Entergy Solutions' **Home Performance with ENERGY STAR®** assessment. The assessment takes a whole-home approach to improving energy efficiency and is no cost to you.

During this in-person assessment, an energy advisor will complete a walk through of your home and will install no-cost energy-efficient products, such as LED light bulbs, smart power strips and smart thermostats. The assessment also reduces the up-front cost of installing energy efficiency upgrades in your home. Depending on the improvements you choose, you could save at least 20% on your annual utility bill.

Lower your carbon footprint with energy-efficient appliance rebates

Energy Smart provides rebates for a variety of **ENERGY STAR certified appliances**, including:

- Smart thermostats: Up to $50
- Air purifiers & Dehumidifiers: $75
- Window air-conditioner units: $50
- Refrigerators: $50
- In-ground pool pumps: $300
- Heat-pump water heaters: $400

Shop Earth shattering deals by visiting our online store

Shop in our **Online Marketplace** for a variety of discounted energy-saving products, including:

- No-cost energy efficiency kits
- Pipe insulation
- Advanced power strips
- Smart thermostats
- Dehumidifiers
- Air purifiers
- And more

Make a difference this Earth Day

To learn more about Entergy Solutions and the other energy-saving opportunities, visit **www.entergysolutionsla.com**, email

Earth Day Press Release
5/2/24

Entergy Solutions
BY ENTERGY LOUISIANA

FOR IMMEDIATE RELEASE:
May 2, 2024

Media Contact:
Megan Sykes
Megan.sykes@aptim.com
985-351-4877

Entergy Solutions extends Earth Day sale on popular energy-saving products

Offers are valid for Entergy Louisiana customers on the program's online marketplace until May 8.

LOUISIANA – Entergy Solutions, a free energy efficiency program open to all Entergy Louisiana customers, is thrilled to announce the extension of Earth Day specials to May 8, offering customers more time to seize incredible savings on energy-saving devices.

Here's a glimpse of a few of the incredible deals offered through Entergy Solutions online marketplace:

- **Amazon Smart Thermostats:** Now available for just $4.99 each - a massive 95% discount off the retail price.
- **Sensi smart thermostats:** With prices as low as $49.00, you can enjoy savings of $20-$30 off the retail price.
- **LED power strips:** This popular product is now 30% off the retail price.

To celebrate Earth Day, Entergy Solutions rolled out savings promotions in April to help customers make an impact with energy conservation upgrades to their homes. Due to high customer demand, Entergy Solutions is extending the discounts to May 8. The online marketplace store continues to offer Entergy customers affordable prices, incentives, and other deals on energy-related products.

Visit entergysolutionsla-marketplace.com to shop for discounted items and learn more about energy-saving tips for your home or business. For more information about Entergy Solutions and how to participate, visit entergysolutionsla.com.

Entergy Solutions
BY ENTERGY LOUISIANA

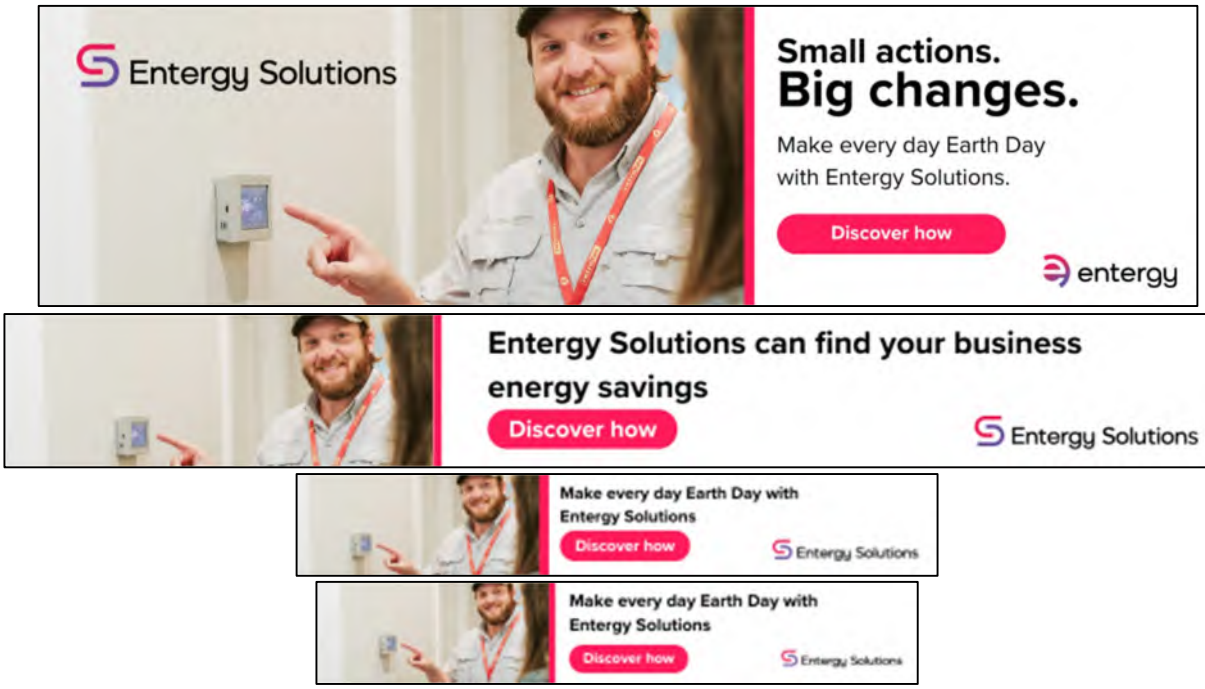
###

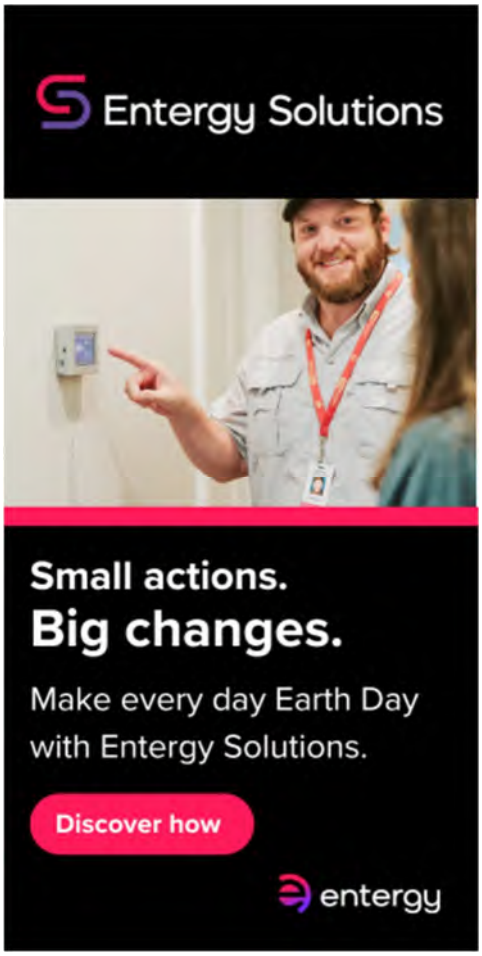
ABOUT ENTERGY SOLUTIONS
Entergy Solutions offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program partners with participating trade allies and retailers, who will help customers find new ways to save. For more information and how to participate, visit entergysolutionsla.com or call 844-829-1300 to speak to an energy advisor.

- Sent to Over 147 Media Outlets
- 43% Open Rate

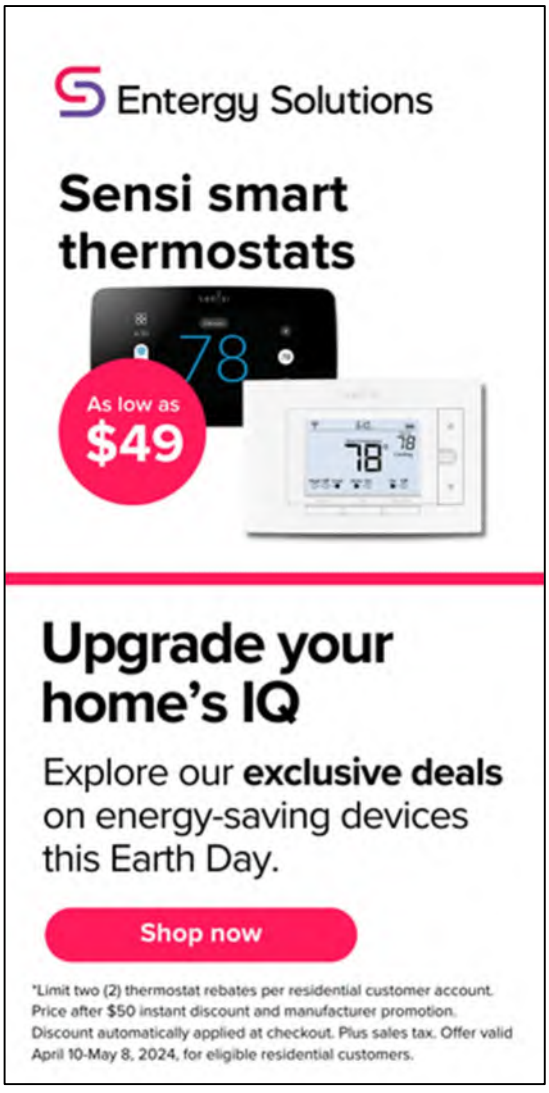
Paid Media

"Upgrade Your Home's IQ" campaign

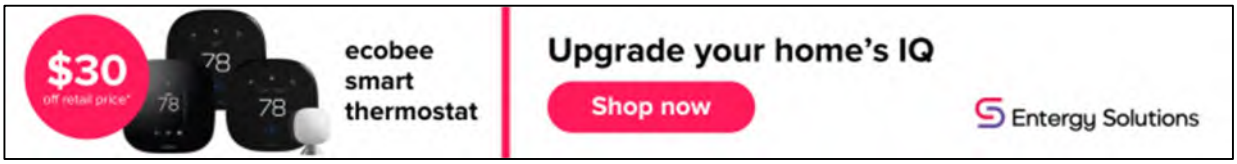


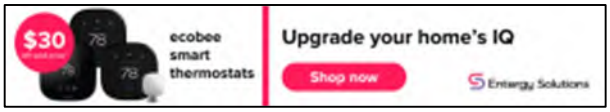


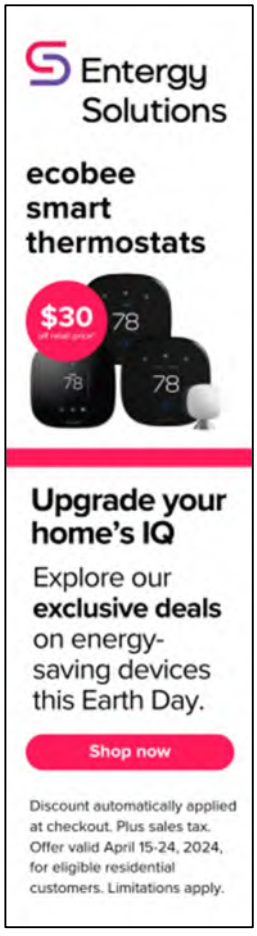
Sensi
April 10-May 8

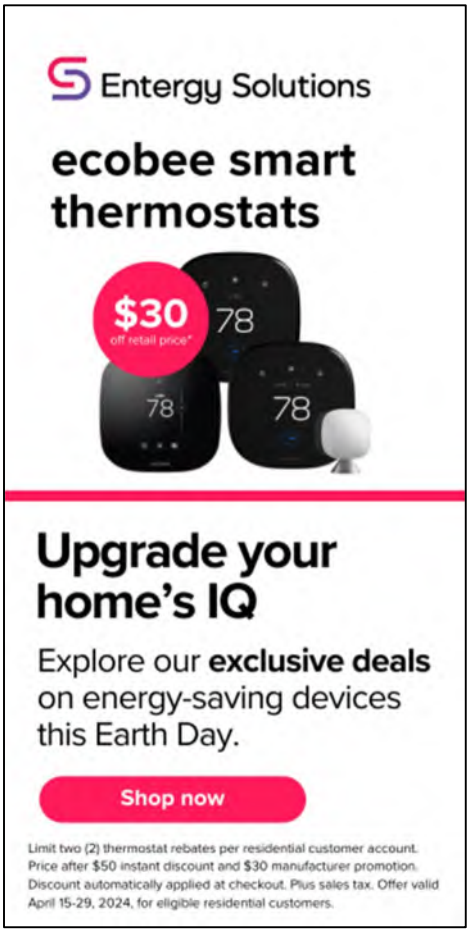


ecobee
April 15-29

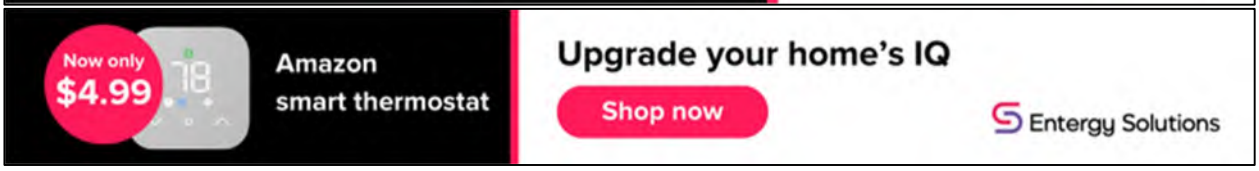


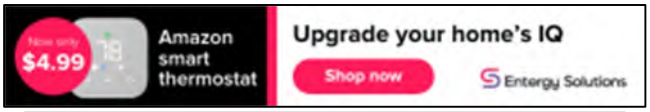


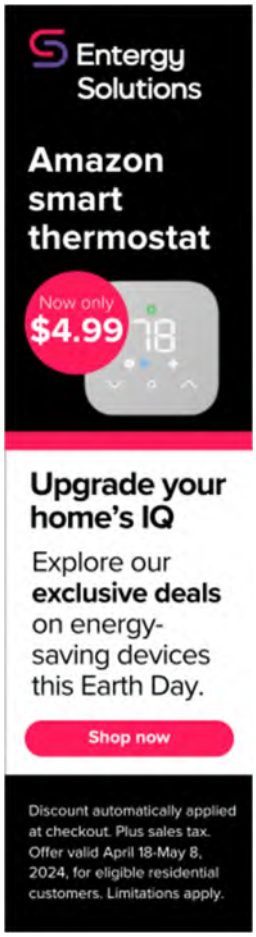


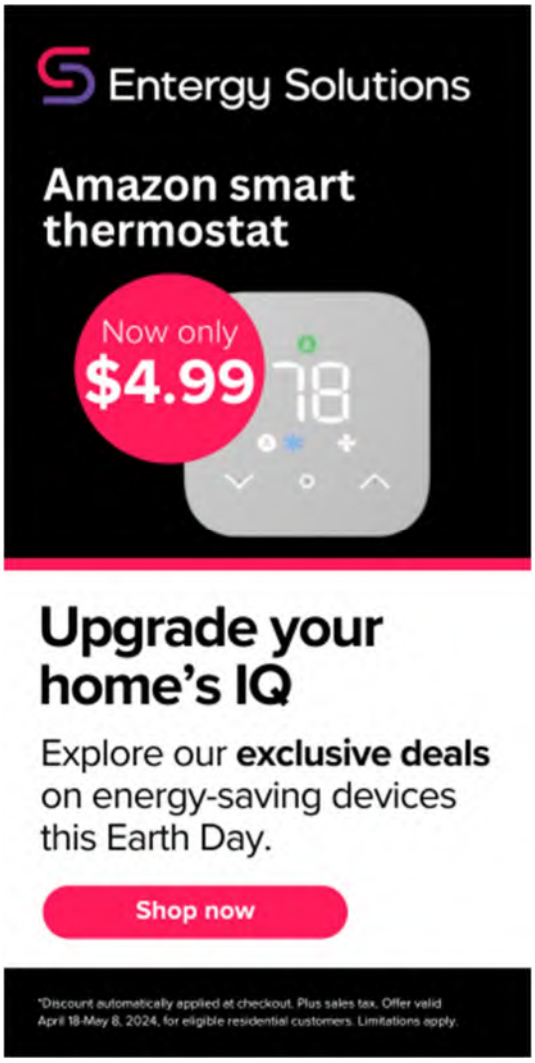


Amazon
April 18-May 8

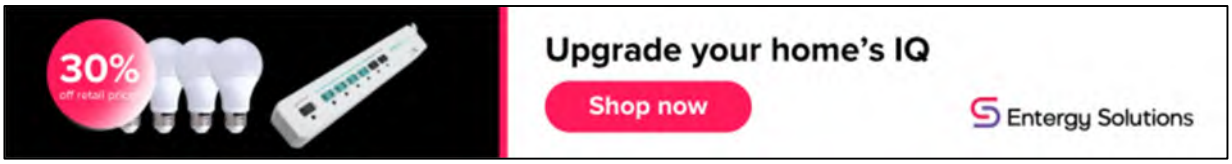


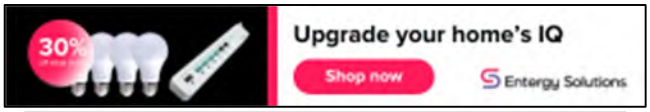






LED Advanced Power Strip
April 8-May 8

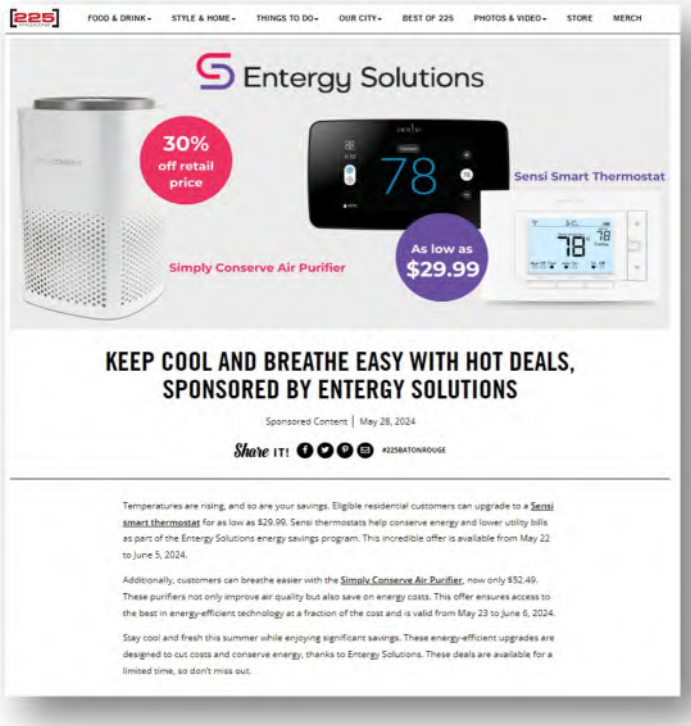




Memorial Day campaign

Earned Media

5/28/25 and 5/30/25



225 FOOD & DRINK STYLE & HOME THINGS TO DO OUR CITY BEST OF 225 PHOTOS & VIDEO STORE MERCH

Entergy Solutions

30% off retail price

Simply Conserve Air Purifier

Sensi Smart Thermostat

As low as $29.99

KEEP COOL AND BREATHE EASY WITH HOT DEALS, SPONSORED BY ENTERGY SOLUTIONS

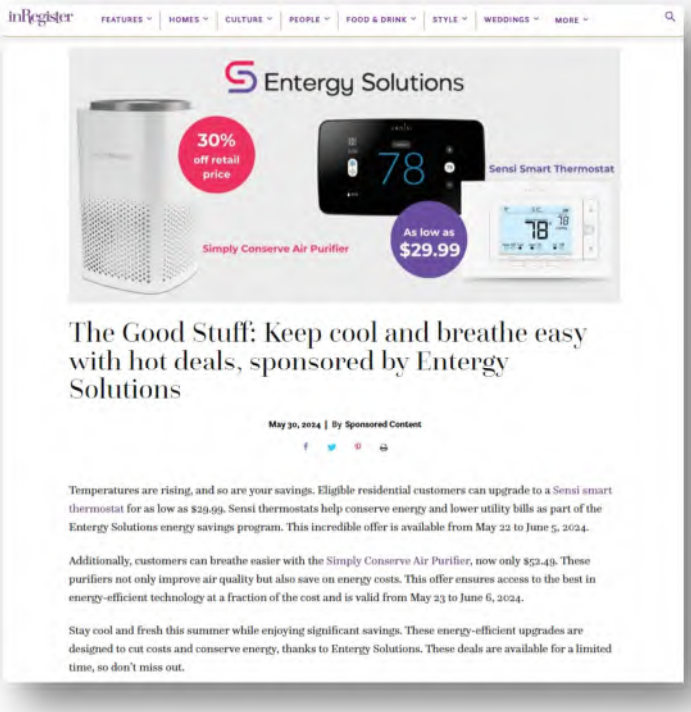
Sponsored Content | May 28, 2024

Share IT! #225BATONROUGE

Temperatures are rising, and so are your savings. Eligible residential customers can upgrade to a Sensi smart thermostat for as low as $29.99. Sensi thermostats help conserve energy and lower utility bills as part of the Entergy Solutions energy savings program. This incredible offer is available from May 22 to June 5, 2024.

Additionally, customers can breathe easier with the Simply Conserve Air Purifier, now only $52.49. These purifiers not only improve air quality but also save on energy costs. This offer ensures access to the best in energy-efficient technology at a fraction of the cost and is valid from May 23 to June 6, 2024.

Stay cool and fresh this summer while enjoying significant savings. These energy-efficient upgrades are designed to cut costs and conserve energy, thanks to Entergy Solutions. These deals are available for a limited time, so don't miss out.



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Entergy Solutions

30% off retail price

Simply Conserve Air Purifier

Sensi Smart Thermostat

As low as $29.99

The Good Stuff: Keep cool and breathe easy with hot deals, sponsored by Entergy Solutions

May 30, 2024 | By Sponsored Content

Temperatures are rising, and so are your savings. Eligible residential customers can upgrade to a Sensi smart thermostat for as low as $29.99. Sensi thermostats help conserve energy and lower utility bills as part of the Entergy Solutions energy savings program. This incredible offer is available from May 22 to June 5, 2024.

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Stay cool and fresh this summer while enjoying significant savings. These energy-efficient upgrades are designed to cut costs and conserve energy, thanks to Entergy Solutions. These deals are available for a limited time, so don't miss out.

Father's Day Campaign

Earned Media
Press Release
June 13, 2024

Entergy Solutions

FOR IMMEDIATE RELEASE:
June 13, 2024

Media Contact:
Megan Sykes
Megan.sykes@aptim.com
985-351-4877

Entergy Solutions offers free Sensi Smart Thermostats just in time for Father's Day

Offers are valid for Entergy Louisiana customers on the program's online marketplace until July 8.

LOUISIANA – Entergy Solutions, a free energy efficiency program open to all Entergy Louisiana customers, makes it easy to beat the heat this summer while saving on utility costs.

For a limited time, customers can enjoy huge savings on a range of thermostats.

- **Sensi Smart Thermostat:** Available now for $0. The retail price is $129.
- **Sensi Touch 2:** Purchase now for $89.99. A $120 discount off the retail price.
- **Sensi Lite:** Buy now for $14.99. $75 off the retail price.

As summer temps reach a record high, Louisiana residents continue to look for ways to reduce energy consumption while keeping their homes cool and comfortable. Entergy Solutions' thermostat deals could not have come at a better time to help customers make an impact with energy conservation, upgrade their homes and save on utility bills. The thermostat promotion is available through July 8 but only while supplies last. The online marketplace continues to offer Entergy customers affordable prices, incentives, and other deals on energy-related products.

Visit entergysolutionsla-marketplace.com to shop for discounted items and learn more about energy-saving tips for your home or business. For more information about Entergy Solutions and how to participate, visit entergysolutionsla.com.

Entergy Solutions

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ABOUT ENTERGY SOLUTIONS
Entergy Solutions offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program partners with participating trade allies and retailers, that will help customers find new ways to save. For more information and how to participate, visit entergysolutionsla.com or call 844-829-1300 to speak to an energy advisor.

Blog Posts

June 13

PUT MONEY BACK INTO DAD'S WALLET: ENTERGY SOLUTIONS OFFERS FREE SENSI SMART THERMOSTAT, SPONSORED BY ENTERGY SOLUTIONS LOUISIANA

Sponsored Content | June 14, 2024

Share it!

As another scorching Louisiana summer approaches, take advantage of Entergy Solutions' incredible smart thermostat deals, including a free Sensi Smart thermostat. Energy-efficient smart thermostats are designed to help you save on utility costs while conserving energy, making your home more comfortable and eco-friendly.

For a limited time, you can enjoy substantial savings on a range of smart thermostats. Order an original Sensi Smart thermostat for $0, with a retail price of $129, a Sensi Lite for $14.99, $75 off the retail price, or a Sensi Touch 2 for only $89.99, $120 off the retail price.

This special offer is available until July 8, 2024, but only while supplies last. By installing a smart thermostat, you can significantly reduce your energy consumption and stay cool throughout the hot summer months. Don't let this fantastic opportunity pass you by. Upgrade your home with these cutting-edge thermostats and enjoy a cooler, more cost-effective summer with Entergy Solutions.

June 14

THURSDAY, JUNE 13, 2024

Beat the Heat: Save big with Entergy Solutions' summer thermostat deals, sponsored by Entergy Solutions

By Sponsored Content

As another scorching Louisiana summer approaches, take advantage of Entergy Solutions' incredible smart thermostat deals. Energy-efficient smart thermostats are designed to help you save on utility costs while conserving energy, making your home more comfortable and eco-friendly.

For a limited time, you can enjoy substantial savings on a range of smart thermostats. Order an original Sensi Smart thermostat for $0 or purchase a Sensi Lite for $14.99 or a Sensi Touch 2 for only $89.99 – a savings of up to $120.

This special offer is available from June 13 to July 8, 2024. By installing a smart thermostat, you can significantly reduce your energy consumption and stay cool throughout the hot summer months. Don't let this fantastic opportunity pass you by. Upgrade your home with these cutting-edge thermostats and enjoy a cooler, more cost-effective summer with Entergy

July 2

Entergy Solutions offers free Sensi Smart thermostat, sponsored by Entergy Solutions Louisiana

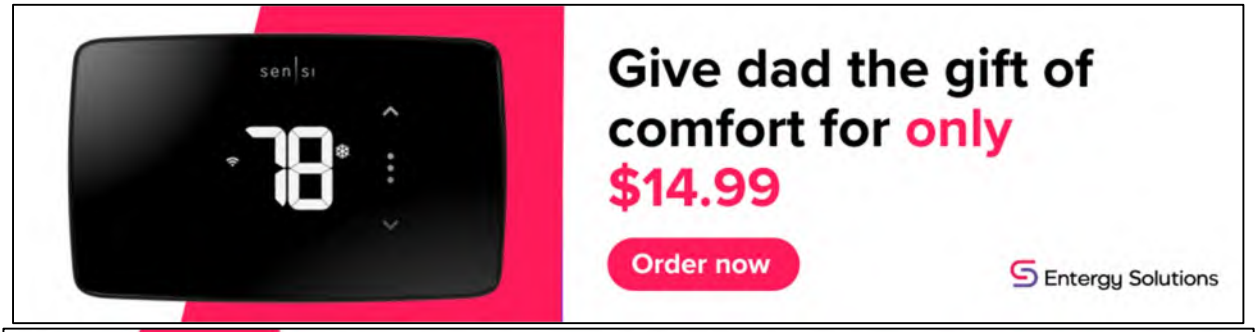
July 2, 2024 | By Sponsored Content

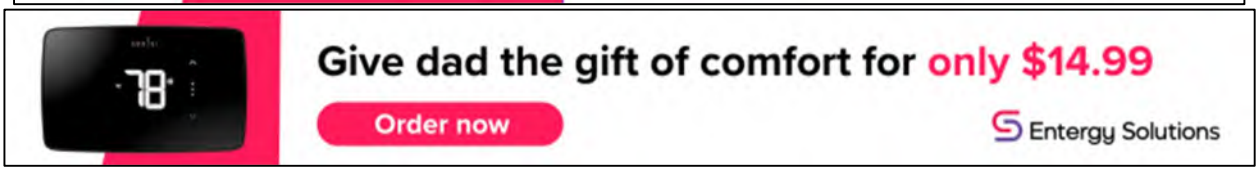
As another scorching Louisiana summer approaches, take advantage of Entergy Solutions' incredible smart thermostat deals, including a free Sensi Smart thermostat. Energy-efficient smart thermostats are designed to help you save on utility costs while conserving energy, making your home more comfortable and eco-friendly.

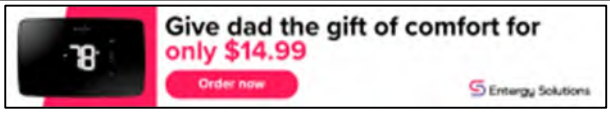
For a limited time while supplies last, you can enjoy substantial savings on a range of smart thermostats. Order an original Sensi Smart thermostat for $0, with a retail price of $129, a Sensi Lite for $14.99, $75 off the retail price, or a Sensi Touch 2 for only $89.99, $120 off the retail price. These prices include the product, shipping, and taxes. Use code EntergySensiShipping at checkout for free shipping.

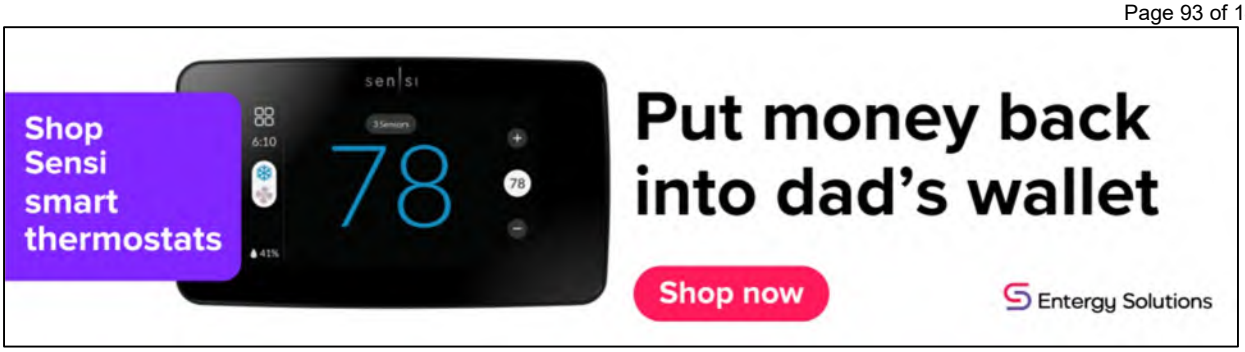
This special offer is available until July 8, 2024. By installing a smart thermostat, you can significantly reduce your energy consumption and stay cool throughout the hot summer months. Don't let this fantastic opportunity pass you by. Upgrade your home with these cutting-edge thermostats and enjoy a cooler, more cost-effective summer with Entergy Solutions.

Paid Media
Digital Ads
June 13-July 8



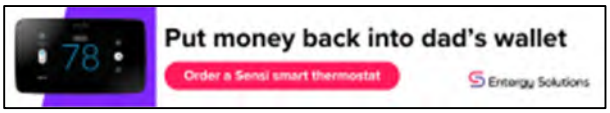





Shop Sensi smart thermostats
Put money back into dad's wallet
Shop now
Entergy Solutions


Put money back into dad's wallet
Order a Sensi smart thermostat
Entergy Solutions


Put money back into dad's wallet
Shop Sensi smart thermostats
Entergy Solutions


Put money back into dad's wallet
Order a Sensi smart thermostat
Entergy Solutions


Entergy Solutions
This Father's Day, put money back into dad's wallet
Shop Sensi smart thermostats
entergy


Entergy Solutions
Only $89.99
$209.99
This Father's Day, put money back into dad's wallet
Shop Sensi smart thermostats
entergy


Entergy Solutions
Put money back into dad's wallet
Shop now
$120
Get yours for
$89.99
for a limited time
June 13-July 8
entergy


Free
Give dad a free Sensi smart thermostat for Father's Day
Order now
Entergy Solutions


Free
Give dad a free Sensi smart thermostat for Father's Day
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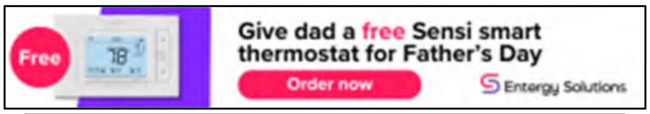
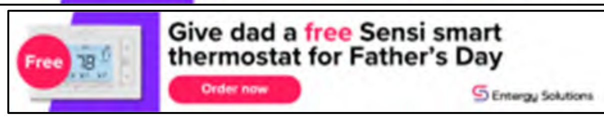
Entergy Solutions


Free
Give dad a free Sensi smart thermostat for Father's Day
Order now
Entergy Solutions


Free
Give dad a free Sensi smart thermostat for Father's Day
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Free
Give dad a free Sensi smart thermostat for Father's Day
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Free
Give dad a free Sensi smart thermostat for Father's Day
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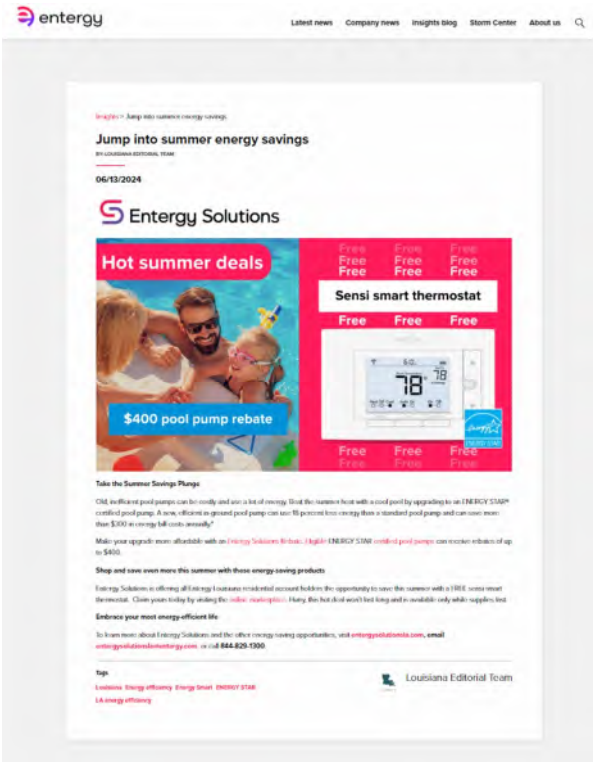
Entergy Solutions
This Father's Day, give dad a
Sensi smart thermostat
Free
while supplies last
Dad doesn't have to know it was free
Order now
June 13-July 8
entergy

“As Low as FREE” campaign

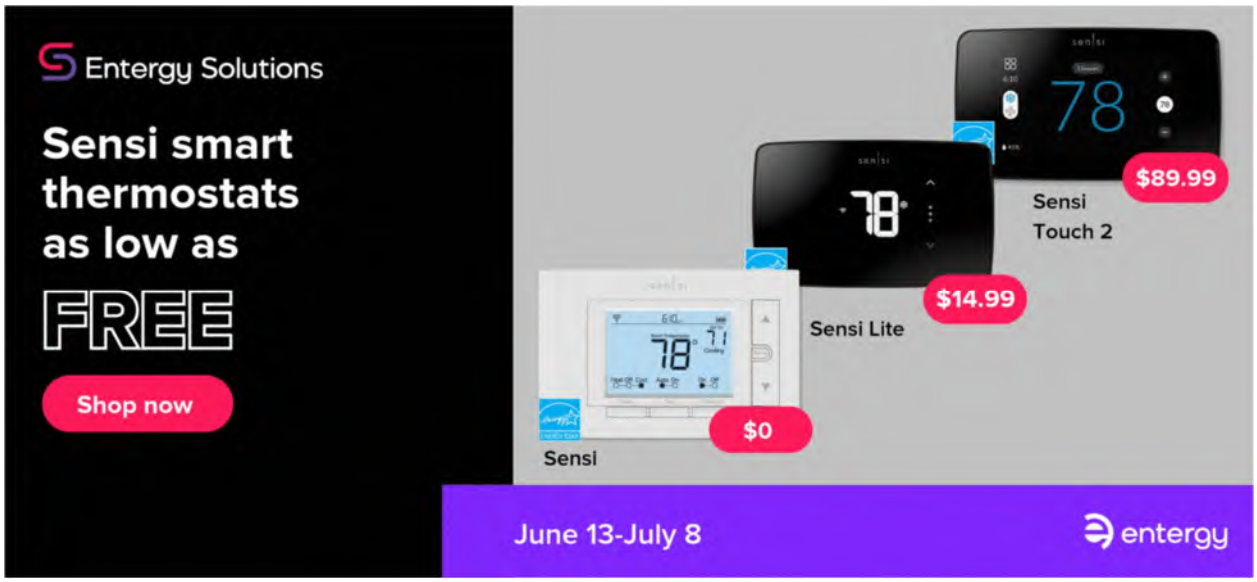
Earned Media

Circuit Article



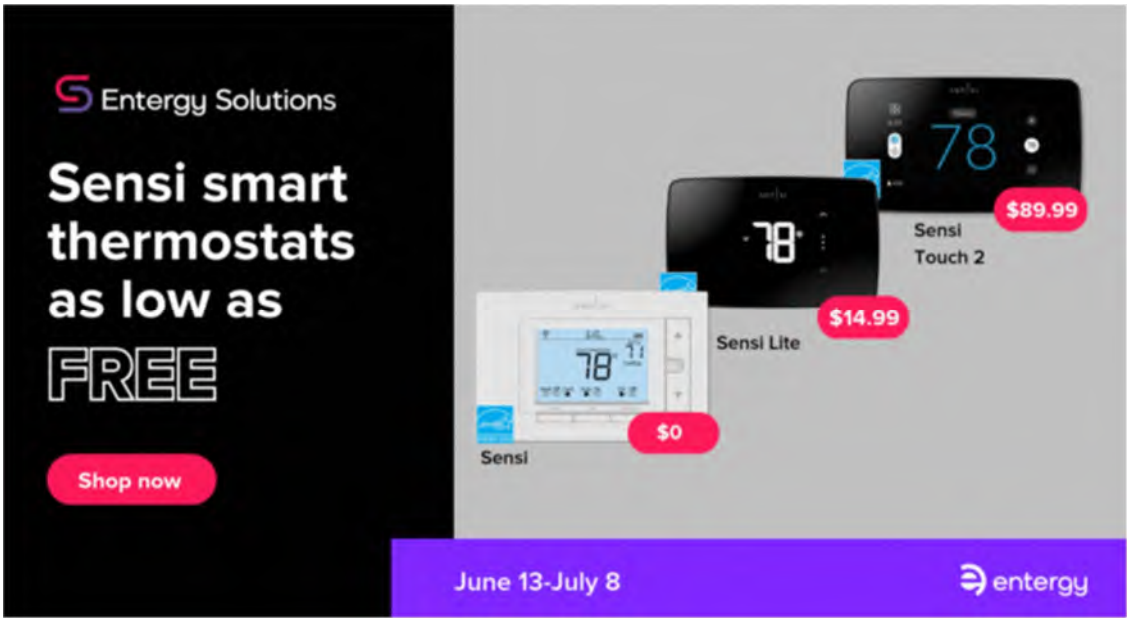
[Jump into summer energy savings | Entergy Newsroom]

Website



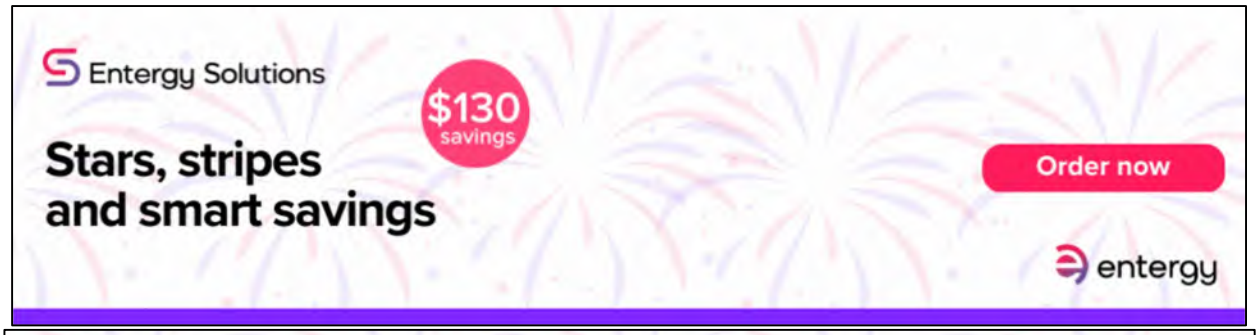
Social Media

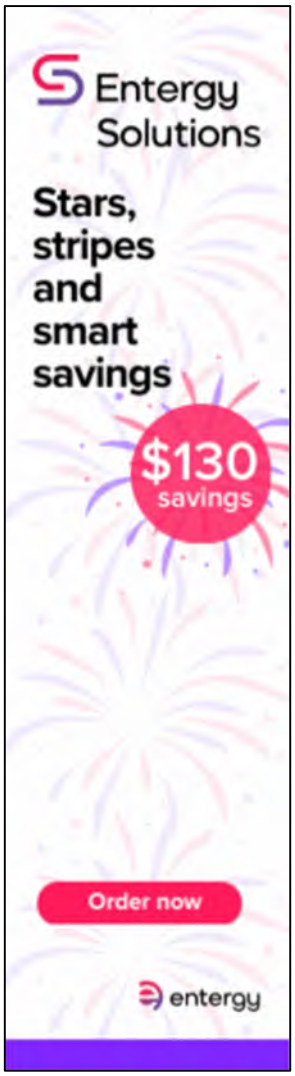
Email Campaign

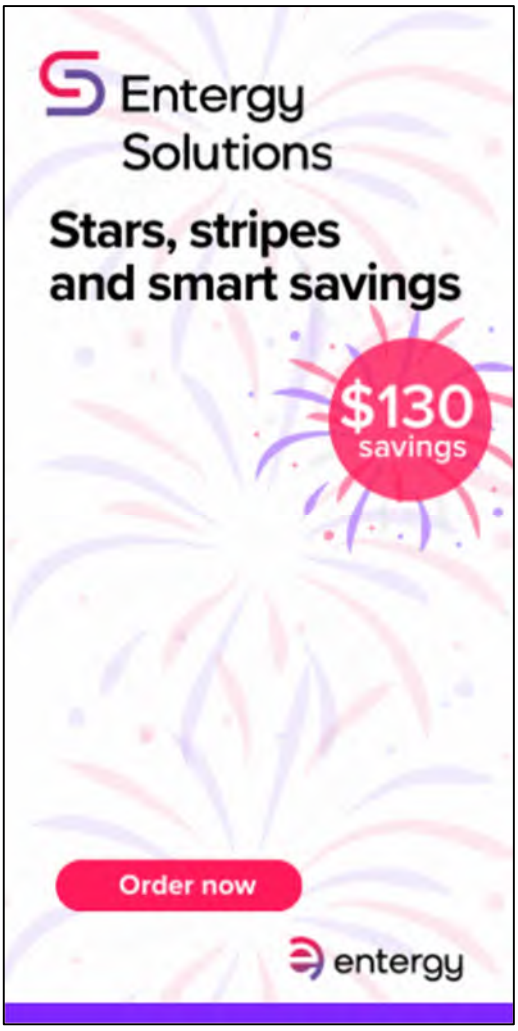


"Stars, Stripes and Smart Savings" Campaign

July 1-14, 2024







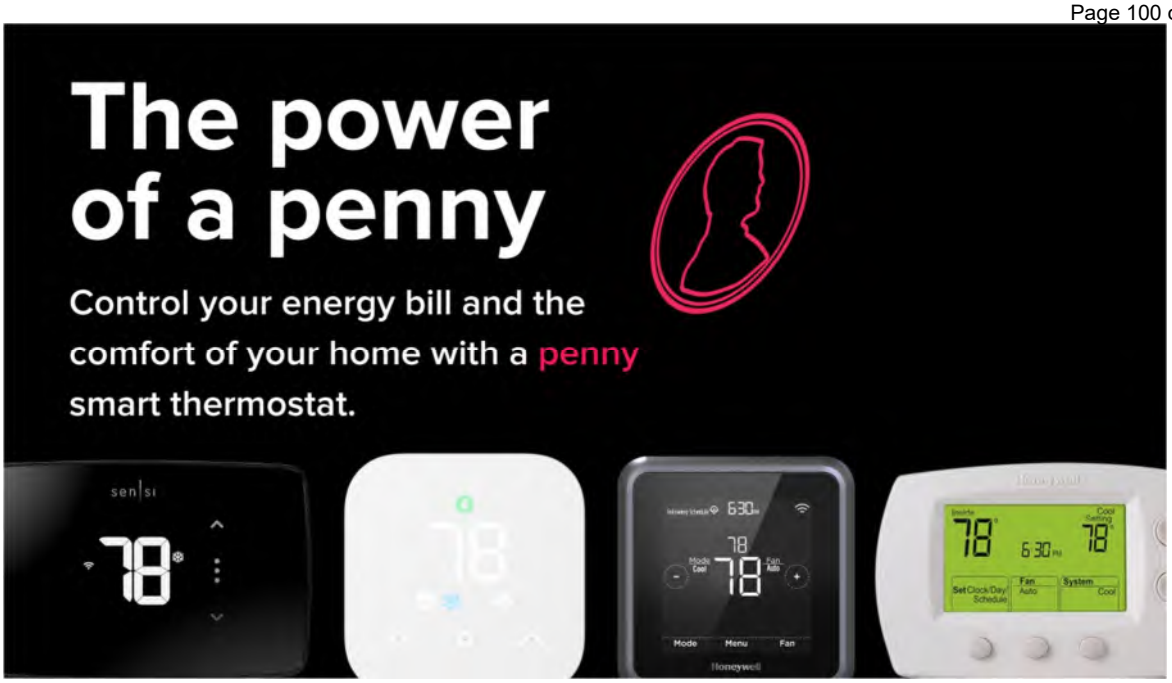
"Summer. Set. Save." Campaign

July 5-15, 2025

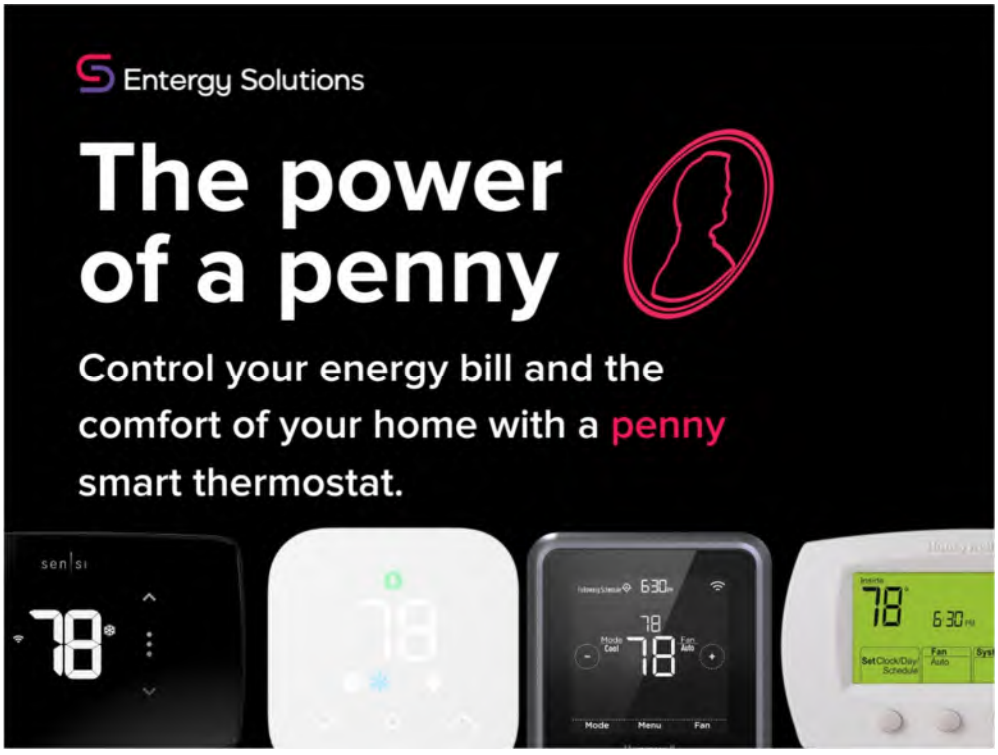
“Power of a Penny” campaign
Aug. 1-Sept. 2, 2024

Bill Insert

Website Banners



Circuit Article



[The power of a penny | Entergy Newsroom]

Insights > The power of a penny

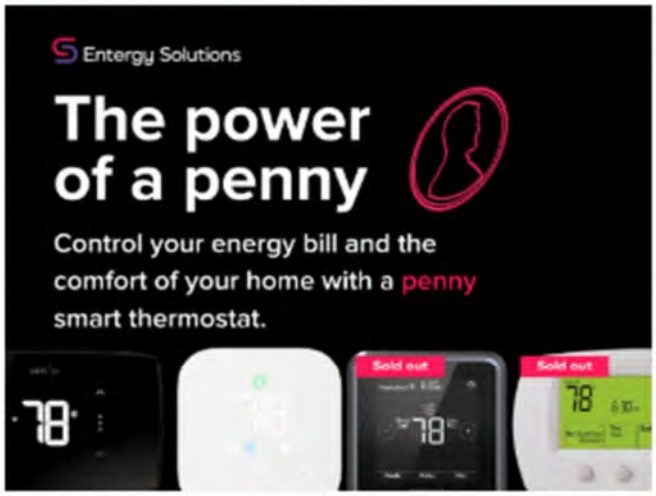
The power of a penny

08/05/2024

As the August heat ramps up for Louisiana residents, for just a penny, Entergy Louisiana customers can make a big difference by reducing energy consumption while also saving on their utility bill.

Unlock significant savings on home energy costs with Entergy Solutions' "Power of a penny" promotion. For a limited time, customers can get select smart thermostats for just $.01, with shipping and taxes included.

- **Amazon smart thermostat:** Available now for $.01. The retail price is $89.99.
- **Sensi lite smart thermostat:** Purchase now for $.01. The retail price is $89.99.



These advanced thermostats help control your home's temperature more efficiently, cutting down on your energy bill. To take advantage of this deal, visit energysolutionsla-marketplace.com/on-sale, choose your thermostat, add it to your cart and apply the code **EntergyAugustShipping** at checkout for free shipping. This offer is available from Aug. 1 to Sept. 7, while supplies last. Don't miss out on this chance to save on energy costs and improve your home's efficiency.

Shop in our Online Marketplace for a variety of discounted energy saving products, including:

- Pipe insulation
- Advanced power strips
- Air purifiers
- And more

Shop penny smart thermostats to reduce energy usage

To learn more about Entergy Solutions and the other energy saving opportunities, visit energysolutionsla.com, email energysolutions@laentergy.com or call **844-829-1300**.

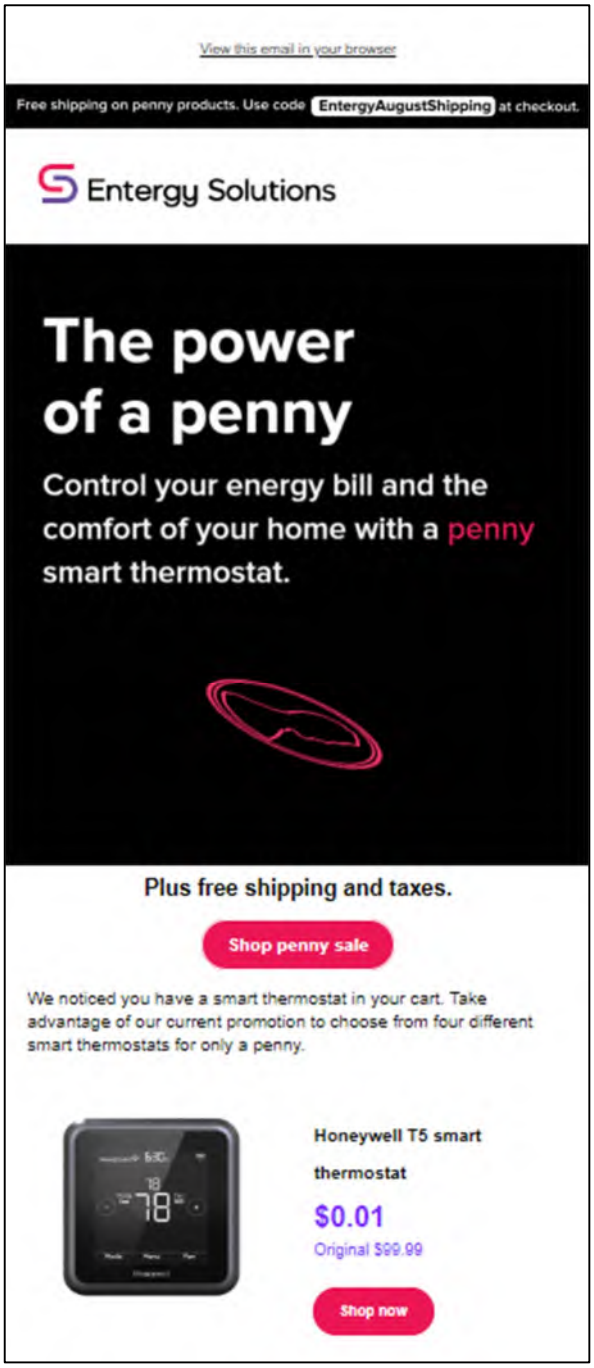
tags

Louisiana Energy efficiency Entergy Solutions

Louisiana Editorial Team

Email Campaign

Email #1 – Aug. 1



View this email in your browser

Free shipping on penny products. Use code **EntergyAugustShipping** at checkout.

Entergy Solutions

The power of a penny

Control your energy bill and the comfort of your home with a penny smart thermostat.

Plus free shipping and taxes.

Shop penny sale

We noticed you have a smart thermostat in your cart. Take advantage of our current promotion to choose from four different smart thermostats for only a penny.

Honeywell T5 smart thermostat

$0.01

Original $99.99

Shop now

Amazon smart thermostat

$0.01

Original $89.99

Shop now

Sensi™ Lite smart thermostat

$0.01

Original $89.99

Shop now

Honeywell WiFi 7-Day programmable thermostat

$0.01

Original $99.99

Shop now

**Penny promo offer valid Aug 1-Sept. 2, 2024, for eligible residential customers. Prices after instant discount. Free shipping available to the first 1,500 orders. Use coupon code EntergyAugustShipping at checkout for free shipping.*

*Use code **EntergyAugustShipping** for free shipping.*

For more information about these energy-saving products and our Entergy Solutions offerings, contact:

844-829-1300 entergysolutionsla.com entergysolutionsla@entergy.com

entergy

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Our mailing address is:
1200 Backyard Lane, Suite 202
Baton Rouge, LA 70802

Want to change how you receive these emails?
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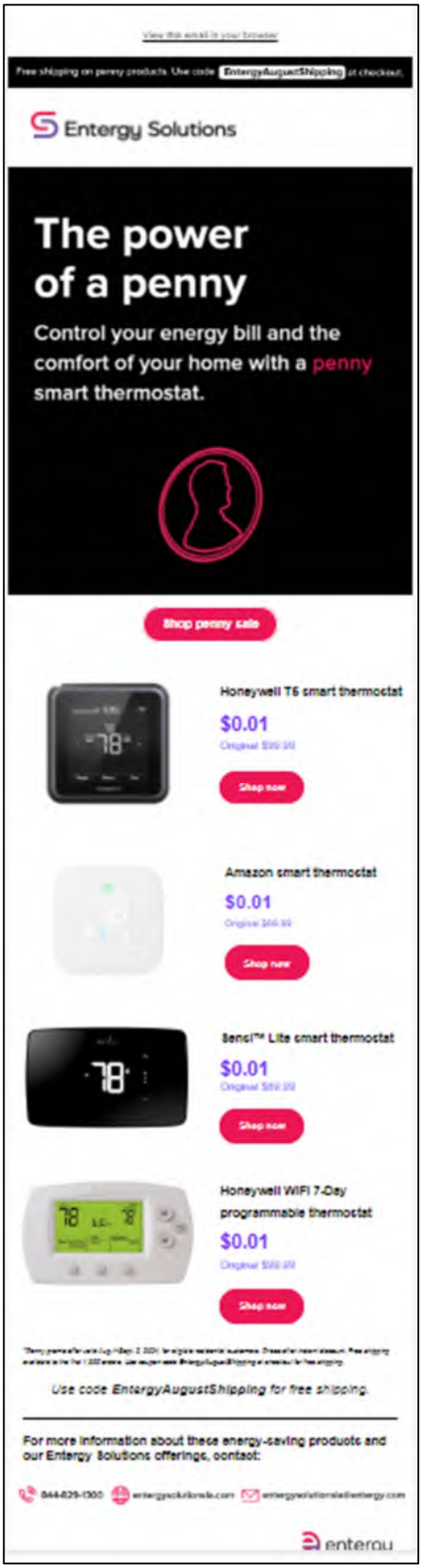
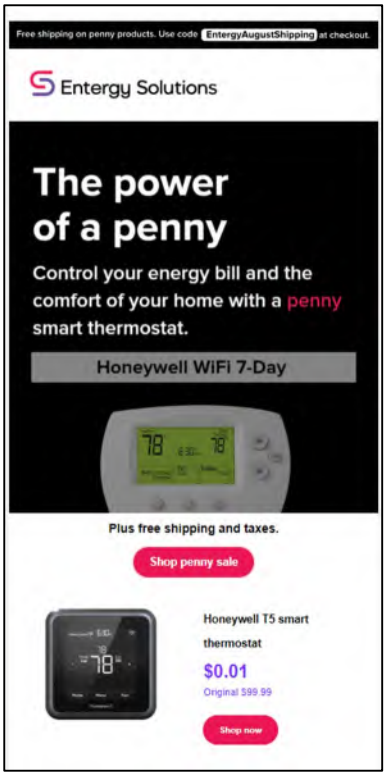
Email #2 – Aug. 1


View this email in your browser
Free shipping on penny products. Use code EntergyAugustShipping at checkout.
Entergy Solutions
The power of a penny
Control your energy bill and the comfort of your home with a penny smart thermostat.
Shop penny sale
Honeywell T6 smart thermostat
$0.01
Shop now
Amazon smart thermostat
$0.01
Shop now
Sensi™ Lite smart thermostat
$0.01
Shop now
Honeywell WiFi 7-Day programmable thermostat
$0.01
Shop now
Use code EntergyAugustShipping for free shipping.
For more information about these energy-saving products and our Entergy Solutions offerings, contact:
844-829-1300
enterou

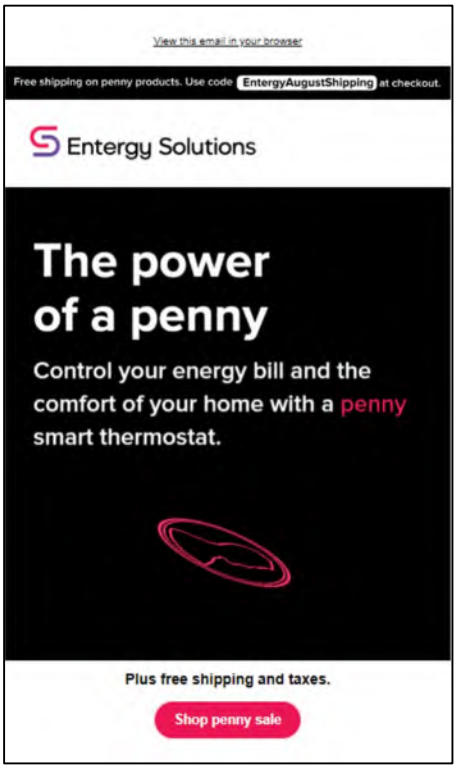
Email #3

Abandoned Cart – Aug. 2



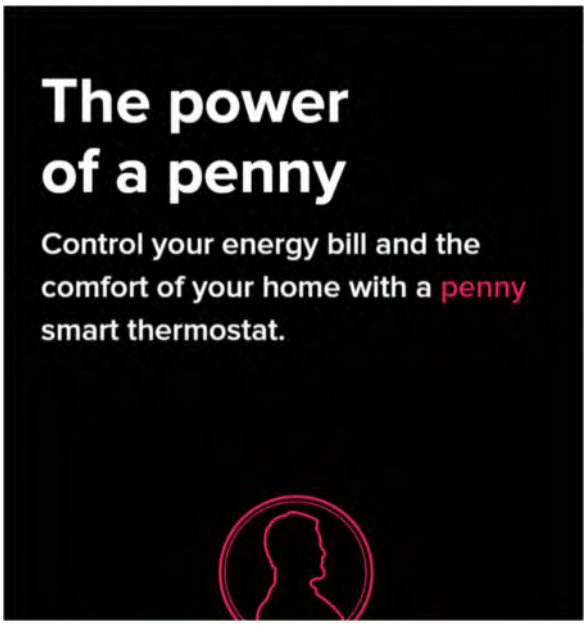
Email #4

DNO Email #1 – Aug. 7



Social Media

Facebook



Post copy: For only $0.01, upgrade your thermostat and lower your energy bill. Act now, while supplies last.

Instagram

For only $0.01, upgrade your thermostat and lower your energy bill. Act now, while supplies last.

Entergy Newsroom

Aug. 5

entergy

Latest news | Company news | Insights blog | Storm Center | About us

Insights > The power of a penny

The power of a penny

BY: LOUISIANA EDITORIAL TEAM

08/05/2024

As the August heat ramps up for Louisiana residents, for just a penny, Entergy Louisiana customers can make a big difference by reducing energy consumption while also saving on their utility bill.

Unlock significant savings on home energy costs with Entergy Solutions' "Power of a penny" promotion. For a limited time, customers can get select smart thermostats for just $.01, with shipping and taxes included.

- **Amazon smart thermostat**: Available now for $.01. The retail price is $89.99.
- **Sensi lite smart thermostat**: Purchase now for $.01. The retail price is $89.99.
- **Honeywell T5 smart thermostat**: Purchase now for $.01. $99.98 discount off the retail price.
- **Honeywell Wi-Fi 7-day programmable thermostat**: Buy now for $.01. $99.98 off the retail price.

These advanced thermostats help control your home's temperature more efficiently, cutting down on your energy bill. To take advantage of this deal, visit **entergysolutionsla-marketplace.com/on-sale**, choose your thermostat, add it to your cart and apply the code **EntergyAugustShipping** at checkout for free shipping. This offer is available from Aug. 1 to Sept. 2, while supplies last. Don't miss out on this chance to save on energy costs and improve your home's efficiency.

Shop in our **Online Marketplace** for a variety of discounted energy-saving products, including:

- Pipe insulation.
- Advanced power strips.
- Air purifiers.
- And more.

Shop penny smart thermostats to reduce energy usage

To learn more about Entergy Solutions and the other energy-saving opportunities, visit **entergysolutionsla.com**, email **entergysolutionsla@entergy.com** or call **844-829-1300**.

Blog Post – 225 Daily (Aug. 12) and InRegister (Aug. 20)

The Power of a Penny, sponsored by Entergy Solutions
Unlock significant savings on home energy costs with Entergy Solutions' "Power of a Penny" promotion. For a limited time, you can get select smart thermostats for just $0.01, with shipping and taxes included.

- **Amazon smart thermostat:** Available now for $0.01. The retail price is $89.99.
- **Sensi Lite smart thermostat:** Purchase now for $0.01. The retail price is $89.99.
- **Honeywell T5 smart thermostat:** Purchase now for $0.01. $99.98 discount off the retail price.
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These advanced thermostats help control your home's temperature more efficiently, cutting down on your energy bill. To take advantage of this deal, visit entergysolutionsla-marketplace.com/on-sale/, choose your thermostat, add it to your cart, and apply the code EntergyAugustShipping at checkout for free shipping. This offer is available from August 1 to September 2, while supplies last. Don't miss out on this chance to save on energy costs and improve your home's efficiency.

Press Release

Aug. 5

FOR IMMEDIATE RELEASE:
August 5, 2024

Media Contact:
Megan Sykes
Megan.sykes@aptim.com
985-351-4877

Entergy Solutions rolls out penny thermostat promotion
Offer valid for Entergy Louisiana customers on the program's online marketplace through September 1

LOUISIANA – Entergy Solutions, a Louisiana energy efficiency program, is offering Entergy Solutions customers access to their new thermostat promotion, the power of a penny. For $0.01, customers can manage their home temperature with a new smart thermostat.

For a limited time, customers can select from the following smart thermostats on sale for $0.01.

- **Amazon smart thermostat:** Purchase now for $0.01. The retail price is $89.99.
- **Sensi Lite smart thermostat:** Purchase now for $0.01. The retail price is $89.99.
- **Honeywell T5 smart thermostat:** Purchase now for $0.01. $99.98 discount off the retail price.
- **Honeywell Wi-Fi 7-day programmable thermostat:** Purchase now for $0.01. $99.98 off the retail price.

In August, the heat makes it difficult for Louisiana residents to keep their homes cool and at the same time keep utility expenses down. For a penny, customers can make a big difference by reducing energy consumption and saving on their utility bill. The Entergy Solutions Online Marketplace aims to help customers make informed decisions about how to manage their energy costs.

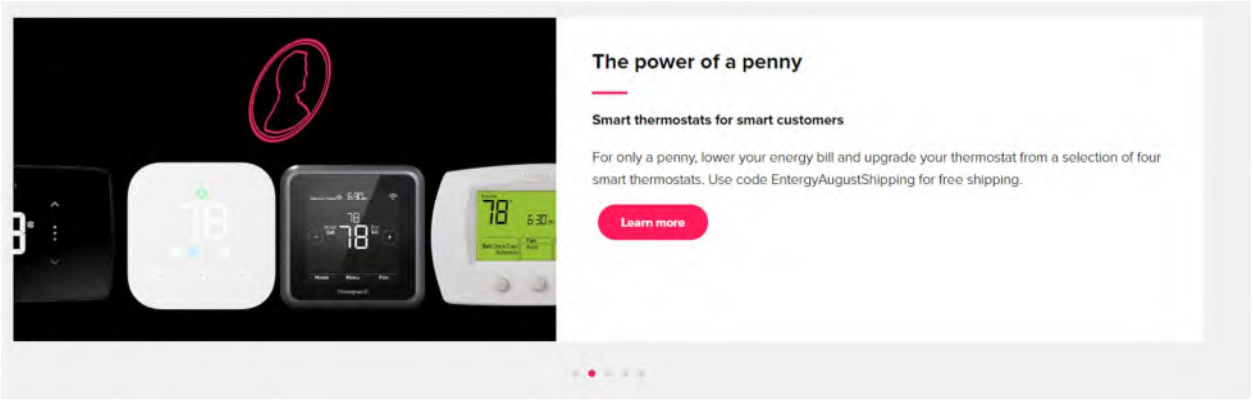
Visit entergysolutionsla-marketplace.com to shop for discounted items and learn more about energy-saving tips for your home or business. For more information about Entergy Solutions and how to participate, visit entergysolutionsla.com.

###

ABOUT ENTERGY SOLUTIONS
Entergy Solutions offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program partners with participating trade allies and retailers, that will help customers find new ways to save. For more information and how to participate, visit entergysolutionsla.com or call 844-829-1300 to speak to an energy advisor.

Entergy Website Rotator

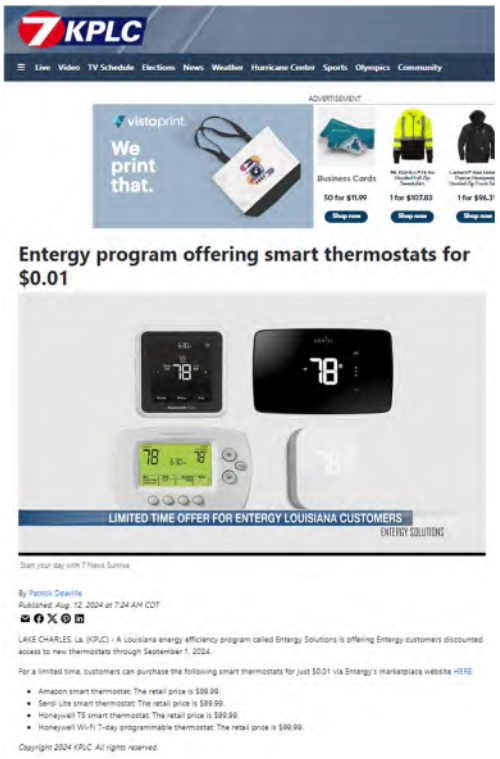
August 2

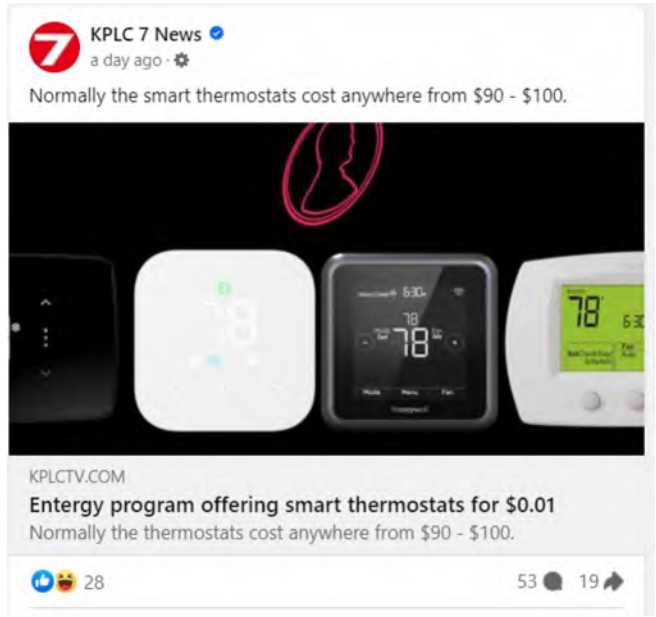


News Station

- **WBRZ, Baton Rouge – Aug. 8**

- **KPLC, Lake Charles – Aug. 12**





- **KNOE, Monroe – Article – Aug. 12**

Entergy Solutions offering thermostats for a penny during August

MONROE, La. (KNOE) - Entergy Solutions is offering Louisiana customers access to thermostats for a penny during the month of August.

Entergy says customers will have access to manage their home temperature with a new smart thermostat. Customers have until September 1 to purchase their new smart thermostats for a penny.

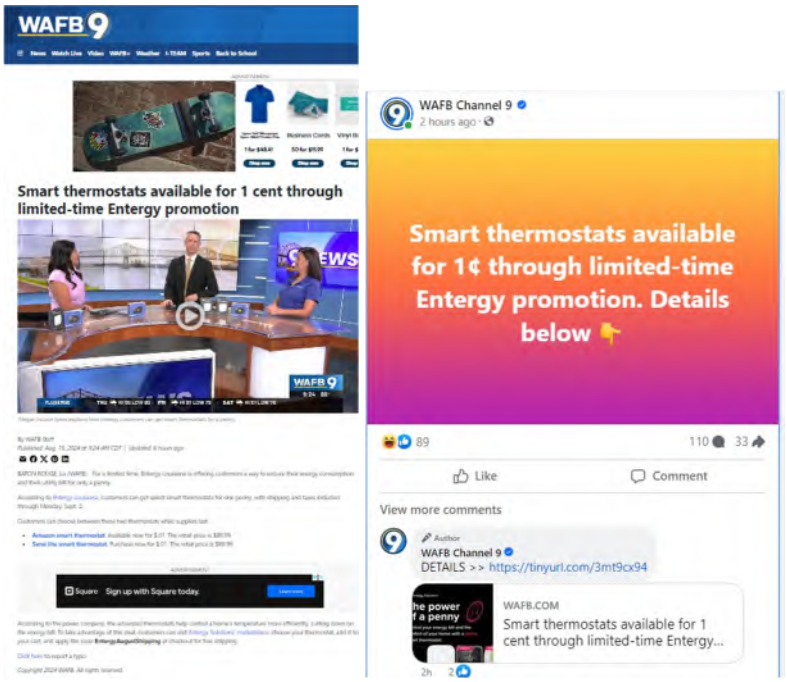
Entergy says the heat makes it difficult for Louisiana residents to keep their homes cool while also keeping costs down. They say the penny promotion can help make a difference in reducing energy consumption and saving money.

The following thermostats are being offered by Entergy:

- **Amazon smart thermostat:** Purchase now for $0.01. The retail price is $89.99.
- **Sensi Lite smart thermostat:** Purchase now for $0.01. The retail price is $89.95.
- **Honeywell T5 smart thermostat:** Purchase now for $0.01. $99.98 discount off the retail price.
- **Honeywell Wi-Fi 7-day programmable thermostat:** Purchase now for $0.01. $99.98 off the retail price.

Customers can visit Entergy Solution Online Marketplace to purchase their thermostats and learn more about energy-saving tips. For more information on Entergy Solutions, click here.

- **WAFB, Baton Rouge – On camera interview – Aug. 15**

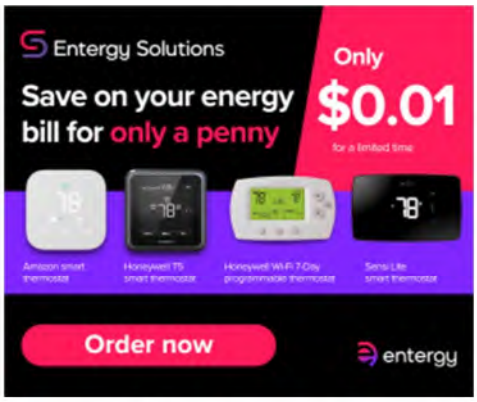


Smart thermostats available for 1 cent through limited-time Entergy promotion

Square Sign up with Square today

Paid Media

Retargeting Banner Ads



“This Holiday Season, Give the Gift of Giving” Campaign

11/13/24-12/4/24
12/12/24-12/26/24

Owned Media

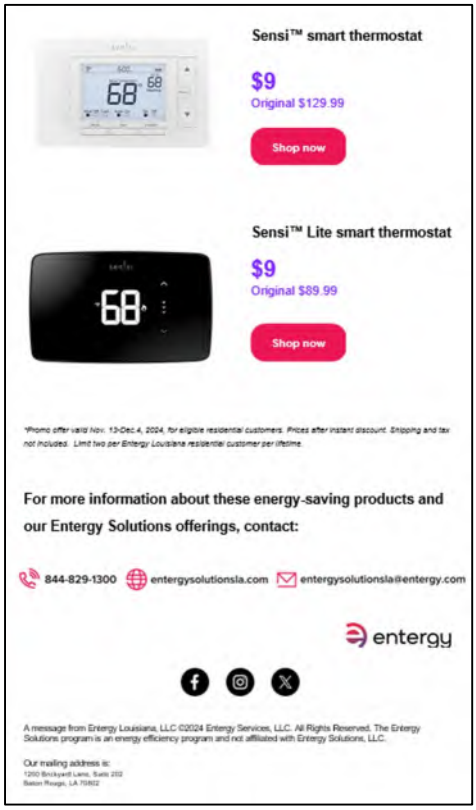
Entergy Solutions Website Banner

OLM Website Banner

Email Campaign

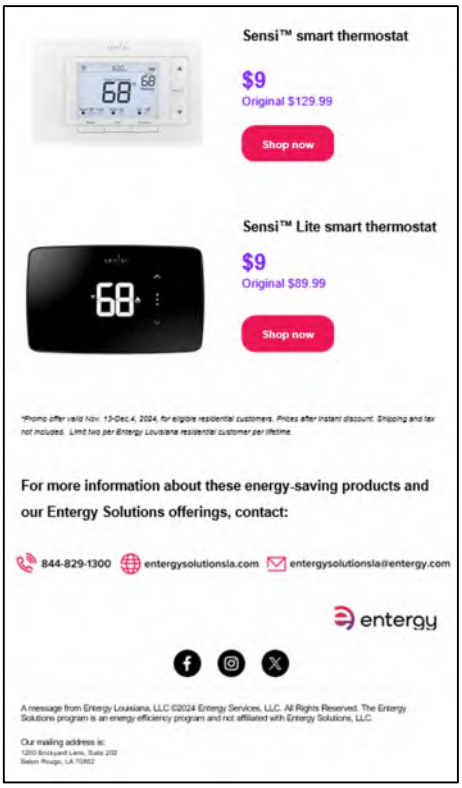
Email #1
11/14/24

Subject line: Unwrap the gift of savings
Preview text: While supplies last.



Email #2
11/21/24

Subject line: For $9, unwrap the gift of savings
Preview text: While supplies last.



Email #3
11/14

Subject line: For $9, unwrap the gift of savings
Preview text: While supplies last.

Entergy Solutions

This holiday season, unwrap the gift of savings

While supplies last.

Shop sale

Sensi™ smart thermostat

$9
Original $129.99

Shop now

Sensi™ Lite smart thermostat

$9
Original $89.99

Shop now

Did you know? A massive **48% of what you spend on energy each year goes on heating and cooling** for the average American home. For most households, keeping the temperature comfortable is the single largest energy expense.

Benefits of a smart thermostat:

- **It's automatic.** A smart thermostat is a device that automatically adjusts the temperature in your home, according to your needs.
- **It's controllable.** With a Wi-Fi-enabled smart thermostat, you can control the temperature of your home remotely from your internet-connected mobile device or computer.
- **It keeps you informed with graphs, data and reports.** Another bonus of a smart thermostat is the regular energy-use reports it provides, which you can monitor and manage to maximize your energy savings.

How much will I save? Sensi smart thermostats tend to save about 23% on your HVAC energy bill on average, helping reduce your monthly energy costs.

**Promo offer valid Nov 13-Dec 4, 2024 for eligible residential customers. Prices after instant discount. Shipping and tax not included. Limit two per Entergy Louisiana residential customer per lifetime. While supplies last.*

For more information about these energy-saving products and our Entergy Solutions offerings, contact:

844-829-1300 entergysolutionsla.com entergysolutionsla@entergy.com

entergy

Our mailing address is:
1200 Brickyard Lane, Suite 202
Baton Rouge, LA 70802

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You can update your preferences or unsubscribe.

Earned Media

Entergy Circuit Article
11/20/24

entergy

View in browser

CIRCUIT

Six things you should do this fall to save energy

As the weather gets colder, these tips will help you save money without sacrificing your family's comfort.

Capture fall efficiencies

Embrace smart savings this holiday season.

As the holiday season approaches, it's the perfect time

Social Media

Caption: This holiday season, give the gift of savings. Grab your $9 Sensi smart thermostat while supplies last by visiting our Online Marketplace.

Thermostats | Entergy Solutions Louisiana Marketplace

Press Release

11/13/24

FOR IMMEDIATE RELEASE:
November 13, 2024

Media Contact:
Megan Sykes
Megan.sykes@aptim.com
985-351-4877

Entergy Solutions rolls out holiday smart thermostat promotion

Offer valid for Entergy Louisiana customers on the program's online marketplace through December 4.

LOUISIANA – Entergy Solutions, a Louisiana energy efficiency program, is offering Entergy Solutions customers access to their new thermostat promotion, "give the gift of savings." For just $9, customers can manage their home temperature with a new smart thermostat.

For a limited time, customers can select from the following smart thermostats on sale for just $9.

Sensi smart thermostat: Available now for $9. The retail price is $129.

Sensi Lite smart thermostat: Purchase now for $9. The retail price is $89.99.

As the holiday season approaches, customers can enjoy the comfort of a perfectly heated home during the chilly winter months while also saving on utility expenses. For less than $10, customers can make a big difference by reducing energy consumption and saving on their utility bill. The Sensi smart thermostat allows customers to easily control their home's temperature from anywhere using their smartphone. The Entergy Solutions Online Marketplace aims to help customers make informed decisions about how to manage their energy costs.

Visit entergysolutionsla-marketplace.com to shop for discounted items and learn more about energy-saving tips for your home or business. For more information about Entergy Solutions and how to participate, visit entergysolutionsla.com.

###

ABOUT ENTERGY SOLUTIONS

Entergy Solutions offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program partners with participating trade allies and retailers that will help customers find new ways to save. For more information and how to participate, visit entergysolutionsla.com or call 844-829-1300 to speak to an energy advisor.

Press Release

Entergy Solutions Louisiana
November Circuit Newsletter 2024

HEADER OPTIONS
Embrace smart savings this holiday season.

COPY

This holiday season, give the gift of savings.

As the holiday season approaches, it's the perfect time to think about gifts that keep on giving. This November, we're excited to announce a fantastic sale on Sensi smart thermostats that will help you save money and energy all year round.

With the Sensi smart thermostat, you can easily control your home's temperature from anywhere using your smartphone. Plus, it's designed to be user-friendly and energy-efficient, making it an ideal gift.

For a limited time, you can get select smart thermostats for just $9, shipping and taxes not included.

- Sensi smart thermostat: Available now for $9. The retail price is $129.
- Sensi lite smart thermostat: Purchase now for $9. The retail price is $89.99.

This incredible sale ends on Dec. 4, or while supplies last, so act fast to secure your Sensi smart thermostat. Whether you're looking to upgrade your own home or gift someone a smarter way to save, now is the time to make the switch to smart technology.

Shop in our Online Marketplace for a variety of discounted energy-saving products, including:

- Pipe insulation
- Advanced power strips
- Dehumidifiers
- Air purifiers
- And more

Stay warm, save money and enjoy the season with Sensi.

CTA
More ways to reduce your usage and save money.
To learn more about Entergy Solutions and the other energy-saving opportunities, visit **entergysolutionsla.com**, email entergysolutionsla@entergy.com or call **844-829-1300**.

LPA Shareable Content

Entergy Solutions rolls out holiday smart thermostat promotion.

Heating and cooling costs account for about 55 percent of the average customer's electric bill, but energy-efficient products like Smart Thermostats can help even out spikes by automatically adjusting the temperature based on a consumer's schedule, habits and even the weather. Smart thermostats give you complete control over your home's temperature using a mobile application. Smart thermostats can extend the life of your air conditioner by preventing it from overworking, even on the hottest days. Some smart thermostat models can even detect issues with your HVAC system or provide an indoor air quality report.

Entergy Solutions, a Louisiana energy efficiency program, is offering Entergy Solutions customers access to their new thermostat promotion, "give the gift of savings." For just $9, customers can manage their home temperature with a new smart thermostat. For a limited time, customers can select from the following smart thermostats on sale for just $9.

- **Sensi smart thermostat:** Available now for $9. The retail price is $129.
- **Sensi Lite smart thermostat:** Purchase now for $9. The retail price is $89.99.

In addition to the discounted Smart Thermostats, the energy efficiency program's residential online marketplace offers a variety of name-brand discounted smart thermostats, water-savers, LED light bulbs, pipe wrap and more. Discounts are automatically applied at checkout, where customers are prompted to enter their active Entergy account number and limits do apply per customer.

Entergy Louisiana puts the security of its customer's data first and does not collect or monitor any of your data. The smart thermostats offered on the online marketplace are priced at a discount through the Entergy Solutions program.

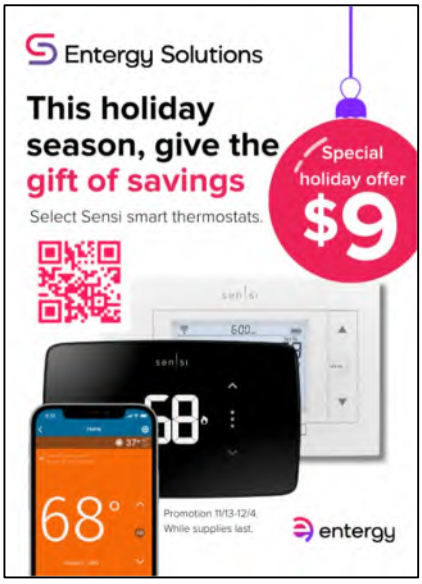
By purchasing a smart thermostat through the online marketplace, customers are NOT giving Entergy permission to access their thermostat in any way. Entergy Solutions Louisiana does NOT run a "demand response" program. This type of program requires explicit consent from the customer for the program to adjust their thermostat settings on days that have been identified by weather trends as a "peak demand" day.

**$9 Sensi smart thermostat promo valid November 13-December 4, 2024, or while supplies last, for eligible residential customers. Prices after instant discount. Shipping and tax not included. Limit two per Entergy Louisiana residential customer per lifetime.*

To purchase your discounted Sensi smart thermostat, visit Entergy Solutions Online Marketplace.

Paid Media

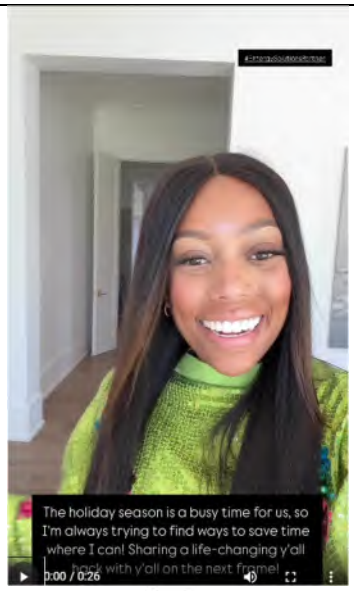
WAFB Traffic Static Ad



This Traffic Report is sponsored by Entergy Solutions Louisiana. From now until supplies last, choose between two smart thermostats for $9.00. Visit entergy solutions LA dash market place dot com or scan the QR code now.
Wednesday, November 13 – 1 scan
Thursday, November 14 – 3 scans
Friday, November 15 – 3 scans
Monday, November 18 – 2 scans
Wednesday, November 20 - 3 scans
Thursday, November 21

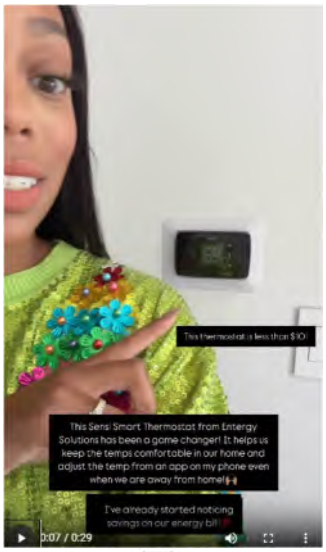
Total scans – 12 scans as of 11/20/24

Social Media Influencer
11/13/24



Updated Frame 1 (1).mov

23 interactions



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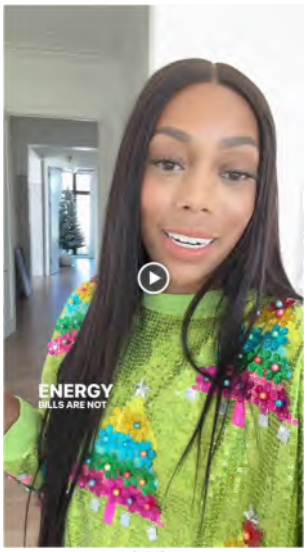
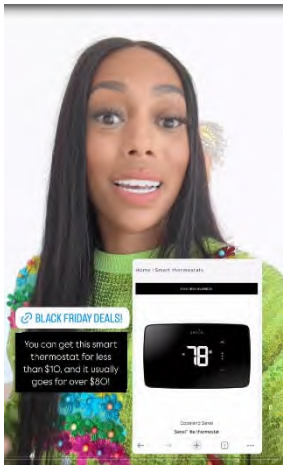


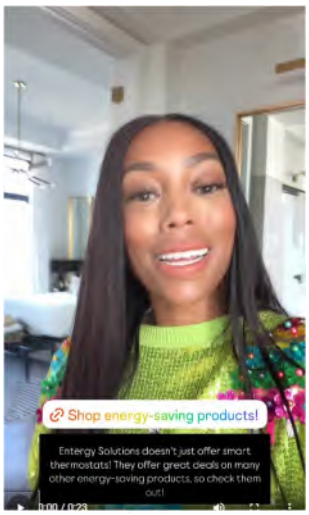
Updated frame 3 (1).mov

15 interactions



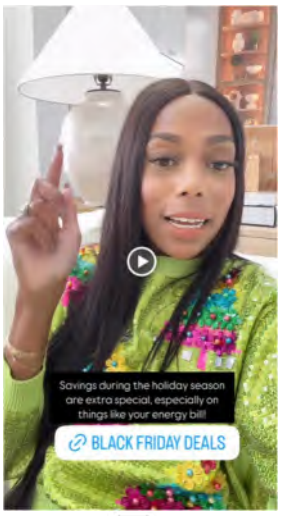
Updated Frame 4 (2).mov

17 interactions
66 link clicks



Updated frame 5 (1).mov

10 interactions
15 link clicks



Updated frame 6 (1) (1).mov

17 interactions

“Sleigh the Energy Bills” Campaign
Owned Media

Entergy Solutions Website Banner

OLM Website Banner

Events

2024 Trade Ally Kick-Off & Awards

February 7, 2024

Baton Rouge, LA

Entergy Solutions

Trade Ally Award Ceremony and Kick-Off Event

February 7, 2024

Welcome and introductions

Heather LeBlanc, *Entergy Louisiana Resource Planning*
Jon Phelps, *Program Director*

2023 Trade ally awards

Commercial
Krystale Sledge, *Events and Outreach Lead*
Dillon Teal, *Senior Energy Advisor*

Residential
Elsie Kuczynski, *Senior Program Manager*
Dillon Teal, *Senior Energy Advisor*

Program updates

Commercial
Dillon Teal, *Senior Energy Advisor*

Residential
Elsie Kuczynski, *Senior Program Manager*

Marketing
Megan Sykes, *Marketing Manager, Louisiana Programs*

Accounting
Jon Phelps, *Program Director*

Q&A

Reception and networking

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Fletcher Technical Community College Check Presentation

March 1, 2024

Higher Ed Pilot Program

Entergy Louisiana Attendees:

Phillip May, President & CEO
Heather LeBlanc, Resource Planning & Market Operations
Stacy Fontenot Hebert, Customer Service Manager
Phoebe James, Sr. Communications Specialist
Perry Pertuit, Mgr. Region Cust Service

Fletcher Attendees:

Dr. Kristine Strickland, Chancellor
Monique Crochet, Vice Chancellor for Institutional Advancement & Community Engagement
Crystal Gienger, Special Assistant to the Chancellor
Crystal Wendell, Executive Assistant

Other:

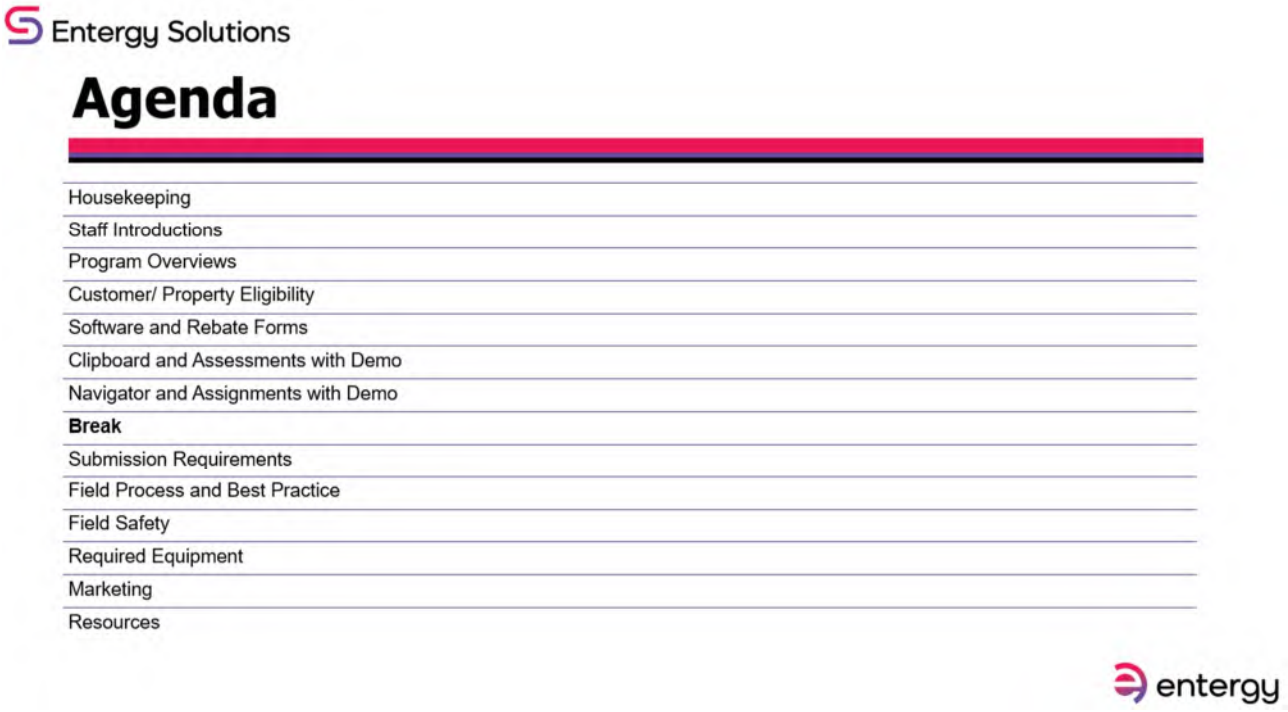
Grayson Walsh, Chief of Staff to Louisiana Public Commissioner, Dr. Craig Greene

Residential Trade Ally Training
March 14, 2024

APTIM Baton Rouge Office

32 participants attended in-person

12 participants attended virtual training



LSU IAC Luncheon

March 18, 2024

LSU Industrial Training & Assessment Center
Baton Rouge, LA

19 IAC participants

4 Entergy Solutions team members

Program Overview

Dillon Teal, Senior Energy Advisor, Entergy Solutions
Kevin Fitzwilliam, Training and Workforce Development Specialist, Energy Smart

IAC Overview

Chandler Hayes, Assistant Director of Research, LSU Industrial Assessment Center

Louisiana Women in Ag Conference

March 21-22, 2024

Agriculture Outreach
Alexandria, LA

Annual conference is geared towards women (and men!) who are in the agriculture industry, whether working for an ag organization or company, farm owners/workers, or recreational gardeners.

10 ft by 10 booth space

"shout outs" on social platforms

La School Facility Managers Association Conference

April 17-19, 2024

Commercial Outreach
Lake Charles, LA

Conference location at the Golden Nugget Casino and Resort in Lake Charles, LA. Entergy Solutions participated by sending two attendees to network with over 80 vendors and 500 facility directors from across the state.

River Region Chamber Golf Tournament

April 25, 2024

Commercial Outreach
Luling, LA

Tent Sponsor
39 4-person teams (150+ participants).
Prime location on golf course.
Collected 24 business cards with several leads. Connected with business owners, facility operators, operation managers.

LSU Sales Training Institute

May 20, 2024

Trade Ally Training
Baton Rouge, LA

27 trade allies participated.

Agenda:

- Creating and delivering value.
- Prospecting and qualifying opportunities.
- Giving consultive presentations.
- Addressing customer objections.
- Gaining customer commitment.
- Nurturing customers for long-term relationships.
- LSU Sales Institute's network of students and alumni

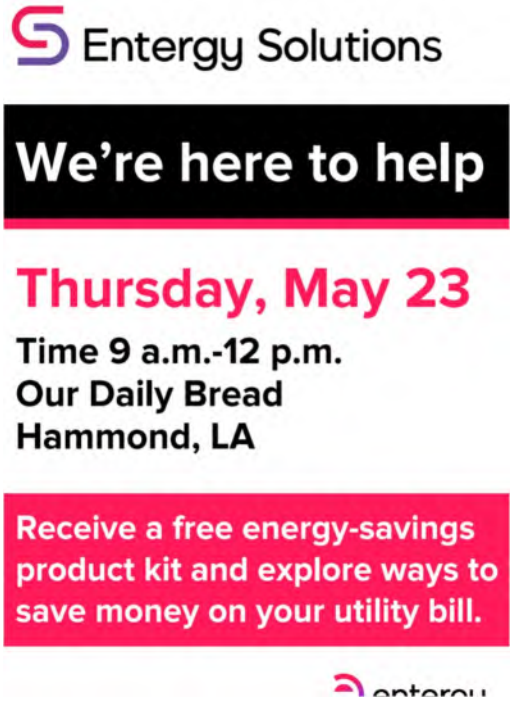
Community of Focus Event
May 23, 2024

Residential IQW Outreach
Hammond, LA

Objective/Goal

Generate goodwill and connect with residential Entergy customers in low-income and disadvantaged areas to offer program energy efficiency upgrades. These upgrades will ultimately help customers reduce their energy usage and possibly save money on their utility bill.

- 75 Assessment Sign-ups
- Deliver 300 outreach kits
- 3 Project and partner success stories in community (Hammond and Amite areas)



LSU Rice Research Station Field Day

June 25, 2024

Ag Outreach
Rayne, LA

- ¼ of the participants were grad students from LSU
- ¼ were farmers from the region
- ¼ were vendors/suppliers
- ¼ LSU Rice Research Station or LSU AG staff

The 114th Annual H. Rouse Caffey Rice Research Station Field Day was held on Tuesday, June 25, 2024 at the rice station located at 1373 Caffey Road, Rayne, LA. Nearly 400 people attended the field day with participants representing all facets of the rice industry. Entergy Solutions participated as part of the expo.

Louisiana Press Association

July 19, 2024

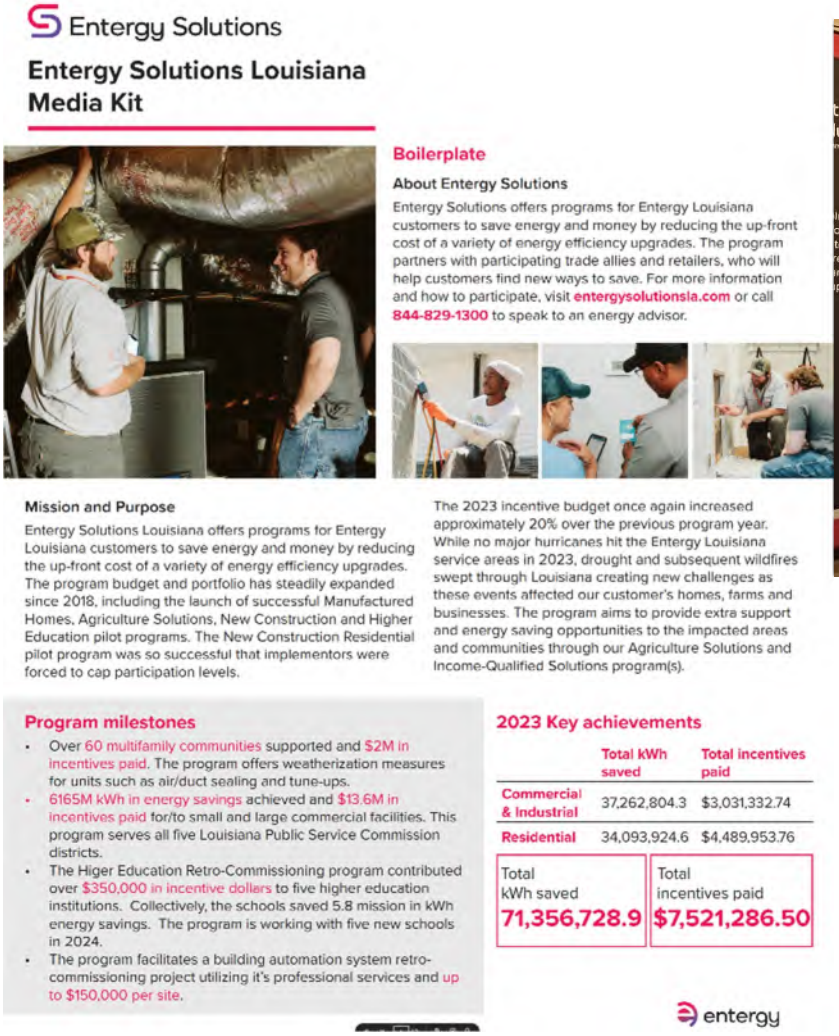
Annual Press Conference
Baton Rouge, LA

Audience: publishers, editors, and ad directors statewide

Location: City Club
355 North Blvd.
Baton Rouge, LA

Stockholder's Meeting (publishers/board members)

Entergy Solutions 10-minute presentation



Entergy Solutions

Entergy Solutions Louisiana Media Kit

Boilerplate

About Entergy Solutions

Entergy Solutions offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program partners with participating trade allies and retailers, who will help customers find new ways to save. For more information and how to participate, visit entergysolutionsla.com or call 844-829-1300 to speak to an energy advisor.

Mission and Purpose

Entergy Solutions Louisiana offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program budget and portfolio has steadily expanded since 2018, including the launch of successful Manufactured Homes, Agriculture Solutions, New Construction and Higher Education pilot programs. The New Construction Residential pilot program was so successful that implementors were forced to cap participation levels.

The 2023 incentive budget once again increased approximately 20% over the previous program year. While no major hurricanes hit the Entergy Louisiana service areas in 2023, drought and subsequent wildfires swept through Louisiana creating new challenges as these events affected our customer's homes, farms and businesses. The program aims to provide extra support and energy saving opportunities to the impacted areas and communities through our Agriculture Solutions and Income-Qualified Solutions program(s).

Program milestones

- Over 60 multifamily communities supported and $2M in incentives paid. The program offers weatherization measures for units such as air/duct sealing and tune-ups.
- 6165M kWh in energy savings achieved and $13.6M in incentives paid for/to small and large commercial facilities. This program serves all five Louisiana Public Service Commission districts.
- The Higer Education Retro-Commissioning program contributed over $350,000 in incentive dollars to five higher education institutions. Collectively, the schools saved 5.8 mission in kWh energy savings. The program is working with five new schools in 2024.
- The program facilitates a building automation system retro-commissioning project utilizing it's professional services and up to $150,000 per site.

2023 Key achievements

	Total kWh saved	Total incentives paid
Commercial & Industrial	37,262,804.3	$3,031,332.74
Residential	34,093,924.6	$4,489,953.76

Total kWh saved	Total incentives paid
71,356,728.9	$7,521,286.50

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Louisiana Municipal Association Conference

August 1-2, 2024

Commercial Outreach
Shreveport, LA

Entergy Solutions joined dozens of vendors from all over Louisiana in Shreveport for the Louisiana Municipal Association's 87th annual convention at the Shreveport Convention Center.

1,500 people, including elected officials from all over the state had the chance to network and receive training in different areas and visit an exhibit hall with a lot of resources and vendors.

Connecting EBR Neighborhood Convention

September 14, 2024

Residential Outreach
Baton Rouge, LA

- 5 mayors; City of St George, BR, Baker, Zachary, & Central
- Neighborhood leaders, residents, business owners, city-parish department heads, and public safety leaders, dedicated to building strong, connected neighborhoods.

Community of Focus Event
September 26, 2024

Residential/IQW
Monroe, LA

Event Goals:

- Be a visible program presence in Monroe area to build program recognition and goodwill
- Offer program information and support via kits and other collateral
- Leverage program and Entergy staff (if available) to answer customer questions
- Identify high needs customers to offer an IQW assessment; get them signed up
- Total of 20 IQW assessments available for residential customers. These will be scheduled on a first come, first serve basis

Entergy Solutions

Sept 26

Thursday, Sept 26
10:30 a.m.-noon
Grace Place Ministries
Monroe, LA

What to expect

- Receive free energy-saving product kit
- Explore ways to save money on your Entergy bill

What we'll need from you to schedule a free in-home energy assessment:

- Copy of your Entergy bill (print or digital), or
- Entergy account number to verify your Entergy account

entergy

West Monroe West Ouachita Golf Tournament

October 7, 2024

Commercial Outreach
Calhoun, LA

Birdie Sponsor for the Scramble for Commerce 2024 Golf Tournament
Morning and afternoon flights
24, 4-man teams
Business owners, industry reps

Super Savings in the Swamp

October 9, 2024

Commercial Outreach
LaPlace, LA

River Region Chamber

St. John, St. James, and St. Charles Parishes

- Super Savings in the Swamp lunch and learn.
- 30 attendees from local businesses.
- 1½ hour pontoon boat swamp tour in LaPlace.
- Entergy area CSM, Flo Dumas, in attendance.
- Captivated audience with a lot of questions.

Capital Area Agency on Aging Health Fair/Expo

October 17, 2024

Residential/IQW
Gonzales, LA

Entergy Louisiana Presenting Sponsor

Entergy Solutions participated with a booth set-up offering program overview to over 800 participants

Handed out 150 residential outreach kits

Capital Area Agency on Aging
HEALTH FAIR EXPO SPONSOR/EXHIBITOR FORM
October 17, 2024
Lamar Dixon Expo Center, Gonzales, LA

The mission of Capital Area Agency on aging is to advocate and provide services to enhance the quality of life for older adults.

West Baton Rouge Golf Tournament

November 4, 2024

Commercial Outreach
Plaquemine, LA

Entergy Solutions participated as a Hole Sponsor

36, 4-man teams (144 participants)

Tent set-up with snacks and print collateral

BASF Check Presentation

November 14, 2024

Commercial/Industrial
Geismar, LA

Entergy Louisiana:

Phillip May, President & CEO
Heather LeBlanc, Resource Planning & Market Operations
Trey Young, Industrial Account Executive
David Freese, Entergy Louisiana Communications

BASF:

Jerry Lebold, Senior Vice President: Geismar Site General Manager
Kevin McCarrol, Sr Director-Operations & Partnership Groups
Brock Zauderer, Site Director of Engineering
Blythe Lamonica, Senior Communications and Public Affairs Manager
Sean Ellis, Communications Manager
Damien Parsons, Mechanical Services Manager
Emory Ficklin, Maintenance Gatekeeper
Parker Sanderson, Sustainability & Verbund Leader

Bernhard:

Michael Cooper – President Sustainability Services
Todd Ollre- Business Unit Manager Sustainability Controls
Andre Simoneaux- Business Unit Manager Suitability Services
Joey Pittman- Senior Service Sales Representative
Darren Lambert- Service Manager

Entergy Solutions

FOR IMMEDIATE RELEASE:
November 14, 2024

Media Contact:
Megan Sykes
Megan.sykes@aptim.com
985-351-4877

Entergy Solutions Louisiana Presents $100,000 to BASF for Energy Efficient Upgrades

Entergy Solutions provides cash incentives to businesses for completing eligible upgrades with proven energy savings

BATON ROUGE, La. – Entergy Solutions, a Louisiana energy efficiency program, recently presented a $100,000 incentive check to BASF for completing significant energy-efficient upgrades to their facilities. Through Entergy Solutions, BASF was empowered to upgrade their pneumatic control and HVAC systems, leading to an impressive reduction in energy usage—specifically, annual savings of 1.2 million kilowatt hours.

Local leaders and representatives with BASF, Entergy Louisiana and other companies involved with the energy efficiency upgrades gathered at BASF's facility in Ascension Parish on Nov. 14, 2024, to celebrate the energy efficiency milestone. The event highlighted the companies' shared commitment to continuing to work together to forge a sustainable future.

The energy efficiency upgrades not only support more efficient operations at BASF, but also reduces their environmental footprint.

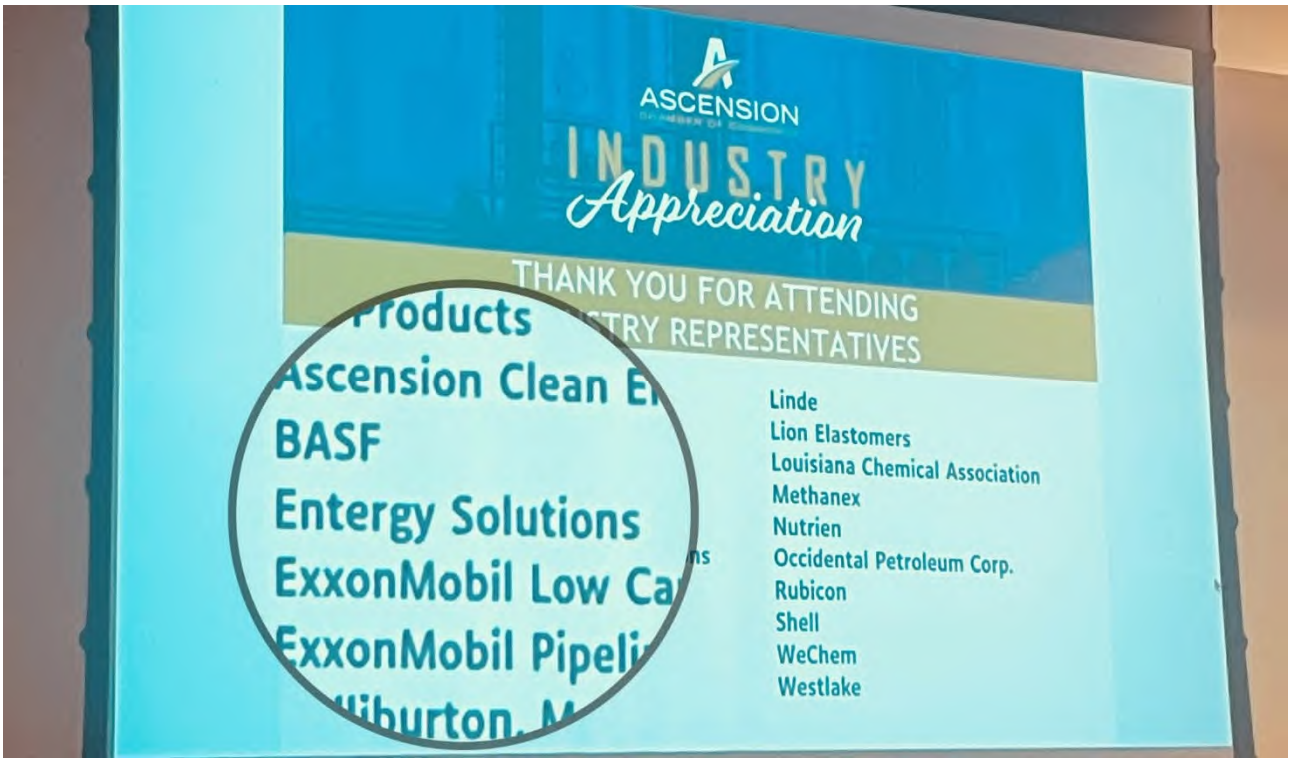
"We're excited to celebrate this energy efficiency milestone with BASF, a company that has long been a leader in sustainability," said Phillip May, president & CEO, Entergy Louisiana. "We're thankful for their partnership and commitment to not only a cleaner, brighter future in Louisiana, but also our communities by providing jobs and investments that improve the places we consider home."

BASF's initiative aligns with Energy Solutions Louisiana's mission and purpose to support businesses in adopting sustainable practices that drive economic growth while safeguarding the environment. The investment made by Energy Solutions Louisiana

Industry Appreciation
November 19, 2024

Commercial & Industrial Outreach
Gonzales, LA

Entergy Solutions was invited by Kevin McCarroll, Sr Director of Operations with BASF Geismar Site, to join the team at the Ascension Chamber of Commerce Industry Appreciation Event. Industry is the engine for success in Ascension Parish and Entergy Solutions was pleased to play a small part in this event by showcasing the C&I program and what is being offered to industry partners.



Chamber Memberships and Events
2024

Ascension:

April 11, 2024	Chamber Luncheon
April 24, 2024	Spring Fling Small Business Networking
May 15, 2024	Women in Business & Lagniappe
May 17, 2024	Small Business Power Week presented by LED
November 19, 2024	Industry Appreciation

Monroe: Joined in September 2024

River Region:

April 25, 2024	Annual Golf Tournament
May 3, 2024	Chamber Luncheon: Chamber 101
June 11, 2024	Chamber Quarterly Meeting
July 12, 2024	Maximize your Membership
October 9, 2024	ELL Presenting Sponsor: Super Savings in the Swamp

Southwest Louisiana:

May 14, 2024	SWLA Day at The Capital
May 23, 2024	Maximize your Membership

West Baton Rouge:

April 23, 2024	Chamber Luncheon: Crime Special Session
	Shelbie Schexnaydre presented on behalf of Entergy Solutions
November 4, 2024	Annual Golf Tournament

West Monroe West Ouachita:

May 16, 2024	Small Business Awards Luncheon
October 7, 2024	Annual Golf Tournament

TETRA TECH

Entergy Louisiana, LLC
Entergy Solutions Program Year 10 2024 Evaluation Report

Prepared for:
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ACKNOWLEDGMENT

We want to acknowledge the many individuals who contributed to the evaluation of 2024, Program Year 10 (PY10). This evaluation effort would not have been possible without their assistance and support.

We wish to thank the staff at APTIM Environmental and Infrastructure, Inc. (APTIM), the implementation contractor, who participated in ongoing evaluation deliverable reviews and discussions, attended biweekly meetings, and responded to follow-up questions and program data and documentation requests. APTIM staff included Jamie Wine, John Krzystowczyk, Elsie Kuczynski, Spencer Kurtz, Travis Sharpe, and Alejandro Martinez. They provided assistance throughout the year in understanding data extracts from the program tracking system, which provided high-quality data that was user-friendly and readily available to the evaluation team. We also want to thank Megan Sykes, who provided branding guidance, review, and support.

We also wish to thank ELL staff, Heather LeBlanc, who also provided input, review, and guidance throughout the evaluation process.

EM&V team primary report contributors include:

Firm	Contributor	Role
Tetra Tech	Theresa Wells	Project manager
	Lark Lee	Technical advisor
	Jonathan Hoechst	Manager and cost-effectiveness lead
	Mark Bergum	Senior engineer
	William Lindsey	Principal consultant and cost-effectiveness analysis
	Nathan Kwan	Commercial sector lead and engineer
	Andrew Spista	Residential sector lead and engineer
	Jack Call	Data analysis and reporting
	Sam Murray	Data analysis and reporting

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1.0 EXECUTIVE SUMMARY

In PY10,2024, Entergy Louisiana, LLC (ELL) provided a comprehensive range of customer options focused on energy efficiency and demand reduction coupled with education and training activities. ELL designed its portfolio to meet the following objectives:

- achieve the net energy-savings target of 91,090 megawatt-hours (MWh) and
- provide significant energy-savings opportunities for all customers and market segments, including low-income.

The portfolio of program offerings was implemented by APTIM. In June 2024, APTIM hired Tetra Tech as its evaluation, measurement, and verification (EM&V) contractor, assuming the role and remaining budget of the prior EM&V contractor. The PY10 ELL evaluation included reduced-scope impact evaluation and process analyses, primarily through program participant surveys.

The impact evaluation resulted in defensible lifetime and annual gross and net energy and demand estimates. Impact evaluation activities are used to calculate realization rates; these rates are determined by dividing evaluated savings (ex-post) by ELL-reported savings (ex-ante savings). A net-to-gross (NTG) ratio[1] was applied to the evaluated savings to determine the net evaluated or achieved savings.

The overarching approach to impact evaluations was to:

- complete a tracking system review to assess if Arkansas (AR) Technical Reference Manual (TRM) v7[2] is correctly applied to calculate savings and assess data captured for new or expanded measure offerings;
- adjust program-reported gross savings using the results of evaluation research, relying primarily on the tracking system review;
- discuss evaluation adjustments for TRM deemed savings or custom measures in each program-level impact section, and document reasons for adjustments and how they directly inform impact recommendations;
- provide complete documentation and transparency of all evaluated savings estimates; and
- provide ongoing technical reviews and guidance.

The approach to the process evaluation was to:

- gain an in-depth understanding of program operations, challenges, and evaluation needs through interviews with APTIM key staff complemented with communication and program documentation reviews throughout the program year, including biweekly status meetings;

[1] The reduced scope did not include activities to update NTG; therefore, NTG ratios deemed from PY9 were applied.
[2] Docket No. 10-100-R Order No. 26 approved the AR TRM v7 on 09/13/2017.

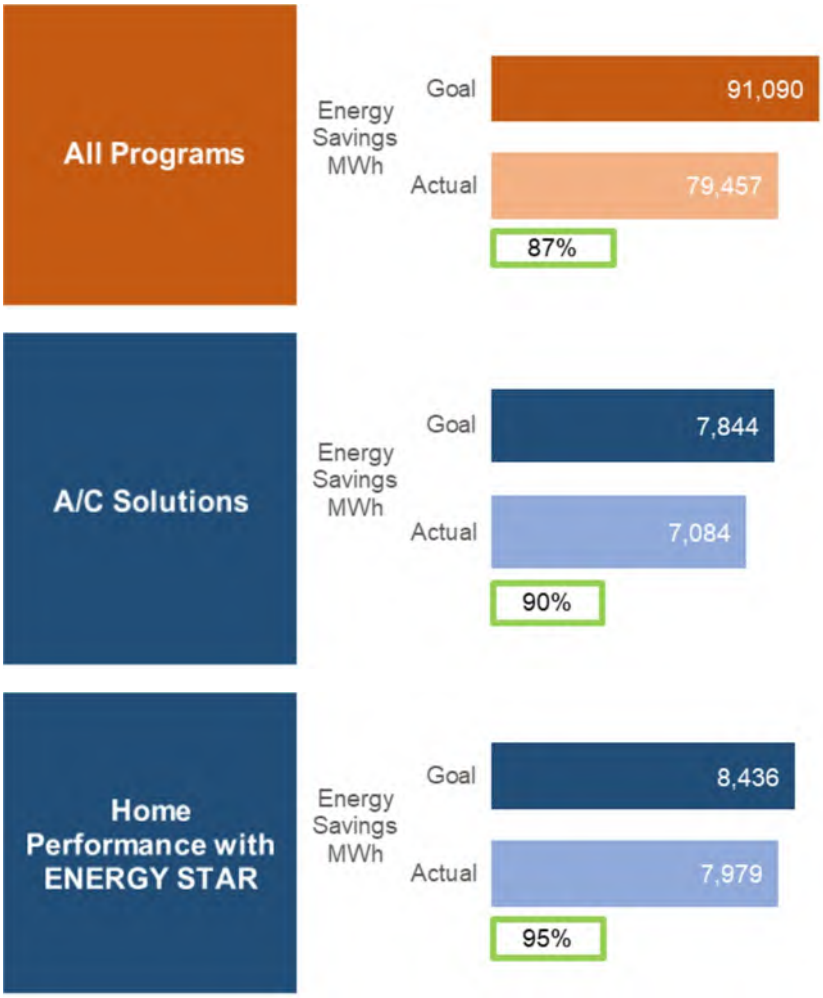
- conduct participant surveys to gather feedback on customer program experience, assess program awareness and satisfaction, and identify potential program barriers to inform recommendations for implementation improvement; and
- track technical assistance requests and outcomes.

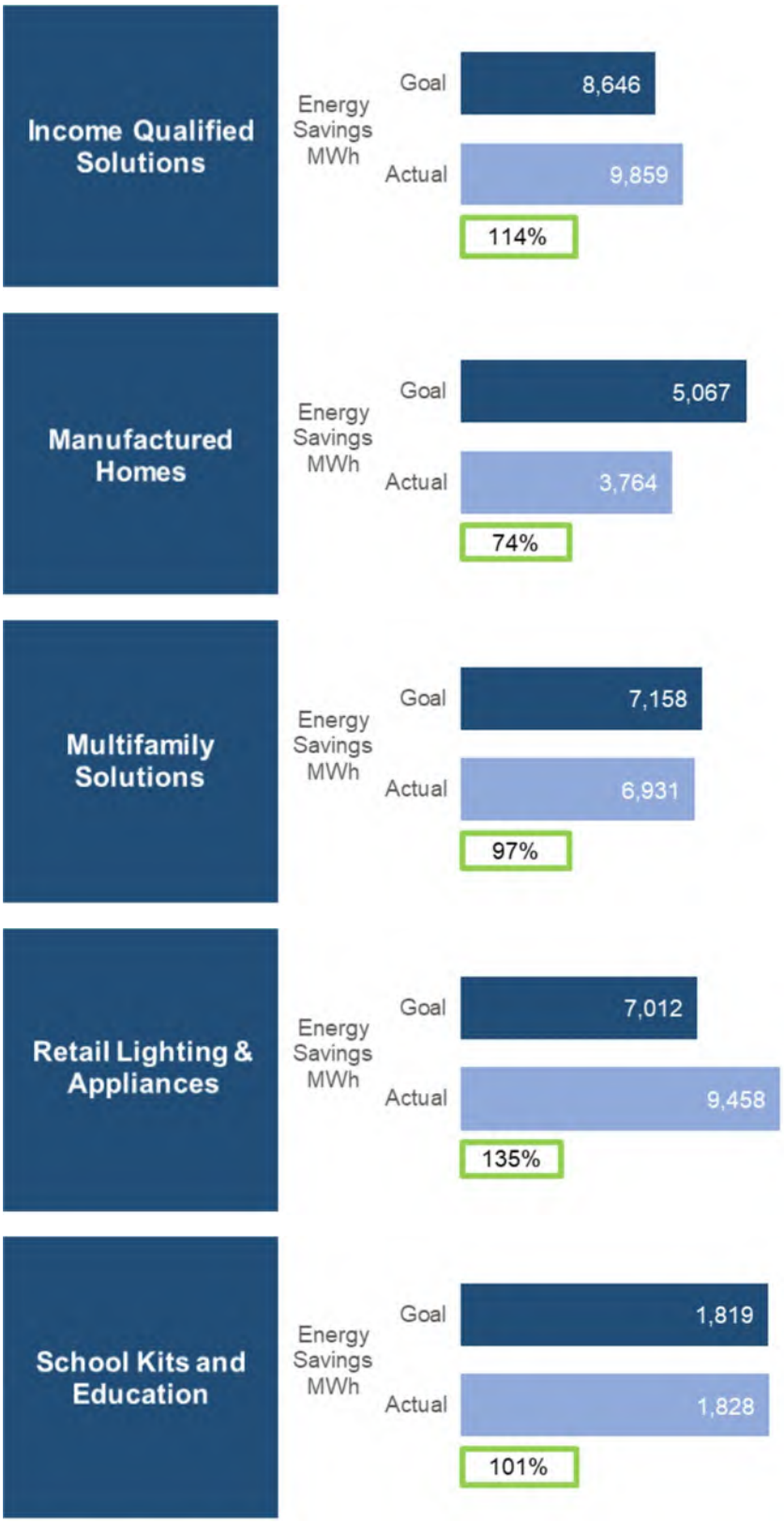
1.1 KEY FINDINGS AND RECOMMENDATIONS

The portfolio achieved 87 percent of its energy savings goals. Individual program performance relative to program savings and demand goals varied. Four of the nine programs exceeded their megawatt-hour savings goals. Five programs did not reach their energy savings goals; these five programs ranged between 66 percent and 97 percent of energy savings goals. One notable improvement from PY9 (2023) was the Small Commercial Solutions program; in PY9, the program achieved 45 percent of its energy savings goals, and in PY10, this increased to 103 percent.

Figure 1 shows the portfolio's total performance relative to program goals, followed by each program's achieved savings relative to program goals.

Figure 1. ELL PY10 Achieved Savings Relative to Program Goals—Overall and by Program




Income Qualified Solutions
Energy Savings MWh
Goal
8,646
Actual
9,859
114%
Manufactured Homes
Energy Savings MWh
Goal
5,067
Actual
3,764
74%
Multifamily Solutions
Energy Savings MWh
Goal
7,158
Actual
6,931
97%
Retail Lighting & Appliances
Energy Savings MWh
Goal
7,012
Actual
9,458
135%
School Kits and Education
Energy Savings MWh
Goal
1,819
Actual
1,828
101%

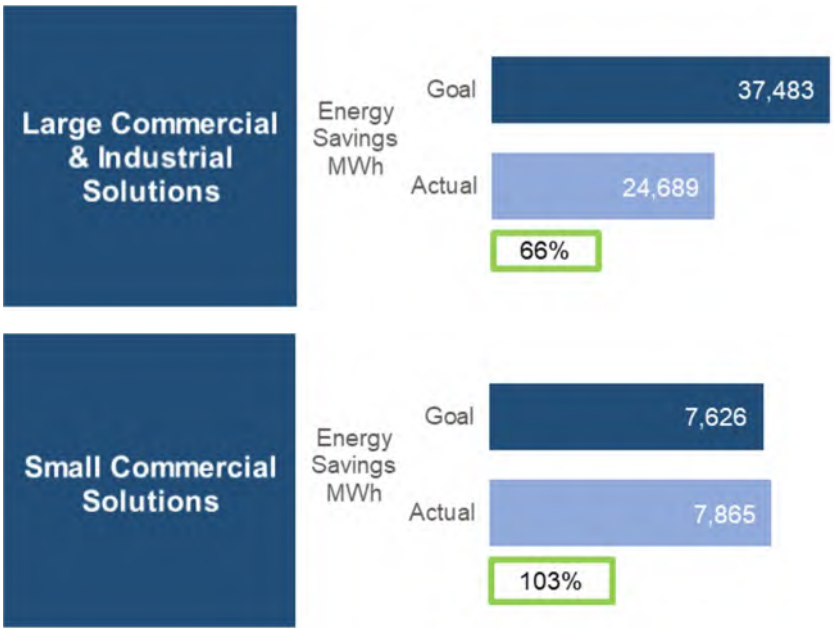
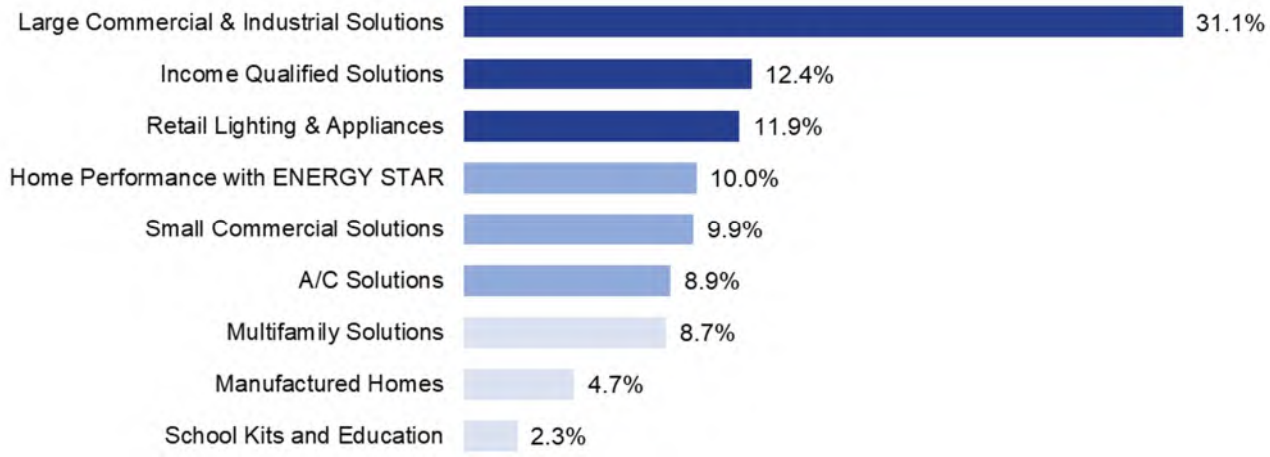


Figure 2 shows each program's contribution to the total portfolio's net energy savings. Large Commercial and Industrial (C&I) Solutions was the most significant contributor to energy savings goals, contributing 31 percent of the total portfolio energy savings. Notably, 12 percent of portfolio savings are achieved by successfully reaching harder-to-reach sectors through the Residential Income Qualified Solutions Pilot program.

Figure 2. ELL PY10 Program Contribution to Total Portfolio Kilowatt-Hour Energy Savings



Overall, evaluated savings were close to matching claimed energy savings with an overall portfolio gross realization rate of 98 percent for both energy savings and demand reductions, as detailed in Table 1. Program-level gross realization rates ranged from 85 percent to 148 percent for energy savings and 86 percent to 121 percent for demand savings. Net savings are calculated based on multiplying evaluated gross savings by an NTG ratio that estimates the percentage of savings attributable to the program. The NTG ratio is 100 percent for all programs, based on calculations done by the previous evaluator.

Table 1. ELL PY10 Gross Savings and Realization Rates

Program	Reported kWh	Evaluated kWh	Gross realization rate (kWh)	Reported kW	Evaluated kW	Gross realization rate (kW)	NTG (kWh)
A/C Solutions	7,229,844	7,083,623	98.0%	1,698.1	1,627.4	95.8%	100%
Home Performance with ENERGY STAR	7,880,627	7,979,381	101.3%	1,746.8	1,703.7	97.5%	100%
Income Qualified Solutions	9,596,198	9,859,197	102.7%	1,889.0	2,281.9	120.8%	100%
Manufactured Homes	3,843,507	3,763,887	97.9%	588.9	582.7	99.0%	100%
Multifamily Solutions	6,930,411	6,931,109	100.0%	959.4	988.4	103.0%	100%
Retail Lighting and Appliances	6,374,403	9,458,087	148.4%	501.4	502.4	100.2%	100%
School Kits and Education	1,828,340	1,828,340	100.0%	237.3	237.3	100.0%	100%
Large Commercial and Industrial Solutions	28,046,397	24,688,990	88.0%	3,670.5	3,241.4	88.3%	100%
Small Commercial Solutions	9,224,278	7,864,744	85.3%	920.4	793.9	86.3%	100%
Total portfolio	**80,954,004**	**79,457,358**	**98.2%**	**12,211.8**	**11,959.1**	**97.9%**	**100%**

Most respondents are satisfied with ELL as a service provider with 71 percent reporting being *somewhat satisfied* or *very satisfied.* Another 20 percent said they were *neither satisfied nor dissatisfied* with ELL as their service provider. For the time it took to address questions, 78 percent of respondents said they were *somewhat satisfied* or *very satisfied.* Program staff thoroughly addressing their question or concerns was the highest rated aspect with 100 percent of respondents reporting being *somewhat satisfied* or *very satisfied.* When asked to rate the satisfaction of their interactions with program staff, 86 percent of respondents said they were *somewhat satisfied* or *very satisfied,* with no reports of being *very dissatisfied.* Overall, 69 percent of respondents across all programs said they were *very satisfied* with the program. Another 18 percent said they were *somewhat satisfied* with the program, and 11 percent responded neutrally, *neither satisfied* nor *dissatisfied*.

APTIM has been responsive to evaluation recommendations and engaged with the EM&V contractor throughout the program year. Continued technical assistance and collaboration between APTIM and the EM&V team supported the programs and facilitated healthier gross savings realization rates. The PY10 evaluation effort identified additional recommendations to continue to stabilize realization rates in subsequent program years, increase the transparency, accuracy, and evaluability of program savings in the future, and develop process improvements to further program performance and satisfaction. The tables below summarize ELL's programs, overviewing key findings and recommendations from the PY10 evaluation. APTIM's status in completing prior PY9 evaluation recommendations is in each program-specific section.

Table 2. A/C Solutions—PY10 Findings and Recommendations

Program summary	The A/C Solutions offering provides residential customers with a comprehensive set of options to help lower energy consumption. Customers can improve the efficiency of their HVAC units with an *air conditioning tune-up* or *replacement*. Other measures included in this program include *central air conditioners* and *duct sealing*, and participants can also qualify for one smart thermostat rebate per HVAC unit.
Key findings	• The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average heating degree day (HDD) across weather zones for the *duct sealing* measure while other programs for the same measure applied an HDD value based on the weather zone of the residence. • The EM&V team found multiple instances where the savings were calculated based on a different heating type from the tracked type. The EM&V team also found instances where the savings were not calculated for a couple of projects. • A couple of the *tune-up* measures were calculated with the new methodology set for PY11. The demand savings for the *level 1 tune-up* measures calculated with the new savings methodology were calculated incorrectly and appeared to be divided by the energy efficiency ratio (EER) twice. • The EM&V team found multiple instances where fields such as the *installation date*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment is installed or provided, a model number should be included in the tracking system. • Some programs assumed an average capacity, while other programs calculated savings based on the nominal tons of the unit serviced to the nearest half-ton. The methodology for the capacities should be consistently applied across all the programs.
PY10 recommendations	• Apply assumed values, such as effective full-load hours (EFLH), heating degree days (HDD), coincidence factors (CF), floor area, and thermostat kilowatt-hour factors consistently across measures and programs. • Increase the internal quality assurance/quality control (QA/QC) process to ensure that heating types and savings values are consistently applied. • Update the demand savings calculations for the *level 1 tune-up* measures. • Apply *cooling capacity* and *heating capacity* consistently across all of the *tune-up* measures for each program. • Increase QA/QC processes for tracking key information.

Table 3. Home Performance with ENERGY STAR—PY10 Findings and Recommendations

Program summary	This program utilizes local auditors and contractors to help residential customers analyze their energy use and identify opportunities to improve efficiency, install low-cost energy-saving measures, and identify and implement more comprehensive home efficiency projects. The offering includes a comprehensive home energy assessment, which may also recommend follow-up measures to be completed by trade ally contractors.
Key findings	• The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average HDD across weather zones for the *duct sealing* measure while other programs for the same measure applied an HDD value based on the weather zone of the residence. • The EM&V team found multiple instances where the savings were calculated based on a different heating type from the tracked type. The EM&V team also found instances where the savings were not calculated for certain measures. • The current savings methodologies for *lighting* measures assume a baseline based on Energy Independence and Security Act (EISA) Tier 1. The *lighting* measures for Home Performance with ENERGY STAR® program should assume the *lighting* baseline based on EISA Tier 2 requirements. • Some programs assumed an average capacity, while other programs calculated savings based on the nominal tons of the unit serviced to the nearest half-ton. The methodology for the capacities should be consistently applied across all the programs. • The EM&V team found multiple instances where fields such as the *installation date*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment is installed or provided, a model number should be included in the tracking system.
PY10 recommendations	• Apply assumed values, such as EFLH, HDD, CF, temperatures, R-values, advanced power strip (APS) locations, *air sealing* assumptions, floor area, and thermostat kilowatt-hour factors consistently across measures and programs. • Increase the internal QA/QC process to ensure that heating types and savings values are consistently applied. • Update the *lighting* baseline from EISA Tier 1 to EISA Tier 2. • Apply *cooling capacity* and *heating capacity* consistently across all of the *tune-up* measures for each program. • Increase QA/QC processes for tracking key information.

Table 4. Income Qualified Solutions—PY10 Findings and Recommendations

Program summary	This program is designed to offer income-qualified customers an in-home assessment and no-cost energy-efficient measures. Eligible no-cost direct installation items include *smart thermostats*, *LED bulbs*, *hot water pipe insulation*, APSs, *faucet aerators*, and *low-flow shower heads*. Comprehensive follow-up measures consist of *air* and *duct sealing* and *ceiling insulation*. The program provides measures at no cost to participants to help overcome the financial barrier to improving their home's energy efficiency.
Key findings	• The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average HDD across weather zones for the *duct sealing* measure while other programs for the same measure applied an HDD value based on the weather zone of the residence. • The EM&V team found multiple instances where the savings were calculated based on a different heating type from the tracked type. The EM&V team also found instances where the savings were not calculated for certain measures. • The current savings methodologies for *lighting* measures assume a baseline based on EISA Tier 1 requirements. The *lighting* measures for the Income Qualified Solutions program should assume a *lighting* baseline based on EISA Tier 2 requirements. • Some programs assumed an average capacity, while other programs calculated savings based on the nominal tons of the unit serviced to the nearest half-ton. The methodology for the capacities should be consistently applied across all the programs. • The EM&V team found multiple instances where fields such as the *installation date*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment is installed or provided, a model number should be included in the tracking system.
PY10 recommendations	• Apply assumed values, such as EFLH, HDD, CF, temperatures, APS locations, *air sealing* assumptions, floor area, and thermostat kilowatt-hour factors consistently across measures and programs. • Increase the internal QA/QC process to ensure that heating types and savings values are consistently applied. • Update the *lighting* baseline from EISA Tier 1 to EISA Tier 2. • Apply *cooling capacity* and *heating capacity* consistently across all of the *tune-up* measures for each program. • Increase QA/QC processes for tracking key information.

Table 5. Manufactured Homes—PY10 Findings and Recommendations

Program summary	Manufactured Homes offers measures to improve the efficiency of the home. The program includes an in-home assessment followed by the implementation of measures such as *duct sealing*, *air sealing*, *AC tune-up,* and *direct install* items. A bonus measure is offered in either *ceiling insulation* or the application of a *cool roof coating* to keep heat infiltration to a minimum during Louisiana's extensive cooling season.
Key findings	• The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average HDD across weather zones for the *duct sealing* measure while other programs for the same measure applied an HDD value based on the weather zone of the residence. • The EM&V team found multiple instances where the savings were calculated based on a different heating type from the tracked type. The EM&V team also found instances where the savings were not calculated for certain measures. • A couple of the *tune-up* measures were calculated with the new methodology set for PY11. The demand savings for the *level 1 tune-up* measures calculated with the new savings methodology were calculated incorrectly and appeared to be divided by the EER twice. • Some programs assumed an average capacity, while other programs calculated savings based on the nominal tons of the unit serviced to the nearest half-ton. The methodology for the capacities should be consistently applied across all the programs. • The EM&V team found multiple instances where fields such as *building type*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment is installed or provided, a model number should be included in the tracking system.
PY10 recommendations	• Apply assumed values, such as EFLH, HDD, CF, temperatures, and *air sealing* assumptions consistently across measures and programs. • Increase the internal QA/QC process to ensure that heating types and savings values are consistently applied. • Update the demand savings calculations for the *level 1 tune-up* measures. • Apply *cooling capacity* and *heating capacity* consistently across all of the *tune-up* measures for each program. • Increase QA/QC processes for tracking key information.

Table 6. Multifamily Solutions—PY10 Findings and Recommendations

Program summary	This program serves multifamily buildings with five or more units under one roof and offers the benefits of energy efficiency to property owners and residents. The program is designed to raise multifamily customers' awareness of the benefits of high-efficiency products, provide education regarding energy usage within their homes, and present savings opportunities. Energy advisors perform a walkthrough inspection to identify needs within the complex and provide direct installation of a specific set of measures. Trade allies are assigned if other upgrade opportunities are identified.
Key findings	• The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average HDD across weather zones for the *duct sealing* measure while other programs for the same measure applied an HDD value based on the weather zone of the residence. • The EM&V team found multiple instances where the savings were calculated based on a different heating type from the tracked type. The EM&V team also found instances where the savings were not calculated for certain measures. • The current savings methodologies for *lighting* measures assume a baseline based on EISA Tier 1. The *lighting* measures for the Multifamily Solutions program should assume the *lighting* baseline based on EISA Tier 2 requirements. • A couple of the *tune-up* measures were calculated with the new methodology set for PY11. The demand savings for the *level 1 tune-up* measures calculated with the new savings methodology were calculated incorrectly and appeared to be divided by the EER twice. • Some programs assumed an average capacity, while other programs calculated savings based on the nominal tons of the unit serviced to the nearest half-ton. The methodology for the capacities should be consistently applied across all the programs. • The EM&V team found multiple instances where fields such as the *building type*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment is installed or provided, a model number should be included in the tracking system.
PY10 recommendations	• Apply assumed values, such as EFLH, HDD, CF, temperatures, *air sealing* assumptions, floor area, and *thermostat* kilowatt-hour factors consistently across measures and programs. • Increase the internal QA/QC process to ensure that heating types and savings values are consistently applied. • Update the *lighting* baseline from EISA Tier 1 to EISA Tier 2. • Update the demand savings calculations for the *level 1 tune-up* measures. • Apply *cooling capacity* and *heating capacity* consistently across all of the *tune-up* measures for each program. • Increase QA/QC processes for tracking key information.

Table 7. Retail Lighting and Appliances—PY10 Findings and Recommendations

Program summary	The Retail Lighting and Appliances program is a residential retail program that increases awareness and sales of efficient lighting and appliances to customers. The program promotes the purchase of energy-efficient *room air conditioners*, *pool pumps*, *refrigerators,* and *heat pump water heaters* and offers a variety of discounted ENERGY STAR-qualified products.
Key findings	• The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average temperature across weather zones for the *low-flow faucet aerators* measure while other programs for the same measure applied temperature values based on the weather zone of the residence. • The EM&V team found multiple instances where the savings were calculated based on the location of the APS. For this program, update the savings calculations so that the savings are averaged between *entertainment* and *home office* locations. • The EM&V team was unable to calculate some of the measures, such as *air purifiers, dehumidifiers, window A/Cs, pool pumps,* and *heat pump water heaters*, because there was not enough information given. • The EM&V team found that some *water heating* measures had unexpected savings differences compared to the same measures throughout the rest of the residential portfolio. The EM&V team believes the differences were likely due to the implementer including an in-service rate (ISR) in the calculation. The EM&V team recommends following the Arkansas TRM savings methodology, which currently does not provide ISRs for these measures. • The EM&V team found multiple instances where fields such as the *installation date*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment is installed or provided, a model number should be included in the tracking system.
PY10 recommendations	• Apply assumed values, such as EFLH, CF, temperatures, floor area, and *thermostat* kilowatt-hour factors, across measures and programs consistently. • Given the nature of the program, it is best practice to use an average savings value for the APS measure since the equipment's installation location will be unknown. • Include critical data in the tracking system to assist in the calculations for *air purifiers*, *dehumidifiers*, *window A/Cs*, *pool pumps*, and *heat pump water heaters*. • Adjust the savings values for *low-flow faucet aerators*, *low-flow showerheads*, and *pipe wrap insulation* to match the TRM assumptions. • Increase QA/QC processes for tracking key information.

Table 8. School Kits and Education—PY10 Findings and Recommendations

Program summary	The School Kits and Education offering targets sixth- and tenth-grade school-age students across the state, to deliver a hands-on lesson and in-person instruction about energy efficiency concepts. Students are sent home with an energy efficiency starter kit and forms with installation data are returned to the team. The program team works closely with school administrators and teachers to market the program and ensure the successful implementation of the energy efficiency education curriculum.
Key findings	• The EM&V team found that slightly different assumptions were used across programs. The EM&V team recommends updating the assumptions based on the information provided through Appendix C. In addition to the methodology shown there, the ISRs for the school kits should also be included in the calculation for the School Kits and Education Program. • For this program, ensure the savings calculations are using an average value between *entertainment* and *home office* locations. In addition to the methodology shown there, the ISRs for the school kits should also be included in the calculation for the School Kits and Education program.
PY10 recommendations	• None.

Table 9. Large Commercial and Industrial Solutions—PY10 Findings and Recommendations

Program summary	The Large Commercial and Industrial Solutions program (LCI) serves customer accounts with an average peak demand of 100 kW or greater who did not opt out of participation during the Quick Start phase. The program provides professional services with education and facility assessments to identify savings opportunities. Incentives increase the affordability of proposed projects, making them more likely to receive approval.
Key findings	• The previous evaluator approved the savings methodology and incentive rates for the *HVAC tune-up* measure without conducting an independent review of the savings methodology that was approved in another jurisdiction. Mid-year, the implementer discovered an error in calculated savings and worked with the Tetra Tech EM&V team to correct the error. However, this affected the claimed savings for the measure and the incentive rates paid out to trade allies. Reviewing methodologies prior to approving them for use in ELL's jurisdiction would prevent confusion regarding claimed savings and best practices for measure implementation. • The EM&V team found that custom M&V projects were not collecting pre- and post-meter data necessary to verify energy savings estimates. The EM&V team recommends the development of a comprehensive M&V plan for all custom projects that includes defining the project scope and baseline conditions, outlining the methodology for estimating energy savings, specifying data collection methods and pre- and post-metering requirements, describing the analysis plan for verifying savings, and planning for a post-implementation review to assess performance and identify lessons learned. By implementing this M&V plan, the program can ensure that pre- and post-meter data are effectively collected and analyzed to verify energy savings for custom projects.

	• The EM&V team found that prescriptive projects were calculating energy savings using calculators based on Arkansas TRM 7.0 and baseline efficiencies that were not aligned with current federal standards or the 2021 International Energy Conservation Code (IECC). The EM&V team recommends reviewing and updating all savings calculators to ensure baseline efficiencies reflect current TRM, federal, and state energy efficiency standards. • The EM&V team identified two line items in the final LCI tracking data labeled as *placeholder measure*. The implementer indicated that these referred to *lighting* projects, which were never updated in the tracking data. The EM&V team recommends enhancing QA/QC processes for the final tracking data to ensure lines labeled as *placeholder measure* are properly labeled.
PY10 recommendations	• Conduct independent cost-effectiveness and savings methodology reviews prior to approving measures for implementation. • Create an M&V plan for custom projects that use IPMVP protocols. • Revise savings calculators to ensure baselines align with IECC 2021, current federal standards for HVAC equipment, and the latest version of the Arkansas TRM. • Enhance QA/QC of final tracking data so *placeholder measures* are properly labeled.

Table 10. Small Commercial Solutions—PY10 Findings and Recommendations

Program summary	The Small Commercial Solutions (SCS) program provides small businesses with average peak demand under 100 kW the opportunity to achieve kilowatt-hour savings through prescriptive and custom projects. The SCS program is designed to overcome barriers unique to small businesses that commonly prevent the purchase of energy-efficient equipment. The program also provides trade allies and small business owners with energy-efficiency information and develops awareness of energy and non-energy benefits.
Key findings	• The EM&V team found that custom M&V projects were not collecting pre- and post-meter data necessary to verify energy savings estimates. The EM&V team recommends the development of a comprehensive M&V plan for all custom projects that includes defining the project scope and baseline conditions, outlining the methodology for estimating energy savings, specifying data collection methods and pre- and post-metering requirements, describing the analysis plan for verifying savings, and planning for a post-implementation review to assess performance and identify lessons learned. By implementing this M&V plan, the program can ensure that pre- and post-meter data are effectively collected and analyzed to verify energy savings for custom projects. • The EM&V team found that prescriptive projects were calculating energy savings using calculators based on Arkansas TRM 7.0 and baseline efficiencies that were not aligned with current federal standards or IECC 2021. The EM&V team recommends reviewing and updating all savings calculators to ensure baseline efficiencies reflect current TRM, federal, and state energy efficiency standards.

	• The EM&V team identified one line item in the final SCS tracking data labeled as *placeholder measure*. The implementer indicated this referred to a *lighting* project that was never updated in the tracking data. The EM&V team recommends enhancing QA/QC processes for the final tracking data to ensure *placeholder measure* projects are properly labeled.
PY10 recommendations	• Conduct independent cost-effectiveness and savings methodology reviews prior to approving measures for implementation. • Create an M&V plan for custom projects that use International Performance Measurement and Verification Protocols. • Revise savings calculators to ensure baselines align with IECC 2021, current federal standards for HVAC equipment, and the latest version of the Arkansas TRM. • Enhance QA/QC of final tracking data so *placeholder measure* projects are properly labeled.

2.0 INTRODUCTION

In PY10, 2024, Entergy Louisiana LLC (ELL) provided a comprehensive range of customer options focused on energy efficiency and demand reduction coupled with education and training activities. ELL designed its portfolio to meet the following objectives:

- achieve the net energy-savings target of 91,090 megawatt-hours (MWh),
- provide significant energy-savings opportunities for all customers and market segments, including low-income.

The portfolio of program offerings was implemented by APTIM. In June 2024, APTIM hired Tetra Tech as its evaluation, measurement, and verification (EM&V) contractor, assuming the role and remaining budget of the prior EM&V contractor. The PY10 ELL evaluation included a reduced-scope impact evaluation and process analyses, primarily through program participant surveys. Also, the EM&V team developed the program evaluation activities based on discussions with APTIM, reviews of program tracking and documentation, a review of prior years' EM&V efforts, and ELL annual reports.

The remainder of this section overviews the EM&V team's evaluation approach. Section 3.0 discusses the overall portfolio results. Sections 4.0 through 12.0 detail the EM&V results for each program, including specific discussions of evaluation methodologies. In the appendices, we include copies of survey instruments and materials, a copy of the C&I Tune-Up Methodology Memo, and a residential measure resource containing consistent assumptions and calculation methodologies across various residential implementation strategies.

In this section, we discuss the evaluation approaches for ELL within the following topics:

- impact evaluations,
- process evaluations, and
- data collection activities.

2.1 IMPACT EVALUATIONS

Our principal approach to the impact evaluation activities for ELL for PY10 includes the following:

- verify program tracking data and correctly apply the Arkansas Technical Reference Manual (TRM) to the applicable program year to calculate savings following TRM 7.0;
- estimate gross- and net-energy and demand impacts at the measure, program, and portfolio levels;
    - adjust program-reported gross savings using the results of evaluation research, relying primarily on the tracking system reviews;
    - provide documentation and transparency of all evaluated savings estimates and, where relevant, comparison with TRM 7.0 calculations;
- provide ongoing technical reviews and guidance throughout the evaluation cycle;

- perform cost-effectiveness tests to estimate the balance between the avoided costs of energy production and demand reduction against the costs of implementing the program, including the program implementation and installation and equipment costs; and
- preliminary and final tracking system review to assess data captured for new measure offerings following TRM 7.0.

2.2 PROCESS EVALUATION

A limited process evaluation was conducted due to the mid-PY10 EM&V contractor change. Our approach to process evaluation activities for ELL's portfolio of programs was to:

- gain an in-depth understanding of program operations, challenges, and evaluation needs through interviews with APTIM key staff complemented with communication and program documentation reviews throughout the program year, including biweekly status meetings;
- conduct participant surveys to gather feedback on the customer experience, and identify potential program barriers, recommendations for implementation improvement, and assess program awareness and satisfaction; and
- track technical assistance requests and outcomes.

The PY10 customer surveys were conducted for the following programs: A/C Solutions, Home Performance with ENERGY STAR®, Income Qualified Solutions, Manufactured Homes, Multifamily Solutions, Retail Lighting and Appliances, Large Commercial and Industrial Solutions, and Small Commercial Solutions.

2.3 DATA COLLECTION ACTIVITIES

The data collection activities listed below were used to support the impact and process evaluations as relevant. The majority of these activities collected primary data.

- **Program staff interviews.** The EM&V team interviewed the program implementer's staff as part of the evaluation planning process. Communication was maintained throughout the program cycle via biweekly meetings to understand program progress and any challenges or successes. Findings from these interviews informed the evaluation research, key findings, and recommendations.
- **Database tracking and materials review.** The EM&V team assessed each program's database and tracking information and provided a census tracking system review of deemed savings measures against the applicable version of the TRM, along with other program materials such as applications, savings workbooks, and quality control protocols.
- **Participant interviews.** The EM&V team conducted participant surveys to collect data on program awareness and satisfaction, factors affecting participation, and demographic information. A total of 198 participant surveys were completed across the residential and commercial programs. Table 11 shows the response by sector and program.

Table 11. Participant Survey Response by Sector and Program

Program name	Count of records in population	Count of unique participants sampled	Total completed surveys	Cooperation rate
Residential				
A/C Solutions	755	150	15	10%
Home Performance with ENERGY STAR	860	150	25	17%
Income Qualified Solutions	1,130	150	31	21%
Manufactured Homes	346	130	9	7%
Multifamily Solutions	14	14	4	29%
Retail Lighting and Appliances	6,095	150	58	39%
Total residential	**9,098**	**744**	**142**	**19%**
Commercial				
Large Commercial and Industrial Solutions	117	55	14	25%
Large Commercial and Industrial Solutions—New Construction Pilot	4	4	1	25%
Small Business Direct Install Pilot	43	38	16	42%
Small Commercial—Income Qualified	24	23	8	35%
Small Commercial Solutions	113	53	17	32%
Small Business Solutions—New Construction Pilot	1	1	0	0%
Total commercial	**302**	**174**	**56**	**32%**
Total	**9,400**	**918**	**198**	**22%**

3.0 PORTFOLIO PERFORMANCE

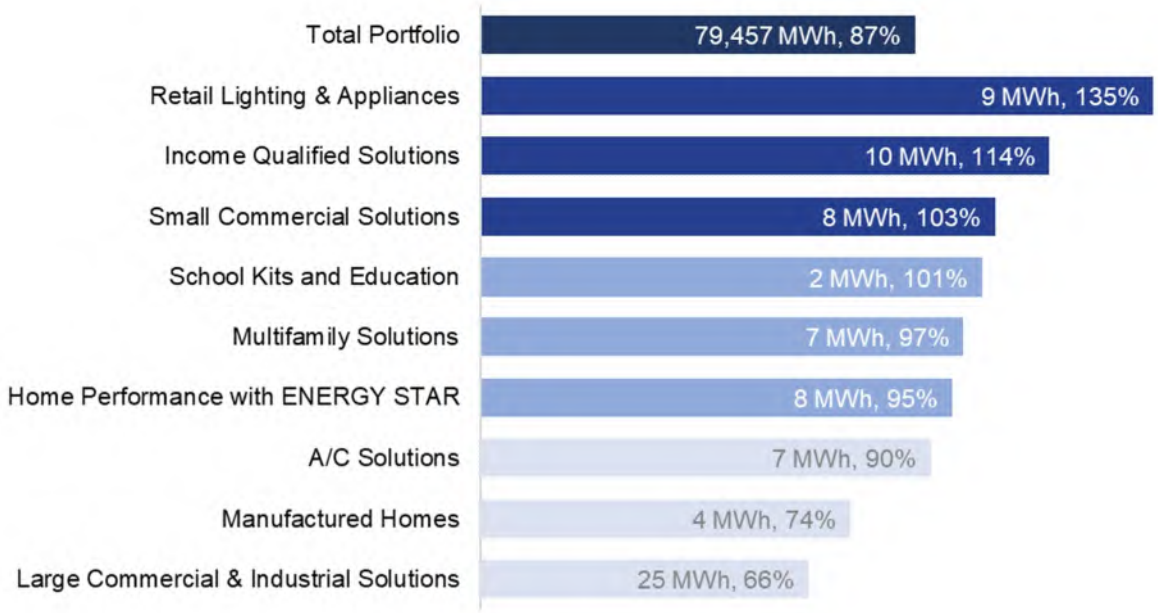
This report section presents overall portfolio results to help Entergy Louisiana, LLC (ELL) and APTIM Environmental and Infrastructure, Inc. (APTIM) with future program planning.

3.1 PORTFOLIO SAVINGS RESULTS

In PY10, ELL offered a portfolio of seven residential and two commercial energy efficiency programs. ELL seeks to provide customers with easy program entry points, flexible options for saving energy, and ongoing support for those who want to pursue deeper energy savings or demand reductions through its energy efficiency portfolio.

The portfolio achieved 87 percent of its energy savings goals. Individual program performance relative to program savings and demand goals varied. Four of the nine programs exceeded their megawatt-hour savings goals. Five programs did not reach their energy savings goals; these five programs ranged between 66 percent and 97 percent of energy savings goals. One notable improvement from PY9 was the Small Commercial Solutions program; in PY9, the program achieved 45 percent of its energy savings goals, and in PY10, this increased to 103 percent.

Figure 3. PY10 Percentage of Net Energy Megawatt-Hour Savings Goals Achieved



Evaluated savings were very similar between claimed energy and demand savings, with an overall portfolio gross realization rate of 98 percent for both. Program-level gross realization rates ranged from 85 percent to 148 percent for energy savings and 86 percent to 121 percent for demand savings. Table 12 shows the reported and evaluated energy savings for PY10 and Table 13 shows the reported and evaluated demand savings.

Table 12. ELL PY10 Reported and Evaluated Energy Savings[3]

Program	Percentage portfolio net savings (kWh)	Reported energy savings (kWh)	Evaluated energy savings (kWh)	Gross realization rate (kWh)	Net-to-gross ratio	Net evaluated energy savings (kWh)
A/C Solutions	8.9%	7,230	7,084	98.0%	100.0%	7,084
Home Performance with ENERGY STAR	10.0%	7,881	7,979	101.3%	100.0%	7,979
Income Qualified Solutions	12.4%	9,596	9,859	102.7%	100.0%	9,859
Manufactured Homes	4.7%	3,844	3,764	97.9%	100.0%	3,764
Multifamily Solutions	8.7%	6,930	6,931	100.0%	100.0%	6,931
Retail Lighting and Appliances	11.9%	6,374	9,458	148.4%	100.0%	9,458
School Kits and Education	2.3%	1,828	1,828	100.0%	100.0%	1,828
Large Commercial and Industrial Solutions	31.1%	28,046	24,689	88.0%	100.0%	24,689
Small Commercial Solutions	9.9%	9,224	7,865	85.3%	100.0%	7,864
Total portfolio	**100.0%**	**80,954**	**79,457**	**98.2%**	**100.0%**	**79,457**

Table 13. ELL PY10 Reported and Evaluated Demand Savings

Program	Percentage portfolio net savings (kW)	Reported demand savings (kW)	Evaluated demand savings (kW)	Gross realization rate (kW)	Net-to-gross ratio	Net evaluated demand savings (kW)
A/C Solutions	13.6%	1.7	1.6	95.8%	100.0%	1.6
Home Performance with ENERGY STAR	14.2%	1.7	1.7	97.5%	100.0%	1.7
Income Qualified Solutions	19.1%	1.9	2.3	120.8%	100.0%	2.3
Manufactured Homes	4.9%	0.6	0.6	99.0%	100.0%	0.6
Multifamily Solutions	8.3%	1.0	1.0	103.0%	100.0%	1.0
Retail Lighting and Appliances	4.2%	0.5	0.5	100.2%	100.0%	0.5
School Kits and Education	2.0%	0.2	0.2	100.0%	100.0%	0.2
Large Commercial and Industrial Solutions	27.1%	3.7	3.2	88.3%	100.0%	3.2
Small Commercial Solutions	6.6%	0.9	0.8	86.3%	100.0%	0.8
Total portfolio	**100.0%**	**12.2**	**12.0**	**97.9%**	**100.0%**	**12.0**

[3] Results rounded to the nearest whole number.

Table 14 summarizes the customers served by programs during PY10, demonstrating the efforts to meet various customer sectors' needs through downstream, midstream, and upstream programs. Retail Lighting and Appliances and School Kits and Education represented the majority of the portfolio participation, as expected given their distribution approach and program design. Participants for Retail Lighting and Appliances were determined by account number for purchases online, while products purchased at participating retail locations were counted based on each quantity purchased. Participants for the School Kits and Education program were counted based on the number of kits distributed.

Table 14. Distribution of Participating Customers by Program and Sector, PY10

Program	Participating customers	Percentage of sector served	Percentage of portfolio
Residential			
A/C Solutions	1,146	4%	4%
Home Performance with ENERGY STAR	2,304	8%	8%
Income Qualified Solutions	1,294	5%	5%
Manufactured Homes	678	2%	2%
Multifamily Solutions	16	0%	0%
Retail Lighting & Appliances	10,496	39%	38%
School Kits and Education	11,300	41%	41%
Residential total	**27,234**	**100%**	**98%**
Commercial			
Large Commercial & Industrial Solutions	179	39%	1%
Small Commercial Solutions	277	61%	1%
Commercial total	**456**	**100%**	**2%**
Total	**27,690**	**–**	**100%**

3.2 KEY PERFORMANCE INDICATORS

Key performance indicators (KPI) are quantifiable metrics used to measure and track progress toward achieving specific goals and objectives. They help to understand performance and identify areas for improvement. APTIM's KPIs measure satisfaction with ELL as a service provider, APTIM's response time to customer questions and complaints, and satisfaction with the response for the customer. The participant surveys conducted as part of the PY10 evaluation captured satisfaction with program staff response time and interaction. Satisfaction with the program overall and with individual program aspects, such as communications with program staff, the quality of the work completed by the trade ally, the performance of the equipment, and the participation process were also asked. This section shows the participant satisfaction results at the portfolio level and by sector and program.

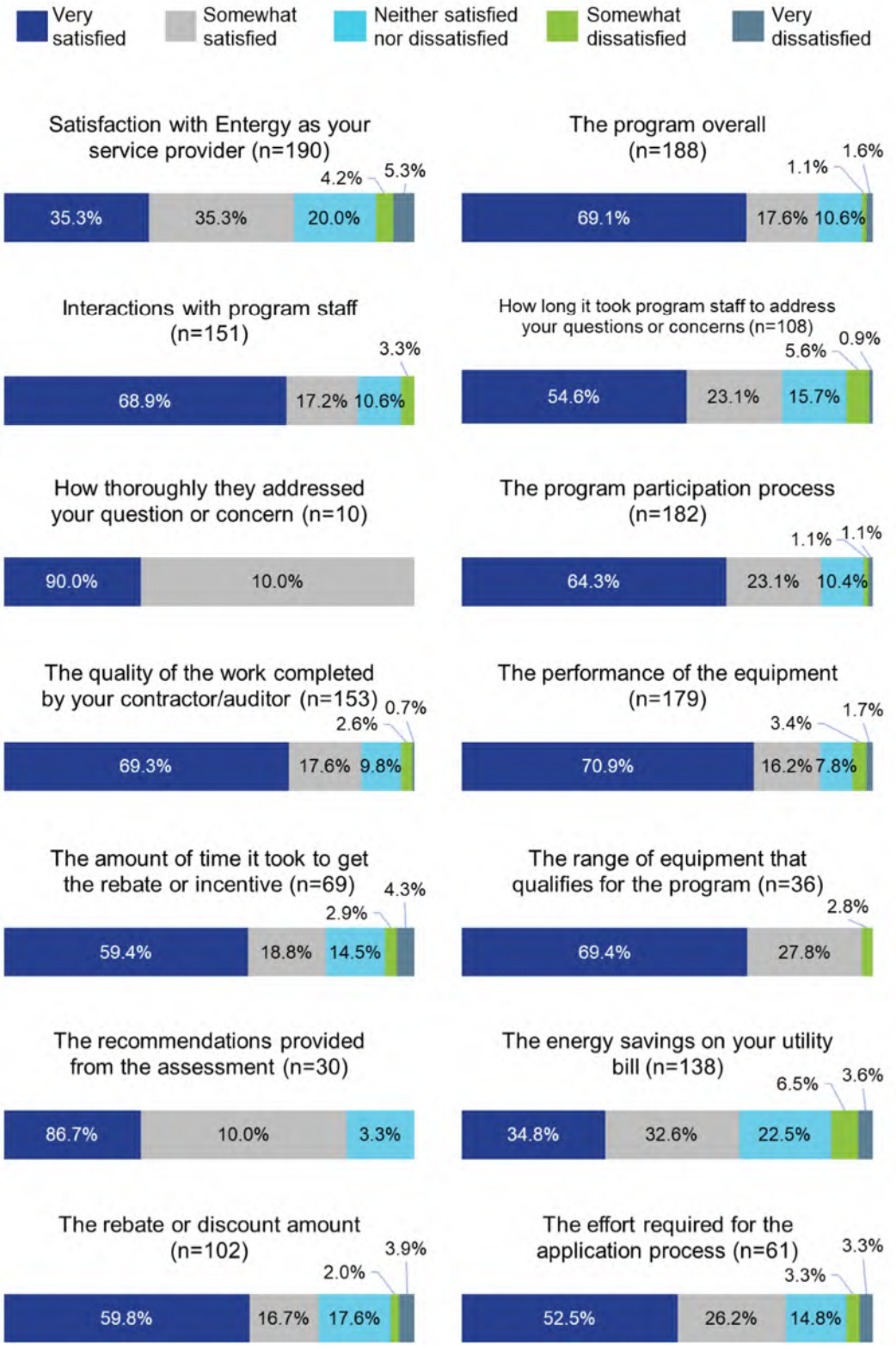
3.2.1 Portfolio-Level

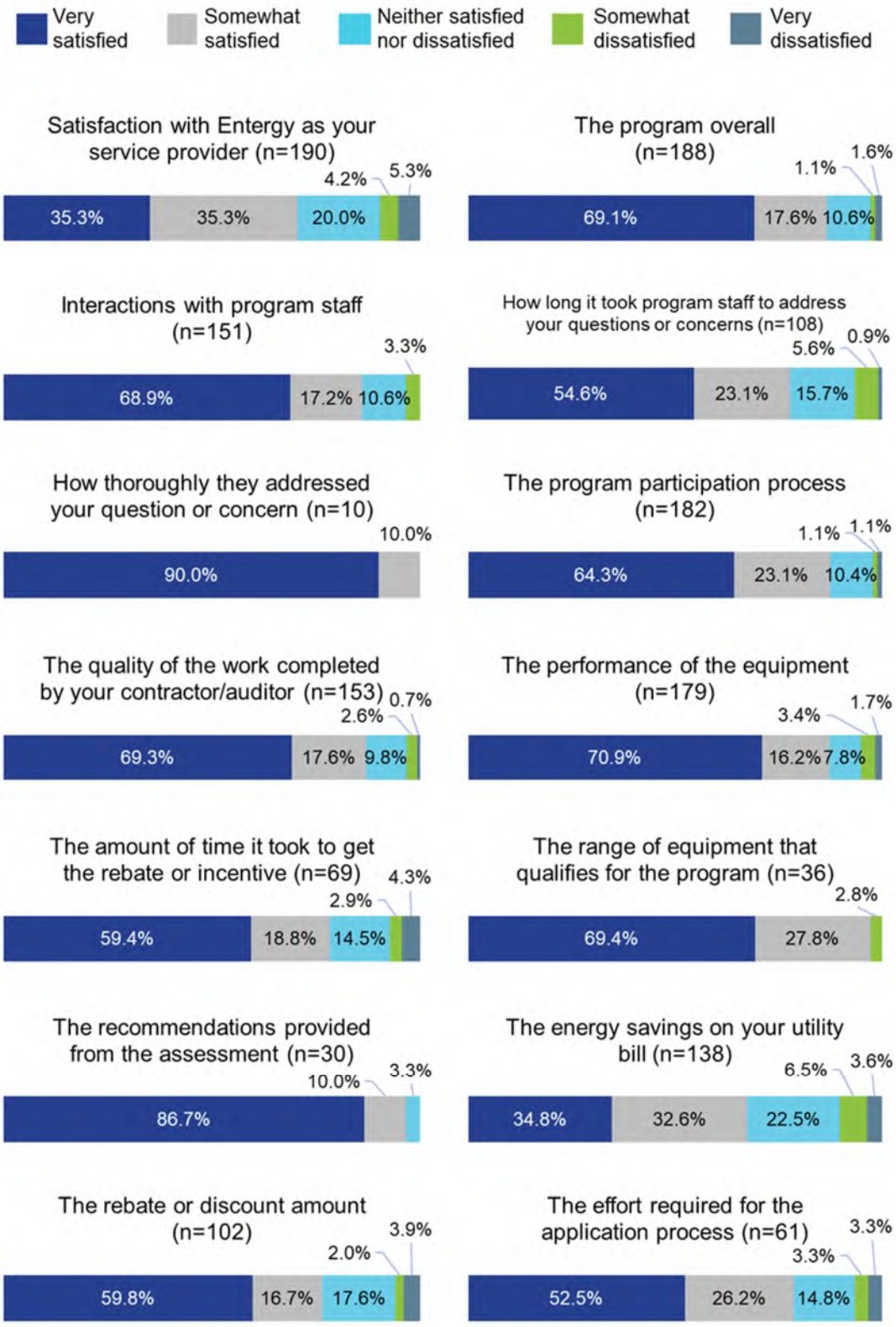
As mentioned, APTIM's KPIs measure satisfaction with ELL as a service provider, their response time to customer questions and complaints, and satisfaction with the response for the customer.

Most respondents are satisfied with ELL as a service provider with 71 percent reporting being *somewhat satisfied* or *very satisfied*, as shown below in Figure 4*.* Another 20 percent said they were *neither satisfied nor dissatisfied* with ELL as their service provider. For the time it took to address questions, 78 percent of respondents said they were *somewhat satisfied* or *very satisfied.* The highest satisfaction was for program staff thoroughly addressing their question or concerns with 100 percent of respondents being *somewhat satisfied* or *very satisfied.* When asked to rate the satisfaction of their interactions with program staff, 86 percent of respondents said they were *somewhat satisfied* or *very satisfied,* with no reports of being *very dissatisfied.*

Overall, program satisfaction is high. Using a scale of *very dissatisfied*, *somewhat dissatisfied*, *neither satisfied nor dissatisfied*, *somewhat satisfied*, and *very satisfied*, 69 percent of respondents across all programs said they were *very satisfied* with the program overall. Another 18 percent said they were *somewhat satisfied* with the program, and 11 percent responded neutrally with *neither satisfied nor dissatisfied*.

Figure 4. Portfolio-Level Satisfaction with ELL and Program Aspects

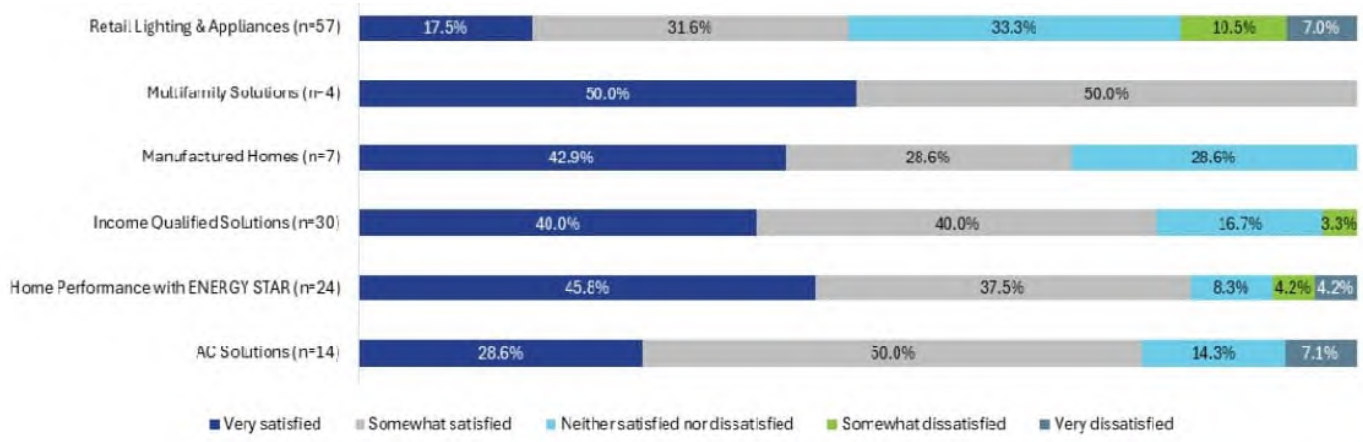



Very satisfied
Somewhat satisfied
Neither satisfied nor dissatisfied
Somewhat dissatisfied
Very dissatisfied
Satisfaction with Entergy as your service provider (n=190)
35.3%
35.3%
20.0%
4.2%
5.3%
The program overall (n=188)
69.1%
17.6%
10.6%
1.1%
1.6%
Interactions with program staff (n=151)
68.9%
17.2%
10.6%
3.3%
How long it took program staff to address your questions or concerns (n=108)
54.6%
23.1%
15.7%
5.6%
0.9%
How thoroughly they addressed your question or concern (n=10)
90.0%
10.0%
The program participation process (n=182)
64.3%
23.1%
10.4%
1.1%
1.1%
The quality of the work completed by your contractor/auditor (n=153)
69.3%
17.6%
9.8%
2.6%
0.7%
The performance of the equipment (n=179)
70.9%
16.2%
7.8%
3.4%
1.7%
The amount of time it took to get the rebate or incentive (n=69)
59.4%
18.8%
14.5%
2.9%
4.3%
The range of equipment that qualifies for the program (n=36)
69.4%
27.8%
2.8%
The recommendations provided from the assessment (n=30)
86.7%
10.0%
3.3%
The energy savings on your utility bill (n=138)
34.8%
32.6%
22.5%
6.5%
3.6%
The rebate or discount amount (n=102)
59.8%
16.7%
17.6%
2.0%
3.9%
The effort required for the application process (n=61)
52.5%
26.2%
14.8%
3.3%
3.3%

3.2.2 Residential Programs

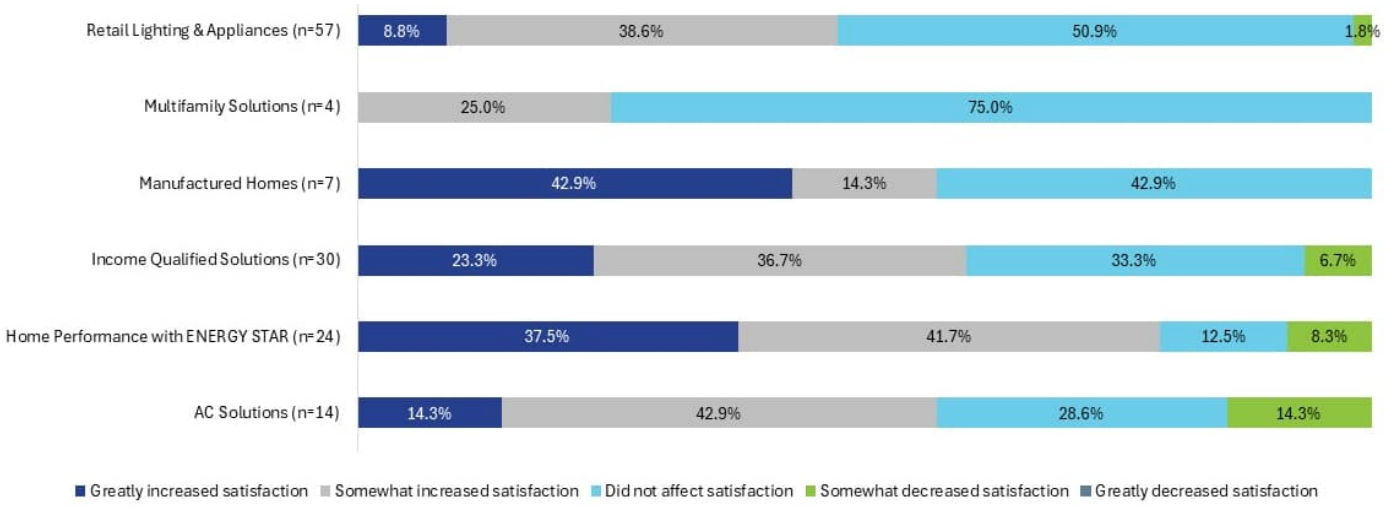
The following graphics further break down the satisfaction results of the residential programs. Note that not all aspects were applicable to all programs.

Figure 5. Residential—Satisfaction with ELL as a Service Provider



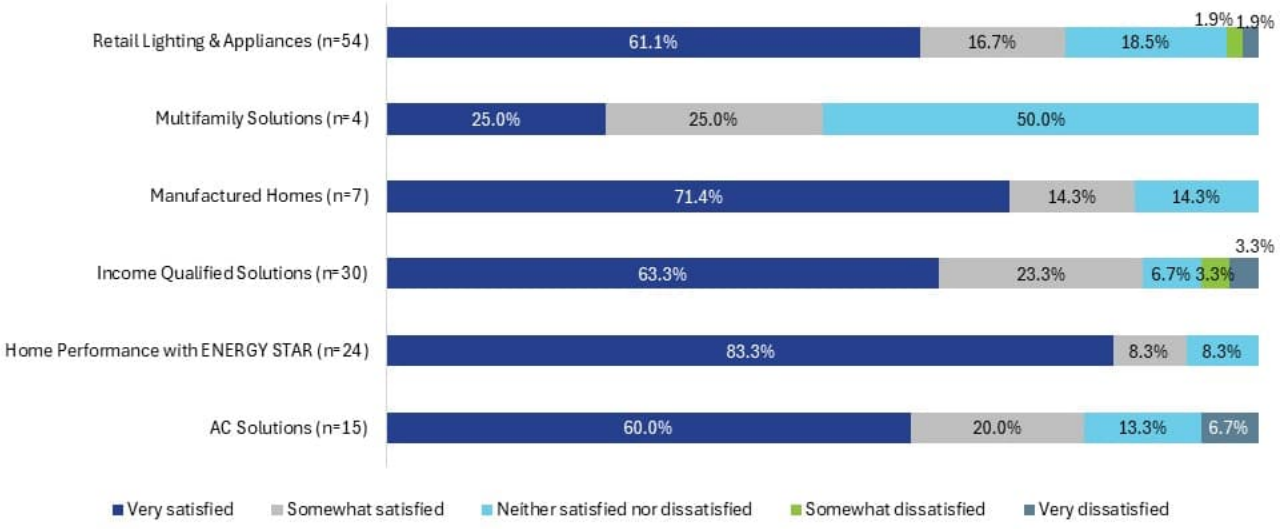
Source: Participant Survey Question Q39

Figure 6. Residential—Effect of Program Participation on Customer Satisfaction



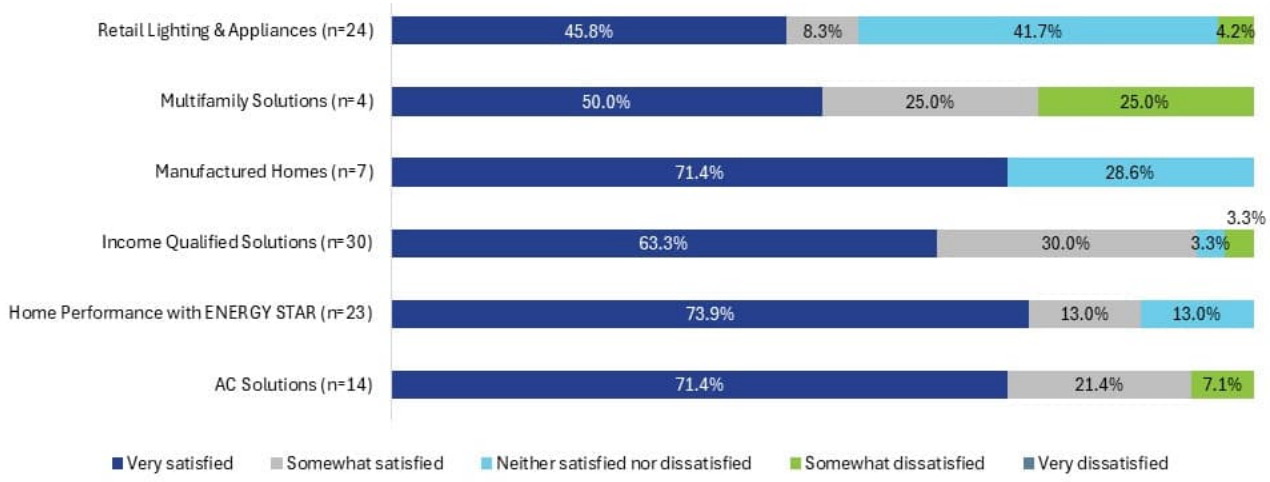
Source: Participant Survey Question Q40

Figure 7. Residential—Satisfaction with the Program Overall



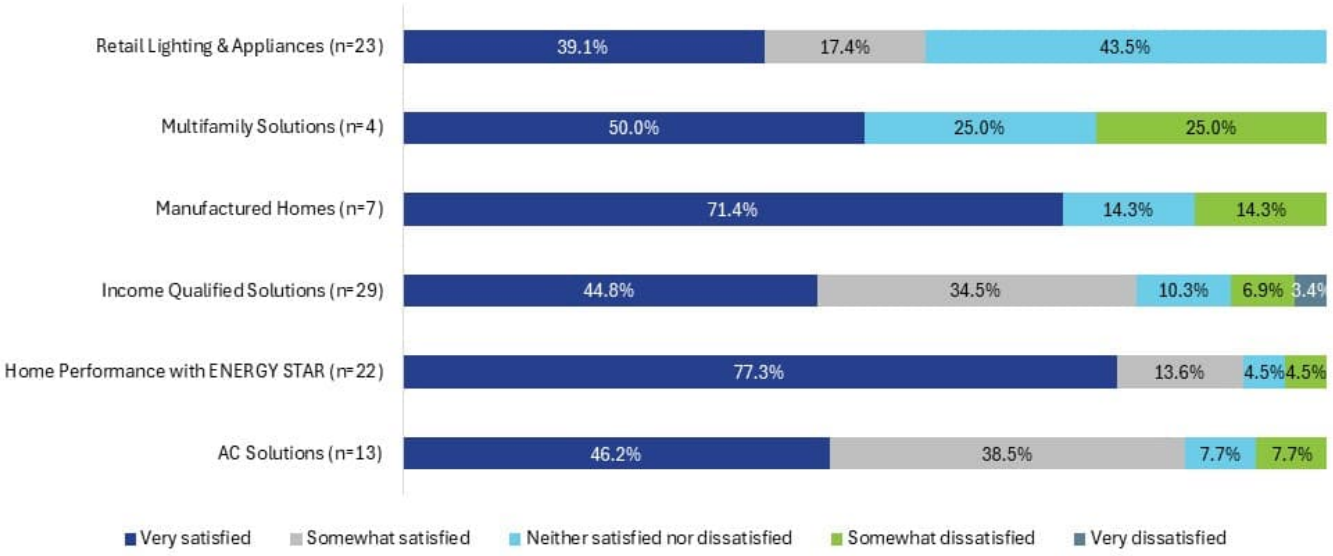
Source: Participant Survey Question Q37A

Figure 8. Residential—Satisfaction with Interactions with Program Staff



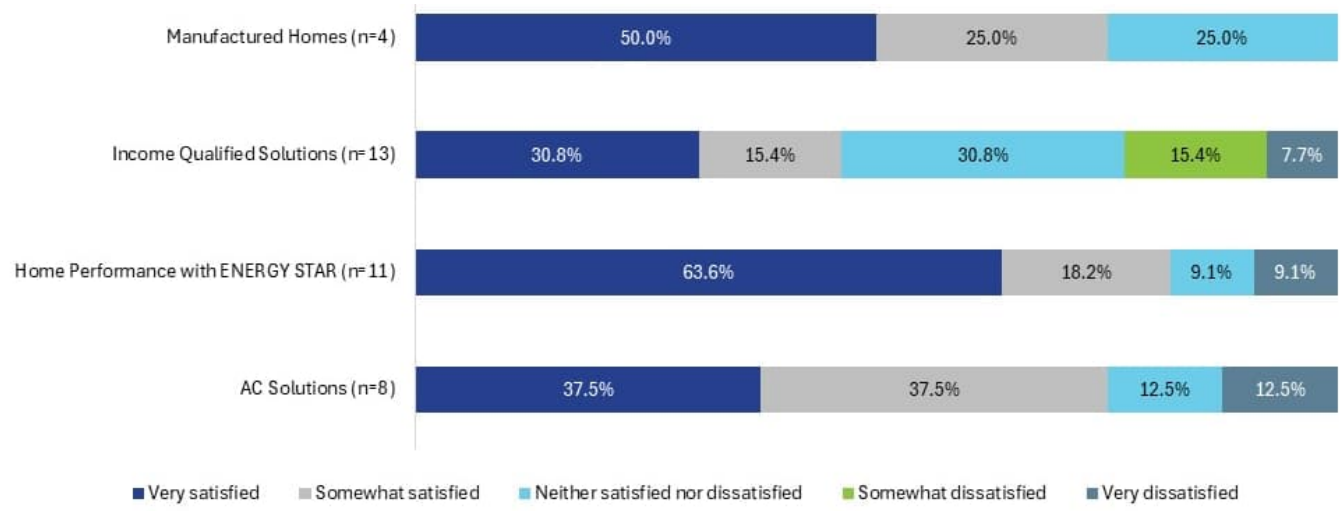
Source: Participant Survey Question Q37B

Figure 9. Residential—Satisfaction with Time Needed for Program Staff to Address Questions



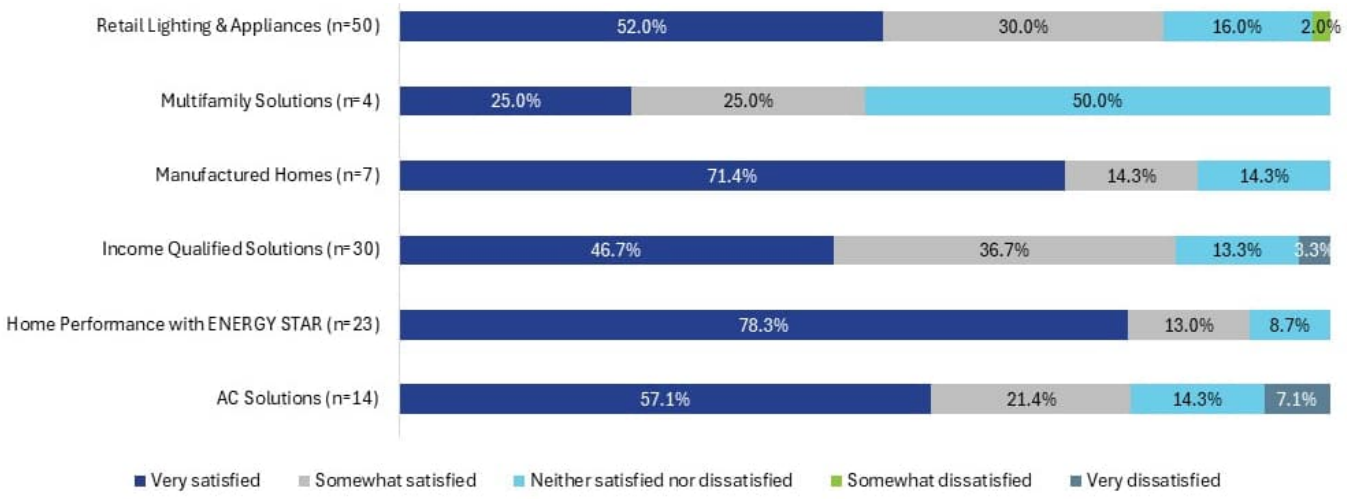
Source: Participant Survey Question Q37C

Figure 10. Residential—Satisfaction with Time Needed to Receive Rebate



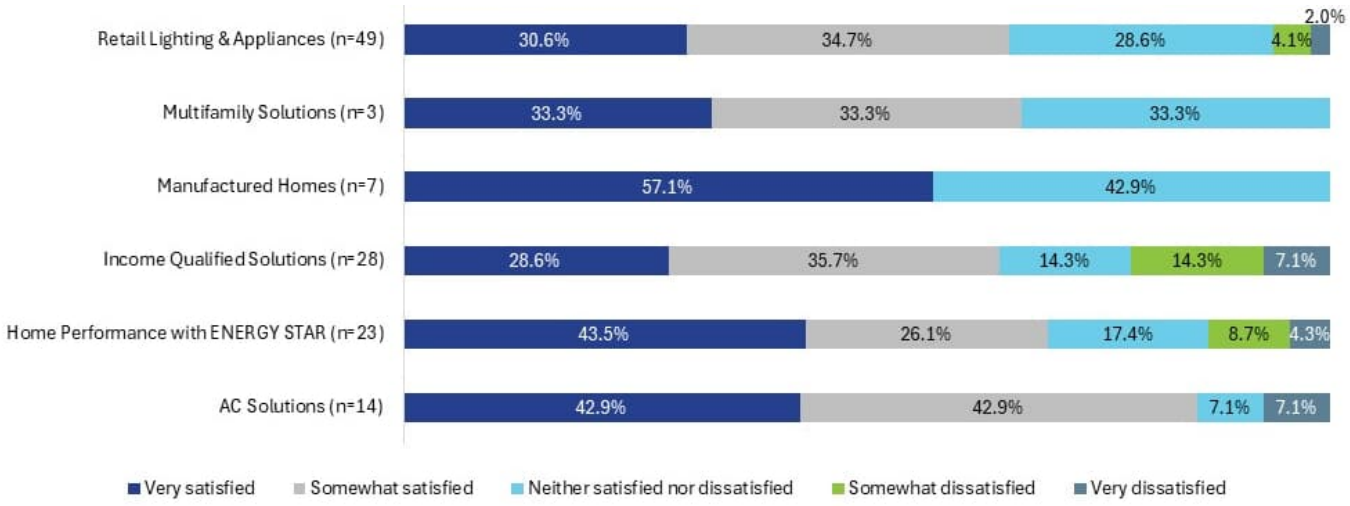
Source: Participant Survey Question Q37D

Figure 11. Residential—Satisfaction with the Program Participation Process



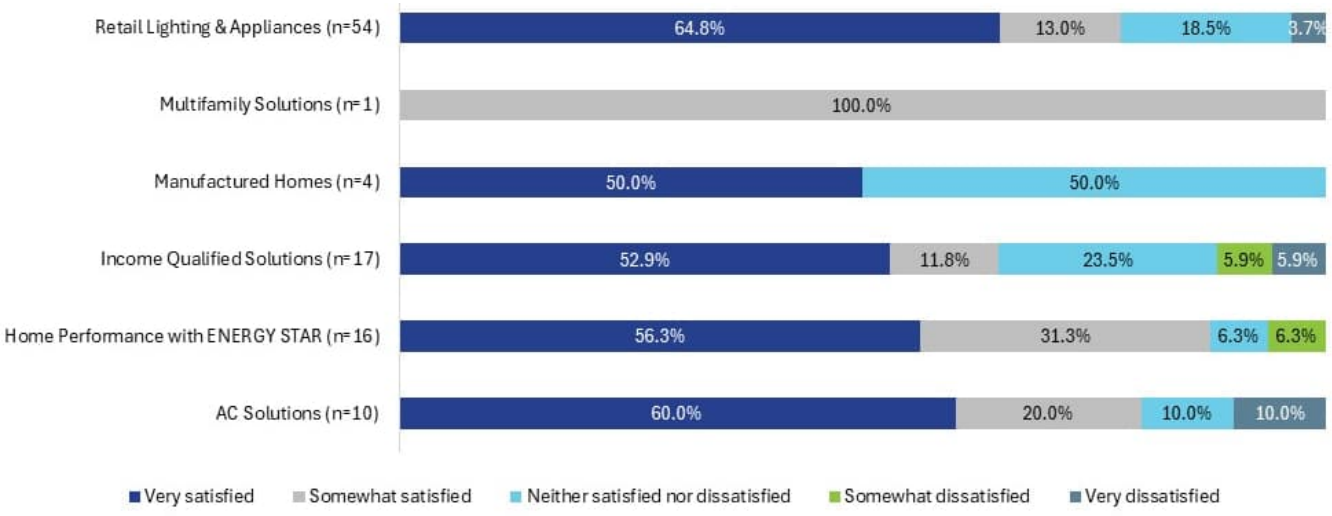
Source: Participant Survey Question Q37E

Figure 12. Residential—Satisfaction with the Energy Savings on Your Bill



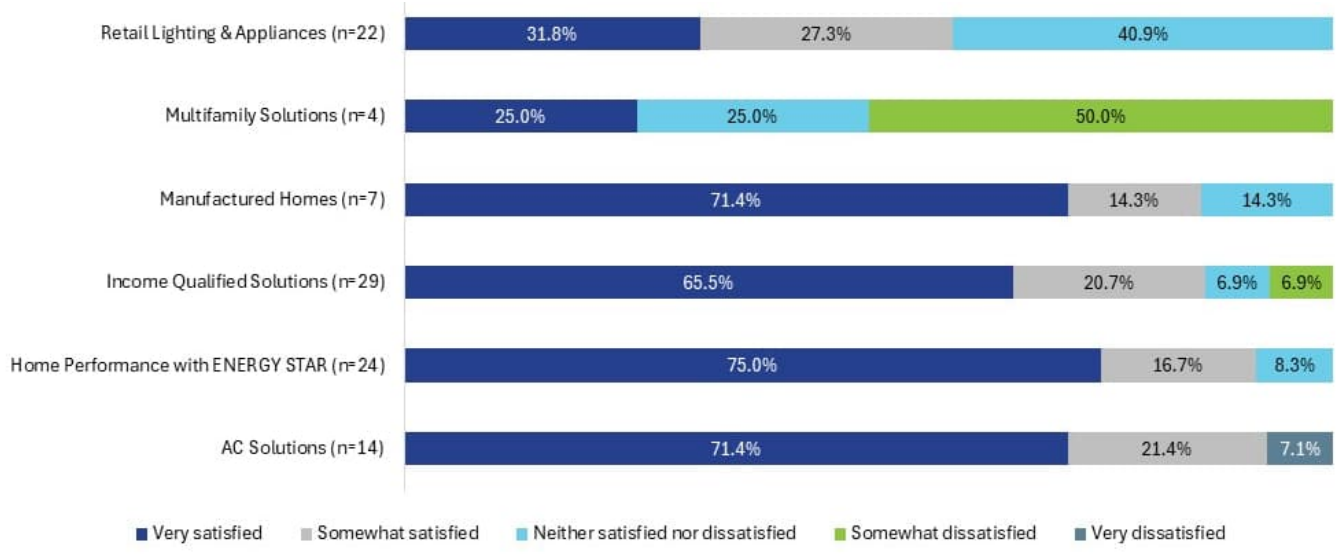
Source: Participant Survey Question Q37F

Figure 13. Residential—Satisfaction with the Rebate or Discount Amount



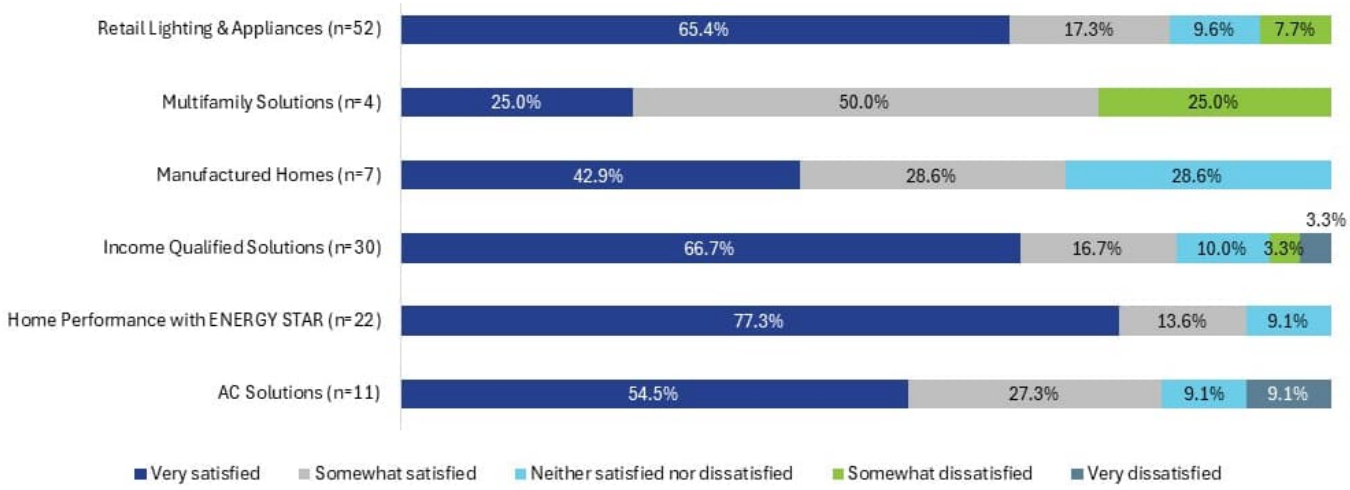
Source: Participant Survey Question Q37G

Figure 14. Residential—Satisfaction with the Quality of the Work Completed by Your Contractor/Energy Auditor



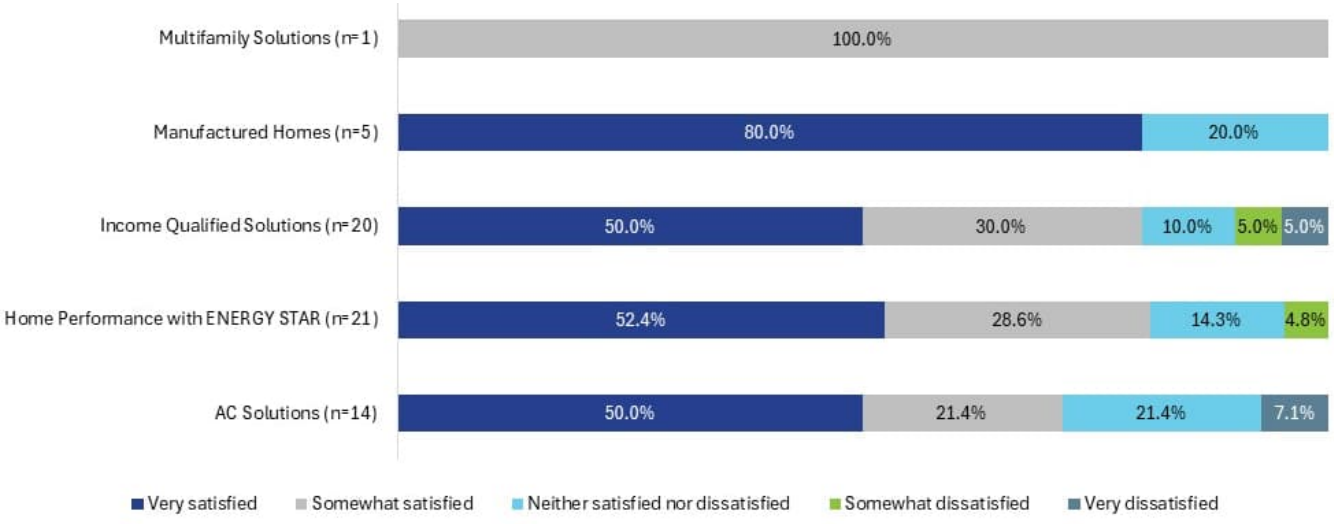
Source: Participant Survey Question Q37H

Figure 15. Residential—Satisfaction with the Performance of the Equipment



Source: Participant Survey Question Q37I

Figure 16. Residential—Satisfaction with the Effort Required for the Application Process

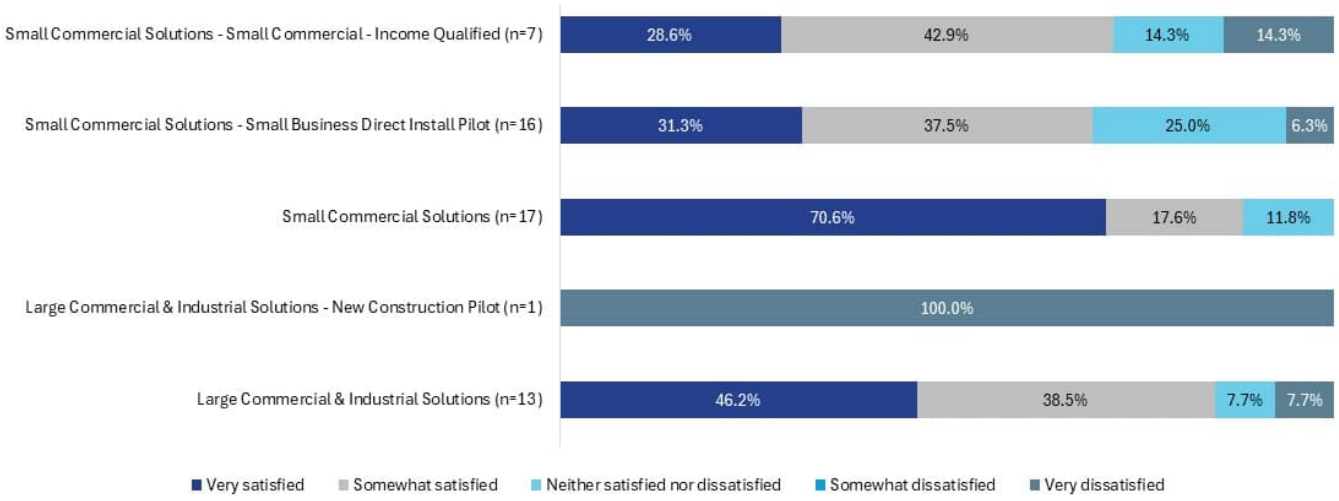


Source: Participant Survey Question Q37J

3.2.3 Commercial

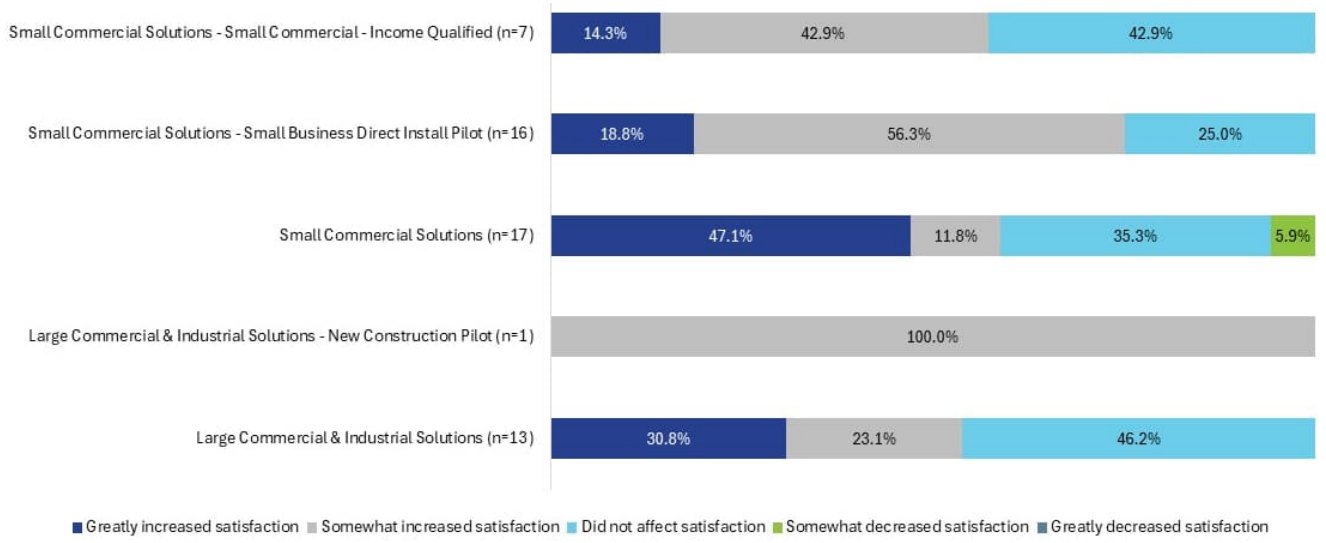
The following graphics further break down the satisfaction results of the commercial programs. Again, not all aspects were applicable to all programs.

Figure 17. Commercial—Satisfaction with ELL as an Electric Service Provider



Source: Participant Survey Question Q32

Figure 18. Commercial—Effect of Program Participation on Customer Satisfaction



Source: Participant Survey Question Q33

Figure 19. Commercial—Satisfaction with the Program Overall

Source: Participant Survey Question Q30A

Figure 20. Commercial—Satisfaction with the Interactions with Program Staff

Source: Participant Survey Question Q30B

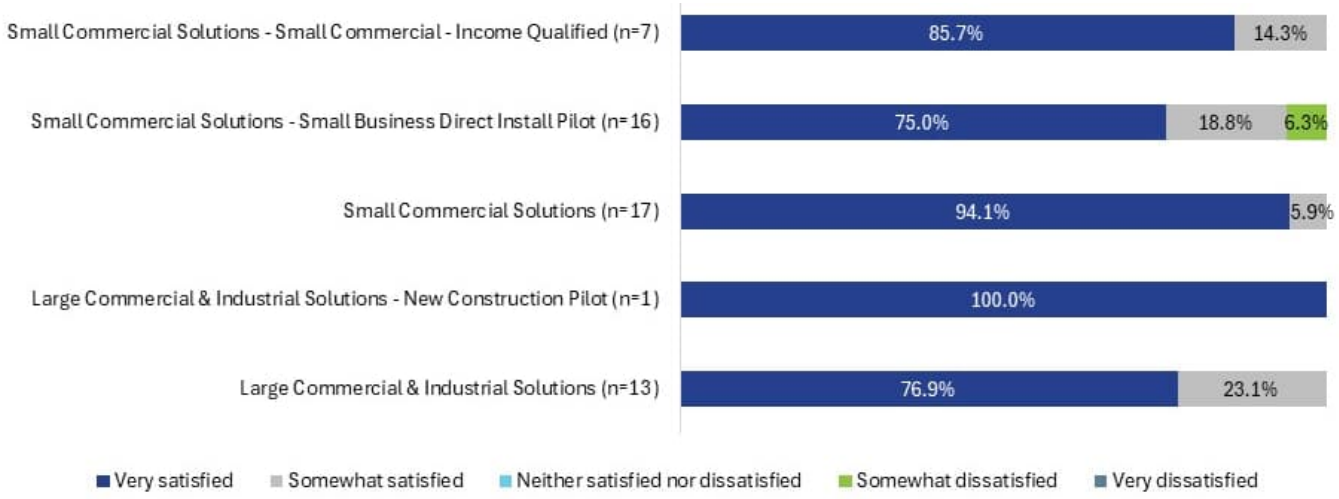
Figure 21. Commercial—Satisfaction with How Long It Took Program Staff to Address Your Questions

Source: Participant Survey Question Q30C

Figure 22. Commercial—Satisfaction with How Thoroughly Program Staff Addressed Your Question

Source: Participant Survey Question Q30D

Figure 23. Commercial—Satisfaction with the Program Participation Process

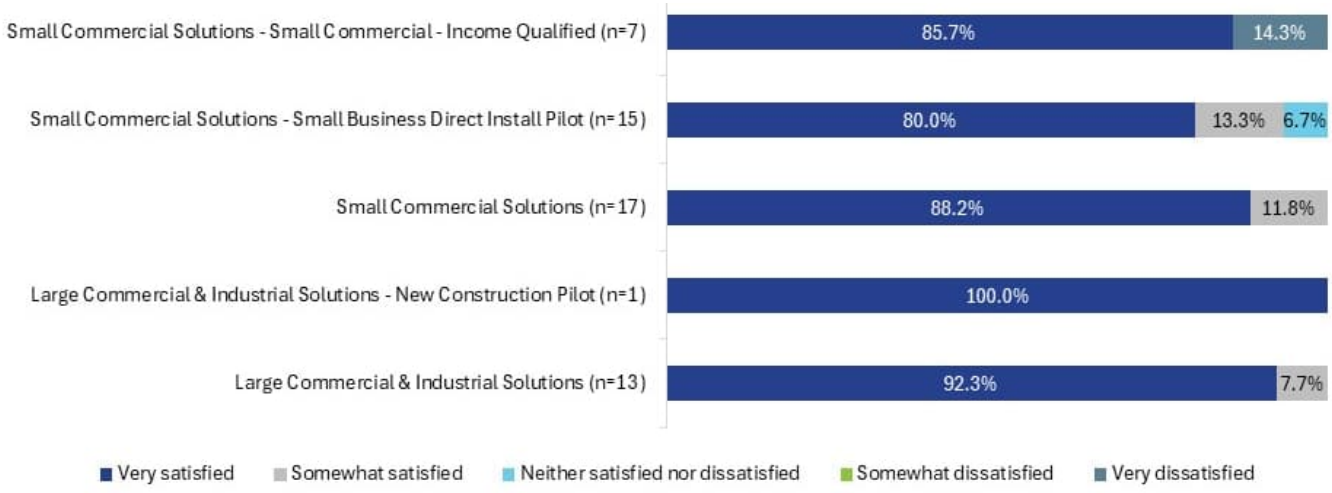


Source: Participant Survey Question Q30E

Figure 24. Commercial—Satisfaction with the Quality of the Work Completed by Your Contractor/Energy Auditor

Source: Participant Survey Question Q30F

Figure 25. Commercial—Satisfaction with the Performance of the Equipment



Source: Participant Survey Question Q30G

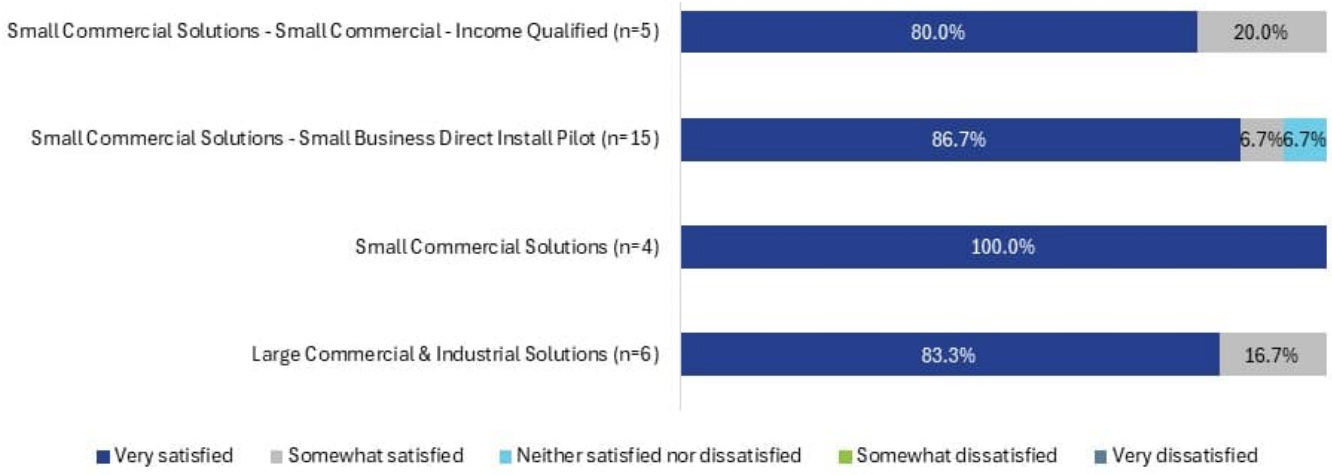
Figure 26. Commercial—Satisfaction with the Amount of Time it Took to Receive Rebate or Incentive

Source: Participant Survey Question Q30H

Figure 27. Commercial—Satisfaction with the Range of Equipment that Qualifies for the Program

Source: Participant Survey Question Q30I

Figure 28. Commercial—Satisfaction with the Recommendation Provided from the Energy Assessment



Source: Participant Survey Question Q30J

Figure 29. Commercial—Satisfaction with the Energy Savings on Your Utility Bill

Source: Participant Survey Question Q30K

3.3 OTHER PROCESS FINDINGS

As part of the PY10 evaluation, the EM&V team completed web surveys with 142 residential program participants and 56 commercial program participants. A subset of results at the portfolio level are presented in this section. Program-level results can be found under the detailed process results in their respective sections of this report.

3.3.1 Program Marketing

Participants were asked how they learned about the program they participated in, with multiple responses permitted. The most common source of program awareness was from some kind of communication with ELL (*ELL account representatives, customer service representatives, emails, mailed information, utility bill inserts*, or *program staff*); 33 percent of respondents, or 62 out of 191 total participants, cited this response (12 of 54 commercial respondents and 50 of 137 residential respondents). *Word-of-mouth* was the next most common response, provided by 31 percent of all respondents (20 percent of commercial respondents and 36 percent of residential respondents). *ELL's website* and *hearing from contractors* were another two commonly cited ways customers learned of Entergy Solutions' programs (26 and 25 respondents out of 191, respectively). All other sources received less than ten percent of mentions from all participants. Two commercial respondents and five residential respondents *did not recall* where they learned of their programs.

Table 15. Portfolio—Source of Program Awareness

Source of awareness	Commercial count	Residential count	Overall count	Overall percentage
ELL communication	12	50	62	32.5%
Word-of-mouth	11	49	60	31.4%
From ELL's website	7	19	26	13.6%
From a contractor	17	8	25	13.1%
Other	7	1	8	4.2%
Social media post	1	6	7	3.7%
Home energy consultant	0	4	4	2.1%
Through an internet search	1	2	3	1.6%
Print advertisement	0	3	3	1.6%
Other website	0	3	3	1.6%
Internet advertisement	0	3	3	1.6%
Radio or TV advertisement	0	2	2	1.0%
Retailer	0	2	2	1.0%
In-store display	0	2	2	1.0%
Respondents (n)	**54**	**137**	**191**	**N/A**

Source: Commercial Survey Questions Q5, Residential Survey Questions Q29
Responses can include multiple selections, so percentages may sum to over 100 percent.

3.3.2 Decision-Making

Participants were asked their reasons for participating in the program. Respondents could give multiple responses. Eighty-three percent of all participants said a reason they participated was to *save money on energy bills* (44 of 56 commercial and 118 of 140 residential). Another motivation for respondents was for *conserving energy and/or protecting the environment* (40 percent). A *financial incentive or free or discounted equipment/services* motivated 75 of 196 respondents (38 percent) to participate in a program.

Improving home comfort was a response option only available to residential participants, where 46 percent of residential respondents and 33 percent of respondents overall mentioned it as a reason for participation. A recommendation from anyone (*friends, family, contractors, ELL staff*, etc.) was a reason cited by 24 percent of respondents from residential and commercial programs. All other reasons for participating were either asked of only one group, commercial or residential, and/or were mentioned by less than ten percent of the total respondents. Table 16 contains the detailed counts and proportions of responses.

Table 16. Portfolio—Reasons for Participating in the Program

Reason for participating in the program	Commercial count	Residential count	Overall count	Overall percentage
Saving money on energy bills	44	118	162	82.7%
Conserve energy and/or protect the environment	29	50	79	40.3%
Financial incentive/discounted or free equipment/services	23	52	75	38.3%
Improve the comfort of my home	0	65	65	33.2%
Recommendation (from friends, family, neighbors, contractor, or ELL)	11	36	47	24.0%
Improve the value of the residence	0	22	22	11.2%
Become as energy efficient as my friends or neighbors	0	20	20	10.2%
Replacing equipment that was broken	18	0	18	9.2%
Participation was very easy	17	0	17	8.7%
Other	4	4	8	4.1%
Respondents (n)	**56**	**140**	**196**	**N/A**

Source: Commercial Survey Questions Q7, Residential Survey Questions Q30
Responses can include multiple selections, so percentages may sum to over 100 percent.

4.0 A/C SOLUTIONS

Entergy Louisiana, LLC's (ELL) A/C Solutions offering provides residential customers with a comprehensive set of options to help lower energy consumption. Customers can improve the efficiency of their HVAC units with a comprehensive air conditioning tune-up or replacement. Other measures included in this program include central air conditioners and duct sealing, and participants can also qualify for one smart thermostat rebate per HVAC unit.

Table 17 documents the key evaluation activities and outlines the impact and process methodologies.

Table 17. A/C Solutions Program Evaluation Plan

Task	Task summary
Impact evaluation approach	Our impact evaluation approach included: • **TRM tracking data verification and review.** We thoroughly reviewed tracking system data for savings calculation accuracy, completeness of data fields, and compliance with the technical reference manual (TRM). • **Ongoing technical assistance.** As needed, we assisted APTIM in reviewing the project and measured savings calculations. • **Cost-effectiveness testing.** Cost-effectiveness tests were performed using reported spending, verified energy savings, and verified demand reduction.
Process evaluation approach	Our process evaluation approach included: • **Program staff interviews.** In-depth interviews with implementation staff were conducted to assess program design elements. • **Materials review.** We reviewed program materials, such as application forms, marketing collateral, training protocols, and website content. • **Participant surveys.** We completed surveys with 15 program participants.

4.1 KEY FINDINGS

In (PY10, A/C Solutions achieved 7,230 megawatt-hours (MWh) in gross energy savings and 1.7 megawatts (MW) in gross demand savings, as shown in Table 18. A/C Solutions' gross evaluated savings were slightly lower than reported energy and demand savings. These adjustments resulted in realization rates of 98.0 percent megawatt-hours and 95.8 percent megawatts. The evaluation, measurement, and verification (EM&V) team's adjustments drive these results during the tracking system review. The program was highly influential in helping customers install equipment and receive program services, and customers were greatly satisfied with the services they received.

Table 18. A/C Solutions—Reported, Evaluated, and Net Savings

Energy/demand savings	Reported savings	Evaluated savings	Realization rate	NTG ratio[4]	Net savings	Program contributions to portfolio savings
Energy savings (MWh)	7,229.8	7,083.6	98.0%	100%	7,083.6	8.9%
Demand savings (MW)	1.698	1.627	95.8%	100%	1.627	13.6%

Table 19. A/C Solutions—Goals vs. Achieved

Savings	Goal	Actual	Percentage achieved
Energy savings (MWh)	7,843.5	7,083.6	90.3%

Almost all respondents (93 percent) learned about the program through *word of mouth*, and the other 7 percent was through a *contractor/trade ally*. Two-thirds of respondents said they were *not at all familiar* with energy-efficiency benefits, and 27 percent were *somewhat familiar*. When asked how interested they would be in making additional improvements in their home, all expressed *some interest* in increasing the home's energy efficiency, 87 percent were interested in *improving the comfort of the home*, and 93 percent were interested in *improving health and safety* in the home.

About three-quarters (73 percent) of respondents *did not have prior plans* to purchase the equipment. Almost all (87 percent) said their reason for participation was to *save money on energy bills*. When asked if the staff was courteous and professional, 87 percent *strongly agreed*. Also, 87 percent *strongly agreed* the work was scheduled in a reasonable amount of time. Almost all (93 percent) *strongly agreed* that the time it took to complete the work was reasonable.

Overall program satisfaction was high, with 80 percent being either *very satisfied* or *somewhat satisfied*. There was also high satisfaction with ELL as a service provider with 79 percent rating *very satisfied* or *somewhat satisfied*. A little over one-half (57 percent) indicated an increase in satisfaction with ELL as a result of the program. Participants in the A/C Solutions program were asked how likely they are to recommend ELL to someone on a scale of 1−10, where 1 is *not at all likely,* and 10 is *extremely likely*. The average response was 8.2 out of 14 participants.

All respondents were owners of *single-family homes*. Most used a *central AC unit* to heat and cool their home (75 percent and 79 percent, respectively).

[4] Based on the PY2023 process evaluation.

4.2 RECOMMENDATIONS

The EM&V team identified five recommendations, shown in Table 20, for APTIM's and ELL's consideration.

Table 20. A/C Solutions—PY10 Recommendations and Key Findings

Type	Recommendation	Key finding
PY10 recommendations	**Recommendation 1:** Apply assumed values, such as effective full-load hours (EFLH), heating degree days (HDD), coincidence factors (CF), floor area, and thermostat kilowatt-hour (kWh) factors, consistently across measures and programs.	The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average HDD across weather zones for the *duct sealing* measure while other programs for the same measure applied an HDD value based on the weather zone of the residence. Refer to Appendix C for guidance for each measure.
	Recommendation 2: Increase the internal quality assurance/quality control (QA/QC) process to ensure that heating types and savings values are consistently applied.	The EM&V team found multiple instances where the savings were calculated based on a different heating type from the tracked type. The EM&V team also found a couple of projects where the savings were not calculated.
	Recommendation 3: Update the demand savings calculations for the *level 1 tune-up* measures.	A couple of the *tune-up* measures were calculated using the new methodology set for PY11. The demand savings for the *level 1 tune-up* measures calculated with the new savings methodology were calculated incorrectly and appeared to be divided by the energy efficiency ratio (EER) twice.
	Recommendation 4: Apply *cooling capacity* and *heating capacity* consistently across all of the *tune-up* measures for each program.	Some programs assumed an average capacity, while other programs calculated savings based on the nominal tons of the unit serviced to the nearest half-ton. The methodology for the capacities should be consistently applied across all the programs. Refer to Appendix C for guidance for each measure.
	Recommendation 5: Increase QA/QC processes for tracking key information.	The EM&V team found multiple instances where fields such as the *installation date*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment is installed or provided, a model number should be included in the tracking system.

Status of prior year recommendations	
PY9 key findings	Respondents often learned about the program through *word of mouth*, *social media*, and *utility mailers* and were motivated to participate in the program to *save money on their energy bills* and to *conserve and protect the environment.*
	Respondents noted they were interested in home improvements that would *improve their health and safety, comfort, and energy efficiency.*
	Respondents were generally satisfied with the A/C Solutions programs' participation process (94.5 percent, n=17), and the program overall (94.5 percent, n=17), both having the highest satisfaction ratings. Only two respondents expressed any level of dissatisfaction.
PY9 recommendations	HVAC realized savings varied wildly, partly due to differences in assumed baseline/efficiency values under the seasonal energy efficiency ratio (SEER) II Policy. Although the tracking data provided makes and model numbers for HVAC units, oftentimes, the model numbers were associated with multiple units on the Air Conditioning, Heating and Refrigeration (AHRI) database. In PY9, the tracking data did not have AHRI reference numbers for HVAC units, making it difficult to verify unit SEER II efficiencies. Program staff may consider tracking and adding AHRI reference numbers with the tracking data. o In progress.

4.3 DETAILED IMPACT EVALUATION RESULTS

The EM&V team focused efforts on delivering a tracking system review, providing technical assistance, and conducting cost-effectiveness testing. Evaluated savings were calculated based on the calculation methodologies provided by the implementer, which were based on the methodologies within the Arkansas TRM 7.0. The verified savings were determined during the tracking system review since impact activities such as desk reviews and on-site visits were not included in the project scope for PY10.

4.3.1 Participant Characterization

Several different measures are provided to participants through the program. Within the tracking system, qualifying products are assigned to unique measure names. The mapping of these measure names to measure categories and measure descriptions is provided in Table 21. The measure descriptions in the table below will be used in place of the measure names in the subsequent tables.

Table 21. A/C Solutions—Measure Categorization by Tracked Measure Name

Measure name	Measure category	Measure description
Central A/C Replacement SEER 16+ Residential Single or Multi Family Home	HVAC	AC/HP replacements
Central A/C Replacement SEER 18+ Residential Single or Multi Family Home	HVAC	AC/HP replacements
Electric Resistance Heat w/ A/C Duct Sealing For Residential Single Family Home	HVAC	Duct sealing
Electric Resistance Heat w/o A/C Duct Sealing For Residential Single Family Home	HVAC	Duct sealing

Measure name	Measure category	Measure description
Gas Heat Duct Sealing For Residential Single Family Home	HVAC	Duct sealing
Heat Pump Duct Sealing For Residential Single Family Home	HVAC	Duct sealing
Heat Pump Replacement SEER 18+ HSPF 9.2+ Residential Single or Multi Family Home	HVAC	AC/HP replacements
Level 1 Central A/C Tune-up For Residential Single or Multi Family Home	HVAC	Tune-ups
Level 2 Central A/C Tune-up with Refrigerant Charge Adjustment For Residential Single or Multi Family Home	HVAC	Tune-ups
Level 2 Heat Pump Tune-up with Refrigerant Charge Adjustment Residential Single or Multi Family Home	HVAC	Tune-ups
Smart Thermostat w/ A/C plus Electric Resistance Heat For Residential Single or Multi Family Home	HVAC	Smart thermostats
Smart Thermostat w/ A/C plus Gas Heat For Residential Single or Multi Family Home	HVAC	Smart thermostats
Smart Thermostat w/ Heat Pump For Residential Single or Multi Family Home	HVAC	Smart thermostats

4.3.2 Tracking System Review

The EM&V team compiled the demand and energy savings results by measure and found that about 87 percent of the energy savings and 82 percent of the demand savings were attributable to *duct sealing* measures. Nearly every participant received *duct sealing* and a *tune-up*. The results are summarized in Table 22.

Table 22. A/C Solutions—PY10 Tracking System Savings by Measure

Measure description	Participants	Quantity	Gross kWh	Gross kW
AC/HP replacements	5	8	13,641	4.1
Duct sealing	1,130	479,390	6,282,978	1,387.1
Smart thermostats	142	159	184,438	0.0
Tune-ups	1,136	1,306	748,786	306.9
Total	**1,146**	**480,863**	**7,229,844**	**1,698.1**

Table 23 shows the incentives paid in PY10 by measure description.

Table 23. A/C Solutions—PY10 Incentives Paid by Measure Description

Measure description	Participants	Projects	Incentive amount ($)
AC/HP replacements	5	5	1,450
Duct sealing	1,130	1,132	688,030
Smart thermostats	142	143	23,850
Tune-ups	1,136	1,138	150,460
Total	**1,146**	**1,148**	**863,790**

4.3.2.1 Tracking System Data Review

The EM&V team also conducted a review of the columns within the tracking system to identify inconsistencies within the data. Overall, the tracking system review found the following:

- Some projects had installation dates that bled into 2025. After reviewing this with the implementer, it was determined that there were some tracking errors, and these projects were part of the PY10 results.
- Some projects were not shown with a status marked *complete*. These projects were discussed with the implementer, and it was determined that these projects were in the process of getting paid using PY10 funds.
- The *primary contacts* column was found to contain some email addresses of the customer or trade ally rather than the name of the primary contact.
- The *primary contact phone* column occasionally contained names and email addresses of the primary contact rather than the phone number.
- A couple of model numbers were missing for the *smart thermostat* and the *AC/HP replacement* measures.

4.3.2.2 Tracking System Savings Review

The EM&V team calculated savings for the program based on the methodology provided by the implementer. Almost all of the measures followed Arkansas TRM 7.0, except for *level 1 tune-ups*, which followed the savings methodology for Illinois TRM 5.0.

Overall, most of the measures were calculated with the correct methodology. The following are the adjustments made by measure description:

- **AC/HP replacement.** There were no adjustments made.
- **Duct sealing.** Two projects had a heating type of *electric resistance* but were calculated with *heat pump* assumptions; both of these projects were missing demand savings. Also, one project was missing both kilowatt-hour and kilowatt savings. Evaluated savings were calculated for the projects missing reported savings. Lastly, the demand savings seem to be calculated with an incorrect coincidence factor (CF), but this finding could not be confirmed.

- **Smart thermostats.** One project had no reported kilowatt-hour savings. Evaluated savings were calculated for the project.
- **Tune-ups.** *Level 2 tune-ups* were calculated with both the Arkansas TRM calculation methodology and the Illinois TRM calculation methodology and added together. Also, kilowatt savings for the *level 2 tune-ups* had the CF misplaced, as it was multiplying the inverse of the efficient EER rather than the difference between the baseline EER and the efficient EER. The EM&V team and implementer have already discussed these two findings, and they have been corrected for PY11. Also, there were *level 1 tune-ups* which calculated savings using the new calculation methodology, and the demand savings based on the new methodology were being calculated incorrectly. The evaluation team believes the savings were divided by the EER twice.

The overall realization rates for kilowatt-hours and kilowatts are 98 percent and 96 percent, respectively. Table 24 summarizes the evaluated savings by measure description.

Table 24. A/C Solutions—PY10 Evaluated Savings Results by Measure Description

Measure description	Ex-ante kWh savings	Ex-post kWh savings	kWh realization rate	Ex-ante kW savings	Ex-post kW savings	kW realization rate
AC/HP replacements	13,641	13,641	100.0%	4.1	4.1	100.0%
Duct sealing	6,282,978	6,294,739	100.2%	1,387.1	1,479.7	106.7%
Smart thermostats	184,438	185,259	100.4%	0.0	0.0-	N/A
Tune-ups	748,786	589,983	78.8%	306.9	143.6	46.8%
Total	**7,229,844**	**7,083,623**	**98.0%**	**1,698.1**	**1,627.4**	**95.8%**

4.3.3 Technical Assistance

The implementer requested a review of the updated savings methodology for PY11. The EM&V review checked the updated *HVAC* measures to ensure that the claimed savings aligned with industry best practices. The EM&V team recommended a new efficiency loss (EL) value of 9.81 percent for the PY11 *level 2 tune-up* measure. The recommended EL value was determined by taking a weighted average based on the refrigerant charge adjustments and type of valve within the system, which were values collected by the implementer for each project. The EM&V team also recommended updating the EFLH values for each climate zone, which will be modeled during PY11.

4.4 DETAILED PROCESS EVALUATION RESULTS

As part of the PY10 evaluation, the EM&V team completed 15 web surveys with program participants. The participant survey collected process information to inform program improvements and assess program influence on decision-making.

4.4.1 Program Marketing

APTIM is responsible for program marketing and outreach. They utilize trade allies, marketing materials, and campaigns, with ELL's approval, to increase program awareness.

Participants were asked how they learned about the program. Fourteen of the 15 respondents (93 percent) reported learning about the program through *word-of-mouth*; the only other source mentioned was the *participant's contractor* (7 percent). Participants who purchased measures were asked where they received information on what to buy; only 4 of the 15 participants reported, noting *contractors*, *friends*, and *ELL* as the sources of information.

In addition to how participants learned about the program, the survey asked respondents how familiar they were with the benefits of installing energy efficiency improvements like those offered in the program. Two-thirds of respondents (67 percent) said they were *not at all familiar* with the benefits. About a quarter said they were *somewhat familiar* (27 percent), and only one respondent said they were *very familiar* with the benefits. Participants were also asked how interested they were in making additional improvements to their homes, using a scale of *extremely interested, very interested, somewhat interested,* or *not at all interested*. All participants were at least *somewhat interested* in increasing the energy efficiency of their home; all but one were interested in improving health and safety, and all but two were interested in improving comfort. The responses are summarized in Table 25.

Table 25. A/C Solutions—Interest in Making Additional Improvements to Your Home

Interest in additional improvements to your home that would…	Extremely Interested	Very Interested	Somewhat Interested	Not at all interested	Total
Increase its energy efficiency (n=15)	20.0%	40.0%	40.0%	0.0%	**100%**
Improve your comfort (n=15)	20.0%	33.3%	33.3%	13.3%	**100%**
Improve your health and safety (n=15)	20.0%	40.0%	33.3%	6.7%	**100%**

Source: Participant Survey Questions Q33A, Q33B, and Q33C

Participants were also asked a series of questions about their use of the ELL website. Four of the 15 respondents (27 percent) said they visited ELL's website for *information on their programs* or *other ways to save energy*. Of those four, three said it was *easy* to find the information they were looking for, and one said it was *somewhat difficult* on a scale of *very easy, easy, somewhat difficult,* or *very difficult*.

4.4.2 Decision-Making

Eleven of the 15 respondents (73 percent) said they did not have prior plans to purchase the measure they received through the program; the other four respondents were asked why they selected the type of measure that they did, with three noting the *rebate* and the *ENERGY STAR® label* as reasons for selecting their measure. Two of the same four respondents noted *purchasing the measure from a program trade ally*, one mentioned *purchasing the measure from a heating/cooling contractor*, and one *did not know*. Two also said the measure was a *new installation*, while the other two *did not know*.

Participants were asked their reasons for participating in the program and were allowed to provide multiple reasons. Almost all of the participants (13 of 15) said a reason they participated was to *save money on energy bills*. The only other reason that was mentioned by more than half of the participants was *a recommendation from a friend or relative*. The respondents who mentioned multiple reasons were then asked which was their main reason; eight of the nine respondents said *saving money on energy bills* was the main reason, and one said it was *a recommendation from a friend*. Table 26 summarizes the responses.

Table 26. A/C Solutions—Reasons for Participating in the Program

Reason for participating in the program	Count	Percentage
Save money on energy bills	13	86.7%
Recommendation from a friend, relative, neighbor, or colleague	8	53.3%
Improve the comfort of my home	7	46.7%
Conserve energy and/or protect the environment	5	33.3%
Become as energy efficient as my friends or neighbors	4	26.7%
Get the free or discounted equipment or service	3	20.0%
Improve the value of the residence	3	20.0%
Respondents (n)	15	100.0%

Source: Participant Survey Questions Q30
Responses can include multiple selections, so percentages may sum to over 100 percent.

4.4.3 Participant Experience

Participants who did not receive direct-install measures were asked if they received an in-home energy assessment. Only one respondent reported receiving an energy assessment in the past. Eight of the 15 respondents (53 percent) said they *reached out to program staff* when asked how they first got in touch with program staff; the other seven said *the staff contacted them first*. All respondents were asked how they found the program staff's contact information; 6 of the 15 (40 percent) reported *receiving contact information from friends, family, or colleagues,* the most common response. The next most common was the *Entergy Solutions website* (4 of 15 respondents, 27 percent).

All participants were then asked if the program staff discussed the energy savings participants would receive through the program. Ten of the 15 (67 percent) said *yes*, 2 said *no*, and 3 *did not recall*. Then, all participants were asked how strongly they agreed with a series of statements on a scale of *strongly agree, somewhat agree, somewhat disagree,* or *strongly disagree*. The responses are summarized in Table 27. At least 13 of the 15 respondents *strongly agreed* with the three statements on the program, indicating satisfaction with *the program staff*, *the time taken to schedule work*, and *the time needed to complete the work*.

Table 27. A/C Solutions—Agreement with Statements

Experience with staff	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Total
The staff was courteous and professional (n=15)	86.7%	6.7%	0.0%	6.7%	**100%**
The work was scheduled in a reasonable amount of time (n=15)	86.7%	6.7%	0.0%	6.7%	**100%**
The time it took to complete the work was reasonable (n=15)	93.3%	0.0%	0.0%	6.7%	**100%**

Source: Participant Survey Questions Q17A, Q17B, and Q17C

Nine of the 15 A/C Solutions participants (60 percent) received *AC tune-up* measures; of those participants, 5 said they *got regular tune-ups* conducted by a heating and cooling contractor, and 4 said *they did not*. Four of the five that *did get regular tune-ups* said it was *not part of a maintenance agreement or plan*. Four respondents reported their last tune-up before the program was *3−5 years ago*, and another four reported *two or fewer years ago*. Participants were asked what the program staff said was different about Entergy Solutions' tune-up compared to the standard tune-up; the responses are summarized in Table 28. Answers varied, with two participants noting *higher energy efficiency*, another two noting *condenser coil cleaning*, and another two reporting *promises to verify airflow*.

Table 28. A/C Solutions—Differences Discussed Between Entergy Solutions and Standard Tune-Ups

Difference between Entergy Solutions' tune-up and a standard tune-up	Count	Percentage
More energy efficient	2	22.2%
Condenser coil cleaning	2	22.2%
Verify airflow	2	22.2%
Evaporator coil cleaning	1	11.1%
Cleaned blower	1	11.1%
Other	1	11.1%

Source: Participant Survey Questions Q23

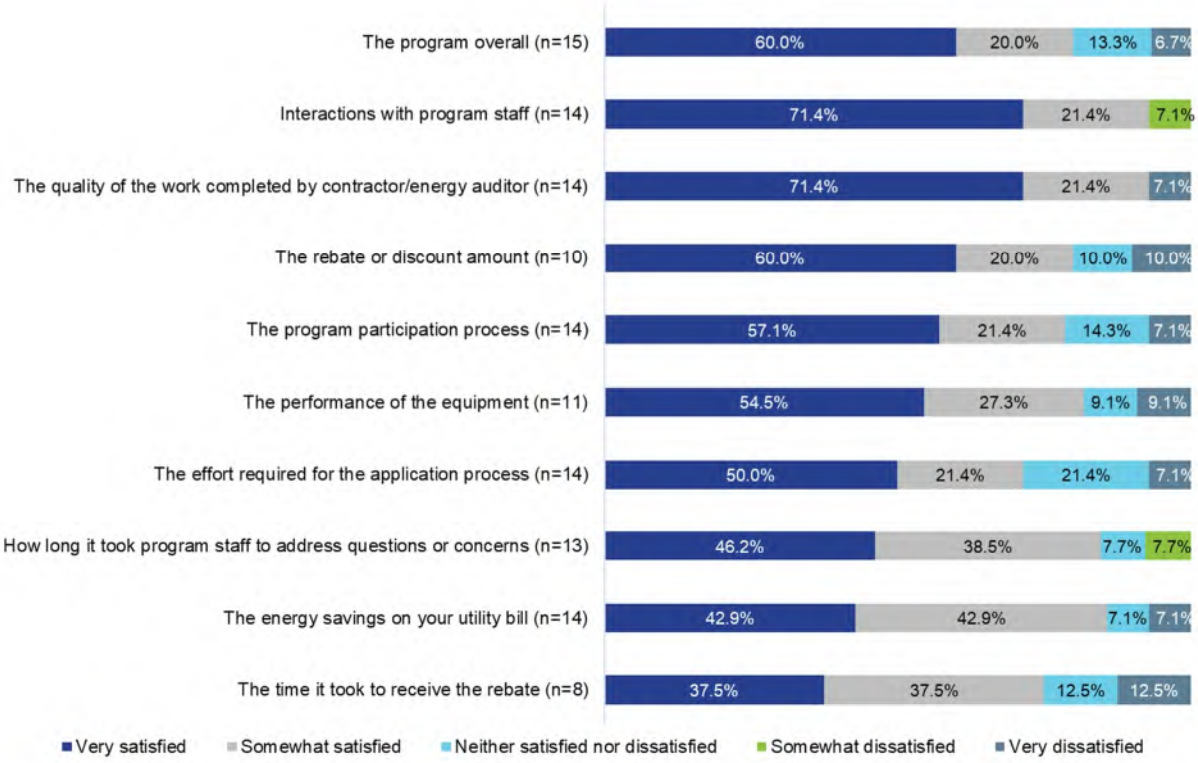
All participants were asked if they contacted Entergy Solutions' program staff with questions; only 1 of the 15 respondents in A/C Solutions program said they called at some point during the program.

4.4.4 Participant Satisfaction

Overall, respondents in the A/C Solutions program rated their satisfaction with the Entergy Solutions program highly. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*, 9 of the 15 respondents (60 percent) said they were *very satisfied*, and an additional 3 said they were *somewhat satisfied* with the program overall.

Using the same scale, over one-half of respondents (between 71 percent and 93 percent) said they were *very satisfied* or *somewhat satisfied* with each aspect of the program. The highest satisfaction came from the *quality of work by the contractor or energy auditor* and *interactions with program staff*, with 71 percent reporting being *very satisfied*. The *time it took to receive the rebate* had the lowest satisfaction of all program aspects, with just 38 percent reporting *very satisfied* and 13 percent reporting *very dissatisfied*. Figure 30 shows the satisfaction ratings for all program aspects.

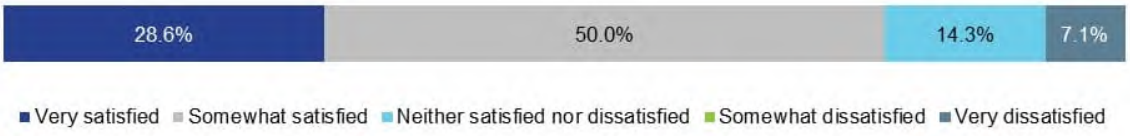
Figure 30. A/C Solutions—Participant Satisfaction with Program Aspects



Source: Participant Survey Question Q37A – Q37J

Figure 31 shows A/C Solutions program participants' satisfaction with ELL as their electric service provider on a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*. More than three-quarters (79 percent) of respondents said they were *somewhat satisfied* or *very satisfied* with ELL. Of the other three respondents, two were *neither satisfied nor dissatisfied*, and one reported being *very dissatisfied*.

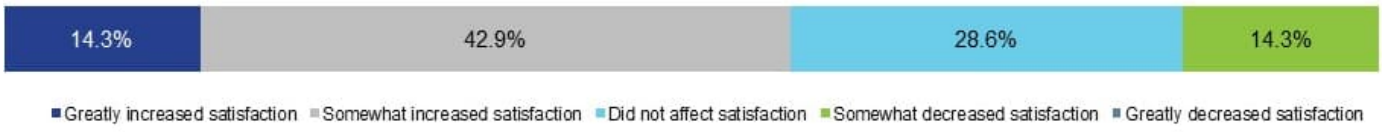
Figure 31. A/C Solutions—Participant Satisfaction with ELL a as Service Provider (n=14)



Source: Participant Survey Questions Q39

Participants were also asked if their participation in the A/C Solutions program affected their satisfaction with ELL. Figure 32 summarizes the responses. On a scale of *greatly increased satisfaction, somewhat increased satisfaction, did not affect satisfaction, somewhat decreased satisfaction,* or *greatly decreased satisfaction*, just under one-half (43%) said the program *somewhat increased satisfaction*. Fourteen percent said it *greatly increased satisfaction*, while 29% said it had no effect on satisfaction.

Figure 32. A/C Solutions—Effect of Program Participation on Satisfaction with ELL (n=14)



Source: Participant Survey Questions Q40

Participants in the A/C Solutions program were asked how likely they were to recommend the Entergy Solutions program to someone on a scale of 1−10, where 1 is *not at all likely,* and 10 is *extremely likely*. The average response was 8.2 out of fourteen participants. Participants then gave recommendations for the program going forward; one responded by *recommending more financial help for seniors*, and another two recommended *higher rebates*. Someone also noted they *could not find information on the ELL website*. No other recommendations were given.

4.4.5 Participant Characteristics

Participants were asked a series of demographic and household characteristic questions. All fourteen respondents from the A/C Solutions program reported living in a *single-family home that they own*. The decade the respondents' homes were built is relatively evenly distributed going back to 1960, as shown in Table 29. One-half of the respondents (50 percent) reported their homes are *between 1,000 and 2,000 square feet*, and 42 percent reported homes *between 2,000 and 3,000 square feet*.

Table 29. A/C Solutions—Home Characteristics

Characteristic	Count	Percentage
Type of home		
Single-family home	14	100.0%
Respondents (n)	**14**	**100.0%**
Homeownership		
Own	14	100.0%
Respondents (n)	**14**	**100.0%**
Year home built		
2020 or later	0	0.0%
2010 or 2019	3	21.4%
2000 to 2009	3	21.4%
1990 to 1999	2	14.3%
1980 to 1989	0	0.0%

Characteristic	Count	Percentage
1970 to 1979	2	14.3%
1960 to 1969	3	21.4%
Before 1960s	1	7.1%
Respondents (n)	**14**	**100%**
Size of home		
Less than 1,000 square feet	1	8.3%
1,000 to 1,999 square feet	6	50.0%
2,000 to 2,999 square feet	5	41.4%
3,000 to 3,999 square feet	0	0.0%
4,000 square feet or more	0	0.0%
Respondents (n)	**12**	**100%**

Source: Participant Survey Questions Q43, Q44, Q45, Q46

Respondents were also asked a series of questions on their heating and cooling systems. Seventy-one percent reported using *natural gas* to heat their home, while the remaining 29 percent said they use *electricity*. Three-quarters of respondents said the type of heating equipment they use is a *central forced air furnace*, while 17 percent reported a *built-in wall heater*, and one person reported a *heat pump*.

Almost 80 percent of respondents said their home's air conditioner is a *central AC*, and 14 percent reported a *heat pump* as their air conditioner. Seventy-three percent reported using *natural gas* for their water heater, and the remaining 27 percent reported using *electricity*.

Table 30. A/C Solutions—Air Conditioner and Heating Characteristics

Characteristic	Count	Percentage
Fuel primarily used to heat the home		
Natural gas	10	71.4%
Electricity	4	28.6%
Respondents (n)	**14**	**100.0%**
Main heating equipment used in home		
Central forced air furnace	9	75.0%
Built-in wall heater	2	16.7%
Heat pump	1	8.3%
Respondents (n)	**12**	**100.0%**
Type of air conditioner used in home		
Central AC	11	78.6%
Heat pump	2	14.3%
Don't use air conditioning	1	7.1%
Respondents (n)	**14**	**100.0%**

Characteristic	Count	Percentage
Type of water heater used in home		
Natural gas	8	72.7%
Electric heat pump	2	18.2%
Electric resistance	1	9.1%
Respondents (n)	**11**	**100.0%**

Source: Participant Survey Questions Q47, Q48, Q49, Q50

Finally, participants reported an average of *2.5 members per household* with all responses ranging from 2−4. Table 31 summarizes the total income of respondents, with one respondent reporting a total household income *under $15,000*, three *between $35,000 and $50,000*, two *between $50,000 and $100,000*, and four *greater than $100,000*.

Table 31. A/C Solutions—Household Income

Household income	Count	Percentage
Less than $15,000	1	10.0%
$15,000 to $25,000	0	0.0%
$25,000 to $35,000	0	0.0%
$35,000 to $50,000	3	30.0%
$50,000 to $75,000	1	10.0%
$75,000 to $100,000	1	10.0%
$100,000 to $150,000	2	20.0%
More than $150,000	2	20.0%
Respondents (n)	**10**	**100.0%**

Source: Participant Survey Questions Q53

4.5 OVERALL SAVINGS ESTIMATES

The EM&V team used tracking system reviews to calculate the program-level realization rates. These rates indicate that the A/C Solutions program achieved similar energy and demand savings. Adjustments based on the tracking system review were incorporated into the realization rates, resulting in 98.0 percent for energy savings and 95.8 percent for demand savings. Table 32 shows the final savings.

Table 32. A/C Solutions—Final Evaluated Energy Savings and Realization Rates by Measure Category[5]

Measure category	Reported savings		Evaluated savings		Realization rate	
	kWh	kW	kWh	kW	kWh	kW
AC/HP replacements	13,641	4.1	13,641	4.1	100.0%	100.0%
Duct sealing	6,282,978	1,387.1	6,294,739	1,479.7	100.2%	106.7%
Smart thermostats	184,438	0.0	185,259	0.0	100.4%	N/A
Tune-ups	748,786	306.9	589,983	143.6	78.8%	46.8%
Total	**7,229,844**	**1,698.1**	**7,083,623**	**1,627.4**	**98.0%**	**95.8%**

[5] A dash indicates that there are no kilowatt savings associated with the respective measure.

5.0 HOME PERFORMANCE WITH ENERGY STAR

Entergy Louisiana LLC's (ELL) Home Performance with ENERGY STAR® (HPwES) program offering utilizes local auditors and contractors to help residential customers analyze their energy use and identify opportunities to improve efficiency, install low-cost energy-saving measures, and identify and implement more comprehensive home efficiency projects. The offering includes a comprehensive home energy assessment, which may also recommend follow-up measures to be completed by trade ally contractors. The home energy assessment includes a walkthrough inspection and direct installation of low-cost measures such as *LED lighting* and *high-efficiency showerheads and water aerators*. Other measures offered through the program include *air and duct sealing*, *tune-ups*, *pipe wrap*, and *advanced power strips*.

Table 33 documents the key evaluation activities and outlines the impact and process methodologies.

Table 33. Home Performance with ENERGY STAR Program Evaluation Plan

Task	Task summary
Impact evaluation approach	Our impact evaluation approach included: • **TRM tracking data verification and review.** We thoroughly reviewed tracking system data for savings calculation accuracy, completeness of data fields, and compliance with the technical reference manual (TRM). • **Ongoing technical assistance.** As needed, we assisted APTIM in reviewing the project and measuring savings calculations. • **Cost-effectiveness testing.** Cost-effectiveness tests were performed using reported spending, verified energy savings, and verified demand reduction.
Process evaluation approach	Our process evaluation approach included: • **Program staff interviews**. In-depth interviews with implementation staff to assess program design elements. • **Materials review.** We reviewed program materials, such as application forms, marketing collateral, training protocols, and website content. • **Participant surveys.** We completed surveys with 25 program participants.

5.1 KEY FINDINGS

In PY10, the program achieved 7,881 megawatt-hours (MWh) in gross energy savings and 1.8 megawatts (MW) in gross demand savings, as shown in Table 34. HPwES's gross evaluated savings were slightly higher than reported for energy savings and slightly lower than reported for demand savings. These adjustments resulted in realization rates of 101.3 percent megawatt-hours and 97.5 percent megawatts. The evaluation, measurement, and verification (EM&V) team's adjustments drive these results during the tracking system review.

Table 34. Home Performance with ENERGY STAR—PY10 Reported, Evaluated, and Net Savings Results

Energy/demand savings	Reported savings	Evaluated savings	Realization rate	NTG ratio*	Net savings	Program contribution to portfolio savings
Energy savings (MWh)	7,880.6	7,979.4	101.3%	100%	7,979.4	10.0%
Demand savings (MW)	1.747	1.704	97.5%	100%	1.704	14.2%

Table 35. Home Performance with ENERGY STAR—Goals vs. Achieved

Savings	Goal	Actual	Percentage achieved
Energy savings (MWh)	8,435.9	7,979.4	94.6%

About one-half of respondents (48 percent) learned about the program through *word of mouth*, another 12 percent through an *email from ELL*. A little over one-half (52 percent) of respondents said they were *not at all familiar* with energy-efficiency benefits, 36 percent were *somewhat familiar,* and when asked how interested they would be in making additional improvements in their home, 92 percent expressed *some interest* in *increasing the home's energy efficiency*. Most (88 percent) are *interested in improving the comfort of the home* and 96 percent were *interested in improving health and safety in the home*.

Most respondents (90 percent) *did not have prior plans* to purchase the equipment, and most (80 percent) said their reason for participation was to *save money on energy bills*.

When asked if the staff was courteous and professional, 84 percent *strongly agreed*. Three-quarters (76 percent) also *strongly agreed* the work was scheduled in a reasonable amount of time and 80 percent *strongly agreed* that the time it took to complete the work was reasonable.

Overall program satisfaction was high, with 92 percent being either *very satisfied* or *somewhat satisfied*. There was also high satisfaction with ELL as a service provider with 83 percent rating *very satisfied* or *somewhat satisfied*. Most (73 percent) indicated an increase in satisfaction with ELL as a result of the program. Participants in the program were asked how likely they are to recommend ELL to someone on a scale of 1-10, where 1 is *not at all likely,* and 10 is *extremely likely*. The average response was 8.1 out of 24 respondents.

Almost all respondents were owners of single-family homes (86 percent and 96 percent, respectively). They also used a central AC unit to heat and cool their homes (95 percent and 96 percent, respectively).

5.2 RECOMMENDATIONS

The EM&V team has identified five recommendations for consideration by APTIM and ELL through the evaluation process, presented in Table 36.

Table 36. Home Performance with ENERGY STAR—PY10 Recommendations and Key Findings

Type	Recommendation	Key finding
PY10 recommendations	**Recommendation 1:** Apply assumed values, such as effective full-load hours (EFLH), heating degree days (HDD), coincidence factors (CF), temperatures, R-values, advanced power strip (APS) locations, *air sealing* assumptions, floor area, and thermostat kilowatt-hour factors consistently across measures and programs.	The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average HDD across weather zones for the *duct sealing* measure while other programs for the same measure applied an HDD value based on the weather zone of the residence. Refer to Appendix C for guidance for each measure.

Type	Recommendation	Key finding
	Recommendation 2: Increase the internal quality assurance/quality control (QA/QC) process to ensure that heating types and savings values are consistently applied.	The EM&V team found multiple instances where the savings were calculated based on a different heating type from the tracked type. The EM&V team also found instances where the savings were not calculated for certain measures.
	Recommendation 3: Update the *lighting* baseline from EISA Tier 1 to EISA Tier 2.	The current savings methodologies for *lighting* measures assume a baseline based on EISA Tier 1. The *lighting* measures for HPwES should assume the *lighting* baseline based on EISA Tier 2 requirements.
	Recommendation 4: Apply *cooling capacity* and *heating capacity* consistently across all of the *tune-up* measures for each program.	Some programs assumed an average capacity, while other programs calculated savings based on the nominal tons of the unit serviced to the nearest half-ton. The methodology for the capacities should be consistently applied across all the programs. Refer to Appendix C for guidance for each measure.
	Recommendation 5: Increase QA/QC processes for tracking key information.	The EM&V team found multiple instances where fields such as the *installation date*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment was installed/provided, a model number should be included in the tracking system.

Table 37. Home Performance with ENERGY STAR—Status of Prior Year Recommendations

Status of prior year recommendations	
PY9 key findings	About one-half of respondents learned about the program through *word of mouth*.
	Respondents were motivated to participate in the program for a variety of reasons including *wanting to save money on their energy bills* (n=9), *improve the comfort of their home* (n=7), *get free/discounted equipment* (n=4), *conserve energy and protect the environment* (n=3), and *recommendation from friend or contractor* (n=2).
	Respondents were mostly satisfied with all aspects of the program and with ELL as their service provider. Among the three respondents who expressed some level of dissatisfaction with some aspect of the program, reasons for dissatisfaction included *poor quality of work by the contractor* (n=1), *high energy bill* (n=1), and *not hearing back from ELL regarding program questions* (n=1).

Status of prior year recommendations	
PY9 recommendations	HVAC realized savings varied wildly, partly due to differences in assumed baseline/efficiency values under the Seasonal Energy Efficiency Ratio (SEER) II Policy. Although the tracking data provided makes and model numbers for HVAC units, oftentimes, the model numbers were associated with multiple units on the Air Conditioning, Heating and Refrigeration Institute (AHRI) database. In PY9, the tracking data did not have AHRI reference numbers for HVAC units, making it difficult to verify unit SEER II efficiencies. Program staff may consider tracking and adding AHRI reference numbers with the tracking data. o In progress.

5.3 DETAILED IMPACT EVALUATION RESULTS

The EM&V team focused efforts on delivering a tracking system review, providing technical assistance, and conducting cost-effectiveness testing. Evaluated savings were calculated based on the calculation methodologies provided by the implementer, which were based on the methodologies within the Arkansas TRM 7.0. The verified savings were determined during the tracking system review, since impact activities such as desk reviews and on-site visits were not included in the project scope for PY10.

The Residential New Construction Pilot is included as a sub-program of HPwES.

5.3.1 Participant Characterization

Several different measures are provided to participants through the program. Within the tracking system, qualifying products are assigned to unique measure names. The mapping of these measure names to measure categories and measure descriptions is provided in Table 38. The measure descriptions in the table below will replace the measure names in the subsequent tables. Measure descriptions denoted with an “NC” are measures under the Residential New Construction Pilot sub-program.

Table 38. Home Performance with ENERGY STAR—Measure Categorization by Tracked Measure Name

Measure name	Measure category	Measure description
1.0 gpm Bathroom Aerator Audit-ELL-HPwES 18	Water heating	Faucet aerator
1.5 gpm Handheld Showerhead Audit-ELL-HPwES 18	Water heating	Showerhead
1.5 gpm Kitchen Aerator Audit-ELL-HPwES 18	Water heating	Faucet aerator
1.5 gpm Showerhead Audit-ELL-HPwES 18	Water heating	Showerhead
Assessment-ELL-HPwES	Miscellaneous	Miscellaneous
Ceiling Insulation (R38)-Follow-Up-ELL-HPwES	Envelope	Ceiling insulation
LED 9W (A-Type)-60W Equivalent Audit-ELL-HPwES 18	Lighting	Lighting
Level1ACTune-UpFollow-UpELLHPwES	HVAC	Tune-ups
Level2ACTune-UpFollow-UpELLHPwES	HVAC	Tune-ups
NC-1.5 gpm Handheld Showerhead-ELL HPwES	Water heating	Showerhead NC
NC-1.5 gpm Showerhead-ELL HPwES	Water heating	Showerhead NC

Measure name	Measure category	Measure description
NC-Central AC (Min. SEER 16+)-ELL HPwES	HVAC	AC/HP replacement NC
NC-Central AC (Min. SEER 17+)-ELL HPwES	HVAC	AC/HP replacement NC
NC-ENERGY STAR Residential LED Downlight-ELL HPwES	Lighting	Lighting NC
NC-ENERGY STAR Residential LED exterior porch light-ELL HPwES	Lighting	Lighting NC
NC-ENERGY STAR Tankless (Instantaneous) Water Heater-ELL HPwES	Water heating	Tankless water heater NC
NC-Heat pump (Min. SEER 16+/HSPF 8.5+)-ELL HPwES	HVAC	AC/HP replacement NC
NC-Heat pump (Min. SEER 17+/HSPF 9.0+)-ELL HPwES	HVAC	AC/HP replacement NC
NC-Smart Thermostat*-ELL HPwES	HVAC	Smart thermostat NC
PipeWrapWaterHeaterAudit-ELL-HPwES-18	Water heating	Pipe wrap insulation
Residential Air Sealing-Follow-Up-ELL-HPwES-18	Envelope	Air infiltration
Residential Duct Sealing-Follow-Up-ELL-HPwES-18	HVAC	Duct sealing
Smart Thermostat Audit-ELL-HPwES-18	HVAC	Smart thermostat
Tier 2 Advanced Power Strip Entertainment Audit-ELL-HPwES 18	Plug load	Advanced power strip
Tier 2 Advanced Power Strip Office Audit-ELL-HPwES 18	Plug load	Advanced power strip

5.3.2 Tracking System Review

The EM&V team compiled the demand and energy savings results by measure and found that about 79 percent of the energy savings and 81 percent of the demand savings were attributable to *HVAC* measures. The Residential New Construction Pilot sub-program had a total energy savings of 1,863 MWh and a total demand savings of 403 kW, which makes up about 24 percent and 23 percent of the program, respectively. The results are summarized in Table 39.

Table 39. Home Performance with ENERGY STAR—PY10 Reported Savings by Measure Description

Measure description	Participants	Quantity	Gross kWh	Gross kW
Advanced power strips	121	124	22,217	4.1
Air sealing	827	1,126,439	1,084,770	252.7
Ceiling insulation	37	65,293	318,337	71.4
AC/HP replacements NC*	785	793	932,144	403.2
Duct sealing	827	291,648	4,297,403	901.1
Smart thermostats	63	79	57,228	0.0
Smart thermostats NC*	1,194	1,214	718,809	0.0

Measure description	Participants	Quantity	Gross kWh	Gross kW
Tune-ups	444	1,526	195,020	109.9
Lighting	1	17	369	0.1
Lighting NC*	1,194	7,613	210,121	0.0
Miscellaneous	981	984	0	0.0
Low-flow faucet aerators	101	220	9,728	1.0
Low-flow showerheads	93	126	32,509	3.4
Low-flow showerheads NC*	1	6	1,537	0.0
Pipe wrap insulation	7	39	170	0.0
Tankless water heater NC*	1	1	265	0.0
Total	**2,304**	**1,496,122**	**7,880,627**	**1,746.8**

***** New construction.

Table 40 shows the incentives paid in PY10 by measure description.

Table 40. Home Performance with ENERGY STAR—PY10 Paid Incentives by Measure Description

Measure description	Participants**	Projects**	Incentive amount ($)
Advanced power strips	121	122	6,200.00
Air sealing	827	832	267,504.33
Ceiling insulation	37	37	33,409.60
AC/HP replacements NC*	785	792	126,150.00
Duct sealing	827	838	445,272.13
Smart thermostats	63	64	11,850.00
Smart thermostats NC*	1,194	1,213	60,700.00
Tune-ups	444	455	54,400.00
Lighting	1	1	85.00
Lighting NC*	1,194	1,213	26,427.00
Miscellaneous	981	983	113,700.00
Low-flow faucet aerators	101	102	1,100.00
Low-flow showerheads	93	94	2,120.00
Low-flow showerheads NC*	1	1	210.00
Pipe wrap insulation	7	7	78.00
Tankless water heater NC*	1	1	50.00
Total	**2,304**	**3,295**	**1,149,256.06**

* New construction.

** The values shown for participants and projects will not sum up to the totals listed at the bottom because some participants and projects had multiple measures.

5.3.2.1 Tracking System Data Review

The EM&V team also conducted a review of the columns within the tracking system to identify inconsistencies within the data. Overall, the tracking system review found the following:

- Some projects had installation dates that bled into 2025. After reviewing the projects with the implementer, it was determined that there were some tracking errors, and these projects were part of the PY10 results.
- Some projects were not shown with a status marked *complete*. These projects were discussed with the implementer, and it was determined that these projects were in the process of getting paid using PY10 funds.
- The *primary contacts* column was found to contain some email addresses of the customer or trade ally rather than the primary contact's name.
- A couple of model numbers were missing for *smart thermostats*, *low-flow faucet aerators*, *low-flow showerheads*, and *advanced power strip* measures.

5.3.2.2 Tracking System Savings Review

The EM&V team calculated savings for the program based on the methodology provided by the implementer. Almost all of the measures followed Arkansas TRM 7.0 except for *level 1 tune-ups*, which followed the savings methodology in Illinois TRM v5.

Overall, most of the measures were calculated with the correct methodology. The following are the adjustments made by measure description:

- **Advanced power strips.** There were no adjustments made.
- **Air infiltration.** Five projects were listed with a *gas* heating type but were calculated with *electric resistance* assumptions. Also, two projects were listed with a *heat pump* heating type but were calculated with *electric resistance* assumptions. Lastly, seven projects were listed with a heating type of *electric resistance* but were calculated with *gas* assumptions.
- **Ceiling Insulation.** One project was listed with a *gas* heating type but was calculated with *electric resistance* assumptions. Also, one project had a heat type of *electric resistance* but was calculated with *gas* heating assumptions. Lastly, there were seven projects without demand savings.
- **AC/HP replacement.** There were no adjustments made.
- **Duct sealing.** Five projects were listed with a *gas* heating type but were calculated with *electric resistance* assumptions. One project was listed with a *heat pump* heating type but calculated with an *electric resistance* heating type. Ten projects were listed with a heating type of *electric resistance* but were calculated with *gas* heating assumptions. There was also a total of seventeen projects where savings were off for an unidentifiable reason.
- **Smart thermostats.** There were no adjustments to the new construction *thermostat* measures. However, the *thermostat floor area* and *kilowatt-hour* factors were updated using the values from the A/C Solutions calculator.

- **Tune-ups.** Kilowatt savings for *level 2 tune-ups* had the CF misplaced, as it was multiplying the inverse of the efficient EER rather than the difference between the baseline EER and the efficient EER. The EM&V team and implementer have already discussed this finding, and it has been corrected for PY11. Three projects with *AC* listed in the measure name were calculating savings using *heat pump* baseline assumptions, and only one of the three projects had a heating type of *heat pump* listed in the heating type column.
- **Lighting.** For the Residential New Construction Pilot program, the baseline wattage was adjusted for the *porchlight* measure. For *retrofit lighting*, the difference in savings was due to rounding.
- **Low-flow faucet aerators.** One project was found to have a *gas* water heating type, so the savings were reduced to zero. Another project was found to be calculated with the recovery efficiency (RE) *gas* baseline assumption. Since the project's water heating type was *electric*, the RE was adjusted to the *electric* heating type value.
- **Low-flow showerheads.** For the Residential New Construction Pilot program, the reported savings were slightly off for a couple of the measures. The savings were adjusted to match the other new construction *showerhead* measure savings. For retrofit projects, one project was found to have a water-heating type of *gas*, so the savings were reduced to zero.
- **Pipe wrap insulation.** The slight difference in savings was due to rounding.
- **Tankless water heater.** There were no savings adjustments made.

The overall realization rates for kilowatt-hours and kilowatts are 101.3 percent and 97.5 percent, respectively. Table 41 summarizes the evaluated savings by measure description.

Table 41. Home Performance with ENERGY STAR—PY10 Evaluation Savings Results by Measure Description

Measure description	Ex-ante kWh savings	Ex-post kWh savings	kWh realization rate	Ex-ante kW savings	Ex-post kW savings	kW realization rate
Advanced power strips	22,217	22,217	100.0%	4.1	4.1	100.0%
Air sealing	1,084,770	1,091,189	100.6%	252.7	252.4	99.9%
Ceiling insulation	318,337	329,830	103.6%	71.4	89.9	125.9%
AC/HP replacements NC*	932,144	932,144	100.0%	403.2	403.2	100.0%
Duct sealing	4,297,403	4,314,644	100.4%	901.1	900.2	99.9%
Smart thermostats	57,228	87,791	153.4%	0.0	0.0	N/A
Smart thermostats NC*	718,809	718,829	100.0%	0.0	0.0	N/A
Tune-ups	195,020	193,916	99.4%	109.9	49.6	45.1%
Lighting	369	369	100.1%	0.1	0.1	100.0%
Lighting NC*	210,121	244,640	116.4%	0.0	0.0	N/A
Miscellaneous	0	0	N/A	0.0	0.0	N/A
Low-flow faucet aerators	9,728	9,659	99.3%	1.0	1.0	99.1%
Low-flow showerheads	32,509	32,171	99.0%	3.4	3.3	99.0%

Measure description	Ex-ante kWh savings	Ex-post kWh savings	kWh realization rate	Ex-ante kW savings	Ex-post kW savings	kW realization rate
Low-flow showerheads NC*	1,537	1,548	100.7%	0.0	0.0	N/A
Pipe wrap insulation	170	170	99.9%	0.0	0.0	99.4%
Tankless water heater NC*	265	265	100.0%	0.0	0.0	N/A
Total	**7,880,627**	**7,979,381**	**101.3%**	**1,746.8**	**1,703.7**	**97.5%**

***** New construction.

Table 42 shows the overall evaluation results for HPwES and the Residential New Construction Pilot program.

Table 42. Home Performance with ENERGY STAR—PY10 Evaluated Savings by Sub-Program

Program	Ex-ante kWh savings	Ex-post kWh savings	kWh realization rate	Ex-ante kW savings	Ex-post kW savings	kW realization rate
Home Performance with ENERGY STAR	6,017,751	6,081,955	101.1%	1,343.6	1,300.6	96.8%
Residential New Construction Pilot	1,862,876	1,897,426	101.9%	403.2	403.2	100.0%
Total	**7,880,627**	**7,979,381**	**101.3%**	**1,746.8**	**1,703.7**	**97.5%**

5.3.3 Technical Assistance

The implementer requested a review of the updated savings methodology for PY11. The EM&V review checked the updated *HVAC* measures to ensure that the claimed savings aligned with industry best practices. The EM&V team recommended a new efficiency loss (EL) value of 9.81 percent for the PY11 *level 2 tune-up* measure. The recommended EL value was determined by taking a weighted average based on the refrigerant charge adjustments and type of valve within the system, which were values collected by the implementer for each project. The EM&V team also recommended updating the EFLH values for each climate zone, which will be modeled during PY11.

5.4 DETAILED PROCESS EVALUATION RESULTS

As part of the PY10 evaluation, the EM&V team completed 25 web surveys with program participants. The participant survey collected process information to inform program improvements and assess program influence on decision-making.

5.4.1 Program Marketing

APTIM is responsible for program marketing and outreach. They utilize trade allies, marketing materials, and campaigns, with ELL's approval, to increase program awareness.

Participants were asked how they first learned about the program. Twelve of the 25 respondents (48 percent) reported learning about the program through *word-of-mouth*, 3 respondents (12 percent) reported an *email from ELL*, and the others mentioned a *contractor* (2 respondents), *mail from ELL* (2 respondents), the *ELL website* (2 respondents), a *home energy consultant* (2 respondents), and *bill inserts or utility mail* (1 respondent). In addition, fifty-six percent of respondents said *program staff reached out to them* and made them aware of the program.

Participants who may have had plans to purchase the equipment prior to learning of the program were asked where they received information on what to buy. Only 6 of the 25 participants may have had prior plans to purchase program measures, noting *contractors*, *friends*, and *ELL* as the sources of information. Once participating in the program.

In addition to how they learned about the program, the survey asked respondents how familiar they were with the benefits of installing energy efficiency improvements like those offered in the program using a scale of *extremely familiar, very familiar, somewhat familiar,* or *not familiar*. Over one-half of respondents (52 percent) said they were *not familiar* with the benefits, 36 percent said they were *somewhat familiar,* and only two respondents reported they were *very* or *extremely familiar* with the benefits. Participants were also asked how interested they were in making additional improvements to their homes on a scale of *extremely interested, very interested, somewhat interested,* or *not at all interested*. Approximately one-half of respondents said they were *extremely interested* in increasing its energy efficiency (48 percent), improving comfort (44 percent), or improving health and safety (52 percent). The responses are summarized in Table 43.

Table 43. Home Performance with ENERGY STAR—Interest in Making Additional Improvements to Your Home

Interest in additional improvements to your home that would…	Extremely Interested	Very Interested	Somewhat Interested	Not at all interested	Total
Increase its energy efficiency (n=25)	48.0%	16.0%	28.0%	8.0%	**100%**
Improve your comfort (n=25)	44.0%	16.0%	28.0%	12.0%	**100%**
Improve your health and safety (n=25)	52.0%	16.0%	28.0%	4.0%	**100%**

Source: Participant Survey Questions Q33A, Q33B, and Q33C

Participants were also asked a series of questions about their use of the ELL website. Of the 24 respondents who recalled either visiting the website or not, 5 respondents (21 percent) said they *had visited ELL's website* for information on their programs or other ways to save energy. On a scale of *very easy, easy, somewhat difficult,* or *very difficult,* all five said it was *easy* or *very easy* to find what they were looking for.

5.4.2 Decision-Making

Eighteen of 20 respondents (90 percent) said they *did not have plans* before the program to purchase the measure they received. The others answered that they *didn't know* whether or not they already had plans to purchase the equipment prior to the program (20 percent) or that they *did have plans* (4 percent). Participants were asked their reasons for participating in the program; respondents could provide multiple reasons for participating. Eighty percent of participants said a reason they participated was to *save money on energy bills*. The only other reason that was mentioned by more than one-half of the participants was to *improve the comfort of their homes*. The respondents who mentioned multiple reasons were then asked which was their main reason. Ten of the 14 respondents said *saving money on energy bills* was the main reason, and the other 4 said it was to *improve the comfort of their home*. Table 44 summarizes the responses.

Table 44. Home Performance with ENERGY STAR—Reasons for Participating in the Program

Reason for participating in the program	Count	Percentage
Save money on energy bills	20	80.0%
Improve the comfort of my home	17	68.0%
Conserve energy and/or protect the environment	9	36.0%
Improve the value of the residence	8	32.0%
Get the free or discounted equipment or service	7	28.0%
Recommendation from a friend, relative, neighbor, or colleague	7	28.0%
Become as energy efficient as my friends or neighbors	3	12.0%
Recommendation from ELL	1	4.0%

Source: Participant Survey Questions Q30
Responses can include multiple selections, so percentages may sum to over 100 percent.

5.4.3 Participant Experience

Participants reported having good access to program staff contact information, with 29 percent having reported receiving contact information from *friends*, *family*, *or colleagues*, and another 29 percent said an *ELL program representative* referred them. The next most common source of program staff contact information was the *Entergy Solutions website* (20 percent).

Eighty-six percent of participants reported that the program staff discussed the energy savings participants would receive through the program. All participants were asked if they agreed with a series of statements using a scale of *strongly agree, somewhat agree, somewhat disagree,* or *strongly disagree*; the responses are summarized in Table 45. At least three-quarters of respondents (between 76 percent and 84 percent) *strongly agreed* with the three statements on the program, indicating satisfaction. Only up to 12 percent of respondents disagreed with any of the statements.

Table 45. Home Performance with ENERGY STAR—Agreement with Statements

Statement	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Total
The staff was courteous and professional (n=25)	84.0%	8.0%	8.0%	0.0%	**100%**
The work was scheduled in a reasonable amount of time (n=25)	76.0%	12.0%	4.0%	8.0%	**100%**
The time it took to complete the work was reasonable (n=25)	80.0%	8.0%	4.0%	8.0%	**100%**

Source: Participant Survey Questions Q17A, Q17B, and Q17C

Only 3 of the 25 HPwES participants received *AC tune-up* measures; of those participants, two said they *got regular tune-ups* conducted by a heating and cooling contractor; both said it was *not a part of a maintenance agreement or plan*. One respondent reported that their last tune-up was *less than a year ago*, and the other reported *1−2 years ago*. Participants were asked what the program staff said was different about Entergy Solutions' tune-up compared to the standard tune-up; the responses are summarized in Table 46.

Table 46. Home Performance with ENERGY STAR—Difference in Entergy Solutions and Standard Tune-Ups

What did they say was different about the Entergy Solutions' tune-up compared to a standard tune-up	Count	Percentage
More energy efficient	1	50.0%
Verify airflow	1	50.0%

Source: Participant Survey Questions Q23

Two respondents in the HPwES program received direct-install measures; both reported receiving *smart power strips* and *smart thermostats*, one receiving one of each, and the other getting three *smart power strips* and one *smart thermostat*. Neither reported that any measures were removed.

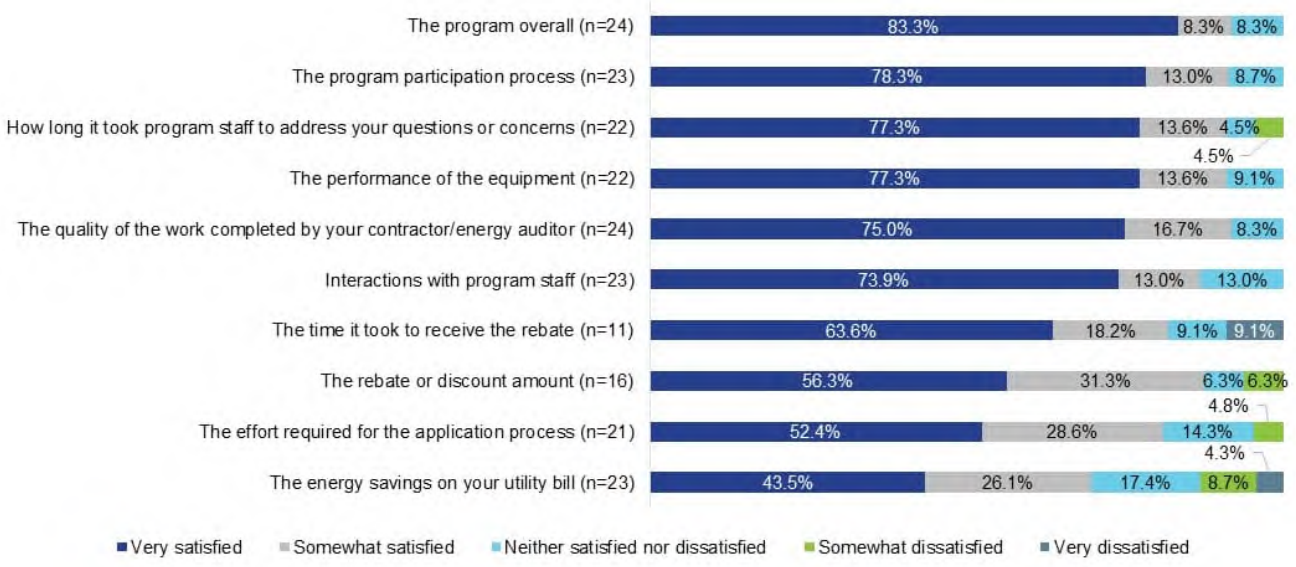
All participants were asked if they contacted Entergy Solutions' program staff with questions; only 3 of the 25 respondents in the HPwES program said they called at some point during the program.

5.4.4 Participant Satisfaction

Overall, respondents in the HPwES program rated their satisfaction with the Entergy Solutions program highly. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*, twenty of the twenty-four respondents (83%) said they were *very satisfied* with the program overall.

Using the same scale, over one-half of respondents (at least 70 percent) said they were *very satisfied* or *somewhat satisfied* with each aspect of the program. The highest satisfaction came from the *program participation process*, the *performance of the equipment*, and the *length of time it took program staff to address questions or concerns*, with at least 77 percent reporting *very satisfied* and 91 percent responding at least *somewhat satisfied* for each aspect. The *energy savings on the utility bill* had the lowest satisfaction of all program aspects, with 44 percent reporting *very satisfied* and 13 percent reporting *very* or *somewhat dissatisfied*.

Figure 33. Home Performance with ENERGY STAR—Participant Satisfaction with Program Aspects



Source: Participant Survey Question Q37A–Q37J

Respondents were asked about the cause of their dissatisfaction; two people noted *not seeing much of a difference in their energy bill*, one person said they *have not received a rebate yet*, and another said *some work is still incomplete*.

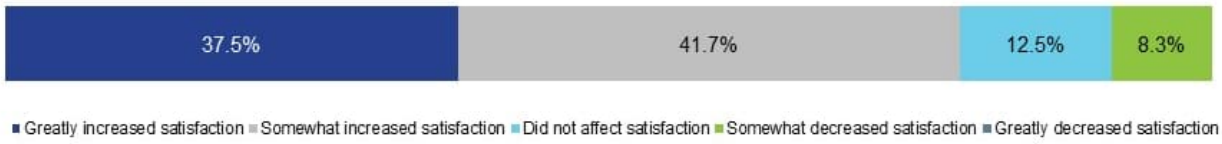
Figure 34 shows HPwES program participants' satisfaction with ELL as their electric service provider. Twenty of 24 respondents (83 percent) said they were *somewhat satisfied* or *very satisfied* with ELL as their electric service provider on a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*. Only one respondent reported being *very dissatisfied*.

Figure 34. Home Performance with ENERGY STAR—Participant Satisfaction with ELL as Service Provider (n=24)

Source: Participant Survey Questions Q39

Participants were also asked if their participation in this program affected their satisfaction with ELL; Figure 35 summarizes the responses. On a scale of *greatly increased satisfaction, somewhat increased satisfaction, did not affect satisfaction, somewhat decreased satisfaction,* or *greatly decreased satisfaction*, 19 of the 24 respondents (79 percent) reported that the program either *greatly* or *somewhat increased satisfaction*, and only two reported any decrease in satisfaction from the program.

Figure 35. Home Performance with ENERGY STAR—Effect of Program Participation on Satisfaction with ELL (n=24)



Source: Participant Survey Questions Q40

Participants in the HPwES program were asked how likely they are to recommend the Entergy Solutions program to someone on a scale of 1−10, with 1 being *not at all likely* and 10 being *extremely likely*; the average response was 8.1 out of 24 responses. Three participants gave a rating of lower than 5, with one person reporting a 1, and 12 responded with a 10. Participants were asked to give recommendations for the program going forward, but none were given.

5.4.5 Participant Characteristics

Participants were asked a series of demographic and household characteristic questions. Most respondents from the HPwES program reported living in a *single-family home* and *owning their home*. The year a respondent's house was built was relatively evenly distributed over the decades, with the most common decade being the *1960s* with 35 percent of respondents, as shown in Table 47. Sixty percent of respondents reported their homes are *between 1,000 and 2,000 square feet*, and 30 percent reported homes *between 2,000 and 3,000 square feet*.

Table 47. Home Performance with ENERGY STAR—Home Characteristics

Characteristic	Count	Percentage
Type of home		
Single-family home	23	95.8%
Apartment or condominium	1	4.2%
Respondents (n)	**24**	**100.0%**
Homeownership		
Own	19	86.4%
Rent	2	9.1%
Own but rent to someone else	1	4.5%
Respondents (n)	**22**	**100.0%**
Year home built		
2020 or later	1	5.9%
2010 or 2019	1	5.9%
2000 to 2009	1	5.9%
1990 to 1999	2	11.8%
1980 to 1989	1	5.9%
1970 to 1979	3	17.6%

Characteristic	Count	Percentage
1960 to 1969	6	35.3%
Before 1960s	2	11.8%
Respondents (n)	**17**	**100%**
Size of home		
Less than 1,000 square feet	1	5.0%
1,000 to 1,999 square feet	12	60.0%
2,000 to 2,999 square feet	6	30.0%
3,000 to 3,999 square feet	1	5.0%
4,000 or more square feet	0	0.0%
Respondents (n)	**20**	**100%**

Source: Participant Survey Questions Q43, Q44, Q45, Q46

Respondents were also asked a series of questions about their heating and cooling systems. Fifty-two percent reported using *electricity* to heat their home and the remaining 48 percent said they use *natural gas*. Twenty out of 21 respondents said the type of heating equipment they use is a *central forced air furnace* and 1 reported a *built-in wall heater*.

All respondents but one said the air conditioning in their home is a *central AC* and one reported using a *wall* or *window unit*. Seventy-nine percent reported using *natural gas* in their water heater, and an additional 16 percent reported a type of *electricity*.

Table 48. Home Performance with ENERGY STAR—Air Conditioner and Heating Characteristics

Characteristic	Count	Percentage
Fuel primarily used to heat the home		
Electricity	12	52.2%
Natural gas	11	47.8%
Respondents (n)	**23**	**100.0%**
Main heating equipment used in home		
Central forced air furnace	20	95.2%
Built-in wall heater	1	4.8%
Respondents (n)	**21**	**100.0%**
Type of air conditioner used in home		
Central AC	22	95.7%
Wall or window unit	1	4.3%
Respondents (n)	**23**	**100.0%**

Characteristic	Count	Percentage
Type of water heater used in home		
Natural gas	15	78.9%
Electric resistance	3	15.8%
Electric heat pump	1	5.3%
Respondents (n)	**19**	**100.0%**

Source: Participant Survey Questions Q47, Q48, Q49, Q50

Lastly, participants reported an average of *2.2 members per household* with all responses ranging from 1−4. Table 49 summarizes the total income of respondents, with five making *$35,000 or less*, five others making *between $30,000 and $50,000*, and a final five making *more than $75,000*. The remaining respondents either *did not complete the survey* (1 of 25) or *refused to answer the question* (9 of 25).

Table 49. Home Performance with ENERGY STAR—Household Income

Household income	Count	Percentage
Less than $15,000	2	13.3%
$15,000 to $25,000	1	6.7%
$25,000 to $35,000	2	13.3%
$35,000 to $50,000	5	33.3%
$50,000 to $75,000	0	0.0%
$75,000 to $100,000	2	13.3%
$100,000 to $150,000	2	13.3%
More than $150,000	1	6.7%
Respondents (n)	**15**	**100.0%**

Source: Participant Survey Questions Q53

5.5 OVERALL SAVINGS ESTIMATES

The EM&V team used tracking system reviews to calculate the program-level realization rates. Program realization rates indicate that the HPwES program achieved similar energy and demand savings. Adjustments based on the tracking system review were incorporated into realization rates, resulting in 101.3 percent for energy savings and 97.5 percent for demand savings. Table 50 shows the final savings.

Table 50. HPwES—Final Evaluated Energy Savings and Realization Rates by Measure Category[6]

Measure category	Reported savings		Evaluated savings		Realization rate	
	kWh	kW	kWh	kW	kWh	kW
Appliances	22,217	4.1	22,217	4.1	100.0%	100.0%
Building envelope	1,403,107	324.1	1,421,019	342.3	101.3%	105.6%
HVAC	6,200,605	1,414.2	6,247,323	1,352.9	100.8%	95.7%
Lighting	210,490	0.1	245,009	0.1	116.4%	100.0%
Miscellaneous	0	0	0	0	N/A	N/A
Water heating	44,208	4.4	43,812	4.4	99.1%	99.0%
Total	**7,880,627**	**1,746.8**	**7,979,381**	**1,703.7**	**101.3%**	**97.5%**

[6] A dash indicates that there are no kilowatt savings associated with the respective measure.

6.0 INCOME QUALIFIED SOLUTIONS

Entergy Louisiana, LLC's (ELL) Income Qualified Solutions (IQS) program is designed to offer income-qualified customers an in-home assessment and no-cost energy-efficient measures. Eligible no-cost direct installation items include *smart thermostats*, *LED bulbs*, *hot water pipe insulation*, *advanced power strips*, *faucet aerators*, and *low-flow showerheads*. Comprehensive follow-up measures consist of *air and duct sealing*, along with *ceiling insulation*. The program provides measures at no cost to participants to help overcome the financial barrier to improving their homes' energy efficiency.

Table 51 documents the key evaluation activities and outlines the impact and process methodologies.

Table 51. Income Qualified Solutions Evaluation Plan

Task	Task summary
Impact evaluation approach	Our impact evaluation approach included: • **TRM tracking data verification and review.** We thoroughly reviewed tracking system data for savings calculation accuracy, completeness of data fields, and compliance with the technical reference manual (TRM). • **Ongoing technical assistance**. As needed, we assisted APTIM in reviewing the project and measured savings calculations. • **Cost-effectiveness testing**. Cost-effectiveness tests were performed using reported spending, verified energy savings, and verified demand reduction.
Process evaluation approach	Our process evaluation approach included: • **Program staff interviews**. In-depth interviews with implementation staff to assess program design elements. • **Materials review.** We reviewed program materials, such as application forms, marketing collateral, training protocols, and website content. • **Participant surveys.** We completed surveys with 31 program participants.

6.1 KEY FINDINGS

In PY10, the IQS program achieved 9,596 megawatt-hours (MWh) in gross energy savings and 1.9 megawatts (MW) in gross demand savings, as shown in Table 52. The IQS program's gross evaluated savings were slightly higher than reported energy savings but significantly higher than reported for demand savings. This resulted in realization rates of 102.7 percent and 120.8 percent for energy savings (megawatt-hours) and demand savings (megawatts), respectively. The variance between the reported and evaluated savings results from the evaluation, measurement, and verification (EM&V) team adjusting the savings during the tracking system review. Customers reported high levels of satisfaction with all program aspects, the program overall, and ELL. *Reducing energy consumption and saving money on the electric bill* is the main driver for customers to participate in the program, and most customers reported that saving energy has become more important over the last two years. Customers benefit from ELL providing upgrades that they may not be able to afford on their own. The energy-saving tips provided during the audit were well received.

Table 52. Income Qualified Solutions—Reported, Evaluated, and Net Savings

Energy/demand savings	Reported savings	Evaluated savings	Realization rate	NTG ratio[7]	Net savings	Program contribution to portfolio savings
Energy savings (MWh)	9,596.2	9,859.2	102.7%	100.0%	9,859.2	12.4%
Demand savings (MW)	1.889	2.282	120.8%	100.0%	2.282	19.1%

Table 53. Income Qualified Solutions—Goals vs. Achieved

Savings	Goal	Actual	Percentage achieved
Energy savings (MWh)	8,646.2	9,859.2	114.0%

About one-half of respondents (48 percent) learned about the program through *word of mouth* and another 23 percent through ELL's website. Just under one-half (47 percent) of respondents said they were *not at all familiar* with energy-efficiency benefits, and 47 percent were *somewhat familiar.* When asked how interested they would be in making additional improvements in their home, almost all (97 percent) expressed *some interest* in *increasing the home's energy efficiency, improving the comfort of the home*, and *improving health and safety in the home*.

Roughly two-thirds (65 percent) of respondents *did not have prior plans* to purchase the equipment, and most (90 percent) said their reason for participation was to *save money on energy bills*.

When asked if the staff was courteous and professional, 87 percent *strongly agreed*. Also, 61 percent *strongly agreed* the work was scheduled in a reasonable amount of time with 26 percent saying they *somewhat agreed.* Almost three-quarters (71 percent) *strongly agreed* that the time it took to complete the work was reasonable, while another 19 percent *somewhat agreed*.

Overall program satisfaction was high, with 87 percent being either *very satisfied* or *somewhat satisfied*. Also, there was a high satisfaction with ELL as a service provider with 80 percent rating *very satisfied* or *somewhat satisfied*. Most (60 percent) indicated an increase in satisfaction with ELL as a result of the program. Participants in the program were asked how likely they are to recommend ELL to someone on a scale of 1−10, where 1 is *not at all likely*, and 10 is *extremely likely*. The average response was 8.1 out of 30 respondents.

Eighty-nine percent of respondents from the IQS program reported living in a *single-family home*, and 85 percent reported *owning their home*. They also used a *central AC unit* to heat and cool their homes (82 percent and 93 percent, respectively).

[7] Based on the PY2020 process evaluation.

6.2 RECOMMENDATIONS

The EM&V team identified five recommendations, shown in Table 54, for APTIM and ELL's consideration from the evaluation activities.

Table 54. Income Qualified Solutions—PY10 Recommendations and Key Findings

Type	Recommendation	Key finding
PY10 recommendations	**Recommendation 1:** Apply assumed values, such as effective full-load hours (EFLH), heating degree days (HDD), coincidence factors (CF), temperatures, APS locations, *air sealing* assumptions, floor area, and thermostat kilowatt-hour factors, consistently across measures and programs.	The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average HDD across weather zones for the *duct sealing* measure while other programs for the same measure applied an HDD value based on the weather zone of the residence. Refer to Appendix C for guidance for each measure.
	Recommendation 2: Increase the internal quality assurance/quality control (QA/QC) process to ensure that heating types and savings values are consistently applied.	The EM&V team found multiple instances where the savings were calculated based on a different heating type from the tracked type. The EM&V team also found instances where the savings were not calculated for certain measures.
	Recommendation 3: Update the *lighting* baseline from EISA Tier 1 to EISA Tier 2.	The current savings methodologies for *lighting* measures assume a baseline based on EISA Tier 1. The *lighting* measures for IQS should assume the *lighting* baseline based on EISA Tier 2 requirements.
	Recommendation 4: Apply *cooling capacity* and *heating capacity* consistently across all of the *tune-up* measures for each program.	Some programs assumed an average capacity, while other programs calculated savings based on the nominal tons of the unit serviced to the nearest half-ton. The methodology for the capacities should be consistently applied across all the programs. Refer to Appendix C for guidance for each measure.
	Recommendation 5: Increase QA/QC processes for tracking key information.	The EM&V team found multiple instances where fields such as the *installation date*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment is installed or provided, a model number should be included in the tracking system.

Table 55. Income Qualified Solutions—Status of Prior Year Recommendations

Status of prior year recommendations	
PY9 key findings	Respondents mostly learned about the program through *word of mouth*.
	Respondents were motivated to participate in the program for a variety of reasons, including *wanting save money on their energy bills* (n=23), *improve comfort of their home* (n=17), *conserve energy and protect the environment* (n=10), *get free/discounted equipment* (n=5), and *recommendation from friend* or contractor (n=4).
	Prior to participating in the program, one-half of respondents were not at all familiar with how improvements in their homes could reduce their energy usage, and all respondents were very or extremely interested in making improvements to their homes that would improve their health and safety, improve their comfort, and increase their home's energy efficiency.
	Although more respondents were satisfied with most aspects of the program than dissatisfied, 20.0 percent to 52.1 percent of respondents were dissatisfied with various aspects of the program. Among the 15 respondents who expressed some level of dissatisfaction with some aspect of the program, all explained that they *did not receive all the promised measures and equipment upgrades*.
PY9 recommendations	Many survey respondents noted they were not familiar with the benefits of improving their home's energy efficiency. ELL should continue to promote the various benefits of energy efficient equipment, both as they relate to cost savings and home comfort.
	Survey respondents indicated they did not get all the equipment and measures they were promised during the initial home assessment. ELL should consider following up with these customers as well as their contractors to ensure customers receive all their measures.
	HVAC realized savings varied wildly, partly due to differences in assumed baseline or efficiency values under the Seasonal Energy Efficiency Ratio (SEER) II Policy. Although the tracking data provided makes and model numbers for HVAC units, oftentimes, the model numbers were associated with multiple units on the Air Conditioning, Heating and Refrigeration Institute (AHRI) database. In PY9, the tracking data did not have AHRI reference numbers for HVAC units, making it difficult to verify unit SEER II efficiencies. Program staff may consider tracking and adding AHRI reference numbers to the tracking data. o In progress.

6.3 DETAILED IMPACT EVALUATION RESULTS

The EM&V team focused efforts on delivering a tracking system review, providing technical assistance, and conducting cost-effectiveness testing. Evaluated savings were calculated based on the calculation methodologies provided by the implementer, which were based on the methodologies within the Arkansas TRM 7.0. The verified savings were determined during the tracking system review, since impact activities such as desk reviews and on-site visits were not included in the project scope for PY10.

6.3.1 Participant Characterization

Several different measures are provided to participants through the program. Within the tracking system, qualifying products are assigned to unique measure names. The mapping of these measure names to measure categories and measure descriptions is provided in Table 56.

The measure descriptions in the table below will be used in place of the measure names in the subsequent tables.

Table 56. Income Qualified Solutions—Measure Categorization by Tracked Measure Name

Measure name	Measure category	Measure description
1.0 gpm Bathroom Aerator Audit-ELL-LIA 18	Water heating	Faucet aerator
1.5 gpm Handheld Showerhead Audit-ELL-LIA 18	Water heating	Showerhead
1.5 gpm Kitchen Aerator Audit-ELL-LIA 18	Water heating	Faucet aerator
1.5 gpm Showerhead Audit-ELL-LIA 18	Water heating	Showerhead
Assessment_IncomeQualified_ELL	Miscellaneous	Miscellaneous
Ceiling Insulation (R30)-Follow-Up-ELL-LIA-18	Envelope	Ceiling insulation
Ceiling Insulation (R38)-Follow-Up-ELL-IQS	Envelope	Ceiling insulation
GE-GE 100W 13YR 4P SW-598124844-ELL IQL Pilot	Lighting	Lighting
GE-GE 100w DL 13yr Clear 4pk-597266569-ELL IQL Pilot	Lighting	Lighting
GE-GE 100w DL 13yr Frosted 4pk-597264842-ELL IQL Pilot	Lighting	Lighting
GE-GE 100W SW CLEAR 4PK-594832192-ELL IQL Pilot	Lighting	Lighting
GE-GE 25W 3PK G25 WH-566831009-ELL IQL Pilot	Lighting	Lighting
GE-GE 25W 4PK MBDEC CLR-567427599-ELL IQL Pilot	Lighting	Lighting
GE-GE 25W 4PK SBDEC CLR-567427600-ELL IQL Pilot	Lighting	Lighting
GE-GE 40W 13YR 4P SW-597266572-ELL IQL Pilot	Lighting	Lighting
GE-GE 40W 3PK G25 WH-566831008-ELL IQL Pilot	Lighting	Lighting
GE-GE 40W 4PK MBDEC CLR-567427597-ELL IQL Pilot	Lighting	Lighting
GE-GE 40W 4PK SBDEC CLR-567427596-ELL IQL Pilot	Lighting	Lighting
GE-GE 40w DL 13yr Clear 4pk-597266585-ELL IQL Pilot	Lighting	Lighting
GE-GE 40w DL 13yr Frosted 4pk-597264990-ELL IQL Pilot	Lighting	Lighting
GE-GE 40W HD RELAX 4PK-597387989-ELL IQL Pilot	Lighting	Lighting
GE-GE 40w Refresh HD 4pk-597264752-ELL IQL Pilot	Lighting	Lighting
GE-GE 40W SW CLEAR 4PK-594832177-ELL IQL Pilot	Lighting	Lighting
GE-GE 60W 13Y 12PK SW-597266118-ELL IQL Pilot	Lighting	Lighting
GE-GE 60W 13YR 4P SW-597266571-ELL IQL Pilot	Lighting	Lighting
GE-GE 60W 3PK G25 WH-566831007-ELL IQL Pilot	Lighting	Lighting

Measure name	Measure category	Measure description
GE-GE 60W 4PK MBDEC CLR-586986323-ELL IQL Pilot	Lighting	Lighting
GE-GE 60W 4PK SBDEC CLR-587148166-ELL IQL Pilot	Lighting	Lighting
GE-GE 60w DL 13yr Clear 4pk-597266837-ELL IQL Pilot	Lighting	Lighting
GE-GE 60w DL 13yr Frosted 12pk-597266576-ELL IQL Pilot	Lighting	Lighting
GE-GE 60w DL 13yr Frosted 4pk-597266603-ELL IQL Pilot	Lighting	Lighting
GE-GE 60W HD RELAX 4PK-594797553-ELL IQL Pilot	Lighting	Lighting
GE-GE 60w Refresh HD 4pk-597266128-ELL IQL Pilot	Lighting	Lighting
GE-GE 60W SW CLEAR 4PK-594797550-ELL IQL Pilot	Lighting	Lighting
GE-GE 65W BR30 4PK SW-650531091-ELL IQL Pilot	Lighting	Lighting
GE-GE 65w BR30 DL 4pk-598124843-ELL IQL Pilot	Lighting	Lighting
GE-GE 65w BR30 DL 8pk-597264870-ELL IQL Pilot	Lighting	Lighting
GE-GE 65w BR30 Refresh HD 2pk-597266568-ELL IQL Pilot	Lighting	Lighting
GE-GE 65w BR30 Relax HD 2pk-597266579-ELL IQL Pilot	Lighting	Lighting
GE-GE 75W 13YR 4P SW-597266584-ELL IQL Pilot	Lighting	Lighting
GE-GE 75w DL 13yr Clear 4pk-597266840-ELL IQL Pilot	Lighting	Lighting
GE-GE 75w DL 13yr Frosted 4pk-597266577-ELL IQL Pilot	Lighting	Lighting
GE-GE 75W HD RELAX 4PK-597387987-ELL IQL Pilot	Lighting	Lighting
GE-GE 75w Refresh HD 4pk-597264847-ELL IQL Pilot	Lighting	Lighting
GE-GE 75W SW CLEAR 4PK-594797551-ELL IQL Pilot	Lighting	Lighting
GE-GE BR30 SW 8PK-599583123-ELL IQL Pilot	Lighting	Lighting
GE-GE LED 25W G16 FRST-566831004-ELL IQL Pilot	Lighting	Lighting
LED 11W (A-Type)-75W Equivalent Audit-ELL-LIA 18	Lighting	Lighting
LED 11W (PAR38)-65W Equivalent Audit-ELL-LIA 18	Lighting	Lighting
LED 15W (A-Type)-100W Equivalent Audit-ELL-LIA 18	Lighting	Lighting
LED 5.5W (Candelabra)-40W Equivalent Audit-ELL-LIA 18	Lighting	Lighting
LED 6W (Globe)-40W Equivalent Audit-ELL-LIA 18	Lighting	Lighting
LED 8W Flood-65W Equivalent-Audit-ELL-LIA	Lighting	Lighting
LED 9W (A-Type)-60W Equivalent Audit-ELL-LIA 18	Lighting	Lighting
Level 1 AC Tune-Up Follow-Up ELL SFIQ	HVAC	Tune-ups
Level 2 AC Tune-Up Follow-Up ELL SFIQ	HVAC	Tune-ups

Measure name	Measure category	Measure description
L'Image-2-pack A19 100W-274171-ELL IQL Pilot	Lighting	Lighting
L'Image-2-pack B11 ES E12 Filament LED bulb -274172-ELL IQL Pilot	Lighting	Lighting
L'Image-2-pack, ES BR30 G3 3000K, 25K-hours-274175-ELL IQL Pilot	Lighting	Lighting
L'Image-A19 4pk 100w equiv-377088-ELL IQL Pilot	Lighting	Lighting
L'Image-A-19 4pk 60w equiv-364251-ELL IQL Pilot	Lighting	Lighting
L'Image-ES 60w Equivalent Dimmable-275533-ELL IQL Pilot	Lighting	Lighting
L'Image-G25 LED ES 2-pack -311974-ELL IQL Pilot	Lighting	Lighting
Outdoor LED 15W (PAR38)-70W Equivalent Audit-ELL-LIA-18	Lighting	Lighting
Pipe Wrap-1/2 inch Water Heater Audit-ELL-LIA-18	Water heating	Pipe wrap insulation
Residential Air Sealing-Follow-Up-ELL-LIA-18	Envelope	Air infiltration
Residential Duct Sealing-Follow-Up-ELL-LIA18	HVAC	Duct sealing
Smart Thermostat Audit-ELL-LIA-18	HVAC	Smart thermostat
Tier 1 Advanced Power Strip Entertainment-Audit-ELL-IQS	Plug load	Advanced power strip
Tier 1 Advanced Power Strip-Office-Audit-ELL-IQS	Plug load	Advanced power strip
Tier 2 Advanced Power Strip Entertainment-Audit-ELL-LIA 18	Plug load	Advanced power strip
Tier 2 Advanced Power Strip-Office-Audit-ELL-LIA 18	Plug load	Advanced power strip

6.3.2 Tracking System Review

The EM&V team compiled the demand and energy savings results by measure and a better mix of savings by measure. About 39 percent of the energy savings and 43 percent of the demand savings were saved with the *HVAC* measures. The *lighting* measures also contributed about 23 percent of the energy savings and 19 percent of the demand savings. The reported savings are summarized in Table **57**.

Table 57. Income Qualified Solutions—PY10 Reported Savings by Measure Description

Measure description	Participants	Quantity	Gross kWh	Gross kW
Advanced power strips	393	653	160,992	22.0
Air sealing	754	1,162,924	995,249	279.3
Ceiling insulation	444	735,819	2,447,794	422.9
Duct sealing	737	233,159	3,315,802	719.5
Smart thermostats	289	308	240,328	0.0
Tune-ups	421	1,520	188,440	84.2

Measure description	Participants	Quantity	Gross kWh	Gross kW
Lighting	386	22,614	2,182,226	354.3
Miscellaneous	824	834	0	0.0
Low-flow faucet aerators	93	190	7,677	0.8
Low-flow showerheads	172	227	57,017	5.9
Pipe wrap insulation	46	153	672	0.1
Total	**1,294**	**2,158,401**	**9,596,198**	**1,889.0**

Table 58 shows the incentives paid in PY10 by measure description.

Table 58. Income Qualified Solutions—PY10 Paid Incentives by Measure Description

Measure description	Participants	Projects	Incentive amount ($)
Advanced power strips	393	394	32,650.00
Air sealing	754	757	465,169.60
Ceiling insulation	444	445	806,719.65
Duct sealing	737	747	582,897.25
Smart thermostats	289	290	53,900.00
Tune-ups	421	430	50,200.00
Lighting	386	872	166,911.75
Miscellaneous	824	834	104,250.00
Low-flow faucet aerators	93	93	1,226.00
Low-flow showerheads	172	172	3,615.00
Pipe wrap insulation	46	46	306.00
Total	**1,294**	**2,643**	**2,267,845.25**

6.3.2.1 Tracking System Data Review

The EM&V team also conducted a review of the columns within the tracking system to identify inconsistencies within the data. Overall, the tracking system review found the following:

- Some projects had installation dates that bled into 2025. After reviewing this with the implementer, it was determined that there were some tracking errors, and these projects were part of the PY10 results.
- Some projects were not shown with a status marked *complete*. These projects were discussed with the implementer, and it was determined that these projects were in the process of getting paid using PY10 funds.
- The *primary contacts* column was found to contain some email addresses of the customer or trade ally rather than the name of the primary contact.
- A couple of model numbers were missing for *smart thermostats*, *lighting*, *low-flow faucet* aerators, *low-flow showerheads*, and *advanced power strip* measures.

6.3.2.2 Tracking System Savings Review

The EM&V team calculated savings for the program based on the provided methodology from the implementer. Almost all of the measures followed the AR TRM 7.0 except for level 1 tune-ups, which followed the savings methodology for the IL TRM v5.

Overall, most of the measures were calculated with the correct methodology. The following are the adjustments made by measure description:

- **Advanced power strips.** There were no adjustments made.
- **Air infiltration.** Ten projects were listed with a *gas* heating type but were calculated with *electric resistance* assumptions. Also, two projects were listed with a *heat pump* heating type but were calculated with *electric resistance* assumptions. Lastly, 43 projects were listed with a heating type of *electric resistance* but were calculated with *gas* assumptions.
- **Ceiling Insulation.** Nine projects were listed with a *gas* heating type but were calculated with *electric resistance* assumptions. Also, sixteen projects had a heat type of *electric resistance* but were calculated with *gas* heating assumptions. Three projects were also calculated with the incorrect savings factor. Most projects were missing demand savings, and one project was missing both energy and demand savings.
- **Duct sealing.** Fourteen projects were listed with a *gas* heating type but were calculated with *electric resistance* assumptions. Thirty-nine projects were listed with a heating type of *electric resistance* but were calculated with *gas* heating assumptions. One project was listed with a heating type of *heat pump* but was calculated with *gas* heating assumptions. There was also one project where savings were off for an unidentifiable reason.
- **Smart thermostats.** The thermostat floor area and kilowatt-hour factors were updated using the values from the A/C Solutions calculator.
- **Tune-ups.** Kilowatt savings for *level 2 tune-ups* had the CF misplaced, as it was multiplying the inverse of the efficient EER rather than the difference between the baseline EER and the efficient EER. The EM&V team and implementer have already discussed this finding, and it has been corrected for PY11.
- **Lighting.** Six projects had a heating type of *electric resistance* but were calculated using *gas* assumptions. One project had a *gas* heating type but was calculated assuming the heating type was *unknown*. Two projects were missing energy and demand savings, and one project had negative savings. Many different lamps saw savings adjustments based on the adjustment of baseline and efficient lamp wattages found in the Arkansas TRM and tracking system.
- **Low-flow faucet aerators.** Five projects were found to have a water heating type of *gas*, so the savings were reduced to zero. One other project was found to be calculated with the recovery efficiency (RE) *gas* baseline assumption. The RE was adjusted to the *electric* heating type value, since the water heating type for the project was electric.
- **Low-flow showerheads.** Six projects were found to have a water heating type of *gas*, so the savings were reduced to zero. One other project was found to be calculated with the RE *gas* baseline assumption. The RE was adjusted to the *electric* heating type value, since the water heating type for the project was electric.

- **Pipe wrap insulation.** Two projects were found to have a water heating type of *gas*, so the savings were reduced to zero. There was also a slight difference in savings was due to rounding.

The overall realization rates for kWh and kW are 102.7% and 120.8%, respectively. Table 59 summarizes the evaluated savings by measure description.

Table 59. Income Qualified Solutions—PY10 Evaluated Savings Results by Measure Description

Measure description	Ex-ante kWh savings	Ex-post kWh savings	kWh realization rate	Ex-ante kW savings	Ex-post kW savings	kW realization rate
Advanced power strips	160,992	160,992	100.0%	22.0	22.0	100.0%
Air sealing	995,249	1,062,748	106.8%	279.3	279.0	99.9%
Ceiling insulation	2,447,794	2,490,285	101.7%	422.9	865.4	204.7%
Duct sealing	3,315,802	3,391,859	102.3%	719.5	719.7	100.0%
Smart thermostats	240,328	366,567	152.5%	0.0	0.0	N/A
Tune-ups	188,440	188,409	100.0%	84.2	43.8	52.0%
Lighting	2,182,226	2,137,789	98.0%	354.3	345.7	97.6%
Miscellaneous	0	0	N/A	0.0	0.0	N/A
Low-flow faucet aerators	7,677	7,014	91.4%	0.8	0.7	91.1%
Low-flow showerheads	57,017	52,890	92.8%	5.9	5.5	92.8%
Pipe wrap insulation	672	644	95.9%	0.1	0.1	95.4%
Total	**9,596,198**	**9,859,197**	**102.7%**	**1,889.0**	**2,281.9**	**120.8%**

6.3.3 Technical Assistance

The implementer requested a review of the updated savings methodology for PY11. The EM&V review checked the updated *HVAC* measures to ensure that the claimed savings aligned with industry best practices. The EM&V team recommended a new efficiency loss (EL) value of 9.81 percent for the PY11 *level 2 tune-up* measure. The recommended EL value was determined by taking a weighted average based on the refrigerant charge adjustments and type of valve within the system, which were values collected by the implementer for each project. The EM&V team also recommended updating the EFLH values for each climate zone, which will be modeled during PY11.

6.4 DETAILED PROCESS EVALUATION RESULTS

As part of the PY10 evaluation, the EM&V team completed 31 web surveys with program participants. The participant survey collected process information to inform program improvements and assess program influence on decision-making.

6.4.1 Program Marketing

There were six participants who may have had plans to purchase measures before learning of the program; when asked where they received information on what to buy, two *did not know*, and one *refused to answer*; the other three cited *ELL* (two respondents) and the *internet* (one respondent) as their source of information. Participants were also asked how they learned about the program. Almost one-half (48 percent) of respondents reported learning about the program through *word-of-mouth*. All of the responses are summarized in Table 60.

Table 60. Income Qualified Solutions—How Participants Originally Learned About the Program

How did you learn about the program	Count	Percentage
Word-of-mouth	15	48.4%
Entergy Solutions website	7	22.6%
Email from Entergy Solutions	3	9.7%
Contractor	3	9.7%
Mailed information from Entergy Solutions	2	6.5%
Other website	2	6.5%
Home energy consultant	2	6.5%
Print advertisement	1	3.2%
Radio or TV advertisement	1	3.2%
Bill inserts or utility mailer	1	3.2%
Internet search	1	3.2%
Program representative	1	3.2%

Source: Participant Survey Questions Q29
Responses can include multiple selections, so percentages may sum to over 100 percent.

In addition to how they learned about the program, the survey asked respondents how familiar they were with the benefits of installing energy efficiency improvements like those offered in the program using a scale of *not familiar, somewhat familiar, very familiar*, or *extremely familiar*. Forty-seven percent said they were *not familiar* with the benefits, another 47 percent said they were *somewhat familiar*. The remaining two respondents said they were *very* or *extremely familiar* with the benefits. Participants were also asked how interested they were in making additional improvements to their homes using a scale of *not at all interested, somewhat interested, very interested*, or *extremely interested*. Ninety-seven percent of respondents were at least *somewhat interested* in each of the aspects, those being *increased energy efficiency*, *improved comfort*, and *improved health*. The responses are summarized in Table 61.

Table 61. Income Qualified Solutions—Interest in Making Additional Improvements to Your Home

Interest in additional improvements to your home that would…	Extremely interested	Very interested	Somewhat interested	Not at all interested	Total
Increase its energy efficiency (n=31)	51.6%	32.2%	12.9%	3.2%	**100%**
Improve your comfort (n=31)	48.4%	29.0%	19.4%	3.2%	**100%**
Improve your health and safety (n=31)	45.2%	38.7%	12.9%	3.2%	**100%**

Source: Participant Survey Questions Q33A, Q33B, and Q33C

Participants were also asked a series of questions about their use of the ELL website. Thirty-nine percent of respondents said they visited ELL's website for *information on their programs or other ways to save energy*. Of those who had visited ELL's website, one-half (6 of 12 respondents) said it was *easy* to find the information they were looking for on a scale of *very easy, easy, somewhat difficult,* or *very difficult;* a third found it *somewhat difficult*, and the remaining two said it was *very difficult.*

6.4.2 Decision-Making

Nearly two-thirds of respondents (65 percent) said they *did not have plans* to purchase their equipment prior to learning about the program, with the other respondents either *not recalling* (29 percent) or reporting that they *did have plans* (6 percent). Those who either had plans or did not recall and had non-direct install measures were asked why they selected the type of measure that they did. They noted the *pricing* and *lowered cost* as reasons for selecting their measure. They also noted purchasing the measure from a *program trade ally* or the *ELL marketplace*.

Participants were asked their reasons for participating in the program, and respondents were able to provide multiple reasons for participating. Ninety percent said a reason they participated was to *save money on energy bills*. No other options were given by more than one-half of the participants. The next most common reason was to *improve the comfort of their home*. The respondents who mentioned multiple reasons were then asked which was their main reason; all 17 respondents said *saving money on energy bills* was the main reason. Table 62 summarizes the responses.

Table 62. Income Qualified Solutions—Reasons for Participating in the Program

Reason for participating in the program	Count	Percentage
Save money on energy bills	28	90.3%
Improve the comfort of my home	14	45.2%
Conserve energy and/or protect the environment	10	32.3%
Get free or discounted equipment or service	6	19.4%
Become as energy efficient as my friends or neighbors	5	16.1%
Recommendation from a friend, relative, neighbor, or colleague	5	16.1%
Improve the value of the residence	5	16.1%
Recommendation from ELL	2	6.5%

Reason for participating in the program	Count	Percentage
Recommendation from contractor	1	3.2%
Other	1	3.2%

Source: Participant Survey Questions Q30
Responses can include multiple selections, so percentages may sum to over 100 percent.

6.4.3 Participant Experience

Sixty-four percent of respondents said they first got in touch with the program staff because they reached out to the staff first, and 36 percent had the staff reach out to them first. All respondents were asked how they found the program staff's contact information; a third of the 27 respondents who recalled where they found the contact information reported *receiving contact information from friends*, *family*, *or colleagues*, the most common response. The next most common was the *Entergy Solutions program website* (26 percent).

All participants were then asked if the program staff discussed the energy savings participants would receive through the program. Seventy-seven percent of the 27 respondents who could recall said the staff *did discuss energy savings* with them. Then, all participants were asked if they agreed with a series of statements using a scale of *strongly agree, somewhat agree, somewhat disagree,* or *strongly disagree*; responses are summarized in Table 63. At least 70 percent of respondents *strongly agreed* with the three statements on the program.

Table 63. Income Qualified Solutions—Agreement with Statements

Statement	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Total
The staff was courteous and professional (n=31)	87.1%	6.5%	0.0%	6.5%	**100%**
The work was scheduled in a reasonable amount of time (n=31)	61.3%	25.8%	3.2%	9.7%	**100%**
The time it took to complete the work was reasonable (n=31)	71.0%	19.4%	3.2%	6.5%	**100%**

Source: Participant Survey Questions Q17A, Q17B, and Q17C

Only 5 of the 31 IQS participants received *AC tune-up* measures. Of those participants, two said they *got regular tune-ups* before the program; both said the tune-ups were part of a maintenance agreement or plan. Participants were asked what the program staff said was different about Entergy Solutions' tune-up compared to the standard tune-up; responses are summarized in Table 64.

Table 64. Income Qualified Solutions—Difference in Entergy Solutions and Standard Tune-Ups

Difference between the Entergy Solutions' tune-up and a standard tune-up	Count	Percentage
Cleaned blower	1	20.0%
Verify airflow	1	20.0%
Other: They did not give any information	1	20.0%

Source: Participant Survey Questions Q23

Ten of the 31 participants in the IQS program got direct install measures; all ten reported getting *smart power strips*, eight reported getting *LEDs*, and seven reported getting a *smart thermostat*. *Showerheads* were the only other direct install measures mentioned, with two reports.

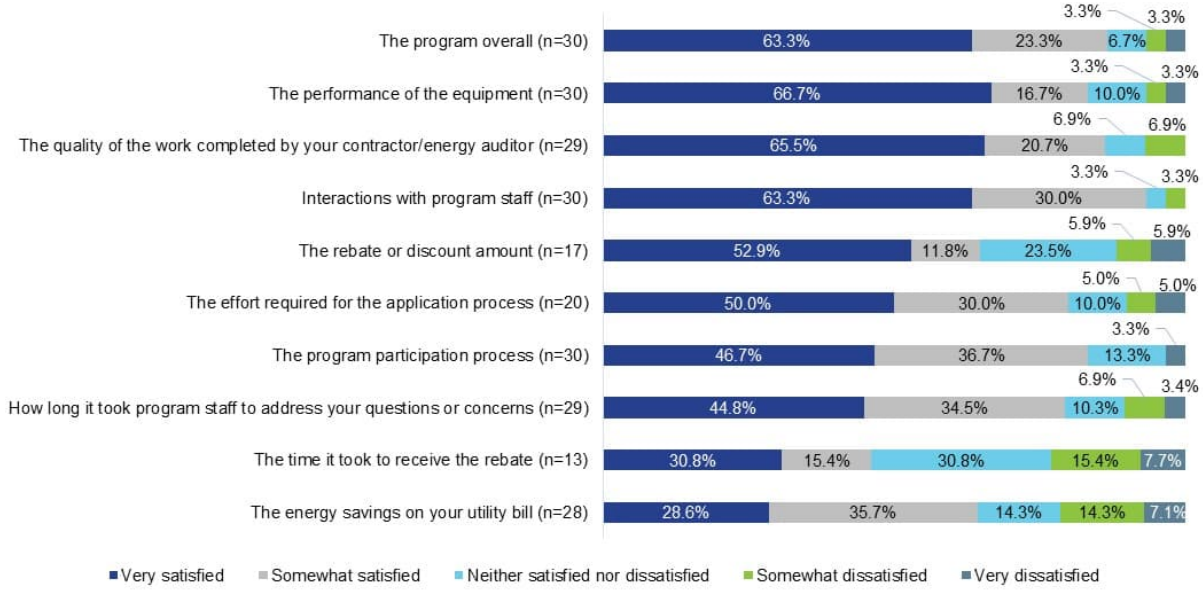
All participants were asked if they contacted Entergy Solutions' program staff with questions. Twenty-nine percent of respondents in the IQS program said they called at some point during the program.

6.4.4 Participant Satisfaction

Overall, respondents in the IQS program rated their satisfaction with the Entergy Solutions program highly. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*, 63 percent said they were *very satisfied*, and an additional 23 percent said they were *somewhat satisfied* with the program overall.

Using the same scale, over one-half of respondents (at least 64 percent) said they were *very satisfied* or *somewhat satisfied* with each aspect of the program except for *the time it took the rebate* (46 percent). The highest satisfaction came from the performance of the equipment, with 67 percent reporting *very satisfied*. The *time it took to receive the rebate* and the *energy savings on the utility bill* had the lowest satisfaction of all program aspects, with just 31 percent and 29 percent reporting *very satisfied,* respectively.

Figure 36. Income Qualified Solutions—Participant Satisfaction with Program Aspects

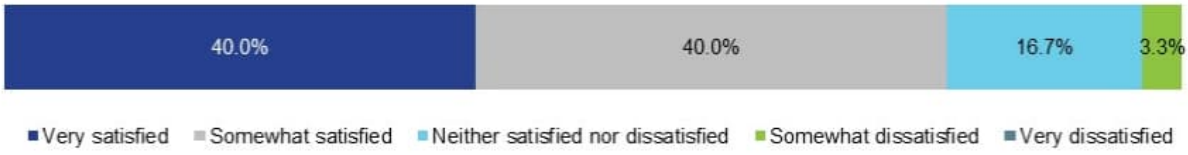


Source: Participant Survey Question Q37A – Q37J

Respondents were asked the reason for their dissatisfaction. Seven people said they *haven't noticed a difference in their home or on their electric bill*; three people also noted *issues with the installation* and *slow communication with program staff*.

Figure 37 shows IQS program participants' satisfaction with ELL as their electric service provider using a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*. Eighty percent of respondents said they were *very* or *somewhat satisfied* with ELL; no one reported being *very dissatisfied*, and only 1 of 30 said they were *somewhat dissatisfied*.

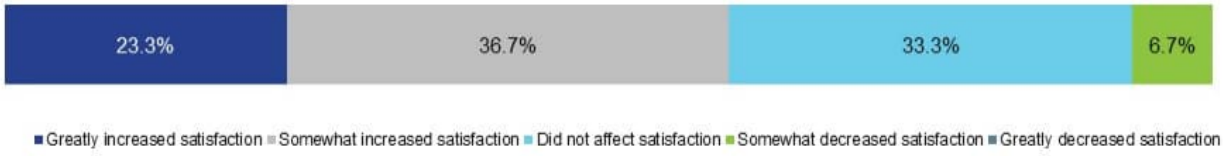
Figure 37. Income Qualified Solutions—Participant Satisfaction with ELL as Service Provider (n=30)



Source: Participant Survey Questions Q39

Participants were also asked if their participation in this program affected their satisfaction with ELL; Figure 38 summarizes the responses on a scale of *greatly increased satisfaction, somewhat increased satisfaction, did not affect satisfaction, somewhat decreased satisfaction,* or *greatly decreased satisfaction*. The most common response was that the program *somewhat increased satisfaction*, with 37 percent reporting. Another 23 percent reported it *greatly increased satisfaction*. Only 2 respondents out of 30 said it *decreased satisfaction* in any way.

Figure 38. Income Qualified Solutions—Effect of Program Participation on Satisfaction with ELL (n=30)



Source: Participant Survey Questions Q40

Participants in the IQS program were asked how likely they are to recommend the Entergy Solutions program to someone on a scale of 1−10, with one being *not at all likely* and 10 being *extremely likely*. The average response was 8.1 from 30 respondents. Only 3 gave a rating lower than a five, and 14 rated a 10. Participants then gave recommendations for the program going forward; the most common recommendation was to *improve the installation process*, with some *noting unfinished work and uncleaned messes*. Otherwise, two participants recommended *faster communication with program staff*.

6.4.5 Participant Characteristics

Participants were asked a series of demographic and household characteristic questions. Eighty-nine percent of respondents from the IQS program reported living in a *single-family home*, and 85 percent reported *owning their home*. The decade respondents' home was built is relatively evenly distributed going back to 1960, as shown in Table 65. Sixty percent of the respondents reported their homes are *between 1,000 and 2,000 square feet*, and 26 percent reported homes *between 2,000 and 3,000 square feet*.

Table 65. Income Qualified Solutions—Home Characteristics

Characteristic	Count	Percentage
Type of home		
Single-family home	25	89.3%
Apartment or condominium	2	7.1%
Duplex or townhome	1	3.6%
Respondents (n)	**28**	**100.0%**
Homeownership		
Own	23	85.2%
Rent	4	14.8%
Respondents (n)	**27**	**100.0%**
Year home built		
2020 or later	0	0.0%
2010 or 2019	2	7.7%
2000 to 2009	3	11.5%
1990 to 1999	3	11.5%
1980 to 1989	1	3.8%
1970 to 1979	8	30.8%
1960 to 1969	5	19.2%
Before 1960s	4	15.4%
Respondents (n)	**26**	**100%**
Size of home		
Less than 1,000 square feet	3	11.1%
1,000 to 1,999 square feet	16	59.3%
2,000 to 2,999 square feet	7	25.9%
3,000 to 3,999 square feet	1	3.7%
4,000 or more square feet	0	0.0%
Respondents (n)	**27**	**100.0%**

Source: Participant Survey Questions Q43, Q44, Q45, Q46

Respondents were also asked a series of questions on their heating and cooling systems. Fifty-six percent reported using *electricity* to heat their home, and of the remaining 45 percent, 41 percent said they use *natural gas* and 4 percent (one respondent) said they *don't heat their home*. Eighty-one percent of respondents said the type of heating equipment they use is a *central forced air furnace*, while 11 percent reported a *portable heater*.

Almost all respondents (93 percent) said their home's air conditioner is a *central AC*, with the remaining seven percent reporting a *wall or window unit*. Seventy-four percent reported using *natural gas* in their water heater, and the remaining 26 percent reported a type of *electricity*.

Table 66. Income Qualified Solutions—Air Conditioner and Heating Characteristics

Characteristic	Count	Percentage
Fuel primarily used to heat the home		
Electricity	15	55.6%
Natural gas	11	40.7%
Don't heat the home	1	3.7%
Respondents (n)	**27**	**100.0%**
Main heating equipment used in home		
Central forced air furnace	22	81.5%
Portable heater	3	11.1%
Heat pump	1	3.7%
Built-in wall heater	1	3.7%
Respondents (n)	**27**	**100.0%**
Type of air conditioner used in home		
Central AC	27	93.1%
Wall or window unit	2	6.9%
Respondents (n)	**29**	**100.0%**
Type of water heater used in home		
Natural gas	14	73.7%
Electric resistance	3	15.8%
Electric heat pump	2	10.5%
Respondents (n)	**19**	**100.0%**

Source: Participant Survey Questions Q47, Q48, Q49, Q50

Lastly, participants reported an average of *2.8 members per household*. Table 67 summarizes the total income of respondents; most respondents' household incomes were *under $35,00*0 (68 percent), with 21 percent reporting incomes of *$35,000 to $75,000* and the remaining 11 percent *between $75,000 and $150,000*.

Table 67. Income Qualified Solutions—Household Income

Household income	Count	Percentage
Less than $15,000	5	26.3%
$15,000 to $25,000	5	26.3%
$25,000 to $35,000	3	15.8%
$35,000 to $50,000	2	10.5%
$50,000 to $75,000	2	10.5%
$75,000 to $100,000	1	5.3%
$100,000 to $150,000	1	5.3%
More than $150,000	0	0.0%
Respondents (n)	**19**	**100.0%**

Source: Participant Survey Questions Q53

6.5 OVERALL SAVINGS ESTIMATES

The EM&V team used tracking system reviews to calculate the program-level realization rates, which indicate that the IQS program achieved similar energy savings, while the evaluated demand savings were higher than the reported demand savings. Adjustments based on the tracking system review were incorporated into realization rates, resulting in 102.7 percent for energy savings and 120.8 percent for demand savings. Table 68 shows the final savings.

Table 68. Income Qualified Solutions—Final Evaluated Energy Savings and Realization Rates by Measure Category[8]

	Reported savings		Evaluated savings		Realization rate	
Measure	kWh	kW	kWh	kW	kWh	kW
Appliances	160,992	22.0	160,992	22.0	100.0%	100.0%
Building envelope	3,443,043	702.2	3,553,033	1,144.4	103.2%	163.0%
HVAC	3,744,571	803.7	3,946,835	763.4	105.4%	95.0%
Lighting	2,182,226	354.3	2,137,789	345.7	98.0%	97.6%
Miscellaneous	0	0.0	0	0.0	N/A	N/A
Water heating	65,366	6.8	60,548	6.3	92.6%	92.6%
Total	**9,596,198**	**1,889.0**	**9,859,197**	**2,281.9**	**102.7%**	**120.8%**

[8] A dash indicates that there are no kilowatt savings associated with the respective measure.

7.0 MANUFACTURED HOMES

Entergy Louisiana, LLC's (ELL) Manufactured Homes program offers measures to improve home efficiency. The program includes an in-home assessment followed by the implementation of measures such as *duct sealing*, *air sealing*, *AC tune-up,* and *direct install* items. A bonus measure is offered in either *ceiling insulation* or the application of a *cool roof coating* to keep heat infiltration to a minimum during Louisiana's extensive cooling season.

Table 69 documents the key evaluation activities and outlines the impact and process methodologies.

Table 69. Manufactured Homes Program Evaluation Plan

Task	Task summary
Impact evaluation approach	Our impact evaluation approach included: • **TRM tracking data verification and review.** We thoroughly reviewed tracking system data for savings calculation accuracy, completeness of data fields, and compliance with the technical reference manual (TRM). • **Ongoing technical assistance**. As needed, we assisted APTIM in reviewing the project and measured savings calculations. • **Cost-effectiveness testing**. Cost-effectiveness tests were performed using reported spending, verified energy savings, and verified demand reduction.
Process evaluation approach	Our process evaluation approach included: • **Program staff interviews**. In-depth interviews with implementation staff to assess program design elements. • **Materials review.** We reviewed program materials, such as application forms, marketing collateral, training protocols, and website content. • **Participant surveys.** We completed surveys with nine program participants.

7.1 KEY FINDINGS

Overall, satisfaction is high among respondents in all aspects of the program included in the survey. Ninety-one percent of respondents said they were *very satisfied* or *satisfied* with the program overall. The majority of respondents, over 80 percent, implemented *some* or *all* of the upgrades recommended. *Saving energy and money on their utility bill* and *fixing air leaks* were cited as what was most useful about the energy audit or assessment. Of those who reported dissatisfaction with aspects of the program, the most commonly cited reasons were *wanting better communication and follow-up from implementation staff*, *more recommendations and information about upgrades*, and *more equipment to be installed*.

In PY10, the Manufactured Homes program achieved 3,844 megawatt-hours (MWh) in gross energy savings and 0.6 megawatts (MW) in gross demand savings, as shown in Table 70. The Manufactured Homes program's gross evaluated savings were slightly lower than reported for both energy and demand savings, resulting in realization rates of 97.9 percent and 99.0 percent (megawatt-hour and megawatt, respectively). The evaluation, measurement, and verification (EM&V) team's adjustments drive these results during the tracking system review.

Table 70. Manufactured Homes—Reported, Evaluated, and Net Savings

Energy/demand savings	Reported savings	Evaluated savings	Realization rate	NTG ratio	Net savings	Program contribution to portfolio savings
Energy savings (MWh)	3,844	3,764	97.9%	100.0%	3,764	4.7%
Demand savings (MW)	0.6	0.6	99.0%	100.0%	0.6	4.9%

Table 71. Manufactured Homes—Goals vs. Achieved

Savings	Goal	Actual	Percentage achieved
Energy savings (MWh)	5,067	3,764	74.3%

Three of the nine respondents said they learned about the program through word of mouth, the others mentioned mail from ELL and the Entergy Solutions website. Most respondents said they were not at all familiar with energy-efficiency benefits (5 of 8) the others said they were somewhat familiar. When asked how interested they would be in making additional improvements in their home, all but one respondent expressed some interest in increasing the home's energy efficiency, improving the comfort of the home, and improving health and safety in the home.

Only one respondent had prior plans to purchase the equipment. Over three-quarters of respondents (78 percent) said they participated to *save money on energy bills*.

When asked if the staff was courteous and professional, all but one respondent said *strongly agree* or *somewhat agree*. A little over three-quarters (78%) strongly agreed the work was scheduled in a reasonable amount of time and 89% *strongly agree* or *somewhat agree* that the time it took to complete the work was reasonable.

Overall program satisfaction was high, with five of the seven respondents (71 percent) saying they were very satisfied with the program.

7.2 RECOMMENDATIONS

The EM&V team identified five recommendations, shown in Table 72, for APTIM and ELL's consideration from the evaluation activities.

Table 72. Manufactured Homes—PY10 Recommendations and Key Findings

Type	Recommendation	Key finding
PY10 recommendations	**Recommendation 1:** Apply assumed values, such as effective full-load hours (EFLH), heating degree days (HDD), coincidence factors (CF), temperatures, and *air sealing* assumptions, consistently across measures and programs.	The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average HDD across weather zones for the *duct sealing* measure while other programs for the same measure applied an HDD value based on the weather zone of the residence. Refer to Appendix C for guidance for each measure.

Type	Recommendation	Key finding
	Recommendation 2: Increase the internal quality assurance/quality control (QA/QC) process to ensure that heating types and savings values are consistently applied.	The EM&V team found multiple instances where the savings were calculated based on a different heating type from the tracked type. The EM&V team also found instances where the savings were not calculated for certain measures.
	Recommendation 3: Update the demand savings calculations for the *level 1 tune-up* measures.	A couple of the *tune-up* measures were calculated with the new methodology set for PY11. The demand savings for the *level 1 tune-up* measures calculated with the new savings methodology were calculated incorrectly and appeared to divide by the energy efficiency ratio (EER) twice.
	Recommendation 4: Apply *cooling capacity* and *heating capacity* consistently across all of the *tune-up* measures for each program.	Some programs assumed an average capacity, while other programs calculated savings based on the nominal tons of the unit serviced to the nearest half-ton. The methodology for the capacities should be consistently applied across all the programs. Refer to Appendix C for guidance for each measure.
	Recommendation 5: Increase QA/QC processes for tracking key information.	The EM&V team found multiple instances where fields such as *building type*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment is installed or provided, a model number should be included in the tracking system.

Table 73. Manufactured Homes—Status of Prior Year Recommendations

Status of prior year recommendations	
PY9 key findings	All respondents were satisfied with all aspects of the program, noted that participation in the program increased their satisfaction with ELL as their service provider, and were *very* or *extremely likely* to recommend the program to friends and family members.
	The program had high realization rates attributable to in-home auditors' findings of lower leakage levels than anticipated on *duct sealing* and *air infiltration* projects.
PY9 recommendations	None.

7.3 DETAILED IMPACT EVALUATION RESULTS

The EM&V team focused efforts on delivering a tracking system review, providing technical assistance, and conducting cost-effectiveness testing. Evaluated savings were calculated based on the calculation methodologies provided by the implementer, which were based on the methodologies within the Arkansas TRM 7.0. The verified savings were determined during the tracking system review, since impact activities such as desk reviews and on-site visits were not included in the project scope for PY10.

7.3.1 Participant Characterization

Several different measures are provided to participants through the program. Within the tracking system, qualifying products are assigned to unique measure names. The mapping of these measure names to measure categories and measure descriptions is provided below. The measure descriptions in the table below will be used in place of the measure names in the subsequent tables.

Table 74. Manufactured Homes—Measure Categorization by Tracked Measure Name

Measure name	Measure category	Measure description
1.0 gpm bathroom aerator for residential manufactured home	Water heating	Faucet aerator
1.5 gpm kitchen aerator for residential manufactured home	Water heating	Faucet aerator
1.5 gpm showerhead for residential manufactured home	Water heating	Showerhead
A/C w/ electric resistance heat duct sealing for residential manufactured home	HVAC	Duct sealing
A/C w/ gas heat duct sealing for residential manufactured home	HVAC	Duct sealing
Air sealing for residential manufactured home	Envelope	Air infiltration
Assessment/audit for residential manufactured home	Miscellaneous	Miscellaneous
Electric resistance heat w/o A/C duct sealing for residential manufactured home	Envelope	Cool roof
Heat pump duct sealing for residential manufactured home	Envelope	Cool roof
Incentive bonus for residential manufactured home	HVAC	Duct sealing
Level 1 central A/C tune-up for residential manufactured home	HVAC	Duct sealing
Level 1 central A/C tune-up for residential single or multifamily home	Miscellaneous	Miscellaneous
Level 2 central A/C tune-up with refrigerant charge adjustment for residential manufactured home	HVAC	Tune-ups
Level 2 central A/C tune-up with refrigerant charge adjustment for residential single or multi family home	HVAC	Tune-ups

7.3.2 Tracking System Review

The EM&V team compiled the demand and energy savings results by measure and a better mix of savings by measure. About 39 percent of the energy savings and 43 percent of the demand savings were saved with the *HVAC* measures. The *lighting* measures also contributed about 23 percent of the energy savings and 19 percent of the demand savings. The reported savings are summarized in Table 75.

Table 75. Manufactured Homes—PY10 Reported Savings by Measure Description

Measure description	Participants	Quantity	Gross kWh	Gross kW
Air Sealing	619	649,452	560,720	70.1
Cool Roofs	12	13,305	4,204	0.0
Duct Sealing	495	144,316	2,981,465	433.3
Tune-Ups	223	225	138,361	69.3
Miscellaneous	678	688	0	0.0
Low-Flow Faucet Aerators	316	827	25,058	3.7
Low-Flow Showerheads	326	495	133,700	12.6
Total	**678**	**809,308**	**3,843,507**	**588.9**

Table 76 shows the incentives paid in PY10 by measure description.

Table 76. Manufactured Homes—PY10 Paid Incentives by Measure Description

Measure description	Participants	Projects	Incentive amount ($)
Air Sealing	619	620	264,993.60
Cool Roofs	12	12	3,991.50
Duct Sealing	495	497	288,836.00
Tune-Ups	223	225	27,550.00
Miscellaneous	678	680	103,600.00
Low-Flow Faucet Aerators	316	318	4,135.00
Low-Flow Showerheads	326	328	12,375.00
Grand total	**678**	**680**	**705,481.10**

7.3.2.1 Tracking System Data Review

The EM&V team also conducted a review of the columns within the tracking system to identify inconsistencies within the data. Overall, the tracking system review found the following:

- Some projects were not shown with a status marked *complete*. These projects were discussed with the implementer, and it was determined that these projects were in the process of getting paid using PY10 funds.
- A couple of model numbers were missing for *low-flow faucet aerator* and *low-flow showerhead* measures. If equipment is installed, the model number of the installed equipment should be included in the tracking system.

7.3.2.2 Tracking System Savings Review

The EM&V team calculated savings for the program based on the provided methodology from the implementer. Almost all of the measures followed the AR TRM 7.0 except for level 1 tune-ups, which followed the savings methodology for the IL TRM v5.

Overall, most of the measures were calculated with the correct methodology. The following are the adjustments made by measure description:

- **Air infiltration.** Ten projects were adjusted to match the methodology of the rest of the *air infiltration* measures within the Manufactured Homes program. Also, one project was missing reported savings. The savings difference was also due to rounding.
- **Cool Roofs.** No adjustments were made to the savings.
- **Duct sealing.** Three projects were listed with an *electric resistance* heating type but were calculated with *heat pump* assumptions. One project was calculated incorrectly for an unknown reason.
- **Tune-ups.** *Level 2 tune-ups* were calculated with both the Arkansas TRM calculation methodology and the Illinois TRM calculation methodology, adding them together. Also, kilowatt savings for the *level 2 tune-ups* had the CF misplaced, as it was multiplying the inverse of the efficient energy efficiency ratio (EER) rather than the difference between the baseline EER and the efficient EER. The EM&V team and implementer have already discussed these two findings, and they have been corrected for PY11. Also, there were *level 1 tune-ups* which calculated savings using the new calculation methodology, and the demand savings based on the new methodology were being calculated incorrectly. The evaluation team believes the savings were divided by the EER twice.
- **Low-flow faucet aerators.** The kilowatt savings seem to be using Baton Rouge weather zone assumptions, while kilowatt-hour savings were calculated using average temperature assumptions across all four weather zones. Savings were adjusted for both kilowatts and kilowatt-hours to use average temperature assumptions across all four weather zones. Also, the kilowatt savings were adjusting the water volume saved based on the faucet aerator flow rate, while the kilowatt-hour savings were calculated with a volume of 381 for all faucet aerators. Kilowatt savings were adjusted to 381 for volume for all measures to keep energy savings around 100 percent.
- **Low-flow showerheads.** The slight difference in savings could not be determined.

The overall realization rates for kilowatt-hours and kilowatts are 97.9 percent and 99.0 percent, respectively. Table 77 summarizes the evaluated savings by measure description.

Table 77. Manufactured Homes—PY10 Evaluated Savings Results by Measure Description

Measure description	Ex-ante kWh savings	Ex-post kWh savings	kWh realization rate	Ex-ante kW savings	Ex-post kW savings	kW realization rate
Air sealing	560,720	518,007	92.4%	70.1	92.6	132.1%
Cool roofs	4,204	4,204	100.0%	0.0	0.0	N/A
Duct sealing	2,981,465	2,987,311	100.2%	433.3	445.4	102.8%

Measure description	Ex-ante kWh savings	Ex-post kWh savings	kWh realization rate	Ex-ante kW savings	Ex-post kW savings	kW realization rate
Tune-ups	138,361	101,635	73.5%	69.3	28.8	41.5%
Miscellaneous	0	0	N/A	0.0	0.0	N/A
Low-flow faucet aerators	25,058	25,040	99.9%	3.7	2.6	70.4%
Low-flow showerheads	133,700	127,689	95.5%	12.6	13.3	105.6%
Total	**3,843,507**	**3,763,887**	**97.9%**	**588.9**	**582.7**	**99.0%**

7.3.3 Technical Assistance

The implementer requested a review of the updated savings methodology for PY11. The EM&V review checked the updated *HVAC* measures to ensure that the claimed savings aligned with industry best practices. The EM&V team recommended a new efficiency loss (EL) value of 9.81 percent for the PY11 *level 2 tune-up* measure. The recommended EL value was determined by taking a weighted average based on the refrigerant charge adjustments and type of valve within the system, which were values collected by the implementer for each project. The EM&V team also recommended updating the EFLH values for each climate zone, which will be modeled during PY11.

7.4 DETAILED PROCESS EVALUATION RESULTS

As part of the PY10 evaluation, the EM&V team completed nine web surveys with program participants. The participant survey collected process information to inform program improvements and assess program influence on decision-making.

7.4.1 Program Marketing

Participants who purchased measures were asked where they received information on what to buy. Only two of the nine participants reported, only noting ELL as the source of information. Participants were also asked how they learned about the program; a third of respondents reported learning about the program through *word-of-mouth*, the most common response. The *Entergy Solutions website* and *mail from ELL* are among the less common sources of program information.

In addition to how they learned about the program, the survey asked respondents how familiar they were with the benefits of installing energy efficiency improvements like those offered in the program using a scale of *extremely familiar, very familiar, somewhat familiar,* and *not familiar*. Five of eight respondents said they were *not at all familiar* with the benefits, and the remaining three said they were *somewhat familiar*. Participants were also asked how interested they were in making additional improvements to their homes; the responses are summarized in Table 78. All but one participant (89 percent) expressed some interest in each aspect.

Table 78. Manufactured Homes—Interest in Making Additional Improvements to Your Home

Interest in additional improvements to your home that would…	Extremely interested	Very interested	Somewhat interested	Not at all interested	Total
Increase its energy efficiency (n=9)	33.3%	22.2%	33.3%	11.1%	**100%**
Improve your comfort (n=9)	33.3%	22.2%	33.3%	11.1%	**100%**
Improve your health and safety (n=9)	33.3%	22.2%	33.3%	11.1%	**100%**

Source: Participant Survey Questions Q33A, Q33B, and Q33C

Participants were also asked a series of questions about their use of the ELL website. Just two of the eight respondents said they visited ELL's website for *information on their programs or other ways to save energy* on a scale of *very easy, easy, somewhat difficult,* or *very difficult*. Of those two, both found it either *easy* or *very easy* to find what they were looking for.

7.4.2 Decision-Making

Only one respondent said they *had plans before the program* to purchase the measure they got through the program; that respondent was asked why they selected the type of measure that they did, but they did not respond, nor did they give where they purchased the measure. They did note that the measure was part of a new construction project.

Participants were asked their reasons for participating in the program; respondents were able to provide multiple reasons for participating. Over three-quarters of respondents (78 percent) said a reason they participated was to *save money on energy bills*. No other reason was mentioned by more than half of respondents. The next most common response was to *improve the comfort of their home* (44 percent). The respondents who mentioned multiple reasons were then asked which was their main reason; two of the five respondents said *saving money on energy bills* was the main reason, one said *improving comfort*, another said a *recommendation from a friend*, and the last said they *wanted free or discounted equipment*. Table 79 summarizes the responses.

Table 79. Manufactured Homes —Reasons for Participating in the Program

Reason for participating in the program	Count	Percentage
Save money on energy bills	7	77.8%
Improve the comfort of my home	4	44.4%
Conserve energy and/or protect the environment	3	33.3%
Become as energy efficient as my friends or neighbors	2	22.2%
Get the free or discounted equipment or service	2	22.2%
Recommendation from a friend, relative, neighbor, or colleague	1	11.1%
Recommendation from contractor	1	11.1%
Recommendation from ELL	1	11.1%

Source: Participant Survey Questions Q30
Responses can include multiple selections, so percentages may sum to over 100 percent.

7.4.3 Participant Experience

The six respondents who could recall were split evenly on whether they reached out to program staff first, or program staff reached out to them first. All respondents were asked how they found the program staff's contact information; three of the six who could recall reported *receiving contact information from friends, family, or colleagues*, the most common response. The next most common was the *ELL program website*, with two reports.

All participants were then asked if the program staff discussed the energy savings participants would receive through the program; seven of the nine said *yes*, one said *no*, and one *did not know*. Then, all participants were asked if they agreed with a series of statements using a scale of *strongly agree, somewhat agree, somewhat disagree,* or *strongly disagree*; the responses are summarized in Table 80. At least two-thirds of respondents strongly agreed with the three statements on the program.

Table 80. Manufactured Homes—Agreement with Statements

Statement	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Total
The staff was courteous and professional (n=8)	75.0%	12.5%	0.0%	12.5%	**100%**
The work was scheduled in a reasonable amount of time (n=9)	66.7%	11.1%	11.1%	11.1%	**100%**
The time it took to complete the work was reasonable (n=9)	77.8%	11.1%	11.1%	0.0%	**100%**

Source: Participant Survey Questions Q17A, Q17B, and Q17C

Only one participant in the Manufactured Homes program received a *tune-up* measure. They did not respond to the series of questions on tune-ups, except for noting the *program staff said the difference between the Entergy Solutions tune-up and a standard tune-up was that it is more energy efficient*.

Just two of the nine participants in the Manufactured Homes program received direct install measures; both reported receiving a *showerhead* and *faucet aerator*.

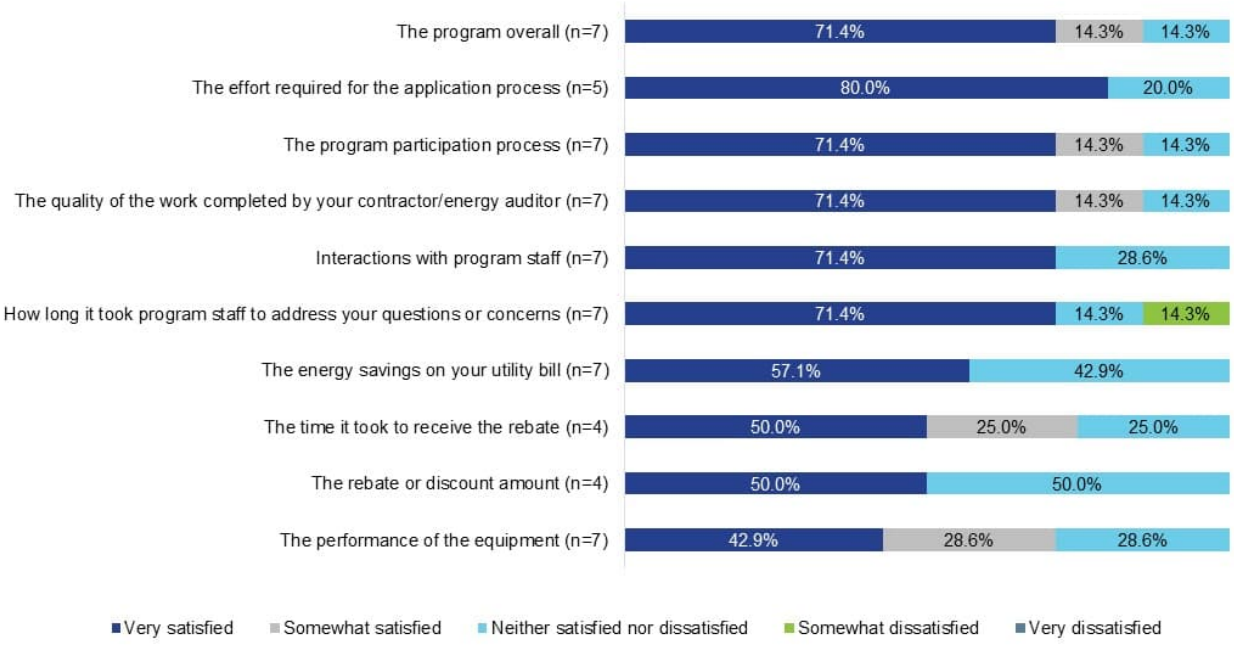
All participants were asked if they contacted Entergy Solutions' program staff with questions; only one of the nine respondents in the Manufactured Homes program said *they called at some point* during the program.

7.4.4 Participant Satisfaction

Overall, respondents in the Manufactured Homes program rated their satisfaction with the Entergy Solutions program highly. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*, five of the seven respondents (71 percent) said they were *very satisfied* with the program overall.

Using the same scale, at least one-half of respondents (50 percent to 86 percent) said they were *very satisfied* or *somewhat satisfied* with each aspect of the program. The highest satisfaction came from the *effort required for the application*, with 80 percent reporting *very satisfied.* The *performance of the equipment* had the lowest satisfaction of all program aspects, with just 43 percent reporting being *very satisfied* and 13 percent reporting *very dissatisfied*. The only program aspect that had any dissatisfaction was *the time it took for program staff to respond to questions*, with 14 percent reporting being *somewhat dissatisfied*. The only recommendation given was that *the process was too long and should be shortened*.

Figure 39. Manufactured Homes—Participant Satisfaction with Program Aspects



Source: Participant Survey Question Q37A – Q37J

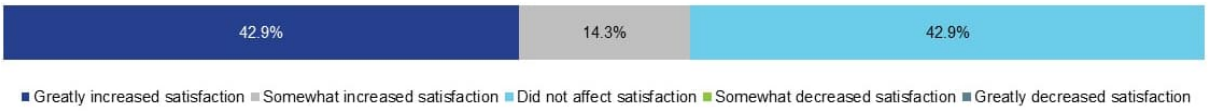
Figure 40 shows participants in the Manufactured Homes programs' satisfaction with ELL as their electric service provider using a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*. Four of the seven respondents said they were *very satisfied* with ELL, and another two reported being *somewhat satisfied*. None of the respondents reported dissatisfaction in any way.

Figure 40. Manufactured Homes—Participant Satisfaction with ELL as Service Provider (n=7)

Source: Participant Survey Questions Q39

Participants were also asked if their participation in this program affected their satisfaction with ELL; Figure 41 summarizes the responses. On a scale of *greatly increased satisfaction, somewhat increased satisfaction, did not affect satisfaction, somewhat decreased satisfaction,* or *greatly decreased satisfaction*, three of seven reported that the program *greatly increased satisfaction*, and another three reported that the program *did not affect satisfaction*. No one reported that the program decreased satisfaction.

Figure 41. Manufactured Homes —Effect of Program Participation on Satisfaction with ELL (n=7)



Source: Participant Survey Questions Q40

Participants in the Manufactured Homes program were asked how likely they are to recommend the Entergy Solutions program to someone on a scale of 1−10, with 1 being *not at all likely* and 10 being *extremely likely*. The average response was 8.9 resulting from the seven responses; only one response was below an 8, and four were a 10. Participants then gave recommendations for the program going forward; one recommendation was to *increase the savings on the utility bill*.

7.4.5 Participant Characteristics

Participants were asked a series of demographic and household characteristic questions. All seven respondents from the Manufactured Homes program reported living in a *manufactured or mobile home*, naturally, and four reported that they owned the home. Four respondents' homes were built in the 1990s, and another two were built after 2010. The majority of respondents (five out of seven) did not know the square footage of their homes. Table 81 contains the detailed responses.

Table 81. Manufactured Homes—Home Characteristics

Characteristic	Count	Percentage
Type of home		
Manufactured or mobile home	7	100.0%
Respondents (n)	**7**	**100.0%**
Homeownership		
Own	4	57.1%
Rent	3	42.9%
Respondents (n)	**7**	**100.0%**
Year home built		
2020 or later	1	16.7%
2010 or 2019	1	16.7%
2000 to 2009	0	0.0%
1990 to 1999	4	66.7%

Characteristic	Count	Percentage
Before 1990s	0	0.0%
Respondents (n)	**6**	**100%**
Size of home		
Less than 1,000 square feet	1	14.3%
1,000 to 1,999 square feet	0	0.0%
2,000 to 2,999 square feet	1	14.3%
3,000 to 3,999 square feet	0	0.0%
4,000 or more square feet	0	0.0%
Don't know	5	71.4%
Respondents (n)	**7**	**100.0%**

Source: Participant Survey Questions Q43, Q44, Q45, Q46

Respondents were also asked a series of questions on their heating and cooling systems. Five of the six respondents reported using *electricity* to heat their homes, and the other one used *natural gas*. All respondents said the type of heating equipment they use is a *central forced air furnace*. All respondents also said the air conditioner in their home is a *central AC*.

Table 82. Manufactured Home—Air Conditioner and Heating Characteristics

Characteristic	Count	Percentage
Fuel primarily used to heat the home		
Electricity	5	83.3%
Natural Gas	1	16.7%
Respondents (n)	**6**	**100.0%**
Main heating equipment used in home		
Central forced air furnace	4	100.0%
Respondents (n)	**4**	**100.0%**
Type of air conditioner used in home		
Central AC	5	100.%
Respondents (n)	**5**	**100.0%**
Type of water heater used in home		
Natural gas	1	33.3%
Electric heat pump	1	33.3%
Electric resistance	1	33.3%
Respondents (n)	**3**	**100.0%**

Source: Participant Survey Questions Q47, Q48, Q49, Q50

Lastly, participants reported an average of *2.3 members per household* with all responses ranging from

1−3. Table 83 summarizes the total income of respondents. Of the four responses received, three reported household incomes *at or below $35,000*, with the final respondent reporting income *between $75,000 and $100,000*.

Table 83. Manufactured Home—Household Income

Household income	Count	Percentage
Less than $15,000	1	25.0%
$15,000 to $25,000	1	25.0%
$25,000 to $35,000	1	25.0%
$35,000 to $50,000	0	0.0%
$50,000 to $75,000	0	0.0%
$75,000 to $100,000	1	25.0%
$100,000 to $150,000	0	0.0%
More than $150,000	0	0.0%
Respondents (n)	**4**	**100.0%**

Source: Participant Survey Questions Q53

7.5 OVERALL SAVINGS ESTIMATES

The EM&V team used the tracking system reviews to calculate the program-level realization rates, which indicate that the Manufactured Homes program achieved similar energy and demand savings as reported. Adjustments based on the tracking system review were incorporated into realization rates, ultimately resulting in realization rates of 100.0 percent and 103.0 percent for energy and demand savings, respectively.

Table 84. Manufactured Homes—Final Evaluated Energy Savings and Realization Rates by Measure Category [9]

	Reported savings		Evaluated savings		Realization rate	
Measure category	kWh	kW	kWh	kW	kWh	kW
Building envelope	564,924	70.1	522,211	92.6	92.4%	132.1%
HVAC	3,119,826	502.6	3,088,946	474.2	99.0%	94.3%
Miscellaneous	0	0.0	0	0.0	N/A	N/A
Water heating	158,758	16.3	152,729	15.9	96.2%	97.5%
Total	**3,843,507**	**588.9**	**3,763,887**	**582.7**	**97.9%**	**99.0%**

[9] A dash indicates that there are no kilowatt savings associated with the respective measure.

8.0 MULTIFAMILY SOLUTIONS

Entergy Louisiana, LLC's (ELL) Multifamily Solutions program serves multifamily buildings with five or more units under one roof and offers the benefits of energy efficiency to property owners and residents. Energy advisors perform a walkthrough inspection to identify needs within the complex and provide direct installation of *LEDs*, *water conservation devices*, *advanced power strips*, and *smart thermostats*. Trade allies are assigned if other upgrade opportunities are identified, such as *air sealing*, *duct sealing*, *air condenser tune-ups*, and *insulation*. The program is designed to raise multifamily customers' awareness of the benefits of high-efficiency products, provide education regarding energy usage within their homes, and present savings opportunities.

Table 85 documents the key evaluation activities and outlines the impact and process methodologies.

Table 85. Multifamily Solutions Program Evaluation Plan

Task	Task summary
Impact evaluation approach	Our impact evaluation approach included: • **TRM tracking data verification and review.** We thoroughly reviewed tracking system data for savings calculation accuracy, completeness of data fields, and compliance with the technical reference manual (TRM). • **Ongoing technical assistance.** As needed, we assisted APTIM in reviewing the project and measured savings calculations. • **Cost-effectiveness testing**. Cost-effectiveness tests were performed using reported spending, verified energy savings, and verified demand reduction.
Process evaluation approach	Our process evaluation approach included: • **Program staff interviews**. In-depth interviews with implementation staff to assess program design elements. • **Materials review.** We reviewed program materials, such as application forms, marketing collateral, training protocols, and website content. • **Participant surveys.** We completed surveys with four program participants.

8.1 KEY FINDINGS

In PY10, the Multifamily Solutions program achieved 6,930 megawatt-hours (MWh) in gross energy savings and 1.0 megawatts (MW) in gross demand savings, as shown in Table 86. The Multifamily Solutions program's gross savings were approximately equal to the reported energy savings, while the evaluated gross demand savings were slightly higher than the reported demand savings, resulting in realization rates of 100.0 percent and 103.0 percent megawatt-hours and megawatts, respectively). The evaluation, measurement, and verification (EM&V) team's adjustments drive these results during the tracking system review.

Table 86. Multifamily Solutions—Reported, Evaluated, and Net Savings

Energy/demand savings	Reported savings	Evaluated savings	Realization rate	NTG ratio	Net savings	Program contribution to portfolio savings
Energy savings (MWh)	6,930.4	6,931.1	100.0%	100.0%	6,931.1	8.7%
Demand savings (MW)	0.959	0.988	103.0%	100.0%	0.988	8.3%

Table 87. Multifamily Solutions—Goals vs. Achieved

Savings	Goal	Actual	Percentage achieved
Energy savings (MWh)	7,158.1	6,931.1	96.8%

Participants were asked how they learned about the program; *emails from ELL*, *a contractor*, the *ELL website*, and a *program representative* were among the information sources noted. When asked how interested they would be in making additional improvements in their home, three of the four expressed some interest in increasing the home's energy efficiency, improving the comfort of the home, and improving health and safety in the home.

Only one respondent had prior plans to purchase the equipment. Three of four participants said they participated to save money on energy bills; two participants also mentioned improving the comfort of their home, conserving energy, and improving the value of their *residence* as reasons for participating.

When asked if the staff was courteous and professional, three of the four said they *strongly agree* or *somewhat agree*. All four said they *strongly agree* or *somewhat agree* the work was scheduled in a reasonable amount of time. Three of the four *strongly agree* or *somewhat agree* that the time it took to complete the work was reasonable.

Overall, respondents rated their satisfaction with the program moderately high. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*, two of four respondents reported *very* or *somewhat satisfied,* and the remaining two said they were *neither satisfied nor dissatisfied*. No respondents said they were *dissatisfied* with the Entergy Solutions program overall. Participants in the program were asked how likely they are to recommend ELL to someone on a scale of 1-10, where 1 is *not at all likely*, and 10 is *extremely likely*. The average response was 6.8 out of the four respondents.

8.2 RECOMMENDATIONS

The EM&V team identified six recommendations, shown in Table 88, for APTIM and ELL's consideration from the evaluation activities.

Table 88. Multifamily Solutions—PY10 Recommendations and Key Findings

Type	Recommendation	Key finding
PY10 recommendations	**Recommendation 1:** Apply assumed values, such as effective full-load hours (EFLH), heating degree days (HDD), coincidence factors (CF), temperatures, *air sealing* assumptions, floor area, and *thermostat* kilowatt-hour factors consistently across measures and programs.	The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average HDD across weather zones for the *duct sealing* measure while other programs for the same measure applied an HDD value based on the weather zone of the residence. Refer to Appendix C for guidance for each measure.
	Recommendation 2: Increase the internal quality assurance/quality control (QA/QC) process to ensure that heating types and savings values are consistently applied.	The EM&V team found multiple instances where the savings were calculated based on a different heating type from the tracked type. The EM&V team also found instances where the savings were not calculated for certain measures.
	Recommendation 3: Update the *lighting* baseline from EISA Tier 1 to EISA Tier 2.	The current savings methodologies for *lighting* measures are assuming a baseline based on EISA Tier 1. The *lighting* measures for Multifamily Solutions should assume the *lighting* baseline based on EISA Tier 2 requirements.
	Recommendation 4: Update the demand savings calculations for the *level 1 tune-up* measures.	A couple of the *tune-up* measures were calculated using the new methodology set for PY11. The demand savings for the *level 1 tune-up measures* using the new savings methodology were calculated incorrectly and appeared to divide by the energy efficiency ratio (EER) twice.
	Recommendation 5: Apply *cooling capacity* and *heating capacity* consistently across all of the *tune-up* measures for each program.	Some programs assumed an average capacity, while other programs calculated savings based on the nominal tons of the unit serviced to the nearest half-ton. The methodology for the capacities should be consistently applied across all the programs. Refer to Appendix C for guidance for each measure.
	Recommendation 6: Increase QA/QC processes for tracking key information.	The EM&V team found multiple instances where fields such as the *building type*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment is installed or provided, a model number should be included in the tracking system.

Table 89. Multifamily Solutions—Status of Prior Year Recommendations

Status of prior year recommendations	
PY9 key findings	The EM&V team found high savings for *smart thermostats* (239.9 percent for Entergy Gulf States Louisiana, LLC (EGSL) and 334.1 percent for ELL). This is attributable to a higher prevalence of electric-resistant heating than included in expected savings estimates.
	Other high-realization measures included *duct sealing* (with increased savings due to past field findings) and *low-flow devices* (through an update to water heater setpoints from the Arkansas TRM).
PY9 recommendations	None.

8.3 DETAILED IMPACT EVALUATION RESULTS

The EM&V team focused efforts on delivering a tracking system review, providing technical assistance, and conducting cost-effectiveness testing. Evaluated savings were calculated based on the calculation methodologies provided by the implementer, which were based on the methodologies within the Arkansas TRM 7.0. The verified savings were determined during the tracking system review, since impact activities such as desk reviews and on-site visits were not included in the project scope for PY10.

8.3.1 Participant Characterization

Several different measures are provided to participants through the program. Within the tracking system, qualifying products are assigned to unique measure names. The mapping of these measure names to measure categories and measure descriptions is provided in Table 90. The measure descriptions in the table below will be used in place of the measure names in the subsequent tables.

Table 90. Multifamily Solutions—Measure Categorization by Tracked Measure Name

Measure name	Measure category	Measure description
1.0 gpm Bathroom Aerator-Elec DI-ELL-MFDI	Water heating	Faucet aerator
1.0 gpm Bathroom Aerator-Elec DI-ELL-MFDILI 18	Water heating	Faucet aerator
1.5 gpm Handheld Showerhead-Elec DI-ELL-MFDILI 18	Water heating	Showerhead
1.5 gpm Kitchen Aerator-Elec DI-ELL-MFDI	Water heating	Faucet aerator
1.5 gpm Kitchen Aerator-Elec DI-ELL-MFDILI 18	Water heating	Faucet aerator
1.5 gpm Showerhead-Elec DI-ELL-MFDI	Water heating	Showerhead
1.5 gpm Showerhead-Elec DI-ELL-MFDILI 18	Water heating	Showerhead
Assessment-ELL-MF	Miscellaneous	Miscellaneous
Assessment-ELL-MFIQ	Miscellaneous	Miscellaneous
LED 5.5W (Candelabra)-40W Equivalent-DI-ELL-MFDI	Lighting	Lighting
LED 5.5W (Candelabra)-40W Equivalent-DI-ELL-MFDILI 18	Lighting	Lighting
LED 6W (Globe)-40W Equivalent-DI-ELL-MFDI	Lighting	Lighting

Measure name	Measure category	Measure description
LED 6W (Globe)-40W Equivalent-DI-ELL-MFDILI 18	Lighting	Lighting
LED 9W (A-Type)-60W Equivalent-DI-ELL-MFDI	Lighting	Lighting
LED 9W (A-Type)-60W Equivalent-DI-ELL-MFDILI 18	Lighting	Lighting
LED8WFlood-65WEquivalent-DI-ELL-MFDI	Lighting	Lighting
MF - A/C with Gas Heat Duct Sealing For Residential Multi Family Home	HVAC	Duct sealing
MF - Air Sealing with Electric Resistance Heat w/ A/C	Envelope	Air Infiltration
MF - Air Sealing with Gas heat w/ A/C	Envelope	Air Infiltration
MF - Air Sealing with Heat Pump	Envelope	Air Infiltration
MF - Electric Resistance Heat w/ A/C Duct Sealing For Residential Multi Family Home	HVAC	Duct sealing
MF - Level 1 A/C Tune-up (No Refrigerant Charge)	HVAC	Tune-ups
MF - Level 2 A/C Tune-up (Refrigerant Charge)	HVAC	Tune-ups
Pipe Wrap-Elec Water Heater-Elec DI-ELL-MFDI	Water heating	Pipe wrap insulation
PipeWrap-ElecWaterHeater-ElecDI-ELL-MFDILI-18	Water heating	Pipe wrap insulation
Smart Thermostat-Elec DI-ELL-MFDI	HVAC	Smart thermostat
Smart Thermostat-Elec DI-ELL-MFDILI-18	HVAC	Smart thermostat
TA Incentive Bonus	Miscellaneous	Miscellaneous
Tier 1 Advanced Power Strip-Entertainment-DI-ELL-MFDI	Plug load	Advanced power strip
Tier 1 Advanced Power Strip-Entertainment-Elec DI-ELL-MFDILI	Plug load	Advanced power strip
Tier 1 Advanced Power Strip-Office-DI-ELL-MFDI	Plug load	Advanced power strip
Tier 1 Advanced Power Strip-Office-Elec DI-ELL-MFDILI	Plug load	Advanced power strip
Tier 2 Advanced Power Strip-Entertainment-DI-ELL-MFDI	Plug load	Advanced power strip

8.3.2 Tracking System Review

The EM&V team compiled the demand and energy savings results by measure and found that about 67 percent of the energy savings and 71 percent of the demand savings were saved with the *duct sealing* measures. The reported savings are summarized in Table 91.

Table 91. Multifamily Solutions—PY10 Reported Savings by Measure Description

Measure description	Participants	Quantity	Gross kWh	Gross kW
Advanced power strips	9	275	69,236	8.3
Air sealing	10	669,297	1,175,557	66.9
Duct sealing	9	233,588	4,610,436	677.4

Measure description	Participants	Quantity	Gross kWh	Gross kW
Smart thermostats	6	59	45,730	0.0
Tune-ups	10	1,308	581,755	150.4
Lighting	7	5,038	113,565	21.6
Miscellaneous	8	1,170	0	0.0
Low-flow faucet aerators	6	1,586	71,729	7.5
Low-flow showerheads	9	987	254,742	26.5
Pipe wrap insulation	6	1,755	7,661	0.9
Total	**16**	**915,063**	**6,930,411**	**959.4**

Table 92 shows the incentives paid in PY10 by measure description.

Table 92. Multifamily Solutions—PY10 Paid Incentives by Measure Description

Measure description	Participants	Projects	Incentive amount ($)
Advanced Power Strips	9	240	13,750.00
Air Sealing	10	929	200,789.10
Duct Sealing	9	980	341,819.25
Smart Thermostats	6	57	10,325.00
Tune-Ups	10	1,257	136,400.00
Lighting	7	752	32,915.00
Miscellaneous	8	1,168	37,762.75
Low-Flow Faucet Aerators	6	821	9,927.00
Low-Flow Showerheads	9	757	15,095.00
Pipe Wrap Insulation	6	570	3,510.00
Total	**16**	**3,158**	**802,293.10**

8.3.2.1 Tracking System Data Review

The EM&V team also conducted a review of the columns within the tracking system to identify inconsistencies within the data. Overall, the tracking system review found the following:

- Some projects were not shown with a status marked *complete*. These projects were discussed with the implementer, and it was determined that these projects were in the process of getting paid using PY10 funds.
- The *premise type* column was missing some home-type designations. Also, home types such as *house* and *commercial* were all housing types listed in the tracking system that didn't appear to be used by the intended customer for the program. Some of these projects potentially would have been better applied to a different program. Provide additional QA/QC to confirm the housing types.

- A couple of model numbers were missing for *advanced power strip*, *smart thermostat*, *lighting*, *low-flow faucet aerator*, and *low-flow showerhead* measures. If equipment is installed, the model number of the installed equipment should be included in the tracking system.
- A couple of projects are marked as *commercial/industrial* under the *portfolio sector* column.

8.3.2.2 Tracking System Savings Review

The EM&V team calculated savings for the program based on the methodology provided by the implementer. Almost all of the measures followed the Arkansas TRM 7.0 except for *level 1 tune-ups*, which followed the savings methodology for the Illinois TRM v5.

Overall, most of the measures were calculated with the correct methodology. The following are the adjustments made by measure description:

- **Advanced power strips.** There were no adjustments made.
- **Air infiltration.** The kilowatt savings difference was due to rounding.
- **Duct sealing.** The kilowatt savings were different between the reported and evaluated values for an unknown reason. The savings were calculated following the A/C Solutions methodology.
- **Smart thermostats.** The savings were adjusted to match the floor area and kilowatt-hour factor assumptions within the A/C Solutions calculator.
- **Tune-ups.** *Level 2 tune-ups* were calculated with both the Arkansas TRM calculation methodology and the Illinois TRM calculation methodology, adding them together. Also, kilowatt savings for the *level 2 tune-ups* had the CF misplaced, as it was multiplying the inverse of the efficient EER rather than the difference between the baseline EER and the efficient EER. The EM&V team and implementer have already discussed these two findings, and they have been corrected for PY11. Also, there were *level 1 tune-ups* which calculated savings using the new calculation methodology, and the demand savings based on the new methodology were being calculated incorrectly. The evaluation team believes the savings were divided by the EER twice.
- **Lighting.** One project shows the home with an *electric resistance* heating type but was calculated using *gas* heating assumptions. Also, six projects had an *unknown* heating type but were calculated using *gas* heating assumptions. Demand savings were slightly off due to rounding.
- **Low-flow faucet aerators.** There were no savings adjustments.
- **Low-flow showerheads.** There were no savings adjustments.
- **Pipe wrap insulation.** The savings were slightly different due to rounding.

The overall realization rates for kilowatt-hours and kilowatts are 100.0 percent and 103.0 percent, respectively. Table 93 summarizes the evaluated savings by measure description.

Table 93. Multifamily Solutions—PY10 Evaluated Savings Results by Measure Description

Measure description	Ex-ante kWh savings	Ex-post kWh savings	kWh realization rate	Ex-ante kW savings	Ex-post kW savings	kW realization rate
Advanced power strips	69,236	69,236	100.0%	8.3	8.3	100.0%
Air sealing	1,175,557	1,175,557	100.0%	66.9	95.7	143.0%
Duct sealing	4,610,436	4,611,598	100.0%	677.4	721.0	106.4%
Smart thermostats	45,730	90,639	198.2%	0.0	0.0	N/A
Tune-ups	581,755	536,545	92.2%	150.4	107.0	71.2%
Lighting	113,565	113,449	99.9%	21.6	21.5	99.7%
Miscellaneous	0	0	N/A	0.0	0.0	N/A
Low-flow faucet aerators	71,729	71,715	100.0%	7.5	7.5	100.0%
Low-flow showerheads	254,742	254,729	100.0%	26.5	26.5	100.0%
Pipe wrap insulation	7,661	7,640	99.7%	0.9	0.9	99.4%
Total	**6,930,411**	**6,931,109**	**100.0%**	**959.4**	**988.4**	**103.0%**

8.3.3 Technical Assistance

The implementer requested a review of the updated savings methodology for PY11. The EM&V review checked the updated *HVAC* measures to ensure that the claimed savings aligned with industry best practices. The EM&V team recommended a new efficiency loss (EL) value of 9.81 percent for the PY11 *level 2 tune-up* measure. The recommended EL value was determined by taking a weighted average based on the refrigerant charge adjustments and type of valve within the system, which were values collected by the implementer for each project. The EM&V team also recommended updating the EFLH values for each climate zone, which will be modeled during PY11.

8.4 DETAILED PROCESS EVALUATION RESULTS

As part of the PY10 evaluation, the EM&V team completed four web surveys with program participants. The participant survey collected process information to inform program improvements and assess program influence on decision-making.

8.4.1 Program Marketing

Participants were asked how they learned about the program; *emails from ELL*, *a contractor*, the *ELL website*, and a *program representative* were among the information sources noted. Participants who purchased measures were asked where they received information on what to buy. Two of the four participants reported, only noting *ELL* as the source of information.

In addition to how they learned about the program, the survey asked respondents how familiar they were with the benefits of installing energy efficiency improvements like those offered in the program using a scale of *extremely familiar, very familiar, somewhat familiar,* and *not familiar*. Three respondents reported, with one saying they were *very familiar*, another saying they were *somewhat familiar*, and the last saying they were *not familiar*. Participants were also asked how interested they were in making additional improvements to their homes; the responses are summarized in Table 94.

Table 94. Multifamily Solutions—Interest in Making Additional Improvements to Your Home

Interest in additional improvements to your home that would…	Extremely interested	Very interested	Somewhat interested	Not at all interested	Total
Increase its energy efficiency (n=4)	0.0%	25.0%	50.0%	25.0%	**100%**
Improve your comfort (n=4)	0.0%	75.0%	0.0%	25.0%	**100%**
Improve your health and safety (n=4)	0.0%	75.0%	0.0%	25.0%	**100%**

Source: Participant Survey Questions Q33A, Q33B, and Q33C

Participants were also asked a series of questions about their use of the ELL website. Three of the four said they *visited ELL's website for information on their programs or other ways to save energy.* On a scale of *very easy, easy, somewhat difficult,* or *very difficult*; of those, all three said it was *easy* or *very easy* to find the information they were looking for.

8.4.2 Decision-Making

Only one respondent said they *had plans before the program* to purchase the measure they got through the program. They noted the *contractor's or retailer's recommendation* as the reason they selected the type of measure that they did. They did not provide where they purchased the measure, but they did note *the measure was part of a new installation project*.

Participants were asked their reasons for participating in the program; respondents were able to provide multiple reasons for participating. Three of four participants said a reason they participated was *to save money on energy bills*; two participants also mentioned *improving the comfort of their home*, *conserving energy*, and *improving the value of the residence* as reasons for participating. The respondents who mentioned multiple reasons were then asked what their main reason was; one noted *conserving energy*, and another said their main reason for participating was *to get free or discounted equipment*. Table 95 summarizes the responses.

Table 95. Multifamily Homes—Reasons for Participating in the Program

Reason for participating in the program	Count	Percentage
Save money on energy bills	3	75.0%
Improve the comfort of my home	2	50.0%
Conserve energy and/or protect the environment	2	50.0%
Improve the value of the residence	2	50.0%
Become as energy efficient as my friends or neighbors	1	25.0%
Get the free or discounted equipment or service	1	25.0%
Recommendation from ELL	1	25.0%

Source: Participant Survey Questions Q30
Responses can include multiple selections, so percentages may sum to over 100 percent.

8.4.3 Participant Experience

Two of the three respondents who could recall said they first got in touch with the program staff because *they reached out to the staff first*. All respondents were asked how they found the program staff's contact information; two of the four respondents reported *receiving contact information from the ELL program website*. The *home auditor that did the assessment* and an *ELL representative* were also mentioned as sources of contact information.

All participants were then asked if the program staff discussed the energy savings participants would receive through the program; all four respondents said *yes*. Then, all participants were asked if they agreed with a series of statements using a scale of *strongly agree, somewhat agree, somewhat disagree,* or *strongly disagree*; the responses are summarized in Table 96. At least three-quarters of respondents *strongly* or *somewhat agreed* with the three statements on the program.

Table 96. Multifamily Solutions—Agreement with Statements

Statement	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Total
The staff was courteous and professional (n=4)	75.0%	25.0%	0.0%	0.0%	**100%**
The work was scheduled in a reasonable amount of time (n=4)	25.0%	75.0%	0.0%	0.0%	**100%**
The time it took to complete the work was reasonable (n=4)	25.0%	50.0%	0.0%	25.0%	**100%**

Source: Participant Survey Questions Q17A, Q17B, and Q17C

One of the four Multifamily Solutions participants received *AC tune-up* measures. They reported *not having regular tune-ups* prior to the program, and that *their last tune-up was 3−5 years ago*. They noted that the *program staff said the difference between the Entergy Solutions tune-up and a standard tune-up was it verified airflow and improved air and duct sealing*.

Just two of the four participants in the Multifamily Solutions program received *direct install* measures: *showerheads*, *smart power strips*, and *smart thermostats*. One participant noted receiving 21 *smart thermostats*.

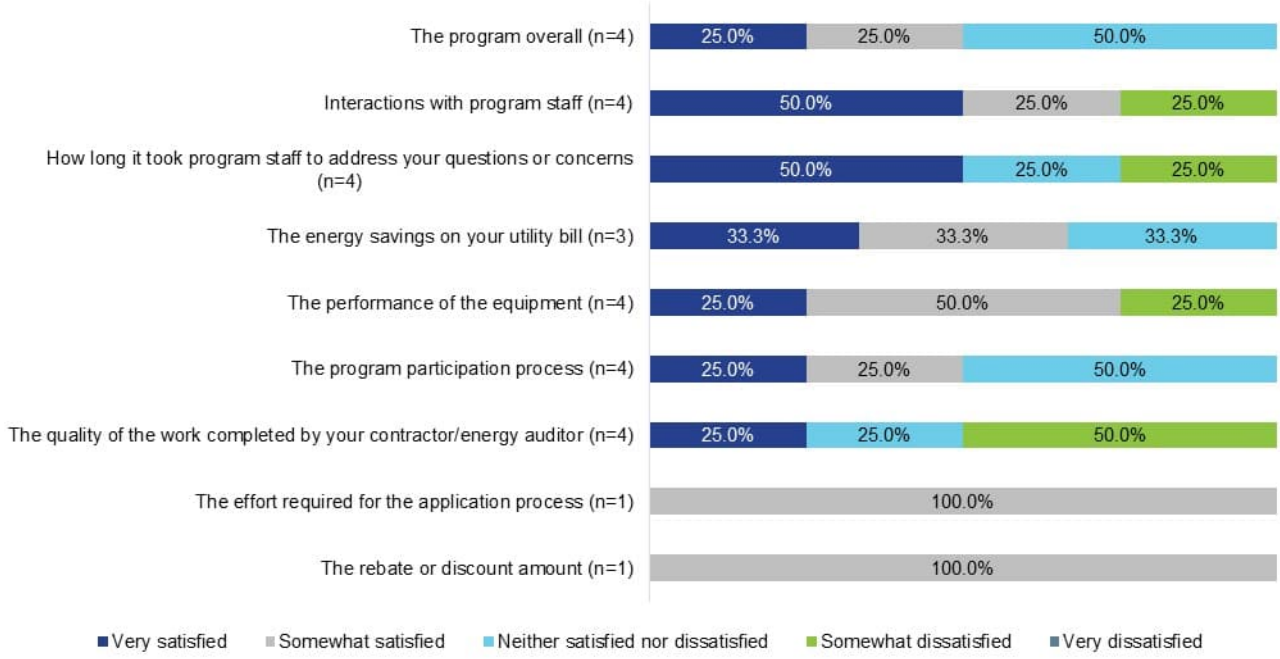
All participants were asked if they contacted Entergy Solutions' program staff with questions; only one of the four respondents in the Multifamily Solutions program said *they called at some point during the program*.

8.4.4 Participant Satisfaction

Overall, respondents rated their satisfaction with the program moderately high. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*, two of four respondents reported *very* or *somewhat satisfied* and the remaining two said they were *neither satisfied nor dissatisfied*. No respondents said they were *dissatisfied* with the Entergy Solutions program overall.

Using the same scale, at least one-half of respondents (between 50 percent and 100 percent) said they were *very satisfied* or *somewhat satisfied* with each aspect of the program, except for *the quality of work completed by your contractor* (25 percent). The highest satisfaction came from *the time it took program staff to address questions* and *interactions with program staff*, with half reporting being *very satisfied*.

Figure 42. Multifamily Homes—Participant Satisfaction with Program Aspects



Source: Participant Survey Question Q37A – Q37J

Three respondents recommended *improving the quality of equipment and cited issues*, and another two recommended *better communications with implementers and installation staff*.

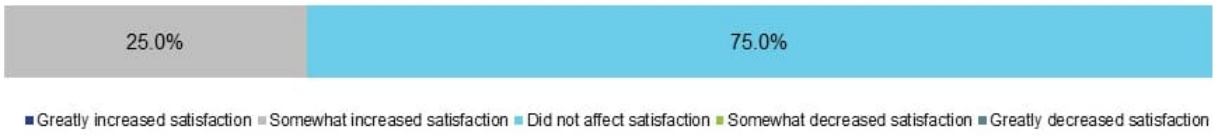
Figure 43 shows Multifamily Solutions program participants' satisfaction with ELL as their electric service provider on a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*. Two of the four respondents said they were *very satisfied* with ELL, and the other two reported being *somewhat satisfied*.

Figure 43. Multifamily Homes—Participant Satisfaction with ELL as Service Provider (n=4)

Source: Participant Survey Questions Q39

Participants were also asked if their participation in this program affected their satisfaction with ELL; Figure 44 summarizes the responses. On a scale of *greatly increased satisfaction, somewhat increased satisfaction, did not affect satisfaction, somewhat decreased satisfaction,* or *greatly decreased satisfaction*, one of the four respondents said it *somewhat increased* their satisfaction with ELL, and the other three said the program *had no effect on their satisfaction*.

Figure 44. Multifamily Homes—Effect of Program Participation on Satisfaction with ELL (n=4)



Source: Participant Survey Questions Q40

Participants in the Multifamily Solutions program were asked how likely they are to recommend the Entergy Solutions program to someone on a scale of 1−10, with 1 being *not at all likely* and 10 being *extremely likely*. The average response was 6.8 from the four respondents; two gave a rating of 5, one rated a 7, and one rated a 10. Participants then gave recommendations for the program going forward. The one recommendation was *closer supervision from ELL over the contractor* and sited *issues with the contractor not showing up on time*.

8.4.5 Participant Characteristics

Participants were asked a series of demographic and household characteristic questions. Three of the four respondents from the Multifamily Solutions program reported living in an *apartment* or *condominium*, and the other one reported living in a *duplex* or *townhome*. All respondents reported that their home is *less than 1,000 square feet*.

Table 97. Multifamily Homes—Home Characteristics

Characteristic	Count	Percentage
Type of home		
Apartment or condominium	3	75.0%
Duplex or townhome	1	25.0%
Respondents (n)	**4**	**100.0%**
Homeownership		
Rent	2	50.0%
Own but rent to someone else	2	50.0%
Respondents (n)	**4**	**100.0%**
Year home built		
1980 or later	0	0.0%
1970 to 1979	2	66.7%

Characteristic	Count	Percentage
1960 to 1969	0	0.0%
Before 1960s	1	33.3%
Respondents (n)	**3**	**100%**
Size of home		
Less than 1,000 square feet	3	100.0%
1,000 to 1,999 square feet	0	0.0%
2,000 to 2,999 square feet	0	0.0%
3,000 to 3,999 square feet	0	0.0%
4,000 or more square feet	0	0.0%
Respondents (n)	**3**	**100%**

Source: Participant Survey Questions Q43, Q44, Q45, Q46

Respondents were also asked a series of questions on their heating and cooling systems. All four reported using *natural gas* to heat their home, and all four also reported using *central AC* as their air conditioning.

Table 98. Multifamily Homes—Air Conditioner and Heating Characteristics

Characteristic	Count	Percentage
Fuel primarily used to heat the home		
Electricity	4	100.0%
Respondents (n)	**4**	**100.0%**
Main heating equipment used in home		
Central forced air furnace	1	50.0%
Built-in baseboard heater	1	50.0%
Respondents (n)	**2**	**100.0%**
Type of air conditioner used in home		
Central AC	4	100.0%
Respondents (n)	**4**	**100.0%**
Type of water heater used in home		
Electric resistance	2	100.0%
Respondents (n)	**2**	**100.0%**

Source: Participant Survey Questions Q47, Q48, Q49, Q50

Lastly, three respondents gave the number of people in their household; *three*, *five*, and *eight or more* were the three responses. Table 99 summarizes the total income of respondents; only two respondents provided their household incomes.

Table 99. Multifamily Homes—Household Income

Household income	Count	Percentage
Less than $15,000	1	50.0%
$15,000 to $25,000	0	0.0%
$25,000 to $35,000	0	0.0%
$35,000 to $50,000	1	50.0%
$50,000 or more	0	0.0%
Respondents (n)	**2**	**100.0%**

Source: Participant Survey Questions Q53

8.5 OVERALL SAVINGS ESTIMATES

The EM&V team used the tracking system reviews to calculate the program-level realization rates, which indicate that the Multifamily Solutions program achieved similar energy and demand savings. Adjustments based on the tracking system review were incorporated into realization rates, resulting in 100.0 percent for energy savings and 103.0 percent for demand savings.

Table 100. Multifamily Solutions—Final Evaluated Energy Savings and Realization Rates by Measure Category[10]

Measure	Reported savings		Evaluated savings		Realization rate	
	kWh	kW	kWh	kW	kWh	kW
Appliances	69,236	8.3	69,236	8.3	100.0%	100.0%
Building envelope	1,175,557	66.9	1,175,557	95.7	100.0%	143.0%
HVAC	5,237,921	827.8	5,238,782	828.0	100.0%	100.0%
Lighting	113,565	21.6	113,449	21.5	99.9%	99.5%
Miscellaneous	0	0.0	0	0.0	N/A	N/A
Water heating	334,132	34.9	334,084	34.9	100.0%	100.0%
Total	**6,930,411**	**959.4**	**6,931,109**	**988.4**	**100.0%**	**103.0%**

[10] No values are represented with a – in the table.

9.0 RETAIL LIGHTING AND APPLIANCES (WITH ONLINE MARKETPLACE)

Entergy Louisiana, LLC's (ELL) Retail Lighting and Appliances program is a residential retail program that increases awareness and sales of efficient lighting and appliances to customers. The program promotes the purchase of energy-efficient *room air conditioners*, *pool pumps*, *refrigerators*, and *heat pump water heaters*, and offers a variety of discounted ENERGY STAR®-qualified products. Beginning in program year (PY) 9 (PY9), participating stores included Dollar Tree, Home Depot, Lowe's, and Sam's Club. Customers can also participate in this program by submitting a mail-in rebate or shopping on the Entergy Solutions Online Marketplace (OLM). Rebates on ENERGY STAR-qualified products are available through mail-in or online rebate forms located on the Entergy Solutions website.

The OLM is an online store that can be accessed through the Entergy Solutions Louisiana website and includes products such as *smart thermostats*, *water-saving aerators*, *low-flow shower heads*, *advanced power strips*, and *pipe insulation*.

Table 101 documents the key evaluation activities and outlines the impact and process methodologies.

Table 101. Retail Lighting and Appliances Program Evaluation Plan

Task	Task summary
Impact evaluation approach	Our impact evaluation approach included: • **TRM tracking data verification and review.** We thoroughly reviewed tracking system data for savings calculation accuracy, completeness of data fields, and compliance with the technical reference manual (TRM). • **Ongoing technical assistance**. As needed, we assisted APTIM in reviewing the project and measured savings calculations. • **Cost-effectiveness testing**. Cost-effectiveness tests were performed using reported spending, verified energy savings, and verified demand reduction.
Process evaluation approach	Our process evaluation approach included: • **Program staff interviews**. In-depth interviews with implementation staff to assess program design elements. • **Materials review.** We reviewed program materials, such as application forms, marketing collateral, training protocols, and website content. • **Participant surveys.** We completed surveys with 58 program participants.

9.1 KEY FINDINGS

In PY10, the Retail Lighting and Appliances program achieved 6,374 megawatt-hours (MWh) in gross energy savings and 0.5 megawatts (MW) in gross demand savings, as shown in Table 102 and detailed in Table 103. The overall evaluated energy savings for the program were higher than the reported savings, while the evaluated demand savings were only slightly higher than the reported demand savings. The overall realization rates for the program are 148.4 percent for energy savings and 100.2 percent for demand savings. The realization rates were determined based on the tracking system review results. Table 102 summarizes the program results.

Table 102. Retail Lighting and Appliances—Reported, Evaluated, and Net Savings

Energy/demand savings	Reported savings	Evaluated savings	Realization rate	NTG ratio*	Net savings	Program contribution to portfolio savings
Energy savings (MWh)	6,374.4	9,458.1	148.4%	100.0%	9,458.1	11.9%
Demand savings (MW)	0.501	0.502	100.2%	100.0%	0.502	4.2%

Table 103. Retail Lighting and Appliances—Goals vs. Achieved

Savings	Goal	Actual	Percentage achieved
Energy savings (MWh)	7,012.3	9,458.1	134.9%

One-half of respondents (50 percent) learned about the program *through an email from Entergy Solutions*. Another 14 percent learned of it from *mailed information*, and 12 percent from the *Entergy Solutions website*. Almost one-half of respondents (47 percent) said they were *somewhat familiar* with the benefits; about one-third said they were *not at all familiar* with the benefits (33 percent), and 19 percent said they were *very* or *extremely familiar.* When asked how interested they would be in making additional improvements in their home, at least 86 percent had *some interest* in *increasing the home's energy efficiency*, *improving the comfort of the home*, and *improving health and safety in the home*.

About two-thirds (62 percent) of respondents *did not have prior plans* to purchase the equipment. Most (81 percent) said their reason for participation was to *save money on energy bills*. Just over one-half said to *get free or discounted equipment or service* (57 percent), and 37 percent said to *improve the comfort of their home* and *conserve energy and/or protect the environment*.

Overall program satisfaction was high, with 88 percent being either *very satisfied* or *somewhat satisfied*. Participants in the program were asked how likely they are to recommend ELL to someone on a scale of 1−10, where one is *not at all likely,* and 10 is *extremely likely*. The average response was 6.4 out of 14 participants.

Most respondents were owners of *single-family homes*, and most used a *central AC unit* to heat and cool their homes (83 percent and 98 percent, respectively).

9.2 RECOMMENDATIONS

The evaluation, measurement, and verification (EM&V) team identified five recommendations for APTIM and ELL's consideration through the evaluation process, presented in Table 104.

Table 104. Retail Lighting and Appliances—PY10 Recommendations and Key Findings

Type	Recommendation	Key finding
PY10 recommendations	**Recommendation 1:** Apply assumed values, such as effective full-load hours (EFLH), coincidence factors (CF), temperatures, floor area, and *thermostat* kilowatt-hour factor, consistently across measures and programs.	The EM&V team found that the assumed values for certain measures were not consistently applied. An example of this finding is that some programs applied an average temperature across weather zones for the *low-flow faucet aerators* measure while other programs for the same measure applied temperature values based on the weather zone of the residence. Refer to Appendix C for guidance for each measure.
	Recommendation 2: With the nature of the program, it is best practice to use an average savings value for *advanced power strips*, since the installation location of the equipment will be unknown.	The EM&V team found multiple instances where the savings were calculated based on the location of the *advanced power strip*. For this program, update the savings calculations so that the savings are averaged between *entertainment* and *home office* locations.
	Recommendation 3: Include critical data in the tracking system to assist in the calculations for *air purifiers*, *dehumidifiers*, *window A/Cs*, *pool pumps*, and *heat pump water heaters*.	The EM&V team was unable to calculate some of the measures from the measure descriptions to the left because there was not enough information given. Refer to Appendix C for guidance for each measure.
	Recommendation 4: Adjust the savings values for *low-flow faucet aerators*, *low-flow showerheads*, and *pipe wrap insulation* to match the TRM assumptions.	The EM&V team found that these *water heating* measures had unexpected savings differences compared to the same measures throughout the rest of the residential portfolio. The EM&V team believes the differences were likely due to the implementer including an in-service rate (ISR) in the calculation. The EM&V team recommends following the Arkansas TRM savings methodology, which currently does not provide ISRs for these measures.
	Recommendation 5: Increase quality assurance/quality control (QA/QC) processes for tracking key information.	The EM&V team found multiple instances where fields such as the *installation date*, *project status*, and *model numbers* were not properly tracked. Columns should remain consistent. When equipment is installed or provided, a model number should be included in the tracking system.

Table 105. Retail Lighting and Appliances—Status of Prior Year Recommendations

Status of prior year recommendations	
PY9 key findings	Many respondents learned about the program through *retailers* and one-half of respondents participated in the program because they *wanted to save money on their energy bills*.
	Thermostat respondents chose their thermostat model based on price and rebate availability, whereas respondents who bought their home, bought refrigerators, pool pumps and heat pump water heaters, and windows based on price.
	Respondents were generally satisfied with the Retail Lighting and Appliances program, with *equipment performance* (88.2 percent, n=82) having the highest satisfaction rating.
	Thirteen respondents were *dissatisfied* with at least one aspect of the program, citing *no decrease in electricity bill* (n=5), *faulty equipment* (n=4), *difficulties getting in touch with ELL representatives* (n=2), and *small rebate* (n=1) as their reasons for dissatisfaction.
PY9 recommendations	None.

9.3 DETAILED IMPACT EVALUATION RESULTS

The EM&V team focused efforts on delivering a tracking system review, providing technical assistance, and conducting cost-effectiveness testing. Evaluated savings were calculated based on the calculation methodologies provided by the implementer, which were based on the methodologies within the Arkansas TRM 7.0. The verified savings were determined during the tracking system review, since impact activities such as desk reviews and on-site visits were not included in the project scope for PY10.

9.3.1 Participant Characterization

Several different measures are provided to participants through the program. Within the tracking system, qualifying products are assigned to unique measure names. The mapping of these measure names to measure categories and measure descriptions is provided in Table 106. The measure descriptions in the table below will be used in place of the measure names in the subsequent tables.

Table 106. Retail Lighting and Appliances—Measure Categorization by Tracked Measure Name

Measure name	Measure category	Measure description
Advanced Power Strip (Tier 2 Entertainment)-TS1810-SC-Marketplace-ELL	Plug load	Advanced power strip
AdvancedPowerStrip(Tier1)-V4-Marketplace-ELL	Plug load	Advanced power strip
Air Purifier Replacement Filter-Marketplace-ELL	Plug load	Air purifier
Air Purifier Up to 840 sqft-Z-MA-40-100-Marketplace-ELL	Plug load	Air purifier
Alen-ALEN BREATHESMART 45I PURIFIER-5214646-ELL Retail24	Plug load	Air purifier
Alen-ALEN BREATHESMART FLEX PURIFIER-5214647-ELL Retail24	Plug load	Air purifier

Measure name	Measure category	Measure description
AM Conservation-LED - Decorative-Marketplace-ELL	Lighting	Lighting
AM Conservation-LED - General Purpose-Marketplace-ELL	Lighting	Lighting
AM Conservation-LED - Reflector-Marketplace-ELL	Lighting	Lighting
Amazon Smart Thermostat-65-Marketplace-ELL	HVAC	Smart thermostat
Amazon Smart Thermostat-85-Marketplace-ELL	HVAC	Smart thermostat
Amazon Smart Thermostat-S6ED3R-89.98-Marketplace-ELL	HVAC	Smart thermostat
Bathroom Aerators (1.0 gpm)-V3-Marketplace-ELL	Water heating	Faucet aerator
Earth 3-function Fixed Showerhead Chrome (1.5 gpm)-N2915CH-10-Marketplace-ELL	Water	Showerhead
Ecobee3-Lite Smart Thermostat 100-V2-Marketplace-ELL	HVAC	Smart thermostat
Ecobee3-LiteSmartThermostat50-V2-Marketplace-ELL	HVAC	Smart thermostat
EcobeeSmartSensors-V2-Marketplace-ELL	HVAC	Smart thermostat
EcobeeSmartThermostatEnhanced-100-Marketplace-ELL	HVAC	Smart thermostat
EcobeeSmartThermostatEnhanced-50-Marketplace-ELL	HVAC	Smart thermostat
EcobeeSmartThermostatPremium-100-Marketplace-ELL	HVAC	Smart thermostat
EcobeeSmartThermostatPremium-50-Marketplace-ELL	HVAC	Smart thermostat
Emerson Sensi-ST55U-75-Marketplace-ELL	HVAC	Smart thermostat
Emerson Sensi-ST55U-80-Marketplace-ELL	HVAC	Smart thermostat
Emerson Sensi-V4-Marketplace-ELL	HVAC	Smart thermostat
Emerson Wall Plate for Sensi Wi-Fi-Marketplace-ELL	HVAC	Smart thermostat
EmersonSensi-V5-Marketplace-ELL	HVAC	Smart thermostat
ENERGY STAR Air Purifier-ELL Mail-in	Plug load	Air purifier
ENERGY STAR Dehumidifier-ELL Mail-in	Plug load	Dehumidifier
ENERGY STAR Heat Pump Water Heater-ELL-Appliances	Water heating	HPWH
ENERGY STAR Refrigerator-ELL-Appliances	Appliances	Refrigerator
ENERGY STAR VFD Pool Pump-Retail-Appliances	Pool	Pool pump
ENERGY STAR Window AC-ELL-Appliances-Retail	HVAC	Window AC
Free Shipping-Marketplace-ELL	HVAC	Miscellaneous
GE - Home Depot-GE 22-PINT DEHUMIDIFIER IN WHITE-1005959440-ELL Retail24	Plug load	Dehumidifier
GE - Home Depot-GE 35-PINT DEHUMIDIFIER IN WHITE-1005959455-ELL Retail24	Plug load	Dehumidifier
GE - Home Depot-GE 50-PINT DEHUMIDIFIER W/ PUMP-1008340471-ELL Retail24	Plug load	Dehumidifier

Measure name	Measure category	Measure description
GE - Home Depot-GE 50-PINT DEHUMIDIFIER-1008340459-ELL Retail24	Plug load	Dehumidifier
GE - Lowes-GE 8000 BTU WAC INVR PWDV08WWF-5632077-ELL Retail24	Plug load	Window AC
HandHeld Showerheads (1.5 gpm)-Marketplace-ELL	Water heating	Showerhead
Healthguard Low-Flow Showerhead (1.5 gpm, HH)-Marketplace-ELL	Water heating	Faucet aerator
Hisense-1000-sq ft Window AC (230-Volt 18000-BTU)-5198837-ELL Retail24	Plug load	Window AC
Hisense-1200-sq ft Window AC (230-Volt 22000-BTU)-5198838-ELL Retail24	Plug load	Window AC
Hisense-HISENSE 22PT DEHUM-1524840-ELL Retail24	Plug load	Dehumidifier
Hisense-HISENSE 25PT DEHUM-5445898-ELL Retail24	Plug load	Dehumidifier
Hisense-HISENSE 35PT DEHUM-4354090-ELL Retail24	Plug load	Dehumidifier
Hisense-HISENSE 35PT DEHUM-5445895-ELL Retail24	Plug load	Dehumidifier
Hisense-HISENSE 50PT DEHUM PMP-5445900-ELL Retail24	Plug load	Dehumidifier
Hisense-HISENSE 50PT DEHUM w/ Pump-2854345-ELL Retail24	Plug load	Dehumidifier
Hisense-HISENSE 50PT DEHUM-2854344-ELL Retail24	Plug load	Dehumidifier
Hisense-HISENSE 50PT DEHUM-5445896-ELL Retail24	Plug load	Dehumidifier
Honeywell C-Wire Adapter-THP9045A1098-Marketplace-ELL	HVAC	Smart thermostat
Honeywell T5 Smart Thermostat -RTH8800WF2022/W-75-Marketplace-ELL	HVAC	Smart thermostat
Honeywell T5 Smart Thermostat -RTH8800WF2022/W-99.98-Marketplace-ELL	HVAC	Smart thermostat
Honeywell T5 Smart Thermostat -RTH8800WF2022/W-Marketplace-ELL	HVAC	Smart thermostat
Honeywell T9 Smart Thermostat w/ Sensor-RCHT9610WFSW2003/W-100-Marketplace-ELL	HVAC	Smart thermostat
Honeywell Wi-Fi 7-Day Programmable Thermostat-RTH6580WF1001/W-Marketplace-ELL	HVAC	Smart thermostat
Honeywell Wi-Fi 7-Day Programmable T-stat-RTH6580WF1001/W-99.98-Marketplace-ELL	HVAC	Smart thermostat
Honeywell Wi-Fi Color Touchscreen Thermostat-RTH9585WF1004/W -Marketplace-ELL	HVAC	Smart thermostat
Honeywell Wi-Fi Color Touchscreen Thermostat-RTH9585WF1004/W-100-Marketplace-ELL	HVAC	Smart thermostat

Measure name	Measure category	Measure description
Honeywell-HONEYWELL PURIFIER 530SQFT TRUE HEPA-1005099363-ELL Retail24	Plug load	Air purifier
Kitchen Aerators (1.5 gpm)-V3-Marketplace-ELL	Water heating	Faucet aerator
Levoit - Home Depot-LEVOIT PURIFIER PLASMA PRO 403 SQ FT-1006800662-ELL Retail24	Plug load	Air purifier
Levoit - Home Depot-LEVOIT PURIFIER VORTEX 219 SQ FT-1006666930-ELL Retail24	Plug load	Air purifier
Levoit - Home Depot-LEVOIT PURIFIER VORTEX AIR 178 SQ FT-1009738013-ELL Retail24	Plug load	Air purifier
Levoit - Lowe's-Core 200S Smart Air Purifier-5412694-ELL Retail24	Plug load	Air purifier
Levoit - Lowe's-PlasmaPro 300 Air Purifier-5412695-ELL Retail24	Plug load	Air purifier
LG-14K BTU DUAL INVERTER WINDOW AC WIFI-1006876064-ELL Retail24	Plug load	Window AC
LG-24K BTU DUAL INVERTER WINDOW AC WIFI-1006800232-ELL Retail24	Plug load	Window AC
LG-24K BTU DUAL INVERTER WINDOW AC WIFI-1006800232-V2-ELL Retail24	Plug load	Window AC
Low-Flow Showerheads (1.5 gpm)-V2-Marketplace-ELL	Water heating	Showerhead
Midea-12K BTU U-SHAPED WINDOW AC-1010451379-ELL Retail24	Plug load	Window AC
Midea-8K BTU U-SHAPED WINDOW AC-1010451315-ELL Retail24	Plug load	Window AC
Niagara Earth Luxe 3 Spray Showerhead-N3915MB-Marketplace-ELL	Water heating	Showerhead
Niagara Rainfall Spa Showerhead-N9517MB-Marketplace-ELL	Water	Showerhead
Niagara Vara II Spray Handheld Shower Wand-N9715MB-HH-Marketplace-ELL	Water	Showerhead
Pipe Insulation-1/2 inch (3ft piece)-V2-Marketplace-ELL	Water heating	Pipe wrap insulation
Sensi Lite-ST25U-65-Marketplace-ELL	HVAC	Smart thermostat
Sensi Lite-ST25U-89.98-Marketplace-ELL	HVAC	Smart thermostat
Sensi Lite-ST25U-Marketplace-ELL	HVAC	Smart thermostat
Sensi Smart Thermostat C-Wire Kit - SA11-Marketplace-ELL	HVAC	Smart thermostat
Sensi Touch 2 Wallplate - Black-SA6B-Marketplace-ELL	HVAC	Smart thermostat
Sensi Touch 2 Wallplate - White-SA6W-Marketplace-ELL	HVAC	Smart thermostat
Sensi Touch 2-ST76U-100-Marketplace-ELL	HVAC	Smart thermostat
Sensi Touch 2-ST76U-Marketplace-ELL	HVAC	Smart thermostat

Measure name	Measure category	Measure description
Shark - Lowe's-SHARK HP102 PURIFER-5209121-ELL Retail24	Plug load	Air purifier
Shark-SHARK PURIFIER HP102-1007899723-ELL Retail24	Plug load	Air purifier
Shark-SHARK PURIFIER HP202-1007912692-ELL Retail24	Plug load	Air purifier
Simply Conserve Advanced Power Strip (Tier 1)-Marketplace-ELL	Plug load	Advanced power strip
SMART Thermostat-ELL-Retail - Appliances	HVAC	Smart thermostat
Tabletop Air Purifier Up to 180 sqft-AM-AP1115-WH-50-Marketplace-ELL	Plug load	Air purifier
Tabletop Air Purifier Up to 180 sqft-AM-AP1115-WH-Marketplace-ELL	Plug load	Air purifier
Tabletop Air Purifier Up to 500 sqft-Z-MA-25-50-Marketplace-ELL	Plug load	Air purifier
Toshiba-10K BTU SMART WIFI WINDOW AC-1010382383-ELL Retail24	Plug load	Window AC
Toshiba-12K BTU SMART WIFI WINDOW AC-1010382390-ELL Retail24	Plug load	Window AC
Toshiba-14K BTU SMART WIFI WINDOW AC-1010382404-ELL Retail24	Plug load	Window AC
Toshiba-8K BTU SMART WIFI WINDOW AC-1010382381-ELL Retail24	Plug load	Window AC
Toshiba-TOSHIBA 50-PINT DEHUMIDIFIER-1010055512-ELL Retail24	Plug load	Dehumidifier
Winix-WINIX PURIFIER A230 BLACK-1009791315-ELL Retail24	Plug load	Air purifier
Winix-WINIX PURIFIER D360 TRUE HEPA-1006107235-ELL Retail24	Plug load	Air purifier
Winix-WINIX PURIFIER D480 TRUE HEPA-1006104381-ELL Retail24	Plug load	Air purifier

9.3.2 Tracking System Review

The EM&V team compiled the demand and energy savings results by measure and found that about 80 percent of the energy savings were saved with *smart thermostats*, while 72 percent of the demand savings were derived from *window AC units*. The reported savings are summarized in Table 107.

Table 107. Retail Lighting and Appliances—PY10 Reported Savings by Measure Description

Measure description	Participants	Quantity	Gross kWh	Gross kW
Advanced power strips	203	314	41,120	7.7
Air purifiers	1,326	1,349	441,420	50.5
Dehumidifiers	1,016	1,016	184,593	42.1

Measure description	Participants	Quantity	Gross kWh	Gross kW
Refrigerators	550	550	36,119	0.0
Smart thermostats	6,260	14,197	5,100,658	0.0
Window ACs	1,255	1,255	357,210	359.7
Lighting	106	288	0	0.0
Pool pumps	62	62	179,489	35.7
Hp water heaters	11	11	22,212	1.9
Low-flow faucet aerators	62	151	2,461	0.1
Low-flow showerheads	75	130	8,052	0.8
Pipe wrap insulation	33	81	1,069	2.9
Total	**10,496**	**19,404**	**6,374,403**	**501.4**

Table 108 shows the incentives paid in PY10 by measure description. Participant and project counts from measures purchased from the online marketplace were determined based the account numbers of the customer, while measures purchased at participating retail locations were determined based on the quantity of products purchased. Advanced power strips, low-flow faucet aerators, lighting, pipe wrap insulation, and low-flow showerheads were exclusively available on the online marketplace, while dehumidifiers, heat pump water heaters, pool pumps, refrigerators, and window A/Cs were available at the retail locations. The air purifiers and smart thermostats were available both through the online marketplace and retail locations.

Table 108. Retail Lighting and Appliances—PY10 Paid Incentives by Measure Description

Measure description	Participants	Projects	Incentive amount ($)
Advanced power strips	203	205	6,524.00
Air purifiers	1,326	1,328	34,575.00
Dehumidifiers	1,016	1,016	25,400.00
Refrigerators	550	550	27,500.00
Smart thermostats	6,260	6,592	915,249.04
Window ACs	1,255	1,255	62,750.00
Lighting	106	109	0.00
Pool pumps	62	62	21,800.00
Hp water heaters	11	11	4,400.00
Low-flow faucet aerators	62	62	205.00
Low-flow showerheads	75	76	1,265.00
Pipe wrap insulation	33	33	324.00
Total	**10,496**	**10,867**	**1,099,992.04**

9.3.2.1 Tracking System Data Review

The EM&V team also conducted a review of the columns within the tracking system to identify inconsistencies within the data. Overall, the tracking system review found the following:

- Some projects had installation dates that bled into 2025. After reviewing this with the implementer, it was determined that there were some tracking errors, and these projects were part of the PY10 results. Improve the tracking process of the installation dates.
- Some projects were not shown with a status marked *complete*. These projects were discussed with the implementer, and it was determined that these projects were in the process of getting paid using PY10 funds.
- Model numbers should be provided for all retail products.

9.3.2.2 Tracking System Savings Review

The EM&V team calculated savings for the program based on the methodology provided by the implementer. All of the measures followed the AR TRM 7.0 methodology.

Overall, most of the measures were calculated with the correct methodology. The following are the adjustments made by measure description:

- **Advanced power strips.** Energy savings were off when the *advanced power strip* location was not provided. There was a difference in demand savings for all projects for unknown reasons. Savings were adjusted to match the Arkansas TRM methodology. If the installation location was *unknown*, an average savings value was used.
- **Air purifiers.** Four projects with the lowest clean air delivery rate (CADR) tier were calculated by the evaluation team, since the CADR could not be confirmed from the tracking system. This adjustment resulted in a decrease in energy and demand savings.
- **Dehumidifiers.** The savings could not be confirmed because the tracking system did not provide enough information. As a result, the savings were not adjusted.
- **Refrigerators.** Savings were adjusted based on ENERGY STAR data gathered from the model numbers in the tracking system.
- **Smart thermostats.** The thermostat floor area and kilowatt-hour factors were updated using the values from the A/C Solutions calculator.
- **Window A/Cs.** The savings could not be confirmed because the tracking system did not provide enough information. As a result, the savings were not adjusted.
- **Pool pumps.** The savings could not be confirmed because the tracking system did not provide enough information. As a result, the savings were not adjusted.
- **Heat pump water heaters.** The savings could not be confirmed because the tracking system did not provide enough information. As a result, the savings were not adjusted.
- **Low-flow faucet aerators.** The evaluation team was unable to confirm the reason for the savings discrepancy. The savings were adjusted to match the Arkansas TRM assumptions. Savings were calculated using the lowest volume of water saved and average temperatures across the four weather zones.

- **Low-flow showerheads.** The evaluation team was unable to confirm the reason for the savings discrepancy. The savings were adjusted to match the Arkansas TRM assumptions. Savings were calculated using the lowest volume of water saved and average temperatures across the four weather zones.
- **Pipe wrap insulation.** The reported demand savings were too high. Demand savings were adjusted to match the Arkansas TRM assumptions using the kilowatt/kilowatt-hour ratio.

The overall realization rates for kilowatt-hours and kilowatts are 100.0 percent and 103.0 percent, respectively. Table 109 summarizes the evaluated savings by measure description.

Table 109. Retail Lighting and Appliances—PY10 Evaluated Savings Results by Measure Description

Measure description	Ex-ante kWh savings	Ex-post kWh savings	kWh realization rate	Ex-ante kW savings	Ex-post kW savings	kW realization rate
Advanced power strips	41,120	61,804	150.3%	7.7	8.4	109.6%
Air purifiers	441,420	441,420	100.0%	50.5	50.5	100.0%
Dehumidifiers	184,593	184,593	100.0%	42.1	42.1	100.0%
Refrigerators	36,119	32,295	89.4%	0.0	0.0	N/A
Smart thermostats	5,100,658	8,139,889	159.6%	0.0	0.0	N/A
Window ACs	357,210	357,210	100.0%	359.7	359.7	100.0%
Lighting	0	0	N/A	0.0	0.0	N/A
Pool pumps	179,489	179,489	100.0%	35.7	35.7	100.0%
Hp water heaters	22,212	22,212	100.0%	1.9	1.9	100.0%
Low-flow faucet aerators	2,461	4,572	185.8%	0.1	0.5	341.6%
Low-flow showerheads	8,052	33,535	416.5%	0.8	3.5	440.2%
Pipe wrap insulation	1,069	1,069	100.0%	2.9	0.1	4.2%
Total	**6,374,403**	**9,458,087**	**148.4%**	**501.4**	**502.4**	**100.2%**

9.3.3 Technical Assistance

The implementer requested assistance with the baseline for *lighting* measures, asking the evaluator to confirm the appropriate baseline for income-qualified retail *lighting* savings based on the Arkansas TRM. The evaluation team confirmed that the EISA Tier 1 baseline may be used through the end of 2024, but the baseline needs to be updated to EISA Tier 2 for PY11.

9.4 DETAILED PROCESS EVALUATION RESULTS

As part of the PY10 evaluation, the EM&V team completed 58 web surveys with program participants. The participant survey collected process information to inform program improvements and assess program influence on decision-making.

9.4.1 Program Marketing

Participants were asked how they learned about the program; one-half of the respondents reported learning about the program *from an email from Entergy Solutions*. All responses are summarized in Table 110. Participants who purchased measures were asked where they received information on what to buy. Only 27 of the 58 participants reported, with 19 noting the *internet* as the most common source. *ELL* (eight respondents), *word-of-mouth* (four respondents), and *retailers* (four respondents) are among the less common sources of information.

Table 110. Retail Lighting and Appliances—How Participants First Learned About the Program

Reason for participating in the program	Count	Percentage
Email from Entergy Solutions	29	50.0%
Mailed information from Entergy Solutions	8	13.8%
Entergy Solutions website	7	12.1%
Social media	6	10.3%
Word-of-mouth	5	8.6%
Print advertisement	2	3.4%
Bill inserts or utility mailer	2	3.4%
Retailer	2	3.4%
Internet advertisement	2	3.4%
In-store display	2	3.4%
Radio or TV advertisement	1	1.7%
Other website	1	1.7%
Internet search	1	1.7%

Source: Participant Survey Questions Q29
Responses can include multiple selections, so percentages may sum to over 100 percent.

In addition to how they learned about the program, the survey asked respondents how familiar they were with the benefits of installing energy efficiency improvements like those offered in the program using a scale of *extremely familiar, very familiar, somewhat familiar,* and *not familiar*. Almost one-half of respondents (47 percent) said they were *somewhat familiar* with the benefits; about one-third said they were *not at all familiar* with the benefits (33 percent), and 19 percent said they were *very* or *extremely familiar*. Participants were also asked how interested they were in making additional improvements to their homes using a scale of *not at all interested, somewhat interested, very interested*, or *extremely interested*; responses are summarized in Table 111. At least 86 percent of respondents were interested in each of the three aspects.

Table 111. Retail Lighting and Appliances—Interest in Making Additional Improvements to Your Home

Interest in additional improvements to your home that would…	Extremely interested	Very interested	Somewhat interested	Not at all interested	Total
Increase its energy efficiency (n=58)	13.8%	36.2%	39.7%	10.3%	**100%**
Improve your comfort (n=58)	10.3%	29.3%	46.6%	13.8%	**100%**
Improve your health and safety (n=58)	15.5%	25.9%	44.8%	13.8%	**100%**

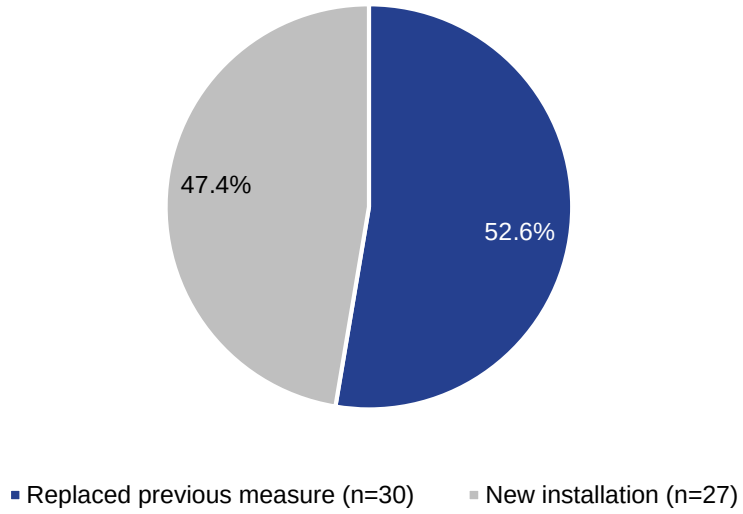
Source: Participant Survey Questions Q33A, Q33B, and Q33C

Participants were also asked a series of questions about their use of the ELL website. Forty-one percent of respondents said they visited ELL's website for *information on their programs or other ways to save energy*. Of those, 91 percent said it was *easy* to find what they were looking for on a scale of *very easy, easy, somewhat difficult,* or *very difficult*.

9.4.2 Decision-Making

Sixty-two percent of respondents said they *did not have plans before the program* to purchase the measure they got through the program. Those who did not get *direct-install* measures were asked why they selected the type of measure that they did; 59 percent reported the *recommendation from the retailer or contractor* was the reason, 55 percent of respondents said the reason was *the price,* and 44 percent reported the reason was the *rebate*. Seventy-six percent of respondents reported purchasing their equipment through the ELL OLM. The next most common method of purchase was an *online retailer* with 12 percent reporting. Figure 45 shows the breakdown of measures by new installation or replacement.

Figure 45. Retail Lighting and Appliances—Was the Measure New Installation or Replacement?



Source: Participant Survey Question Q8

Those who had their measure replace a previous measure were asked about the working condition of the previous measure. Over three-quarters (76 percent) of respondents said their *original equipment was fully working and not in need of repair*; 10 percent said it *was working but needed minor repairs*; and another 10 percent reported *it was not working*. The average estimated age of the old equipment before replacement is 9.1 years, and the median age is 5.5.

Participants were asked their reasons for participating in the program; respondents could give multiple reasons for participating. Eighty-one percent said a reason they participated was to *save money on energy bills*. The only other reason that was mentioned by more than one-half of the participants was to *get free or discounted equipment*, with 57 percent reporting. The respondents who mentioned multiple reasons were then asked what their main reason; 56 percent said the main reason was *saving money on their energy bill*, and 20 percent said *getting the free equipment*. Table 112 summarizes the responses.

Table 112. Retail Lighting and Appliances—Reasons for Participating in the Program

Reason for participating in the program	Count	Percentage
Save money on energy bills	47	81.0%
Get the free or discounted equipment or service	33	56.9%
Improve the comfort of my home	21	36.2%
Conserve energy and/or protect the environment	21	36.2%
Recommendation from ELL	9	15.5%
Become as energy efficient as my friends or neighbors	5	8.6%
Recommendation from a friend, relative, neighbor, or colleague	4	6.9%
Improve the value of the residence	4	6.9%
Other	3	5.2%

Source: Participant Survey Questions Q30
Responses can include multiple selections, so percentages may sum to over 100 percent.

9.4.3 Participant Experience

Participants who did not receive *direct-install* measures were asked if they received an in-home energy assessment; only seven percent of the 55 respondents reported receiving an energy assessment in the past. Fifty-four percent of respondents said *they first got in touch with the program staff* because the program staff contacted them first. All respondents were asked how they found the program staff's contact information; 72 percent reported receiving contact information from the *ELL program website*. *Friends and family*, *internet search*, and *ELL emails* were also sites as sources of contact information.

All participants were then asked if the program staff discussed the energy savings participants would receive through the program. Seventy-six percent of the 42 respondents said the *program staff did not discuss the energy savings with them*. Then, all participants were asked if they agreed with a series of statements using a scale of *strongly agree, somewhat agree, somewhat disagree,* or *strongly disagree*. The responses are summarized in Table 113. At least 60 percent of respondents *strongly agreed* with the three statements on the program, with only two respondents disagreeing with the statement *the work was scheduled in a reasonable amount of time*.

Table 113. Retail Lighting and Appliances—Agreement with Statements

Statement	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Total
The staff was courteous and professional (n=25)	84.0%	16.0%	0.0%	0.0%	**100%**
The work was scheduled in a reasonable amount of time (n=16)	62.5%	25.0%	6.3%	6.3%	**100%**
The time it took to complete the work was reasonable (n=18)	66.7%	33.3%	0.0%	0.0%	**100%**

Source: Participant Survey Questions Q17A, Q17B, and Q17C

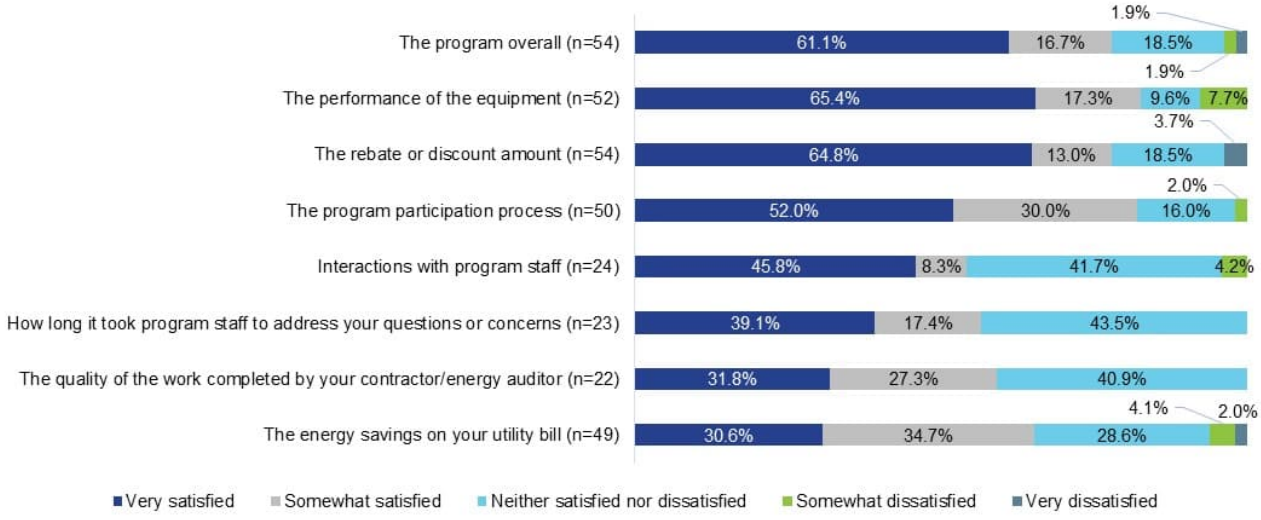
All participants were asked if they contacted Entergy Solutions' program staff with questions; only five percent of the 58 Retail Lighting and Appliances respondents said *they called at some point during the program*.

9.4.4 Participant Satisfaction

Overall, respondents in the Retail Lighting and Appliances program rated their satisfaction with the program highly. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*, 61 percent of respondents said they were *very satisfied*, and an additional 17 percent said they were *somewhat satisfied* with the program overall.

Using the same scale, over one-half of respondents (at least 54 percent) said they were *very satisfied* or *somewhat satisfied* with each aspect of the program. The highest satisfaction came from *the performance of the equipment* and the *rebate amount*, with 65 percent reporting being *very satisfied*. The *energy savings on your utility bill* had the lowest satisfaction of all program aspects, with just 31 percent reporting being *very satisfied*.

Figure 46. Retail Lighting and Appliances—Participant Satisfaction with Program Aspects

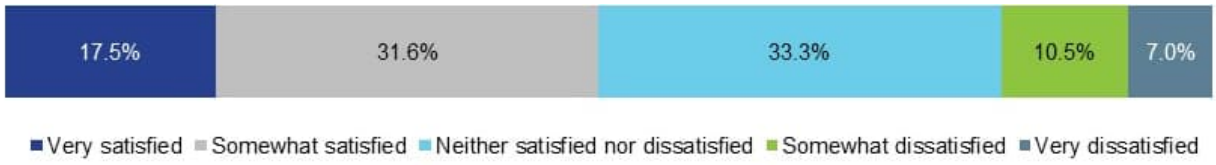


Source: Participant Survey Question Q37A – Q37J

Five respondents said their dissatisfaction came from the *lack of savings on the utility bill*. Two people also noted *issues with their smart thermostats not running properly*.

Figure 47 shows Retail Lighting and Appliances program participants' satisfaction with ELL as their electric service provider on a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*. Thirty-two percent said respondents said they were *somewhat satisfied* with ELL, and another 18 percent reported being *very satisfied*. Only 18 percent reported being dissatisfied with ELL as an electric service provider.

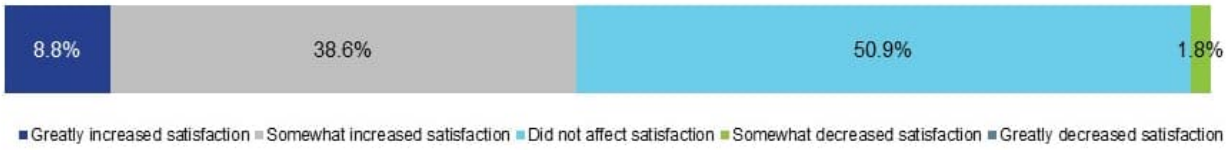
Figure 47. Retail Lighting and Appliances—Participant Satisfaction with ELL as Service Provider (n=57)



Source: Participant Survey Questions Q39

Participants were also asked if their participation in this program affected their satisfaction with ELL; Figure 48 summarizes the responses on a scale of *greatly increased satisfaction, somewhat increased satisfaction, did not affect satisfaction, somewhat decreased satisfaction,* or *greatly decreased satisfaction*. The most common response was that the program *did not affect satisfaction* with over one-half reporting (51 percent); the next most common is that the program *somewhat increased satisfaction* (39 percent). Only nine percent said the program *greatly increased satisfaction* with ELL, and two percent reported a decrease in satisfaction.

Figure 48. Retail Lighting and Appliances—Effect of Program Participation on Satisfaction with ELL (n=57)



Source: Participant Survey Questions Q40

Participants in the Retail Lighting and Appliances program were asked how likely they are to recommend ELL to someone on a scale of 1−10, with 1 being *not at all likely* and 10 being *extremely likely*. The average response was 6.4 out of 57 responses. Participants then gave recommendations for the program going forward. Four recommend *lowering the costs or increasing the savings*; *getting more information about the program and measures installed* was recommended as well.

9.4.5 Participant Characteristics

Participants were asked a series of demographic and household characteristic questions. Eighty-four percent of respondents from the Retail Lighting and Appliances program reported living in a *single-family home*, and 89 percent reported *owning their home*. The decade respondents' home was built is relatively evenly distributed going back to 1960, as shown in Table 114. Forty-two percent of the respondents reported their homes are *between 1,000 and 2,000 square feet*, and 36 percent reported homes *between 2,000 and 3,000 square feet*.

Table 114. Retail Lighting and Appliances—Home Characteristics

Characteristic	Count	Percentage
Type of home		
Single-family home	46	83.6%
Manufactured or mobile home	5	9.1%
Duplex or townhome	2	3.6%
Apartment or condominium	2	3.6%
Respondents (n)	**55**	**100.0%**
Homeownership		
Own	48	88.9%
Rent	5	9.3%
Own but rent to someone else	1	1.9%
Respondents (n)	**54**	**100.0%**
Year home built		
2020 or later	4	7.7%
2010 or 2019	6	11.5%
2000 to 2009	8	15.4%
1990 to 1999	12	23.1%
1980 to 1989	4	7.7%
1970 to 1979	5	9.6%
1960 to 1969	6	11.5%
Before 1960s	7	13.5%
Respondents (n)	**52**	**100%**
Size of home		
Less than 1,000 square feet	3	5.5%
1,000 to 1,999 square feet	23	41.8%
2,000 to 2,999 square feet	20	36.4%

Characteristic	Count	Percentage
3,000 to 3,999 square feet	7	12.7%
4,000 square feet or more	2	3.6%
Respondents (n)	**55**	**100.0%**

Source: Participant Survey Questions Q43, Q44, Q45, Q46

Respondents were also asked a series of questions about their heating and cooling systems. Fifty-four percent reported *electricity* to heat their homes, while 45 percent said they use *natural gas*. Eighty-three percent of respondents said the type of heating equipment they use is a *central forced air furnace*, while 12 percent reported a *heat pump*.

Almost all (98 percent) of respondents said the air conditioner in their home is *central AC*. Sixty percent reported using *natural gas* in their water heater, and another 35 percent reported a type of *electricity*.

Table 115. Retail Lighting and Appliances—Air Conditioner and Heating Characteristics

Characteristic	Count	Percentage
Fuel primarily used to heat the home		
Electricity	30	53.6%
Natural gas	25	44.6%
Propane	1	1.8%
Respondents (n)	**56**	**100.0%**
Main heating equipment used in home		
Central forced air furnace	43	82.7%
Heat pump	6	11.5%
Built-in wall heater	2	3.8%
Other	1	1.9%
Respondents (n)	**52**	**100.0%**
Type of air conditioner used in home		
Central AC	55	98.2%
Heat pump	1	1.8%
Respondents (n)	**56**	**100.0%**
Type of water heater used in home		
Natural gas	28	59.6%
Electric resistance	13	27.7%
Electric heat pump	4	8.5%
Propane	2	4.3%
Respondents (n)	**47**	**100.0%**

Source: Participant Survey Questions Q47, Q48, Q49, Q50

Lastly, participants reported an average of *2.7 members per household*. Table 116 summarizes the total income of respondents. Incomes tended to be higher when compared to other Entergy Solutions programs; 17 percent of respondents had a household income of *$50,000 or less*, 37 percent were *between $50,000 and $100,000*, and the remaining 46 percent earned *more than $100,000*.

Table 116. Retail Lighting and Appliances—Household Income

Household income	Count	Percentage
Less than $15,000	1	2.4%
$15,000 to $25,000	1	2.4%
$25,000 to $35,000	1	2.4%
$35,000 to $50,000	4	9.8%
$50,000 to $75,000	9	22.0%
$75,000 to $100,000	6	14.6%
$100,000 to $150,000	10	24.4%
More than $150,000	9	22.0%
Respondents (n)	**41**	**100.0%**

Source: Participant Survey Questions Q53

9.5 OVERALL SAVINGS ESTIMATES

The EM&V team used tracking system reviews to calculate the program-level realization rates, which indicate that the Retail Lighting and Appliances program achieved much higher energy savings, while the program achieved similar demand savings. Adjustments based on the tracking system review were incorporated into realization rates, resulting in 148.4 percent for energy savings and 100.2 percent for demand savings. Table 117 shows the final savings.

Table 117. Retail Lighting and Appliances—Final Evaluated Energy Savings and Realization Rates by Measure Category[11]

	Reported savings		Evaluated savings		Realization rate	
Measure	kWh	kW	kWh	kW	kWh	kW
Appliances	703,252	100.3	720,112	101.0	102.4%	100.7%
HVAC	5,457,868	359.7	8,497,099	359.7	155.7%	100.0%
Lighting	0	0.0	0	0.0	N/A	N/A
Pumps	179,489	35.7	179,489	35.7	100.0%	100.0%
Water heating	33,794	5.7	61,388	6.0	181.7%	105.3%
Total	**6,374,403**	**501.4**	**9,458,087**	**502.4**	**148.4%**	**100.2%**

[11] A dash indicates that there are no kilowatt savings associated with the respective measure.

10.0 SCHOOL KITS AND EDUCATION

Entergy Louisiana, LLC's (ELL) School Kit & Education offering targets sixth- through tenth-grade school-age students across the state, to deliver a hands-on lesson and in-person instruction about energy efficiency concepts. Students are sent home with an energy efficiency starter kit and forms with installation data are returned to the team. The program team works closely with school administrators and teachers to market the program and ensure the successful implementation of the energy efficiency education curriculum.

Table 118 documents the key evaluation activities and outlines the impact and process methodologies.

Table 118. School Kits and Education Program Evaluation Plan

Task	Task summary
Impact evaluation approach	Our impact evaluation approach included: • **TRM tracking data verification and review.** We thoroughly reviewed tracking system data for savings calculation accuracy, completeness of data fields, and compliance with the TRM. • **Ongoing technical assistance**. As needed, we assisted APTIM in reviewing the project and measured savings calculations. • **Cost-effectiveness testing**. Cost-effectiveness tests were performed using reported spending, verified energy savings, and verified demand reduction.
Process evaluation approach	Our process evaluation approach included: • **Program staff interviews**. In-depth interviews with implementation staff to assess program design elements.

10.1 KEY FINDINGS

In PY10, the School Kits and Education program reported 1,828 megawatt-hours (MWh) in gross energy savings and 0.2 megawatts (MW) in gross demand savings. Table 119 below shows the reported and evaluated savings across the program. The overall evaluated savings were equal to the reported savings, resulting in an overall realization rate of 100.0 percent for both energy and demand savings. The savings were determined based on the tracking system review results.

Table 119. School Kits and Education Program—Reported, Evaluated, and Net Savings

Energy/demand savings	Reported savings	Evaluated savings	Realization rate	NTG ratio*	Net savings	Program contribution to portfolio savings
Energy savings (MWh)	1,828.3	1,828.3	100.0%	100.0%	1,828.3	2.3%
Demand savings (MW)	0.237	0.237	100.0%	100.0%	0.237	2.0%

Table 120. School Kits and Education Program—Goals vs. Achieved

Savings	Goal	Actual	Percentage achieved
Energy savings (MWh)	1,818.7	1,828.3	100.5%

10.2 RECOMMENDATIONS

The evaluation, measurement, and verification (EM&V) team identified two recommendations for APTIM and ELL's consideration through the evaluation process, presented in Table 121.

Table 121. School Kits and Education Program—PY10 Recommendations and Key Findings

Type	Recommendation	Key finding
PY10 recommendations	**Recommendation 1:** Ensure the *water heating* measures within the kits are updated to match the savings calculations reflected in the other programs, with the addition of the in-service rates (ISR) recommended in Section 11.3.3.	The EM&V team found that slightly different assumptions were used across programs. The EM&V team recommends to update the assumptions based on the information provided through Appendix C. In addition to the methodology shown there, the ISRs for the school kits should also be included in the calculation for the School Kits and Education program.
	Recommendation 2: Given the nature of the program, it is best practice to use an average savings value for *advanced power strips* since the equipment's installation location will be unknown. The ISRs recommended in Section 11.3.3 should also be included in the calculation.	For this program, ensure the savings calculations are using an average value between *entertainment* and *home office* locations. In addition to the methodology shown in Appendix C, the ISRs in Section 11.3.3 for the school kits should also be included in the calculation.

Table 122. School Kits and Education Program—Status of Prior Year Recommendations

Status of prior year recommendations	
PY9 key findings	None.
PY9 recommendations	None.

10.3 DETAILED IMPACT EVALUATION RESULTS

The EM&V team focused efforts on delivering a tracking system review, providing technical assistance, and conducting cost-effectiveness testing. Evaluated savings were calculated based on the calculation methodologies provided by the implementer, which were based on the methodologies within Arkansas TRM 7.0. The verified savings were determined during the tracking system review, since impact activities such as desk reviews and on-site visits were not included in the project scope for PY10.

10.3.1 Participant Characterization

Several different measures are provided to participants through the program. Within the tracking system, qualifying products are assigned to unique measure names. The mapping of these measure names to measure categories and measure descriptions is provided in Table 123. The measure names in the table below will be used in the subsequent tables.

Table 123. School Kits and Education Program—Measure Categorization by Tracked Measure Name

Measure name	Measure category	Measure description
Energy efficiency school kit (incentive only)	EE kits	EE kits
Energy Efficiency School Kit (savings and incentive)	EE kits	EE kits

10.3.2 Tracking System Review

The EM&V team compiled the demand and energy savings results by measure. *Energy Efficiency School Kit (savings and incentive)* contained all of the demand and energy savings for the program. The *energy efficiency school kit (incentive only)* measure was used to track the ordering of the school kits, and the savings values and quantity of kits were subtracted out of the measure when the kits were delivered. As a result, the participant, quantity, and savings values for the *energy efficiency school kit (incentive only)* measure equated to zero. The participants were based on the total number of kits provided to the students. The results are summarized in Table 124.

Table 124. School Kits and Education—PY10 Reported Savings by Measure Name

Measure name	Participants	Quantity	Gross kWh	Gross kW
Energy efficiency school kit (incentive only)	0	0	0	0
Energy efficiency school kit (savings and incentive)	11,300	11,300	1,828,340	237.3
Total	**11,300**	**11,300**	**1,828,340**	**237.3**

Table 125 shows the incentives paid in PY10 by measure description.

Table 125. School Kits and Education Program—PY10 Paid Incentives by Measure Name

Measure name	Participants	Projects	Incentive amount
Energy efficiency school kit (incentive only)	0	0	0
Energy efficiency school kit (savings and incentive)	11,300	11,300	282,500
Total	**11,300**	**11,300**	**282,500**

10.3.2.1 Tracking System Data Review

The EM&V team also conducted a review of the columns within the tracking system to identify inconsistencies within the data. The EM&V team recommends continuing the current tracking data processes.

10.3.2.2 Tracking System Savings Review

The EM&V team calculated savings for the program based on the methodology provided by the implementer. All of the measures followed Arkansas TRM 7.0 methodology.

Overall, the measures were calculated with the correct methodology, which resulted in no savings adjustments for the program.

The overall realization rates for both kilowatt-hour and kilowatt savings are 100.0 percent. Table 126 summarizes the evaluated savings by measure description.

Table 126. School Kits and Education Program—PY10 Evaluated Savings Results by Measure Name

Measure name	Ex-ante kWh savings	Ex-post kWh savings	kWh realization rate	Ex-ante kW savings	Ex-post kW savings	kW realization rate
Energy efficiency school kit (incentive only)	0	0	N/A	0.0	0.0	N/A
Energy efficiency school kit (savings and incentive)	1,828,340	1,828,340	100.0%	237.3	237.3	100.0%
Total	**1,828,340**	**1,828,340**	**100.0%**	**237.3**	**237.3**	**100.0%**

10.3.3 Technical Assistance

The evaluation team assisted the implementer in updating the ISRs for the school EE kits. The team recommended ISRs of 50.5 percent for *faucet aerators*, 57.4 percent for *showerheads*, and 91 percent for *advanced power strips*.

10.4 OVERALL SAVINGS ESTIMATES

The EM&V team used tracking system reviews to calculate the program-level realization rates, which indicate that the School Kits and Education program achieved similar energy and demand savings. No adjustments were made based on the tracking system reviews, resulting in 100.0 percent for both energy and demand savings. Table 127 shows the final savings.

Table 127. School Kits and Education—Final Evaluated Energy Savings and Realization Rates by Measure Category

Measure category	Reported savings		Evaluated savings		Realization rate	
	kWh	kW	kWh	kW	kWh	kW
EE kits	1,828,340	237.3	1,828,340	237.3	100.0%	100.0%
Total	**1,828,340**	**237.3**	**1,828,340**	**237.3**	**100.0%**	**100.0%**

11.0 LARGE COMMERCIAL AND INDUSTRIAL SOLUTIONS

Entergy Louisiana, LLC's (ELL) Large Commercial and Industrial Solutions (LCI) program serves customer accounts with an average peak demand of 100 kilowatts (kW) or greater and who did not opt out of participation during the Quick Start phase. The program provides professional services with education and facility assessments to identify savings opportunities. Incentives increase the affordability of proposed projects making them more likely to receive approval. Projects may be incentivized up to 100% of the total cost. The program connects customers with a network of trade ally contractors to complete upgrades and offers a suite of prescriptive measure incentives. The program incentivizes custom measures but requires energy-savings calculations that account for site-specific equipment and scenarios. The program provides workbooks and may assist in generating these calculations. Pre-approval of funds is required before purchasing equipment or beginning work in nearly all situations.

The LCI program also includes the following subprograms:

- Higher Education Pilot,
- Commercial New Construction, and
- Agriculture Solutions.

Higher Education Pilot

The Higher Education Pilot program provides retro-commissioning projects for local and community colleges. The projects primarily consist of building automation system upgrades, as well as lighting projects.

Commercial New Construction

The Commercial New Construction program provides incentives for customers who install equipment above the baseline energy code. The program covers ground-up construction, gut rehab, and additions to existing facilities. The program implementer assists with energy-savings calculations and recommendations as early in the project as requested. Applications for funding are accepted up to 60 days after substantial completion of these projects. Measures include *lighting*, *refrigeration*, *tune-ups*, *air conditioners*, and *heat pumps*.

Agriculture Solutions

The Agriculture Solutions program offers special measures to agriculture-related facilities. The program offers incentives and creates workbooks to assist in lowering energy usage. The team attends agriculture-specific events, performs special outreach, and works with trade allies who serve agricultural clients.

Other

Pilot programs for retro-commissioning (Retro-Commissioning Pilot) and street lighting are also in the planning stages, but they have yet to be implemented in PY10.

Table 128 documents the key evaluation activities and outlines the impact and process methodologies.

Table 128. Large Commercial and Industrial Solutions Program Evaluation Plan

Task	Task summary
Impact evaluation approach	Our impact evaluation approach included: • **TRM tracking data verification and review.** We thoroughly reviewed tracking system data for savings calculation accuracy, completeness of data fields, and compliance with the technical reference manual (TRM). • **Ongoing technical assistance**. As needed, we assisted APTIM in reviewing the project and measured savings calculations. • **Cost-effectiveness testing**. Cost-effectiveness tests were performed using reported spending, verified energy savings, and verified demand reduction.
Process evaluation approach	Our process evaluation approach included: • **Program staff interviews**. In-depth interviews with implementation staff to assess program design elements. • **Materials review.** We reviewed program materials, such as application forms, marketing collateral, training protocols, and website content. • **Participant surveys.** We completed surveys with 14 LCI program participants and one LCI Commercial New Construction program participant.

11.1 KEY FINDINGS

According to the PY10 program tracking data, the LCI program incentivized energy efficiency measures to 179 unique participants[12] through 45 trade allies. Table 129 outlines the claimed savings by program subtype. The majority of the program's savings (79%) came from projects without a subprogram. The Commercial New Construction subprogram demonstrated a slight increase in savings compared to the previous year, contributing nearly nine percent of the total program savings.

Table 129. Large Commercial and Industrial Solutions—Reported Participation and Savings[13][14]

Subprogram	Trade allies[15]	Participants[16]	Program savings (kWh)	Percentage of program savings (kWh)
No subprogram[17]	38	162	22,251,610.2	79.3%
Agriculture Solutions[18]	1	2	901,521.0	3.2%
Higher Education Pilot	5	7	2,118,970.8	7.6%

[12] A unique participant is based on a distinct business address.
[13] Final tracking data were provided on February 3, 2025.
[14] Per the direction of the implementer, 2,698 kWh and 0.6 kW program savings—reported in tracking data attributed to a *placeholder measure*—were included in the analysis as a lighting project with no subprogram.
[15] A trade ally may install measures across multiple measure categories or multiple projects. Thus, the total count of trade allies may not equal the sum of individual rows by subprogram.
[16] A participant may install measures across multiple measure categories or multiple projects. Thus, the total count of participants and projects may not equal the sum of individual rows by subprogram.
[17] Projects that did not have a subprogram.
[18] Identified in the tracking data as "Agriculture Pilot."

Subprogram	Trade allies [15]	Participants[16]	Program savings (kWh)	Percentage of program savings (kWh)
Commercial New Construction[19]	5	7	2,503,556.3	8.9%
Retro-Commissioning Pilot[20]	1	1	270,738.8	1.0%
Total	**45**	**179**	**28,046,397.1**	**100.0%**

In PY10, the LCI program reported a total of 28,046 MWh in gross energy savings and 3.7 MW in gross demand savings. Table 130 presents the reported and evaluated savings across the program. The program fell short of achieving its planned energy and demand savings goals, achieving only 66% of the annual energy savings target, as shown in Table 130.

Table 130. Large Commercial and Industrial Solutions—Reported, Evaluated, and Net Savings

Energy/demand savings	Reported savings	Evaluated savings[21]	Realization rate[22]	NTG ratio[23]	Net savings	Program contribution to portfolio savings
Energy savings (MWh)	28,046.4	24,689.0	88.0%	1.0	24,689.0	31.1%
Demand savings (MW)	3.670	3.241	88.3%	1.0	3.241	27.1%

Table 131. Large Commercial and Industrial Solutions—Goals vs. Achieved

Savings	Goal	Actual	Percentage achieved
Energy savings (MWh)	37,483	24,689	65.9%

A little over one-third of respondents (36%) learned about the program through word of mouth, 28% through a contractor, and 21% through an ELL representative. Almost one-half of respondents (47%) said the best way to reach companies like theirs to provide information about incentives and energy-saving opportunities was by visits from contractors or program staff. Another 47% said email was the best way to contact them, followed by targeting owners or upper management (27%).

Respondents were asked how the incentive compared to what they expected, and 10 of 12 respondents said it was about what they expected. One said it was somewhat less than the amount expected, and the other said *it was much less than the amount expected*.

[19] Identified in the tracking data as “New Construction Pilot”
[20] The Retro-Commissioning Pilot was not a dedicated pilot/subprogram in PY10 but was entered in the tracking data as a future option to use.
[21] Evaluated savings calculated using program-level realization rates from PY2023.
[22] Program level realization rates for kWh and kW savings calculated by combining reported ELL and EGSL realization rates from PY2023.
[23] NTG ratio calculated by the previous evaluator.

Overall, LCI respondents rated their satisfaction with the program highly. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*, 12 of the 14 respondents (86%) said they were *very satisfied*, and an additional 2 said they were *somewhat satisfied* with the program overall. Using the same scale, 79% of respondents said they were *somewhat satisfied* or *very satisfied* with ELL as their service provider.

11.2 RECOMMENDATIONS

The EM&V team identified four recommendations for APTIM and ELL's consideration through the evaluation process, presented in Table 132.

Table 132. Large Commercial and Industrial Solutions—PY10 Recommendations and Key Findings

Type	Recommendation	Key finding
PY10 recommendations	**Recommendation 1:** Conduct independent cost-effectiveness and savings methodology reviews prior to approving measures for implementation.	The previous evaluator approved the savings methodology and incentive rates for the *HVAC tune-up* measure without conducting an independent review of the savings methodology that was approved in another jurisdiction. Mid-year, the implementer discovered an error in calculated savings and worked with the EM&V team to correct the error. However, this affected the claimed savings for the measure and the incentive rates paid out to trade allies. Reviewing methodologies prior to approving them for use in ELL's jurisdiction would prevent confusion regarding claimed savings and best practices for measure implementation.
	Recommendation 2: Create a measurement and verification (M&V) plan for custom projects that use International Performance Measurement and Verification Protocols (IPMVP).	The EM&V team found that custom M&V projects were not collecting pre- and post-meter data necessary to verify energy savings estimates. The EM&V team recommends the development of a comprehensive M&V plan for all custom projects that includes defining the project scope and baseline conditions, outlining the methodology for estimating energy savings, specifying data collection methods and pre- and post-metering requirements, describing the analysis plan for verifying savings, and planning for a post-implementation review to assess performance and identify lessons learned. By implementing this M&V plan, the program can ensure that pre- and post-meter data are effectively collected and analyzed to verify energy savings for custom projects.

Type	Recommendation	Key finding
	Recommendation 3: Revise savings calculators to ensure baselines align with the International Energy Conservation Code (IECC) 2021, current federal standards for HVAC equipment, and the latest version of the Arkansas TRM.	The EM&V team found that prescriptive projects were calculating energy savings using calculators based on Arkansas TRM 7.0 and baseline efficiencies that were not aligned with current federal standards or IECC 2021. The EM&V team recommends reviewing and updating all savings calculators to ensure baseline efficiencies reflect current TRM, federal, and state energy efficiency standards.
	Recommendation 4: Enhance quality assurance/quality control (QA/QC) of final tracking data.	The EM&V team identified two line items in the final LCI tracking data labeled as *placeholder measure*. The implementer indicated that these referred to *lighting* projects, which were never updated in the tracking data. The EM&V team recommends enhancing QA/QC processes for the final tracking data to ensure lines labeled as *placeholder measure* are properly labeled.

Table 133. Large Commercial and Industrial Solutions —Status of Prior Year Recommendations

Status of prior year recommendations	
PY9 impact recommendations	Conduct more detailed reviews of trade ally savings submissions.
	o *In progress.* The implementer and evaluation team conducted a savings methodology review for the tune-up measure in PY10 to ensure that the claimed savings aligned with industry best practices. Other activities included reviewing custom M&V projects to ensure methodologies align with IPMVP protocols.

11.3 DETAILED IMPACT EVALUATION RESULTS

The EM&V team focused efforts on delivering a tracking system review, providing technical assistance on custom methodologies, and conducting cost-effectiveness testing. Evaluated savings were calculated by applying the program-level realization rates determined by the previous evaluator in PY2023 to every project in the program. The verified savings were determined during the tracking system review since impact activities such as desk reviews and on-site visits were not included in the project scope for PY10.

11.3.1 Participant Characterization

Several different measures are provided to participants through the program. Within the tracking system, qualifying products are assigned to unique measure names. The mapping of these measure names to measure categories is provided below.

Table 134. Large Commercial and Industrial Solutions—Mapping to Measure Category

Measure description	Measure category
2023 Customer 20% Bonus replacing No Bonus	Administrative
2024 Early Completion Bonus - Tier 1 20%	Administrative
2024 Early Completion Bonus - Tier 2 10%	Administrative
2024 Trade Ally Project Completion Bonus	Administrative
A/C Tune-Up (1.5 to 3.5 Tons)	Tune-up
A/C Tune-Up (10.1 to 15 Tons)	Tune-up
A/C Tune-Up (15.1 to 25 Tons)	Tune-up
A/C Tune-Up (25.1 to 30 Tons)	Tune-up
A/C Tune-Up (3.6 to 5.0 Tons)	Tune-up
A/C Tune-Up (30.1 to 50 Tons)	Tune-up
A/C Tune-Up (5.1 to 10 Tons)	Tune-up
A/C Tune-Up (50.1 to 80 Tons)	Tune-up
A/C Unit < 5.42 Tons - Min. efficiency of 12.3 EER/14.5 SEER2	HVAC
A/C Unit >= 20 Tons - Min. efficiency 10.8 EER/13.5 SEER	HVAC
A/C Unit 11.25 - 19.9 Tons - Min. efficiency 12.2 EER/14.8 SEER	HVAC
A/C Unit 5.42 - 11.24 Tons - Min. efficiency 12.2 EER/14.8 SEER	HVAC
Air Cooled Chiller <150 Tons - Min. full load eff 1.18 kW/ton and 0.76 kW/ton IPLV	HVAC
Air Cooled Chiller >=150 Tons - Min. full load eff 1.18 kW/ton and 0.75 kW/ton IPLV	HVAC
Air Handler Coil Cleaning	Custom
Anti-Sweat Heater Control	Refrigeration
Auto Door-Closers - Freezers (Refrigeration)	Custom
Door Gaskets - Coolers (Refrigeration)	Custom
Door Gaskets - Freezers (Refrigeration)	Custom
ECM Motor	Motors
ECM Motor for HVAC	Motors
ECM Motor for Refrigeration	Motors
Efficient Custom Agriculture Equipment Replacing Existing Equipment	Custom
Evaporator Fan Controller	Refrigeration
Guest Room Energy Management Controls	HVAC
Heat Pump < 5.42 Tons - Min. efficiency 12.3 EER/14.5 SEER2/8.0 HSPF2	HVAC

Measure description	Measure category
Heat Pump >= 20 Tons - Min. efficiency 10.3 EER/13.0 SEER/12.0 HSPF	HVAC
Heat Pump 11.25 - 19.9 Tons - Min. efficiency 10.9 EER/14.0 SEER/12.0 HSPF	HVAC
Heat Pump 5.42 - 11.24 Tons - Min. efficiency 11.3 EER/14.5 SEER/12.0 HSPF	HVAC
Heat Pump Tune-Up (1.5 to 3.5 Tons)	Tune-up
Heat Pump Tune-Up (10.1 to 15 Tons)	Tune-up
Heat Pump Tune-Up (3.6 to 5.0 Tons)	Tune-up
Heat Pump Tune-Up (5.1 to 10 Tons)	Tune-up
HVAC Controls / EMS Replacing Existing Equipment	Custom
HVAC Controls / EMS Replacing No Existing Equipment or Failed Equipment	Custom
Interior Lighting Controls Replacing No Controls	Lighting
LED Downlight Kit Replacing Exterior Incandescent/Halogen Lamp	Lighting
LED Downlight Kit Replacing Incandescent/Halogen Lamp	Lighting
LED Exit Sign <=5 Watts Replacing Incandescent or Halogen Exit Sign	Lighting
Lighting Controls	Lighting
Lighting Power Density - Exterior	Lighting
Lighting Power Density - Interior	Lighting
Linear Tube LED 2 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	Lighting
Linear Tube LED 4 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	Lighting
Linear Tube LED 4 ft Lamp Replacing T5	Lighting
Linear Tube LED 4 ft Lamp Replacing T5HO	Lighting
Linear Tube LED 8 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	Lighting
Linear Tube LED 8 ft Lamp Replacing Existing High Output Fluorescent Inefficient Lamp	Lighting
Linear Tube LED Fixture Replacing Incandescent	Lighting
Linear Tube LED Fixture Replacing T12	Lighting
Linear Tube LED Fixture Replacing T5HO	Lighting
Linear Tube LED Fixture Replacing T8	Lighting
Linear Tube LED U-Tube Lamp Replacing Existing Fluorescent Inefficient Lamp	Lighting

Measure description	Measure category
Non Linear LED Fixture Replacing CFL	Lighting
Non Linear LED Fixture Replacing Existing Inefficient Lighting Fixture	Lighting
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture <175 Watts	Lighting
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture >=175 and <=250 Lamp Watts	Lighting
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture >=251 and <=400 Lamp Watts	Lighting
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture >=401 Watts and <=1000 Watts	Lighting
Non Linear LED Fixture Replacing Halogen	Lighting
Non Linear LED Fixture Replacing High Intensity Discharge Fixture <175 Lamp Watts	Lighting
Non Linear LED Fixture Replacing High Intensity Discharge Fixture >=175 and <=250 Lamp Watts	Lighting
Non Linear LED Fixture Replacing High Intensity Discharge Fixture >=251 and <=400 Lamp Watts	Lighting
Non Linear LED Fixture Replacing Incandescent	Lighting
Non Linear LED Fixture Replacing Metal Halide	Lighting
PLACEHOLDER MEASURE	Administrative
Retrocommissioning Study/Labor - Higher Ed	Administrative
Tune-Up of Air-Cooled Chiller	Tune-up
Tune-Up of Water-Cooled Chiller (Reciprocating, Rotary Screw, Scroll)	Tune-up
VFD for Fan Replacing No Existing Equipment or Failed Equipment	Custom
VFD for Pump Replacing No Existing Equipment or Failed Equipment	Custom
Walk-in Strip Curtains	Refrigeration

Table 135 outlines the claimed number of program participants and the percentage of savings by measure category in PY10. *Lighting* (including both prescriptive and custom lighting projects in the data) was the dominant measure category in PY10, accounting for 38% of claimed demand (kilowatt) and 38% of energy (kilowatt-hour) savings. Custom projects (across Agriculture Solutions, Higher Education Pilot, and Commercial New Construction subprograms) accounted for 22% of demand savings and 44% of energy savings.

Table 135. PY10 Reported Large Commercial and Industrial Solutions Participation and Savings by Measure Category

Measure category	Participants[24]	Projects[24]	Program savings		Percentage of program savings	
			kW	kWh	kW	kWh
Administrative[25]	65	65	0.6	2,698	0.0%	0.0%
Custom	60	62	816.0	12,458,624	22.2%	44.4%
HVAC	18	18	602.0	2,114,926	16.4%	7.5%
Lighting	53	53	1,390.5	10,521,445	37.9%	37.5%
Motors	6	6	35.9	311,072	1.0%	1.1%
Refrigeration	44	46	131.4	1,438,852	2.8%	4.2%
Tune-up	48	48	723.9	1,459,249	19.7%	5.2%
Total	**179**	**181**	**3,670.5**	**28,046,397**	**100.0%**	**100.0%**

Table 136 outlines the savings and percentage of savings by measure in PY10. *HVAC controls/EMS replacing existing equipment* was the most significant measure for energy savings in PY10, accounting for 24 percent of claimed gross kilowatt-hour savings. The *linear tube LED fixture replacing T8* measure was the most significant measure for demand savings in PY10, accounting for 16 percent of claimed gross kilowatt savings.

Table 136. PY10 Reported LCI Participation and Savings by Measure

Measure	Program savings		Percentage of program savings	
	kW	kWh	kW	kWh
Administrative				
2023 Customer 20% Bonus replacing No Bonus	-*	-	-	-
2024 Early Completion Bonus - Tier 1 20%	-	-	-	-
2024 Early Completion Bonus - Tier 2 10%	-	-	-	-

[24] A unique participant is based on a distinct business address. A project is a unique project number defined by the tracking data field *Project Number (Project) (Project)*. A participant may install measures across multiple measure categories and multiple projects. As a result, the total count of participants and projects may not equal the sum of the counts by measure category.

[25] Per the implementer, 2,698 kWh and 0.6 kW program savings reported in tracking data attributed to a *placeholder measure* is actually a *lighting* project.

Measure	Program savings		Percentage of program savings	
	kW	kWh	kW	kWh
2024 Trade Ally Project Completion Bonus	-	-	-	-
PLACEHOLDER MEASURE[26]	0.6	2,698	<0.1%	<0.1%
Retrocommissioning Study/Labor - Higher Ed	-	-	-	-
Custom				
Air Handler Coil Cleaning	131.7	1,179,179	3.6%	4.2%
Auto Door-Closers - Freezers (Refrigeration)	213.1	65,539	5.8%	0.2%
Door Gaskets - Coolers (Refrigeration)	0.0	1,050	<0.1%	<0.1%
Door Gaskets - Freezers (Refrigeration)	355.4	3,120,310	9.7%	11.1%
Efficient Custom Agriculture Equipment Replacing Existing Equipment	108.8	752,406	3.0%	2.7%
HVAC Controls / EMS Replacing Existing Equipment	0.7	6,830,244	<0.1%	24.4%
HVAC Controls / EMS Replacing No Existing Equipment or Failed Equipment	-	270,739	-	1.0%
VFD for Fan Replacing No Existing Equipment or Failed Equipment	6.2	90,043	0.2%	0.3%
VFD for Pump Replacing No Existing Equipment or Failed Equipment	0.1	149,115	<0.1%	0.5%
HVAC				
A/C Unit < 5.42 Tons - Min. efficiency of 12.3 EER/14.5 SEER2	10.4	44,589	0.3%	0.2%
A/C Unit >= 20 Tons - Min. efficiency 10.8 EER/13.5 SEER	60.7	210,245	1.7%	0.7%
A/C Unit 11.25 - 19.9 Tons - Min. efficiency 12.2 EER/14.8 SEER	7.7	55,811	0.2%	0.2%
A/C Unit 5.42 - 11.24 Tons - Min. efficiency 12.2 EER/14.8 SEER	1.6	14,968	<0.1%	<0.1%
Air Cooled Chiller <150 Tons - Min. full load eff 1.18 kW/ton and 0.76 kW/ton IPLV	7.4	23,416	0.2%	<0.1%
Air Cooled Chiller >=150 Tons - Min. full load eff 1.18 kW/ton and 0.75 kW/ton IPLV	29.8	134,396	0.8%	0.5%
Guest Room Energy Management Controls	48.9	116,269	1.3%	0.4%

[26] Per the implementer, 2,698 kWh and 0.6 kW program savings reported in tracking data attributed to a *placeholder measure* is actually a *lighting* project.

Measure	Program savings		Percentage of program savings	
	kW	kWh	kW	kWh
Heat Pump < 5.42 Tons - Min. efficiency 12.3 EER/14.5 SEER2/8.0 HSPF2	411.5	1,366,969	11.2%	4.9%
Heat Pump >= 20 Tons - Min. efficiency 10.3 EER/13.0 SEER/12.0 HSPF	8.4	61,912	0.2%	0.2%
Heat Pump 11.25 - 19.9 Tons - Min. efficiency 10.9 EER/14.0 SEER/12.0 HSPF	1.8	9,589	<0.1%	<0.1%
Heat Pump 5.42 - 11.24 Tons - Min. efficiency 11.3 EER/14.5 SEER/12.0 HSPF	13.9	76,762	0.4%	0.3%
Lighting				
Interior Lighting Controls Replacing No Controls	12.5	43,768	0.3%	0.2%
LED Downlight Kit Replacing Exterior Incandescent/Halogen Lamp	-	3,624	-	<0.1%
LED Downlight Kit Replacing Incandescent/Halogen Lamp	0.3	1,503	<0.1%	<0.1%
LED Exit Sign <=5 Watts Replacing Incandescent or Halogen Exit Sign	0.4	3,235	<0.1%	<0.1%
Lighting Controls	15.1	40,846	0.4%	0.1%
Lighting Power Density - Exterior	-	878,770	-	3.1%
Lighting Power Density - Interior	185.9	1,164,532	5.1%	4.2%
Linear Tube LED 2 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	0.6	3,797	<0.1%	<0.1%
Linear Tube LED 4 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	241.1	1,097,887	6.6%	3.9%
Linear Tube LED 4 ft Lamp Replacing T5	1.9	12,897	<0.1%	<0.1%
Linear Tube LED 4 ft Lamp Replacing T5HO	1.1	7,156	<0.1%	<0.1%
Linear Tube LED 8 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	8.3	37,199	0.2%	0.1%
Linear Tube LED 8 ft Lamp Replacing Existing High Output Fluorescent Inefficient Lamp	0.1	380	<0.1%	<0.1%
Linear Tube LED Fixture Replacing Incandescent	0.6	5,194	<0.1%	<0.1%
Linear Tube LED Fixture Replacing T12	1.3	8,172	<0.1%	<0.1%
Linear Tube LED Fixture Replacing T5HO	52.2	346,375	1.4%	1.2%
Linear Tube LED Fixture Replacing T8	603.5	3,252,837	16.4%	11.6%
Linear Tube LED U-Tube Lamp Replacing Existing Fluorescent Inefficient Lamp	3.3	20,872	<0.1%	<0.1%

Measure	Program savings		Percentage of program savings	
	kW	kWh	kW	kWh
Non Linear LED Fixture Replacing CFL	25.1	107,012	0.7%	0.4%
Non Linear LED Fixture Replacing Existing Inefficient Lighting Fixture	7.0	45,877	0.2%	0.2%
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture <175 Watts	-	2,592	-	<0.1%
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture >=175 and <=250 Lamp Watts	-	39,833	-	0.1%
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture >=251 and <=400 Lamp Watts	-	204,260	-	0.7%
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture >=401 Watts and <=1000 Watts	-	1,273,765	-	4.5%
Non Linear LED Fixture Replacing Halogen	0.8	2,302	<0.1%	<0.1%
Non Linear LED Fixture Replacing High Intensity Discharge Fixture <175 Lamp Watts	2.1	11,249	<0.1%	<0.1%
Non Linear LED Fixture Replacing High Intensity Discharge Fixture >=175 and <=250 Lamp Watts	0.4	2,082	<0.1%	<0.1%
Non Linear LED Fixture Replacing High Intensity Discharge Fixture >=251 and <=400 Lamp Watts	11.2	38,691	0.3%	0.1%
Non Linear LED Fixture Replacing Incandescent	11.9	54,421	0.3%	0.2%
Non Linear LED Fixture Replacing Metal Halide	203.6	1,810,318	5.5%	6.5%
Motors				
ECM Motor	5.2	45,622	0.1%	0.2%
ECM Motor for HVAC	0.9	4,981	<0.1%	<0.1%
ECM Motor for Refrigeration	29.7	260,469	0.8%	0.9%
Refrigeration				
Anti-Sweat Heater Control	15.0	645,558	0.4%	2.3%
Evaporator Fan Controller	3.4	30,064	<0.1%	0.1%
Walk-in Strip Curtains	83.2	502,762	2.3%	1.8%

Measure	Program savings		Percentage of program savings	
	kW	kWh	kW	kWh
Tune-up				
A/C Tune-Up (1.5 to 3.5 Tons)	160.2	324,133	4.4%	1.2%
A/C Tune-Up (10.1 to 15 Tons)	64.1	124,305	1.7%	0.4%
A/C Tune-Up (15.1 to 25 Tons)	116.0	232,031	3.2%	0.8%
A/C Tune-Up (25.1 to 30 Tons)	26.1	59,737	0.7%	0.2%
A/C Tune-Up (3.6 to 5.0 Tons)	90.2	167,578	2.5%	0.6%
A/C Tune-Up (30.1 to 50 Tons)	94.7	228,157	2.6%	0.8%
A/C Tune-Up (5.1 to 10 Tons)	103.7	194,332	2.8%	0.7%
A/C Tune-Up (50.1 to 80 Tons)	23.3	42,282	0.6%	0.2%
Heat Pump Tune-Up (1.5 to 3.5 Tons)	11.5	26,960	0.3%	<0.1%
Heat Pump Tune-Up (10.1 to 15 Tons)	3.5	7,411	<0.1%	<0.1%
Heat Pump Tune-Up (3.6 to 5.0 Tons)	3.0	6,800	<0.1%	<0.1%
Heat Pump Tune-Up (5.1 to 10 Tons)	2.2	4,619	<0.1%	<0.1%
Tune-Up of Air-Cooled Chiller	20.3	33,772	0.6%	0.1%
Tune-Up of Water-Cooled Chiller (Reciprocating, Rotary Screw, Scroll)	5.0	7,133	0.1%	<0.1%
Total	**3,670.5**	**28,046,397**	**100.0%**	**100.0%**

*A dash '-' represents no energy or demand savings.

Table 137 shows the incentives paid in PY10 by measure category. There were no changes to the incentive levels from PY9 to PY10.

Table 137. PY10 Large Commercial and Industrial Solutions Incentives by Measure Category

Measure category	Participants[27]	Projects[27]	Incentive amount
Administrative[28]	65	65	$105,988.83
Custom	60	62	$1,369,331.41
HVAC	18	18	$119,514.96
Lighting	53	53	$654,412.40

[27] A unique participant is based on a distinct business address. A project is a unique project number defined by the tracking data field *Project Number (Project) (Project)*. A participant may install measures across multiple measure categories and multiple projects. As a result, the total count of participants and projects may not equal the sum of the counts by measure category.

[28] Per the implementer, 2,698 kWh and 0.6 kW program savings reported in tracking data attributed to a *placeholder measure* is actually a *lighting* project.

Measure category	Participants[27]	Projects[27]	Incentive amount
Motors	6	6	$48,059.00
Refrigeration	44	46	$129,257.50
Tune-up	48	48	$722,639.68
Total	**179**	**181**	**$3,149,203.78**

11.3.2 Program Documentation and Tracking Data Review

To understand the LCI program, the EM&V team interviewed program staff and reviewed all information available on ELL's website related to the program and documentation provided by APTIM. The EM&V team received the following documentation related to the program:

- APTracks data tracking system extract containing PY10 participant information and savings;
- savings calculation workbooks for Agriculture Solutions and Commercial New Construction subprograms and *compressed air*, *HVAC tune-ups, lighting*, and *non-lighting* measures; and
- the program application, marketing materials, measure-specific information, and incentive amounts found on the ELL website.

11.3.2.1 Tracking System/Database Review

The EM&V team reviewed all program-claimed tracking data to assess the extent to which it provided the key input parameters needed for Arkansas TRM-based algorithms and the final claimed values necessary for each measure. The review also identified inconsistencies in the classification of subprograms and measure descriptions. Overall, the tracking system review found the following:

- Most line items did not report sufficient parameters to recreate savings calculations from the tracking data. The following is a list of measures and required parameters to calculate energy savings that were not included in the tracking data:
    - **AC tune-ups:** EER and capacity of AC units, whether RCA was conducted
    - **AC unit:** baseline, installed SEER
    - **Air-cooled chiller:** baseline kW/ton, installed kW/ton
    - **Anti-sweat heater control:** Freezer vs cooler designation
    - **ECM motor for refrigeration:** Freezer vs cooler designation
    - **ECM motor (new construction):** Refrigeration temperature
    - **Evaporator fan controller:** Refrigeration temperature
    - **Heat pump unit:** baseline and installed SEER, baseline and installed HSPF
    - **Heat pump tune-ups:** EER, HSPF, capacity of heat pump units, whether RCA was conducted
    - **Interior lighting controls:** Control type installed

- **LED lighting:** baseline and retrofit wattage, baseline and retrofit quantity
- **Low-flow bath aerator:** Flow rate through the aerator
- **Solid door reach-in refrigerator:** Freezer vs cooler designation, reach-in size (cubic feet)
- **Tune-up of air-cooled chiller:** Integrated Part-Load Value (IPLV) of chiller
- **Tune-up of water-cooled chiller:** IPLV of chiller
- **Walk-in strip curtains:** Freezer vs cooler designation, building type

- Two projects in the LCI program reported a *placeholder measure* in the final tracking data. Per the implementer, this line item is actually a *lighting* project.

11.3.3 Technical Assistance

The EM&V team supported the PY9 recommendation to conduct more detailed reviews of trade ally submissions by supporting the implementor with the technical assistance of a variety of custom methodologies in PY10.

The implementer and evaluation team conducted a savings methodology review for the *tune-up* measure in PY10 to ensure that the claimed savings aligned with industry best practices. Other activities included reviewing custom M&V projects to ensure methodologies align with IPMVP protocols, reviewing the program's *compressed air leak repair* offering, providing guidance on *general service lamp (GSL)* baseline standards, and implementing a new door on *open refrigerated cases custom* measure.

Table 138 outlines a summary of the tech assistance provided, along with the final resolution.

Table 138. PY10 Technical Assistance Log

Measure category	Issue	Resolution
All	APTIM asked Tetra Tech to review all prescriptive calculators for alignment with Arkansas TRM and federal standards.	The EM&V team found that prescriptive projects were calculating energy savings using calculators based on AR TRM 7.0 and baseline efficiencies that were not aligned with current federal standards or IECC 2021. The EM&V team recommends reviewing and updating all savings calculators to ensure baseline efficiencies reflect the latest TRM, federal, and state energy efficiency standards.

Measure category	Issue	Resolution
Tune-up	The previous evaluator approved the savings methodology and incentive rates for the *HVAC tune-up* measure without conducting an independent review of the methodology that was validated in another jurisdiction. Mid-year, APTIM discovered that the savings algorithm for *tune-ups without refrigerant charge* overcounted energy savings, prompting APTIM to adjust the savings methodology.	Tetra Tech assisted APTIM in exploring additional savings for *tune-ups without refrigerant charge adjustment*. Tetra Tech also assisted APTIM in creating a memo documenting verified savings and in facilitating discussions with the Louisiana Public Service Commission and a tune-up contractor.
Custom	APTIM aimed to explore the potential for claiming higher than 40% savings in the first year of the project in PY2025 for custom projects following IPMVP Option C.	Tetra Tech reviewed the legacy Option C projects claimed by APTIM and determined that no additional savings could be claimed. The EM&V team found that custom M&V projects were not collecting the necessary pre- and post-meter data to verify energy savings estimates. Tetra Tech recommends creating a comprehensive M&V plan for custom projects following IPMVP Option C. This plan should include defining the project scope and baseline conditions, outlining the methodology for estimating energy savings, specifying data collection methods and pre- and post-metering requirements, describing the analysis plan for verifying savings, and planning for a post-implementation review to assess performance and identify lessons learned.
Compressed air	APTIM requested that Tetra Tech review the *compressed air leak repair* offering.	Tetra Tech conducted the review and provided feedback on the offering.
Lighting	APTIM sought feedback on whether a specific *pin lamp* can be incentivized under the new general service lamp (GSL) standards.	Tetra Tech confirmed that the specific *pin lamp* is considered a GSL and can still be incentivized, provided the baseline is set to ≤ 45 lumens per watt.
HVAC	APTIM requested feedback on a custom savings path for new technology.	Tetra Tech and APTIM discussed potential applications for the technology, including the possibility of an IPMVP Option A pathway if used for retrofitting.

Measure category	Issue	Resolution
Refrigeration	APTIM requested technical assistance on custom savings for adding doors to open refrigerated cases.	Tetra Tech directed APTIM to the deemed savings methodology in the Illinois TRM and recommended making adjustments to account for the specific climate conditions in Louisiana.

11.3.4 Program Website Review

Information found on the Entergy Solutions Business Solutions website includes a general description of the program, such as eligibility and contact information, to learn more about how participation works. There are landing pages for *agriculture solutions*, *commercial and industrial*, *commercial new construction*, and *trade allies*. Each landing page provides a list of potentially eligible measures.

The *commercial and industrial* page offers several resources, including a link to prescriptive incentive rates, information on custom incentives, and access to the application form and calculation workbooks. It also provides contact information for both *lighting* and *non-lighting* trade allies. The available calculator workbooks cover areas such as *lighting*, *non-lighting*, *compressed air*, *HVAC tune-ups*, and *agriculture*.

The *agriculture* landing page features a program testimonial, a brief introduction, and a link to start the application process. It outlines five steps for participation and includes two case studies.

The *commercial new construction* landing page presents an introduction to the program, details on eligibility and the application process, and links to documents that provide guidelines, incentives, and workbooks.

The *trade ally* landing page provides an overview of the Entergy Solutions program, detailing the types of measures available for both residential and commercial and industrial sectors. It also includes information on how to become a trade ally or locate an existing trade ally. The *find a participating trade ally* link on the landing page directs users to a list of *commercial non-lighting* trade allies, which was last updated in April 2023. The EM&V team recommends updating this link to include both *lighting* and *non-lighting* trade allies.

11.4 DETAILED PROCESS EVALUATION RESULTS

As part of the PY10 evaluation, the EM&V team completed 15 web surveys with program participants, one of whom was an LCI Commercial New Construction participant. As part of the PY10 evaluation, the EM&V team completed six web surveys with program participants. The participant survey collected process information to inform program improvements and assess program influence on decision-making.

11.4.1 Program Marketing

Participants who purchased measures were asked how they heard of the LCI program. Of the 14 respondents, 36 percent heard of the program by *word of mouth*. About one-quarter of respondents heard about the program through a *contractor* (28 percent) and another quarter heard about it through an *ELL representative* (21 percent). The only other source mentioned was an *ELL customer service representative*. Responses are summarized in Table 139.

Table 139. Large Commercial and Industrial Solutions—Mode of Program Awareness

How did you learn about the program?	Counts	Responses*
Word of mouth	5	35.7%
From a contractor	4	28.6%
From an ELL account representative	3	21.4%
Other	2	14.3%
From an ELL customer service representative	1	7.1%
Respondents (n)	**14**	**N/A**

Source: Participant Survey Question Q5

*Responses can include multiple selections, so percentages may sum to over 100 percent.
Don't know, *not applicable*, and *refused* responses are excluded.

In addition, respondents were asked about the best way to contact them about program information and incentives. Out of 15 respondents, seven reported visits from contractors or program staff, seven reported email and four reported that giving owners or upper management the information is the best method. Other responses included bill inserts, phone calls, and direct mail. Responses are summarized in Table 140.

Table 140. Large Commercial and Industrial—Preferred Modes of Communication

What is the best way to reach companies like yours with information about incentives and energy-saving opportunities?	Counts	Responses*
Visits from contractors or program staff	7	46.7%
Email	7	46.7%
Target owners/upper management	4	26.7%
Bill inserts	3	20.0%
Phone	3	20.0%
Other	3	20.0%
Direct mail	1	6.7%
Respondents (n)	**15**	**N/A**

Source: Participant Survey Question Q6
*Responses can include multiple selections, so percentages may sum to over 100 percent.
Don't know, *not applicable*, and *refused* responses are excluded.

11.4.2 Decision-Making

Respondents were asked their primary reasons for participating in the program. Out of 15 respondents, 73 percent reported *saving money on their energy bills*, 60 percent mentioned *saving energy*, and another 60 percent mentioned the *financial incentive*. Less than one-half of respondents (40 percent) reported *replacing equipment that was broken*, *protecting the environment* (33 percent), *ease of participation* (33 percent), and a *recommendation from a contraction or program staff* (27 percent). Responses are summarized in Table 141.

Table 141. Large Commercial and Industrial Solutions—Reasons for Participating in the Program

Reason for participating in the program	Count	Percentage
Saving money on energy bills	11	73.3%
Saving energy	9	60.0%
Financial incentive	9	60.0%
Replacing equipment that was broken	6	40.0%
Protecting the environment	5	33.3%
Participation was very easy	5	33.3%
Recommendation from a contractor	4	26.7%
Recommendation from program staff	3	20.0%
Other	1	6.7%
Respondents (n)	**15**	**N/A**

Source: Participant Survey Questions Q7
Responses can include multiple selections, so percentages may sum to over 100 percent.

To understand the influence of the program representative in completing the project, respondents were asked if they would have completed the project without the program representative's recommendation on a scale of *definitely would have, probably would have, probably would not have,* or *definitely would not have*. Out of seven respondents, three respondents said they *definitely would have* and three said they *probably would have*. Only one respondent said they *probably would not have* completed the project without the recommendation, and no one said they *definitely would not have* completed the project if not for the program representative's recommendation. Responses are summarized in Table 142.

Table 142. Large Commercial and Industrial Solutions—Likelihood of Completing Project Without Program Representative's Recommendation

Without the representative's recommendation, would you have completed the project?	Count	Percentage
Definitely would not have	0	0.0%
Probably would not have	1	14.3%
Probably would have	3	42.9%
Definitely would have	3	42.9%
Respondents (n)	**7**	**100.0%**

Source: Participant Survey Questions Q10

Using the same scale, respondents were asked if they would have completed the project without the financial incentive. Out of 15 respondents, 3 said they *definitely would have,* and 8 said they *probably would have*. Responses are summarized in Table 143.

Table 143. Large Commercial and Industrial Solutions—Likelihood of Completing Project Without Program Incentive

Without the representative's recommendation, would you have completed the project?	Count	Percentage
Definitely would not have	0	0.0%
Probably would not have	4	26.7%
Probably would have	8	53.3%
Definitely would have	3	20.0%
Respondents (n)	**15**	**100.0%**

Source: Participant Survey Questions Q11

Table 144 summarizes responses about concerns of participating in the program. Most respondents did not mention any concerns, citing that *participation was an easy decision*. The only concern raised was *if the program was real*. Small Business Solutions customers also tended to be skeptical about these programs, thinking it could be a 'scam' or 'too good to be true.'

Table 144. Large Commercial and Industrial Solutions—Concerns About Participation

Did you have any concerns about participating?	Count	Percentage
I had some concerns	1	6.7%
It was an easy decision	14	93.3%
Respondents (n)	**15**	**100.0%**

Source: Participant Survey Questions Q12

Table 145 summarizes responses about the length of time to move forward after submitting an application for the program. About one-half of respondents reported *2−4 weeks* (53 percent), and about a quarter of respondents reported *less than 2 weeks* (27 percent). Some respondents did have longer wait times of *more than 6 weeks* (13 percent) and *more than 8 weeks* (7 percent).

Table 145. Large Commercial and Industrial Solutions—Length of Time to Proceed with Project After Application

Length of time to move forward after application	Count	Percentage
Less than 2 weeks	4	26.7%
2 to 4 weeks	8	53.3%
More than 4 weeks to 6 weeks	0	0.0%
More than 6 weeks to 8 weeks	2	13.3%
More than 8 weeks	1	6.7%
Respondents (n)	**15**	**100.0%**

Source: Participant Survey Questions Q25

11.4.3 Participant Experience

Participants were asked if anyone helped them complete the program application. Out of 14 respondents, nine *completed the application by themselves*, eight *had a contractor help them*, four *had a co-worker help them*, and another four *had an equipment vendor help*. Two respondents *got help with the application from an ELL representative*. Table 146 summarizes the responses.

Table 146. Large Commercial and Industrial Solutions—Application Help Received

Who helped you complete the application?	Count	Percentage
Yourself	9	64.3%
A contractor	8	57.1%
Another member of your company	4	28.6%
An equipment vendor	4	28.6%
An ELL representative	2	14.3%
Respondents (n)	**14**	**N/A**

Source: Participant Survey Question Q21
*Responses can include multiple selections, so percentages may sum to over 100 percent.
Don't know, *not applicable*, and *refused* responses are excluded.

LCI program participants were asked to rate the clarity of application instructions on a scale of *very difficult to follow, somewhat difficult to follow, neither difficult nor easy to follow, somewhat easy to follow,* or *very easy to follow.* Two-thirds of respondents said the application was *somewhat easy to follow*, two respondents thought the application was *very easy,* and one person thought it was *neither difficult nor easy to follow*. Responses are summarized in Table 147. Most people (79 percent) reported *knowing who to ask for help with application materials* if necessary (Table 148).

Table 147. Large Commercial and Industrial Solutions—Application Instruction Clarity

Rate the clarity of the application instructions	Count	Percentage
Very difficult to follow	0	0.0%
Somewhat difficult to follow	0	0.0%
Neither difficult nor easy to follow	1	11.1%
Somewhat easy to follow	6	66.7%
Very easy to follow	2	22.2%
Respondents (n)	**9**	**100.0%**

Source: Participant Survey Question Q22

Table 148. Large Commercial and Industrial Solutions—Clarity of Application Assistance

Did you have a clear sense of whom you could approach for application assistance?	Count	Percentage
Yes	11	78.6%
No	3	21.4%
Respondents (n)	**14**	**100.0%**

Source: Participant Survey Question Q24
Don't know, *not applicable*, and *refuse* responses are excluded.

Respondents were asked a series of questions regarding the financial incentive. Out of 12 respondents, 10 said the incentive amount was *about what they expected,* and the remaining two respondents thought the incentive amount was *less than they were expecting.* Responses are summarized in Table 149. They were also asked how long it took to receive the incentive. Five respondents received the incentive in *4−6 weeks*, three respondents reported *2−4 weeks,* and two said it took the incentive more than 8 weeks to arrive. Responses are summarized in Table 150.

Table 149. Large Commercial and Industrial Solutions—Incentive Amount

How did the incentive amount compare to what was expected?	Count	Percentage
It was much less than the amount expected	1	8.3%
It was somewhat less than the amount expected	1	8.3%
It was about the amount expected	10	83.3%
It was somewhat more than the amount expected	0	0.0%
It was much more than the amount expected	0	0.0%
Respondents (n)	**12**	**100.0%**

Source: Participant Survey Question Q26
Don't know, *not applicable*, and *refused* responses are excluded.

Table 150. Large Commercial and Industrial Solutions—Time to Receive Incentive

Length of time to receive incentive	Count	Percentage
Less than 2 weeks	1	8.3%
2 to 4 weeks	3	25.0%
More than 4 weeks to 6 weeks	5	41.7%
More than 6 weeks to 8 weeks	1	8.3%
More than 8 weeks	2	16.7%
Respondents (n)	**12**	**100.0%**

Source: Participant Survey Question Q27
Don't know, not applicable, and *refused* responses are excluded.

Respondents were asked questions about the assistance and recommendations from the program representative. About one-half of respondents *received assistance or an assessment from a representative* (53 percent), and most of them (88 percent) said they *installed the measure that was recommended*. Results are summarized in Table 151 and Table 152.

Table 151. Large Commercial and Industrial Solutions—Program Representative Assistance

Received assessment or assistance from program representative	Count	Percentage
Yes	8	53.3%
No	7	46.7%
Respondents (n)	**15**	**100.0%**

Source: Participant Survey Question Q8

Table 152. Large Commercial and Industrial Solutions—Program Representative Recommendation

Representative recommended the installed measure	Count	Percentage
Yes	7	87.5%
No	1	12.5%
Respondents (n)	**8**	**100.0%**

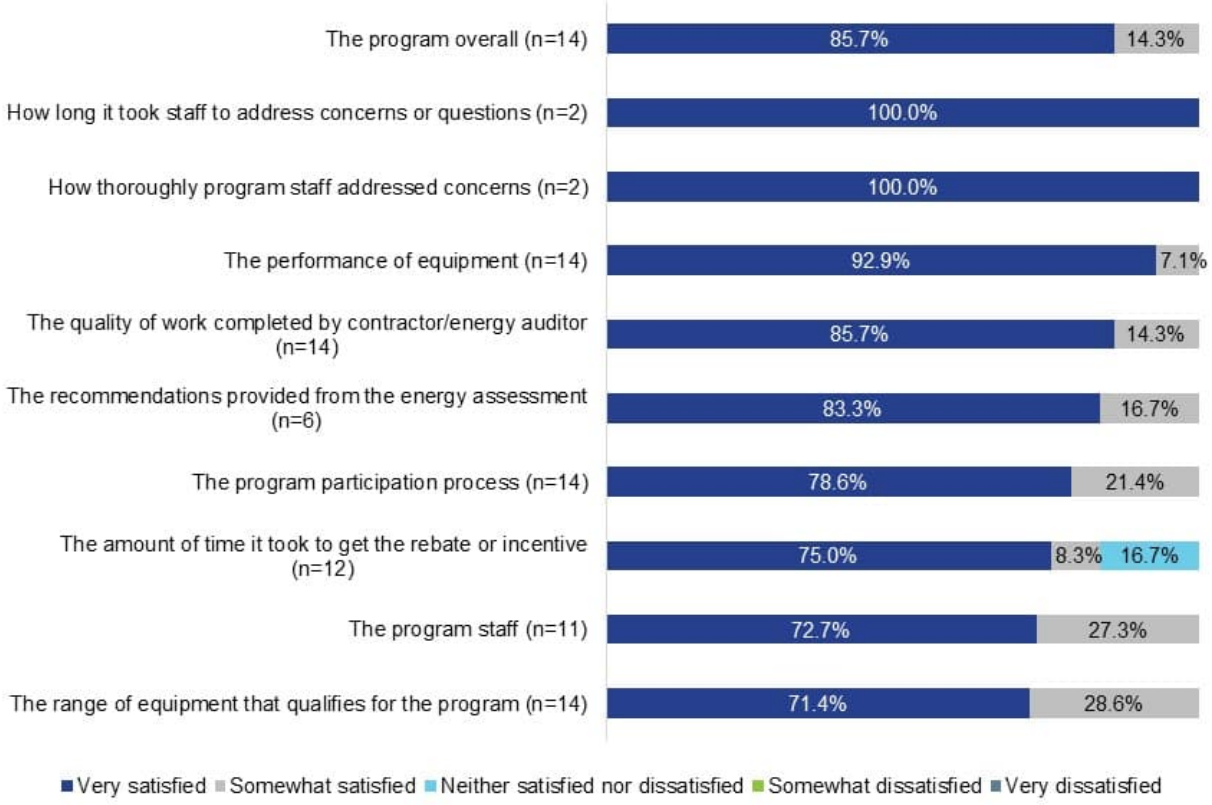
Source: Participant Survey Question Q9

11.4.4 Participant Satisfaction

Overall, LCI respondents rated their satisfaction with the program highly. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*, 12 of the 14 respondents (86%) said they were *very satisfied*, and an additional 2 said they were *somewhat satisfied* with the program overall.

On the same scale, no respondent rated their satisfaction with any program factor as *dissatisfied* or *very dissatisfied*. The highest satisfaction ratings came from the two customers who raised questions or concerns with the program staff: they were both *very satisfied* with *the length of time it took to address their concerns* and *the thoroughness with which the staff addressed the concerns.* The *performance of the equipment* was also highly rated, with more respondents than the previous two factors. Thirteen of 14 customers were *very satisfied* with the *equipment's performance*. Figure 49 contains a detailed breakdown of responses to the questions related to the satisfaction of various program aspects.

Figure 49. Large Commercial and Industrial Solutions—Participant Satisfaction with Program Aspects



Source: Participant Survey Question Q30A – Q30J

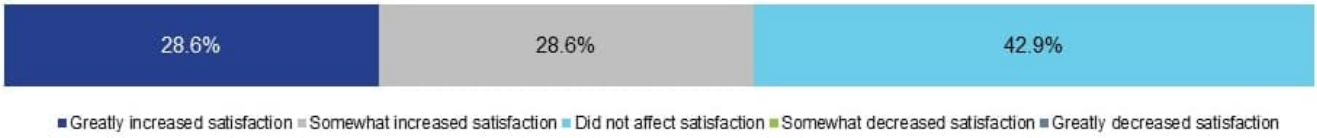
Figure 50 shows LCI participants' satisfaction with ELL as their electric service provider on a similar scale to the previous questions. Six of the 14 respondents said they were *very satisfied* with ELL, and another 5 reported being *somewhat satisfied*; of the remaining 3, 1 was *neither satisfied nor dissatisfied*, and 2 reported being *very dissatisfied*.

Figure 50. Large Commercial and Industrial Solutions—Participant Satisfaction with ELL as Service Provider (n=13)

Source: Participant Survey Questions Q32

Participants were also asked if their participation in this program affected their satisfaction with ELL. Figure 51 summarizes the responses on a scale of *greatly increased satisfaction, somewhat increased satisfaction, did not affect satisfaction, somewhat decreased satisfaction,* or *greatly decreased satisfaction*. The most common response was that the program *did not affect satisfaction* (6 of 14). Four reported that the program *somewhat increased satisfaction* and another four reported *greatly increased satisfaction*.

Figure 51. Large Commercial and Industrial—Effect of Program Participation on Satisfaction with ELL (n=14)



Source: Participant Survey Questions Q33

11.4.5 Participant Characteristics

Participants were asked a series of questions regarding their company. Most respondents *work at one of their company's locations* (64 percent) and *own the building* (62 percent). The most common roles of respondents were *facilities manager* (20 percent), *manager* (20 percent), or *other facilities management or maintenance position* (20 percent). Other common responses were *financial/administrative position* (13 percent), or *proprietor/owner* (13 percent). Table 153 summarizes the characteristics of the participants.

Table 153. Large Commercial and Industrial—Participant Characteristics

Characteristic	Count	Percentage
Facility description		
Your company's only location	3	21.4%
One of several locations owned by your company	9	64.3%
The headquarter location of a company with several locations	2	14.3%
Respondents (n)	**14**	**100.0%**
Building ownership		
Rent	3	23.1%
Own and occupy	8	61.5%
Own and rent to someone else	2	15.4%
Respondents (n)	**13**	**100.0%**
Job title		
Facilities Manager	3	20.0%
Other facilities management/maintenance position	3	20.0%
Manager	3	20.0%
Other financial/administrative position	2	13.3%
Proprietor/owner	2	13.3%
Other	2	13.3%
Respondents (n)	**15**	**100%**

Source: Participant Survey Questions Q36, Q37, Q4

11.5 OVERALL SAVINGS ESTIMATES

Conducting desk reviews and independent verifications to calculate the program-level savings was in the EM&V team's scope for PY10 so realization rates calculated by the previous evaluator in PY9 were applied across all projects in PY10.

Table 154. PY10 Large Commercial and Industrial Reported and Evaluated Savings

Measure category	Reported savings		Evaluated savings		Realization rate[29]	
	kWh	kW	kWh	kW	kWh	kW
Administrative	2,698	0.6	2,375	0.5	88.0%	88.3%
Custom	12,458,624	816.0	10,967,215	720.6	88.0%	88.3%
HVAC	2,114,926	602.0	1,861,750	531.7	88.0%	88.3%
Lighting	10,521,445	1,390.5	9,261,933	1,227.9	88.0%	88.3%
Motors	311,072	35.9	273,834	31.7	88.0%	88.3%
Refrigeration	1,178,384	101.6	1,037,321	89.7	88.0%	88.3%
Tune-up	1,459,249	723.9	1,284,563	639.3	88.0%	88.3%
Total	**28,046,397**	**3,670.5**	**24,688,990**	**3,241.4**	**88.0%**	**88.3%**

[29] Realization rates were calculated by the previous evaluator from PY2023.

12.0 SMALL COMMERCIAL SOLUTIONS

Entergy Louisiana, LLC's (ELL) Small Commercial Solutions (SCS) program provides small businesses with average peak demand under 100 kilowatts (kW) the opportunity to achieve kilowatt-hour (kWh) savings through prescriptive and custom projects. The SCS program is designed to overcome barriers unique to small businesses that commonly prevent the purchase of energy-efficient equipment. The program also provides trade allies and small business owners with energy-efficiency information and develops awareness of energy and non-energy benefits.

The SCS program also includes the following subprograms:

- Small Commercial Income-Qualified Solutions Pilot (IQS),
- Small Business Direct Install (SBDI) Pilot,
- Small Commercial New Construction (NC), and
- Small Commercial Agriculture Solutions.

Small Commercial Income-Qualified Solutions Pilot

In December of PY9, the program implemented a soft launch of the Small Commercial IQS Pilot. This pilot will be fully launched in PY10 and would cover 100 percent of the project cost up to $30,000 allowing the program to cover the incentive, material, labor, and miscellaneous charges. Measures included in this program mostly consist of *lighting* and *lighting controls*.

Small Business Direct Install Pilot

In PY10, the program will implement the launch of the SBDI Pilot. The program offers an energy assessment, which includes direct installation of low-cost measures and a walkthrough inspection to recommend additional projects that can be completed to further reduce energy use.

Small Commercial New Construction

The Small Commercial New Construction program provides incentives for customers who install equipment above the baseline energy code. The program covers ground-up construction, gut rehab, and additions to existing facilities. The program implementer assists with energy-savings calculations and recommendations as early in the project as requested. Applications for funding are accepted up to 60 days after substantial completion of these projects. Measures include *lighting*, *refrigeration*, *tune-ups*, *air conditioners*, and *heat pumps*.

Small Commercial Agriculture Solutions

- Similar to the Large Commercial and Industrial Solutions program, the Small Commercial Agriculture Solutions program offers special measures to agriculture-related facilities but to facilities that meet the small commercial requirement. There were no Small Commercial Agriculture Solutions projects in PY10.

Table 155 documents the key evaluation activities and outlines the impact and process methodologies.

Table 155. Small Commercial Solutions Program Evaluation Plan

Task	Task summary
Impact evaluation approach	Our impact evaluation approach included: • **TRM tracking data verification and review.** We thoroughly reviewed tracking system data for savings calculation accuracy, completeness of data fields, and compliance with the technical reference manual (TRM). • **Ongoing technical assistance**. As needed, we assisted APTIM in reviewing the project and measured savings calculations. • **Cost-effectiveness testing**. Cost-effectiveness tests were performed using reported spending, verified energy savings, and verified demand reduction.
Process evaluation approach	Our process evaluation approach included: • **Program staff interviews**. In-depth interviews with implementation staff to assess program design elements. • **Materials review.** We reviewed program materials, such as application forms, marketing collateral, training protocols, and website content. • **Participant surveys.** We completed surveys with 17 Small Commercial Solutions, 16 SBDI Pilot, and 8 IQS Pilot subprogram participants.

12.1 KEY FINDINGS

Based on the PY10 program tracking data, the SCS program incentivized energy efficiency measures to 277 unique participants[30] through 43 trade allies. Table 156 provides the program's claimed savings by program subtype. The most considerable amount of program savings was attributable to projects without a subprogram, with 89% of claimed savings. The IQS Pilot program showed an increase in savings compared to last year and accounted for nearly six% of program savings.

Table 156. Small Commercial Solutions—Reported Participation and Savings[31]

Subprogram	Trade allies[32]	Participants[33]	Program savings (kWh)	Percentage of program savings (kWh)
No subprogram[34]	35	201	8,247,474	89.4%
Small Commercial New Construction[35]	4	8	234,865	2.5%
Small Business Direct Install Pilot	2	43	225,067	2.4%
Small Commercial Income-Qualified Solutions Pilot	8	26	516,871	5.6%
Total	**43**	**277**	**9,224,278**	**100.0%**

[30] A unique participant is based on a distinct business address.
[31] Final tracking data were provided on February 3, 2025.
[32] A trade ally may install measures across multiple measure categories or multiple projects. Thus, the total count of trade allies may not equal the sum of individual rows by subprogram.
[33] A participant may install measures across multiple measure categories or multiple projects. Thus, the total count of participants and projects may not equal the sum of individual rows by measure category.
[34] Projects that did not have a subprogram name.
[35] Identified in the tracking data as “New Construction Pilot.”

In PY10, the SCS program reported 9,224 MWh in gross energy savings and 0.9 MW in gross demand savings.

Table 157 The table below shows the reported and evaluated savings across the program. The program did meet its energy savings planning goals, achieving 103% of the energy savings goal.

Table 157. Small Commercial Solutions—Reported, Evaluated, and Net Savings

Energy/demand savings	Reported savings	Evaluated savings[36]	Realization rate[37]	NTG ratio[38]	Net savings	Program contribution to portfolio savings
Energy savings (MWh)	9,224.3	7,864.7	85.3%	1.0	7,864.1	9.9%
Demand savings (MW)	0.920	0.794	86.3%	1.0	0.794	6.6%

Table 158. Small Commercial Solutions—Goals vs. Achieved

Savings	Goal	Actual	Percentage achieved
Energy savings (MWh)	7,626	7,865	103.1%

One-third of respondents (33%) learned about the program through a contractor and 18% through the ELL website. Three-quarters of respondents (75%) said the best way to reach them is through email. The next most mentioned method was by visits from contractors or program staff (33%).

Respondents were asked how the incentive compared to what they expected, and 81% said it was about what they expected. Among the IQS respondents, 14% said it was much more than the amount expected.

Overall, respondents rated their satisfaction with the SCS program highly. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied,* nearly all respondents in all programs were either *somewhat satisfied* or *very satisfied* (all but one SCS respondent). Fourteen of the 17 SCS respondents were *very satisfied* (82%), with two of the others *somewhat satisfied* and one *neither satisfied nor dissatisfied.* Sixty-nine percent of SBDI respondents and 86% of IQS Pilot respondents were *very satisfied,* with the remaining respondents of both programs being *somewhat satisfied.*

12.2 RECOMMENDATIONS

The evaluation, measurement, and verification (EM&V) team has identified four recommendations for consideration by ELL and APTIM (Table 159). These recommendations are the same as those specified in the Large Commercial and Industrial Solutions program.

[36] Evaluated savings calculated using program-level realization rates from PY2023.
[37] Program-level realization rates for kilowatt-hour and kilowatt savings calculated by combining reported ELL and legacy Entergy Gulf States Louisiana (EGSL) realization rates from PY2023.
[38] NTG ratio calculated by the previous evaluator.

Table 159. Small Commercial Solutions—PY10 Recommendations and Key Findings

Type	Recommendation	Key finding
PY10 recommendations	**Recommendation 1:** Conduct independent cost-effectiveness and savings methodology reviews prior to approving measures for implementation.	The previous evaluator approved the savings methodology and incentive rates for the *HVAC tune-up* measure without conducting an independent review of the savings methodology that was approved in another jurisdiction. Mid-year, the implementer discovered an error in calculated savings and worked with the Tetra Tech EM&V team to correct the error. However, this affected the claimed savings for the measure and the incentive rates paid out to trade allies. Reviewing methodologies prior to approving them for use in ELL's jurisdiction would prevent confusion regarding claimed savings and best practices for measure implementation.
	Recommendation 2: Create a measurement and verification (M&V) plan for custom projects that use International Performance Measurement and Verification Protocols (IPMVP).	The EM&V team found that custom M&V projects were not collecting pre- and post-meter data necessary to verify energy savings estimates. The EM&V team recommends developing a comprehensive M&V plan for all custom projects that includes defining the project scope and baseline conditions, outlining the methodology for estimating energy savings, specifying data collection methods and pre- and post-metering requirements, describing the analysis plan for verifying savings, and planning for a post-implementation review to assess performance and identify lessons learned. By implementing this M&V plan, the program can ensure that pre- and post-meter data are effectively collected and analyzed to verify energy savings for custom projects.
	Recommendation 3: Revise savings calculators to ensure baselines align with the International Energy Conservation Code (IECC) 2021, current federal standards for HVAC equipment, and the latest version of the Akansas TRM.	The EM&V team found that prescriptive projects were calculating energy savings using calculators based on Arkansas TRM 7.0 and baseline efficiencies that were not aligned with current federal standards or IECC 2021. The EM&V team recommends reviewing and updating all savings calculators to ensure baseline efficiencies reflect current TRM, federal, and state energy efficiency standards.
	Recommendation 4: Enhance quality assurance/quality control (QA/QC) of final tracking data so *placeholder measure* projects are properly labeled.	The EM&V team identified one line item in the final SCS tracking data labeled as *placeholder measure*. The implementer indicated this referred to a *lighting* project that was never updated in the tracking data. The EM&V team recommends enhancing QA/QC processes for the final tracking data to ensure *placeholder measure* projects are properly labeled.

Table 160. Small Commercial Solutions—Status of Prior Year Recommendations

Status of prior year recommendations	
PY9 recommendations	Conduct more detailed reviews of trade ally savings submissions.
	o *In progress.* The implementer and evaluation team conducted a savings methodology review for the tune-up measure in PY10 to ensure that the claimed savings aligned with industry best practices. Other activities included reviewing custom M&V projects to ensure methodologies align with IPMVP protocols.

12.3 DETAILED IMPACT EVALUATION RESULTS

The EM&V team focused efforts on delivering a tracking system review, providing technical assistance on custom methodologies, and conducting cost-effectiveness testing. Evaluated savings were calculated by applying the program-level realization rates determined by the previous evaluator in PY2023 to every project in the program. The verified savings were determined during the tracking system review since impact activities such as desk reviews and on-site visits were not included in the project scope for PY10.

12.3.1 Participant Characterization

Several different measures were provided to participants through the program. Within the tracking system, qualifying products were assigned to unique measure names. The mapping of these measure names to measure categories is provided below.

Table 161. Small Commercial Solutions—Mapping to Measure Category

Measure description	Measure category
2024 Early Completion Bonus - Tier 1 20%	Administrative
2024 Early Completion Bonus - Tier 2 10%	Administrative
2024 Trade Ally Project Completion Bonus	Administrative
A/C Tune-Up (1.5 to 3.5 Tons)	Tune-up
A/C Tune-Up (10.1 to 15 Tons)	Tune-up
A/C Tune-Up (15.1 to 25 Tons)	Tune-up
A/C Tune-Up (3.6 to 5.0 Tons)	Tune-up
A/C Tune-Up (5.1 to 10 Tons)	Tune-up
A/C Unit < 5.42 Tons - Min. efficiency of 12.3 EER/14.5 SEER2	HVAC
A/C Unit 11.25 - 19.9 Tons - Min. efficiency 12.2 EER/14.8 SEER	HVAC
A/C Unit 5.42 - 11.24 Tons - Min. efficiency 12.2 EER/14.8 SEER	HVAC
Air Handler Coil Cleaning	Custom
Anti-Sweat Heater Control	Refrigeration
Auto Door-Closers - Coolers (Refrigeration)	Custom

Measure description	Measure category
Auto Door-Closers - Freezers (Refrigeration)	Custom
Commercial Fryer Replacing No Existing Equipment or Failed Equipment	Custom
Door Gaskets - Freezers (Refrigeration)	Custom
ECM Motor for Refrigeration	Motors
ENERGY STAR Combination Commercial Oven <15 Pan	Food service
ENERGY STAR Combination Commercial Oven <15 Pan Replacing Existing Equipment	Food service
ENERGY STAR Commercial Ice maker	Refrigeration
Evaporator Fan Controller	Refrigeration
Guest Room Energy Management Controls	HVAC
Heat Pump < 5.42 Tons - Min. efficiency 12.3 EER/14.5 SEER2/8.0 HSPF2	HVAC
Heat Pump 5.42 - 11.24 Tons - Min. efficiency 11.3 EER/14.5 SEER/12.0 HSPF	HVAC
Heat Pump Tune-Up (1.5 to 3.5 Tons)	Tune-up
Heat Pump Tune-Up (10.1 to 15 Tons)	Tune-up
Heat Pump Tune-Up (25.1 to 30 Tons)	Tune-up
Heat Pump Tune-Up (3.6 to 5.0 Tons)	Tune-up
Heat Pump Tune-Up (5.1 to 10 Tons)	Tune-up
HVAC Controls / EMS Replacing Existing Equipment	Custom
Interior Lighting Controls Replacing No Controls	Lighting
LED A-Type Lamp Replacing Incandescent/Halogen Lamp	Lighting
LED Downlight Kit Replacing Exterior Incandescent/Halogen Lamp	Lighting
LED Downlight Kit Replacing Incandescent/Halogen Lamp	Lighting
LED Exit Sign <=5 Watts Replacing Incandescent or Halogen Exit Sign	Lighting
Lighting Controls	Lighting
Lighting Power Density - Exterior	Lighting
Lighting Power Density - Interior	Lighting
Linear Tube LED 2 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	Lighting
Linear Tube LED 2 ft Lamp Replacing Exterior T5HO	Lighting
Linear Tube LED 2 ft Lamp Replacing T5HO	Lighting
Linear Tube LED 4 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	Lighting
Linear Tube LED 4 ft Lamp Replacing Existing High Output Fluorescent Inefficient Lamp	Lighting

Measure description	Measure category
Linear Tube LED 4 ft Lamp Replacing Exterior Existing Fluorescent Inefficient Lamp	Lighting
Linear Tube LED 4 ft Lamp Replacing T5HO	Lighting
Linear Tube LED 8 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	Lighting
Linear Tube LED 8 ft Lamp Replacing Existing High Output Fluorescent Inefficient Lamp	Lighting
Linear Tube LED Fixture Replacing T12	Custom
Linear Tube LED Fixture Replacing T5HO	Custom
Linear Tube LED Fixture Replacing T8	Custom
Linear Tube LED U-Tube Lamp Replacing Existing Fluorescent Inefficient Lamp	Lighting
Non Linear LED Fixture Replacing Existing Inefficient Lighting Fixture	Custom
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture <175 Watts	Lighting
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture >=175 and <=250 Lamp Watts	Lighting
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture >=251 and <=400 Lamp Watts	Lighting
Non Linear LED Fixture Replacing High Intensity Discharge Fixture >=401 Watts and <=1000 Watts	Lighting
Non Linear LED Fixture Replacing Metal Halide	Custom
PLACEHOLDER MEASURE	Administrative
SBDI - Advanced power strip - 7-outlet	Lighting
SBDI - Emerson Sensi Wi-Fi Touch Screen Smart T-stat	Lighting
SBDI - LED 11W BR30	Custom
SBDI - LED 15W A-Lamp ES	Custom
SBDI - LED 4W Candelabra Filament	Other
SBDI - LED 9W A19 ES	HVAC
SBDI - LED linear 14W hybrid install 4000-5000K	Lighting
SBDI - LED U-tube 15W hybrid 35/40/50K	Lighting
SBDI - Low-flow bath aerator (1.0 GPM)	Lighting
Small C&I Low Income Full Project Cost Bonus	Lighting
Solid Door Reach-In Refrigerator	Lighting
VFD for Fan Replacing No Existing Equipment or Failed Equipment	Lighting
VFD for Pump Replacing No Existing Equipment or Failed Equipment	Domestic hot water
Walk-in Strip Curtains	Custom

Table 162 below outlines the claimed number of program participants and the percentage of savings by measure category in PY10. *Lighting* was the dominant measure category in PY10 for demand savings, accounting for 34 percent of claimed demand (kilowatt) savings. Meanwhile, *custom measures* were the dominant measure category in PY10 for energy savings, accounting for 71 percent of energy savings.

Table 162. PY10 Reported Small Commercial Solutions Participation and Savings by Measure Category

Measure category	Participants[39]	Projects[39]	Program savings		Percentage of program savings	
			kW	kWh	kW	kWh
Administrative	68	68	1.4	16,134	0.1%	0.2%
Custom	150	152	305.2	6,499,921	33.2%	70.5%
Domestic hot water	3	3	1.0	4,506	0.1%	0.0%
Food service	4	4	13.9	71,988	1.5%	0.8%
HVAC	34	34	117.4	359,784	12.8%	3.9%
Lighting	103	103	314.8	1,678,663	34.2%	18.2%
Motors	30	30	12.4	111,013	1.4%	1.2%
Other	7	7	-	1,408	0.0%	0.0%
Refrigeration	51	51	23.0	211,064	2.5%	2.3%
Tune-up	22	22	131.3	269,796	14.3%	2.9%
Total	**277**	**279**	**920.4**	**9,224,278**	**100.0%**	**100.0%**

Table 163 outlines the savings and percentage of savings by measure in PY10. *HVAC controls/EMS replacing existing equipment* was the most significant measure in PY10 and accounted for 23 percent of claimed gross kilowatt-hour savings. The *linear tube LED 4 ft lamp replacing existing fluorescent inefficient lamp* measure was the most significant measure for demand savings in PY10, accounting for 12 percent of claimed gross kilowatt savings.

Table 163. PY10 Reported Small Commercial Solutions Participation and Savings by Measure

Measure	Program savings		Percentage of program savings	
	kW	kWh	kW	kWh
Administrative				
2024 Early Completion Bonus - Tier 1 20%	-*	-	-	-
2024 Trade Ally Project Completion Bonus	-	-	-	-

[39] A unique participant is based on a distinct business address. A project is a unique project number defined by the tracking data field *Project Number (Project) (Project)*. A participant may install measures across multiple measure categories and multiple projects. As a result, the total count of participants and projects may not equal the sum of the counts by measure category.

Measure	Program savings		Percentage of program savings	
	kW	kWh	kW	kWh
PLACEHOLDER MEASURE[40]	1.4	16,134	<1%	<1%
Custom				
Air Handler Coil Cleaning	13.5	177,206	1%	2%
Auto Door-Closers - Coolers (Refrigeration)	1.9	13,202	<1%	<1%
Auto Door-Closers - Freezers (Refrigeration)	1.9	13,957	<1%	<1%
Commercial Fryer Replacing No Existing Equipment or Failed Equipment	0.5	3,320	<1%	<1%
Door Gaskets - Freezers (Refrigeration)	38.7	340,725	4%	4%
HVAC Controls / EMS Replacing Existing Equipment	36.2	2,709,862	4%	29%
Linear Tube LED Fixture Replacing T12	28.6	95,132	3%	1%
Linear Tube LED Fixture Replacing T5HO	39.9	130,204	4%	1%
Linear Tube LED Fixture Replacing T8	51.7	246,210	6%	3%
Non Linear LED Fixture Replacing Existing Inefficient Lighting Fixture	1.7	8,184	<1%	<1%
Non Linear LED Fixture Replacing Halogen	3.1	12,186	<1%	<1%
Non Linear LED Fixture Replacing Metal Halide	16.9	2,111,596	2%	23%
Small C&I Low Income Full Project Cost Bonus	-	-	-	-
VFD for Fan Replacing No Existing Equipment or Failed Equipment	31.3	101,729	3%	1%
VFD for Pump Replacing No Existing Equipment or Failed Equipment	39.3	536,408	4%	6%
Domestic hot water				
SBDI - Low-flow bath aerator (1.0 GPM)	1.0	4,506	<1%	<1%
Food service				
ENERGY STAR Combination Commercial Oven <15 Pan	5.6	28,795	<1%	<1%
ENERGY STAR Combination Commercial Oven <15 Pan Replacing Existing Equipment	8.4	43,193	<1%	<1%
HVAC				
A/C Unit < 5.42 Tons - Min. efficiency of 12.3 EER/14.5 SEER2	1.5	10,320	<1%	<1%
A/C Unit 11.25 - 19.9 Tons - Min. efficiency 12.2 EER/14.8 SEER	2.8	19,512	<1%	<1%

[40] Per the implementer, 16,134 kWh and 1.4 kW program savings reported in tracking data attributed to a *placeholder measure* is actually a *lighting* project.

Measure	Program savings		Percentage of program savings	
	kW	kWh	kW	kWh
A/C Unit 5.42 - 11.24 Tons - Min. efficiency 12.2 EER/14.8 SEER	11.7	57,243	1%	<1%
Guest Room Energy Management Controls	100.2	238,441	11%	3%
Heat Pump < 5.42 Tons - Min. efficiency 12.3 EER/14.5 SEER2/8.0 HSPF2	0.4	3,597	<1%	<1%
Heat Pump 5.42 - 11.24 Tons - Min. efficiency 11.3 EER/14.5 SEER/12.0 HSPF	0.7	5,179	<1%	<1%
SBDI - Emerson Sensi Wi-Fi Touch Screen Smart T-stat	-	25,493	-	<1%
Lighting				
Interior Lighting Controls Replacing No Controls	7.7	26,217	<1%	<1%
LED A-Type Lamp Replacing Incandescent/Halogen Lamp	0.1	380	<1%	<1%
LED Downlight Kit Replacing Exterior Incandescent/Halogen Lamp	-	60	-	<1%
LED Downlight Kit Replacing Incandescent/Halogen Lamp	7.5	49,738	<1%	<1%
LED Exit Sign <=5 Watts Replacing Incandescent or Halogen Exit Sign	1.1	8,233	<1%	<1%
Lighting Controls	1.1	2,076	<1%	<1%
Lighting Power Density - Exterior	-	102,002	-	1%
Lighting Power Density - Interior	26.6	114,112	3%	1%
Linear Tube LED 2 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	0.2	1,017	<1%	<1%
Linear Tube LED 2 ft Lamp Replacing Exterior T5HO	-	1,119	-	<1%
Linear Tube LED 2 ft Lamp Replacing T5HO	0.1	799	<1%	<1%
Linear Tube LED 4 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	114.4	514,372	12%	6%
Linear Tube LED 4 ft Lamp Replacing Existing High Output Fluorescent Inefficient Lamp	0.1	509	<1%	<1%
Linear Tube LED 4 ft Lamp Replacing Exterior Existing Fluorescent Inefficient Lamp	-	3,636	-	<1%
Linear Tube LED 4 ft Lamp Replacing T5HO	2.1	7,143	<1%	<1%
Linear Tube LED 8 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	21.4	84,044	2%	<1%
Linear Tube LED 8 ft Lamp Replacing Existing High Output Fluorescent Inefficient Lamp	4.3	17,641	<1%	<1%

Measure	Program savings		Percentage of program savings	
	kW	kWh	kW	kWh
Linear Tube LED 4 ft Lamp Replacing Exterior Existing Fluorescent Inefficient Lamp	0.3	1,241	<1%	<1%
Linear Tube LED 4 ft Lamp Replacing T5HO	-	10,283	-	<1%
Linear Tube LED 8 ft Lamp Replacing Existing Fluorescent Inefficient Lamp	-	15,612	-	<1%
Linear Tube LED 8 ft Lamp Replacing Existing High Output Fluorescent Inefficient Lamp	-	53,538	-	<1%
Linear Tube LED U-Tube Lamp Replacing Existing Fluorescent Inefficient Lamp	-	183,159	-	2%
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture <175 Watts	0.3	1,385	<1%	<1%
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture >=175 and <=250 Lamp Watts	39.8	170,993	4%	2%
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture >=251 and <=400 Lamp Watts	33.8	139,211	4%	2%
Non Linear LED Fixture Replacing Exterior High Intensity Discharge Fixture >=401 Watts and <=1000 Watts	0.7	1,678	<1%	<1%
Non Linear LED Fixture Replacing High Intensity Discharge Fixture <175 Lamp Watts	4.0	10,058	<1%	<1%
Non Linear LED Fixture Replacing High Intensity Discharge Fixture >=251 and <=400 Lamp Watts	0.4	1,269	<1%	<1%
Non Linear LED Fixture Replacing High Intensity Discharge Fixture >=401 Watts and <=1000 Watts	3.8	11,571	<1%	<1%
SBDI - LED 11W BR30	45.0	145,265	5%	2%
SBDI - LED 15W A-Lamp ES	0.1	302	<1%	<1%
SBDI - LED 4W Candelabra Filament	7.7	26,217	<1%	<1%
SBDI - LED 9W A19 ES	0.1	380	<1%	<1%
SBDI - LED linear 14W hybrid install 4000-5000K	-	60	-	<1%
SBDI - LED U-tube 15W hybrid 35/40/50K	7.5	49,738	<1%	<1%
Motors				
ECM Motor for Refrigeration	12.4	111,013	1%	1%
Other				
SBDI - Advanced power strip - 7-outlet	-	1,408	-	<1%

Measure	Program savings		Percentage of program savings	
	kW	kWh	kW	kWh
Refrigeration				
Anti-Sweat Heater Control	1.6	69,930	<1%	<1%
ENERGY STAR Commercial Ice maker	0.1	1,037	<1%	<1%
Evaporator Fan Controller	3.3	29,061	<1%	<1%
Solid Door Reach-In Refrigerator	0.1	951	<1%	<1%
Walk-in Strip Curtains	17.8	110,085	2%	1%
Tune-up				
A/C Tune-Up (1.5 to 3.5 Tons)	59.9	127,424	7%	1%
A/C Tune-Up (10.1 to 15 Tons)	7.3	13,273	<1%	<1%
A/C Tune-Up (15.1 to 25 Tons)	13.8	24,982	1%	<1%
A/C Tune-Up (3.6 to 5.0 Tons)	26.2	55,482	3%	<1%
A/C Tune-Up (5.1 to 10 Tons)	12.2	22,211	1%	<1%
Heat Pump Tune-Up (1.5 to 3.5 Tons)	2.1	4,636	<1%	<1%
Heat Pump Tune-Up (10.1 to 15 Tons)	0.8	1,635	<1%	<1%
Heat Pump Tune-Up (25.1 to 30 Tons)	1.7	3,603	<1%	<1%
Heat Pump Tune-Up (3.6 to 5.0 Tons)	7.0	15,763	<1%	<1%
Heat Pump Tune-Up (5.1 to 10 Tons)	0.4	787	<1%	<1%
Total	**920.4**	**9,224,278**	**100%**	**100%**

*A dashed line indicates no savings.

Table 164 shows the incentives paid in PY10 by measure category. There were no changes to the incentive levels from PY9 to PY10.

Table 164. PY10 Small Commercial and Industrial Solutions Incentives by Measure Category

Measure category	Participants[41]	Projects[41]	Incentive Amount
Administrative[42]	68	68	$50,486.92
Custom	150	152	$1,012,015.21

[41] A unique participant is based on a distinct business address. A project is a unique project number defined by the tracking data field *Project Number (Project) (Project)*. A participant may install measures across multiple measure categories and multiple projects. As a result, the total count of participants and projects may not equal the sum of the counts by measure category.

[42] Per the implementer, 16,134 kWh and 1.4 kW program savings reported in tracking data attributed to a *placeholder measure* is actually a *lighting* project.

Measure category	Participants[41]	Projects[41]	Incentive Amount
Domestic hot water	3	3	$48.00
Food service	53	53	$654,412.40
HVAC	34	34	$41,183.29
Lighting	103	103	$181,313.55
Motors	48	48	$722,639.68
Other	7	7	$1,150.00
Refrigeration	51	51	$25,829.15
Tune-up	22	22	$164,470.03
Total	**277**	**279**	**$1,503,597.45**

12.3.2 Program Documentation and Tracking Data Review

To understand the SCS program, the EM&V team interviewed program staff and reviewed all information available on ELL's website related to the program and documentation provided by APTIM. The EM&V team received the following documentation related to the program:

- APTracks data tracking system extract containing PY10 participant information and savings;
- savings calculation workbooks for Agriculture Solutions and Commercial New Construction subprograms, and *compressed air*, *HVAC tune-ups*, *lighting*, and *non-lighting measures*; and
- program application, marketing materials, measure-specific information, and incentive amounts found on the ELL website.

12.3.2.1 Tracking System/Database Review

The EM&V team reviewed all program-claimed tracking data to assess the extent to which it provided the key input parameters needed for Arkansas TRM-based algorithms and the final claimed values necessary for each measure. The review also identified inconsistencies in classification of subprograms and measure descriptions. These results are similar to the results from the Large Commercial and Industrial Solutions tracking system review.

Overall, the tracking system review found the following:

- Most line items did not report sufficient parameters to recreate savings calculations from the tracking data. The following is a list of measures and the parameters that are required to calculate energy savings that were not included in the tracking data:
    - **AC tune-ups:** EER and capacity of AC units, whether RCA was conducted
    - **AC unit:** baseline, installed SEER
    - **Anti-sweat heater control:** freezer vs cooler designation
    - **ECM motor for refrigeration:** freezer vs cooler designation
    - **ECM motor (new construction):** refrigeration temperature

  - **Evaporator fan controller:** refrigeration temperature
  - **Heat pump unit:** baseline and installed SEER, baseline and installed HSPF
  - **Heat pump tune-ups:** EER, HSPF, capacity of heat pump units, whether RCA was conducted
  - **Interior lighting controls:** control type installed
  - **LED lighting:** baseline and retrofit wattage, baseline and retrofit quantity
  - **Low-flow bath aerator:** flow rate through the aerator
  - **Solid door reach-in refrigerator:** Freezer vs cooler designation, reach-in size (cubic feet)
  - **Walk-in strip curtains:** Freezer vs cooler designation, building type

- One new construction *lighting* project in the SCS program did not appear under the Small Commercial New Construction subprogram.
- One project in the SCS program reported a *placeholder measure* in the final tracking data. Per the implementer, this line item is actually a *lighting* project.

12.3.3 Technical Assistance

The EM&V team supported the PY9 recommendation to conduct more detailed reviews of trade ally submissions by supporting the implementor with the technical assistance of a variety of custom methodologies in PY10. This section is identical to Section 11.3.3.

The implementer and evaluation team conducted a savings methodology review for the tune-up measure in PY10 to ensure that the claimed savings aligned with industry best practices. Other activities included reviewing custom M&V projects to ensure methodologies align with IPMVP protocols, reviewing the program's compressed air leak repair offering, providing guidance on general service lamp baseline standards, and implementing a new door on open refrigerated cases custom measure.

Below is a summary of the tech assistance provided, along with the final resolution.

Table 165. PY10 Technical Assistance Log

Measure category	Issue	Resolution
All	APTIM asked Tetra Tech to review all prescriptive calculators for alignment with Arkansas TRM and federal standards.	The EM&V team found that prescriptive projects were calculating energy savings using calculators based on AR TRM 7.0 and baseline efficiencies that were not aligned with current federal standards or IECC 2021. The EM&V team recommends reviewing and updating all savings calculators to ensure baseline efficiencies reflect the latest TRM, federal, and state energy efficiency standards.

Measure category	Issue	Resolution
Tune-up	The previous evaluator approved the savings methodology and incentive rates for the *HVAC tune-up* measure without conducting an independent review of the methodology that was validated in another jurisdiction. Mid-year, APTIM discovered that the savings algorithm for *tune-ups without refrigerant charge* overcounted energy savings, prompting APTIM to adjust the savings methodology.	Tetra Tech assisted APTIM in exploring additional savings for *tune-ups without refrigerant charge* adjustment. Tetra Tech also assisted APTIM in creating a memo documenting verified savings and in facilitating discussions with the Louisiana Public Service Commission and a tune-up contractor.
Custom	APTIM aimed to explore the potential for claiming higher than 40% savings in the first year of the project in PY2025 for custom projects following IPMVP Option C.	Tetra Tech reviewed the legacy Option C projects claimed by APTIM and determined that no additional savings could be claimed. The EM&V team found that custom M&V projects were not collecting the necessary pre- and post-meter data to verify energy savings estimates. Tetra Tech recommends creating a comprehensive M&V plan for custom projects following IPMVP Option C. This plan should include defining the project scope and baseline conditions, outlining the methodology for estimating energy savings, specifying data collection methods and pre- and post-metering requirements, describing the analysis plan for verifying savings, and planning for a post-implementation review to assess performance and identify lessons learned.
Compressed air	APTIM requested that Tetra Tech review the *compressed air leak repair* offering.	Tetra Tech conducted the review and provided feedback on the offering.
Lighting	APTIM sought feedback on whether a specific *pin lamp* can be incentivized under the new general service lamp (GSL) standards.	Tetra Tech confirmed that the specific *pin lamp* is considered a GSL and can still be incentivized, provided the baseline is set to ≤ 45 lumens per watt.
HVAC	APTIM requested feedback on a custom savings path for new technology.	Tetra Tech and APTIM discussed potential applications for the technology, including the possibility of an IPMVP Option A pathway if used for retrofitting.
Refrigeration	APTIM requested technical assistance on custom savings for adding doors to open refrigerated cases.	Tetra Tech directed APTIM to the deemed savings methodology in the Illinois TRM, and recommended making adjustments to account for the specific climate conditions in Louisiana.

12.3.3.1 Program Website Review

There is not a separate website for SCS. Information found on the Entergy Solutions Business Solutions website includes a general description of the program, such as eligibility and contact information to learn more about how participation works. There are landing pages for *agriculture solutions*, *commercial and industrial*, *commercial new construction*, and *trade allies*. Each landing page provides a list of potentially eligible measures.

The *commercial and industrial* page offers several resources, including a link to prescriptive incentive rates, information on custom incentives, and access to the application form and calculation workbooks. It also provides contact information for both *lighting* and *non-lighting* trade allies. The available calculator workbooks cover areas such as *lighting*, *non-lighting*, *compressed air*, *HVAC tune-ups*, and *agriculture*.

The *agriculture solutions* landing page features a program testimonial, a brief introduction, and a link to start the application process. It outlines five steps for participation and includes two case studies.

The *commercial new construction* landing page presents an introduction to the program, details on eligibility and the application process, and links to documents that provide guidelines, incentives, and workbooks.

The *trade ally* landing page provides an overview of the Entergy Solutions program, detailing the types of measures available for both residential and commercial and industrial sectors. It also includes information on how to become a trade ally or locate an existing trade ally. The *find a participating trade ally* link on the landing page directs users to a list of *commercial non-lighting* trade allies, which was last updated in April 2023. The EM&V team recommends updating this link to include both *lighting* and *non-lighting* trade allies.

12.4 DETAILED PROCESS EVALUATION RESULTS

As part of the PY10 evaluation, the EM&V team completed 41 web surveys with program participants. The participant survey collected process information to inform program improvements and assess program influence on decision-making. Results are presented by program. Respondents participated in the SCS, SBDI Pilot, and IQS Pilot programs.

12.4.1 Program Marketing

Participants were asked how they heard about the SCS program. Overall, the most common source of awareness among respondents was from a *contractor* (33 percent overall). The second most common was through the *ELL website* (18 percent overall), though no IQS Pilot respondents reported learning about the program through this source. Instead, one-quarter of IQS Pilot participants learned of the program through *word of mouth* (29 percent). Other common sources of awareness for IQS Pilot participants were from an *ELL representative* (14%) or *through their own internet search* (14 percent). Another common method of awareness for SCS participants included *word of mouth* (12 percent). For the SBDI Pilot, common sources of awareness were from an *ELL representative* (19 percent) and *word of mouth* (13 percent). Results are summarized in Table 166.

Table 166. Small Commercial Solutions—Mode of Program Awareness

How did you learn about the program?	SCS	SBDI	IQS	Overall
From a contractor	41.2%	18.8%	42.9%	32.5%
From ELL's website	29.4%	12.5%	0.0%	17.5%
Word of mouth	11.8%	12.5%	28.6%	15.0%
From an ELL customer service representative	5.9%	18.8%	14.3%	12.5%
Other	11.8%	12.5%	14.3%	12.5%
From an ELL account representative	5.9%	18.8%	0.0%	10.0%
Social media post	0.0%	6.3%	0.0%	2.5%
Through an internet search	0.0%	0.0%	14.3%	2.5%
Respondents (n)	**17**	**16**	**7**	**40**

Source: Participant Survey Question Q5
*Responses can include multiple selections, so percentages may sum to over 100 percent.
Don't know, *not applicable*, and *refused* responses are excluded.

Respondents were also asked about their preferred method of communication for learning about program information and incentives. The most common method between all programs was email (75 percent overall). SBDI Pilot and IQS Pilot participants *prefer a phone call* (33 percent for SBDI Pilot, 38 percent for IQS Pilot) and SCS participants *prefer a visit from contractors or program staff* (41 percent). Other common preferred communication methods include *direct mail* (27 percent for SBDI Pilot) and *targeting owners or upper management* (20 percent for SBDI Pilot, 25 percent for IQS Pilot). Methods that are not as commonly preferred are *bill inserts* (13 percent for SBDI Pilot, 0 percent for IQS Pilot) and *direct mail* (6 percent for SCS). Results are summarized in Table 167.

Table 167. Small Commercial Solutions—Preferred Modes of Communication

What is the best way to reach companies like yours with information about incentives and energy-saving opportunities?	SCS	SBDI	IQS	Overall
Email	70.6%	86.7%	62.5%	75.0%
Visits from contractors or program staff	41.2%	26.7%	25.0%	32.5%
Phone	17.6%	33.3%	37.5%	27.5%
Direct mail	5.9%	26.7%	12.5%	15.0%
Target owners/upper management	0.0%	20.0%	25.0%	12.5%
Bill inserts	17.6%	13.3%	0.0%	12.5%
Other	23.5%	0.0%	12.5%	12.5%
Respondents (n)	**17**	**15**	**8**	**40**

Source: Participant Survey Question Q6
*Responses can include multiple selections, so percentages may sum to over 100 percent.
Don't know, *not applicable*, and *refused* responses are excluded.

12.4.2 Decision-Making

Respondents were asked about their primary reason for participating in the program. The most common reason reported among all program participants was *saving money on energy bills* (81 percent overall). For SCS, another common reason was *saving energy* (53%) and the *financial incentive* (53 percent). Less common reasons for SCS participation were a *recommendation from a contractor* or a *recommendation from program staff* 6 percent for both). For SBDI Pilot participants, other common reasons for participating were *saving energy* (50 percent) and the *ease of participation* (38 percent). Less common reasons were *protecting the environment* (19 percent), a *recommendation from program staff* (13 percent), and a *recommendation from a contractor* (6 percent). For IQS Pilot participants, other common reasons for participation were the financial incentive (63 percent), saving energy (38 percent), *replacing equipment that was broken* (38 percent), and the *ease of participation* (38 percent). A less common reason was a *recommendation from program staff* (13 percent). Results are summarized in Table 168.

Table 168. Small Commercial Solutions—Reasons for Participating in the Program

Reason for participating in the program	SCS	SBDI	IQS	Overall
Saving money on energy bills	76.5%	93.8%	62.5%	80.5%
Saving energy	52.9%	50.0%	37.5%	48.8%
Financial incentive	52.9%	0.0%	62.5%	34.1%
Replacing equipment that was broken	29.4%	25.0%	37.5%	29.3%
Participation was very easy	17.6%	37.5%	37.5%	29.3%
Protecting the environment	29.4%	18.8%	25.0%	24.4%
Recommendation from a contractor	5.9%	6.3%	25.0%	9.8%
Recommendation from program staff	5.9%	12.5%	12.5%	9.8%
Other	5.9%	6.3%	12.5%	7.3%
Respondents (n)	**17**	**16**	**8**	**41**

Source: Participant Survey Questions Q7
Responses can include multiple selections, so percentages may sum to over 100%.

Respondents were asked about the likelihood of completing the project without the program representative's recommendation on a scale of *definitely would not have, probably would not have, probably would have,* or *definitely would have*. Out of four SCS respondents, one-half said they *definitely would have* completed the project without the recommendation, one said *probably would have*, and one said they *probably would not have*. Out of six IQS Pilot respondents, one-half said they *probably would have* completed the project without the recommendation, two said they *probably would not have*, and one said they *definitely would have* completed the project. Results are summarized in Table 169.

Table 169. Small Commercial Solutions—Likelihood of Completing Project Without Program Representative's Recommendation

Without the representative's recommendation, would you have completed the project?	SCS	IQS	Overall
Definitely would not have	0.0%	0.0%	0.0%
Probably would not have	25.0%	33.3%	30.0%
Probably would have	25.0%	50.0%	40.0%
Definitely would have	50.0%	16.7%	30.0%
Respondents (n)	**4**	**6**	**10**

Source: Participant Survey Questions Q10

On an identical scale, respondents were asked if they would have completed the project without the financial incentive. Out of 15 SCS participants, over one-half said they *probably would have,* and one-quarter said *they definitely would have*. Out of eight IQS Pilot respondents, one-half said they *probably would have* completed the project without the program incentive, three said they *probably would not have*, and one respondent said they *definitely would have*. Results are summarized in Table 170.

Table 170. Small Commercial Solutions—Likelihood of Completing Project Without Program Incentive

Without the representative's recommendation, would you have completed the project?	SCS	IQS	Overall
Definitely would not have	0.0%	0.0%	0.0%
Probably would not have	20.0%	37.5%	26.1%
Probably would have	53.3%	50.0%	52.2%
Definitely would have	26.7%	12.5%	21.7%
Respondents (n)	**15**	**8**	**23**

Source: Participant Survey Questions Q11

Table 171 summarizes responses about concerns about participating in the program. Most respondents across all programs (87% for SCS, 93% for SBDI Pilot, 63% for IQS Pilot) reported that participating in the program was an easy decision. The remaining respondents reported having some concerns, but all concerns were regarding the legitimacy of the program as it seemed 'too good to be true.' Results are summarized in Table 171.

Table 171. Small Commercial Solutions—Concerns About Participation

Did you have any concerns about participating?	SCS	SBDI	IQS	Overall
I had some concerns	13.3%	6.7%	37.5%	15.8%
It was an easy decision	86.7%	93.3%	62.5%	84.2%
Respondents (n)	**15**	**15**	**8**	**38**

Source: Participant Survey Questions Q12

Table 172 summarizes responses about the length of time to move forward after submitting an application for the program. Most respondents across both programs reported short wait times. Most SCS participants reported waiting *less than four weeks* before moving forward with the project. A few SCS participants had to wait *more than 6 weeks* (27 percent). Most IQS Pilot participants waited *between 2−6 weeks* (67 **percent**). One IQS Pilot respondent waited *less than 2 weeks* and one waited *between 6−8 weeks*.

Table 172. Small Commercial Solutions—Length of Time to Proceed with Project After Application

Length of time to move forward after application	SCS	IQS	Overall
Less than 2 weeks	20.0%	16.7%	19.0%
2 to 4 weeks	53.3%	33.3%	47.6%
More than 4 weeks to 6 weeks	0.0%	33.3%	9.5%
More than 6 weeks to 8 weeks	13.3%	16.7%	14.3%
More than 8 weeks	13.3%	0.0%	9.5%
Respondents (n)	**15**	**6**	**21**

Source: Participant Survey Questions Q25

12.4.3 Participant Experience

Participants were asked a series of questions regarding their experience with the application process. Table 173 reports their responses when asked about receiving help on their application. Most respondents were *involved in completing the application* (64%). Other common sources of help included a *contractor* (29% for SCS, 38% for IQS Pilot), *another member of their company* (24% for SCS, 38% for IQS Pilot), and an *ELL representative* (24% for SCS, 38% for IQS Pilot). Few participants mentioned receiving help from an *equipment vendor*.

All respondents from SCS and IQS Pilot said the application was *somewhat* or *very easy to follow* on a scale of *very difficult to follow, somewhat difficult to follow, neither difficult nor easy to follow, somewhat easy to follow,* or *very easy to follow*. Results are summarized in Table 174. Most respondents from IQS Pilot (88%) and all respondents for SCS reported *having a clear sense of whom they could approach for application assistance*. Results are summarized in Table 175.

Table 173. Small Commercial Solutions—Application Help Received

Who helped you complete the application?	SCS	IQS	Overall
Yourself	64.7%	62.5%	64.0%
A contractor	29.4%	37.5%	32.0%
Another member of your company	23.5%	37.5%	28.0%
An ELL representative	23.5%	25.0%	24.0%

Who helped you complete the application?	SCS	IQS	Overall
An equipment vendor	0.0%	12.5%	4.0%
Other	5.9%	0.0%	4.0%
Respondents (n)	**17**	**8**	**25**

Source: Participant Survey Question Q21
*Responses can include multiple selections, so percentages may sum to over 100%.
Don't know, *not applicable*, and *refused* responses are excluded.

Table 174. Small Commercial Solutions—Application Instruction Clarity

Rate the clarity of the application instructions	SCS	IQS	Overall
Very difficult to follow	0.0%	0.0%	0.0%
Somewhat difficult to follow	0.0%	0.0%	0.0%
Neither difficult nor easy to follow	0.0%	0.0%	0.0%
Somewhat easy to follow	54.5%	40.0%	50.0%
Very easy to follow	45.5%	60.0%	50.0%
Respondents (n)	**11**	**5**	**16**

Source: Participant Survey Question Q22

Table 175. Small Commercial Solutions—Clarity of Application Assistance

Did you have a clear sense of whom you could approach for application assistance?	SCS	IQS	Overall
Yes	100.0%	87.5%	95.8%
No	0.0%	12.5%	4.2%
Respondents (n)	**16**	**8**	**24**

Source: Participant Survey Question Q24
Don't know, *not applicable*, and *refused* responses are excluded.

Respondents were asked a series of questions regarding the financial incentive. When asked about the incentive amount, most respondents thought the incentive amount was *what they expected* (79% for SCS and 86% for IQS Pilot). The remaining IQS Pilot respondents thought it was *much more than they expected* (14%). Some SCS respondents *thought they would receive more* (14%). Results are reported in Table 176.

Table 176. Small Commercial Solutions—Incentive Amount

How did the incentive amount compare to what was expected?	SCS	IQS	Overall
It was much less than the amount expected	7.1%	0.0%	4.8%
It was somewhat less than the amount expected	7.1%	0.0%	4.8%
It was about the amount expected	78.6%	85.7%	81.0%

How did the incentive amount compare to what was expected?	SCS	IQS	Overall
It was somewhat more than the amount expected	7.1%	0.0%	4.8%
It was much more than the amount expected	0.0%	14.3%	4.8%
Respondents (n)	**14**	**7**	**21**

Source: Participant Survey Question Q26
Don't know, *not applicable*, and *refused* responses are excluded.

Most SCS respondents received their incentive *between 2−6 weeks* (75 percent), though one received it in *less than 2 weeks* and two received it in *6 weeks or more*. Most IQS Pilot respondents received their incentive *between 4−6 weeks* (75 percent). One IQS Pilot respondent received it *between 2−4 weeks*. Results are summarized in Table 177.

Table 177. Small Commercial Solutions—Time to Receive Incentive

Length of time to receive incentive	SCS	IQS	Overall
Less than 2 weeks	8.3%	0.0%	6.3%
2 to 4 weeks	41.7%	25.0%	37.5%
More than 4 weeks to 6 weeks	33.3%	75.0%	43.8%
More than 6 weeks to 8 weeks	8.3%	0.0%	6.3%
More than 8 weeks	8.3%	0.0%	6.3%
Respondents (n)	**12**	**4**	**16**

Source: Participant Survey Question Q27
Don't know, not applicable, and refuse responses excluded.

Respondents were asked if they received an assessment or assistance from a program representative. Most SCS respondents reported *not having* received an assessment or assistance (75 percent), though most IQS Pilot respondents reported *having received* an assessment or assistance (75 percent). Results are summarized in Table 178. From the assessment or assistance, all SCS and IQS Pilot respondents reported installing the measure that was recommended. Table 179 reports the results.

Table 178. Small Commercial Solutions—Program Representative Assistance

Received assessment or assistance from program representative	SCS	IQS	Overall
Yes	25.0%	75.0%	41.7%
No	75.0%	25.0%	58.3%
Respondents (n)	**16**	**8**	**24**

Source: Participant Survey Question Q8

Table 179. Small Commercial Solutions—Program Representative Recommendation

Representative recommended the installed measure	SCS	IQS	Overall
Yes	100.0%	100.0%	100.0%
No	0.0%	0.0%	0.0%
Respondents (n)	**4**	**6**	**10**

Source: Participant Survey Question Q9

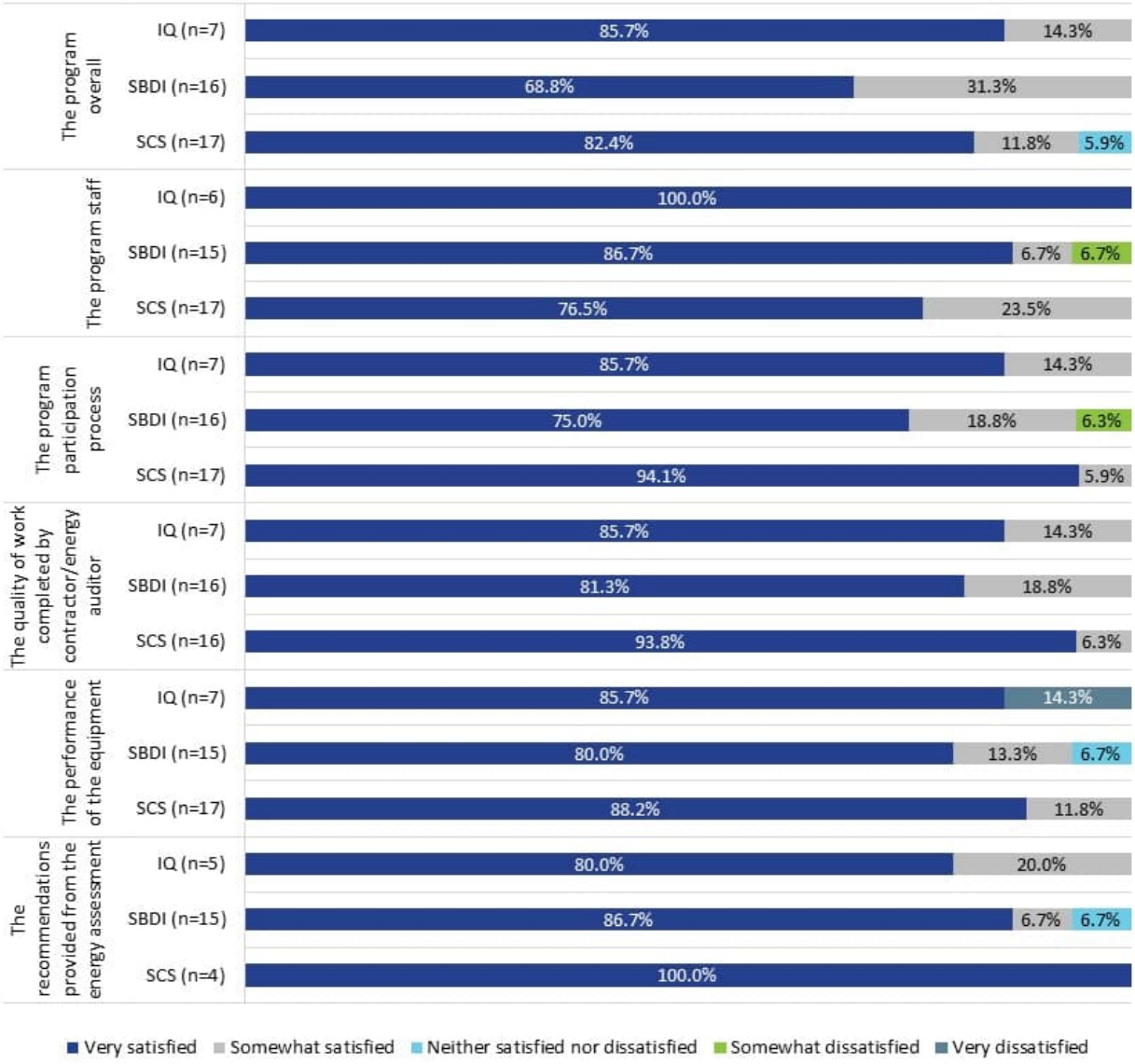
12.4.4 Participant Satisfaction

Overall, respondents rated their satisfaction with the SCS program highly. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied,* nearly all respondents in all programs were either *somewhat satisfied* or *very satisfied* (all but one SCS respondent). Fourteen of the 17 SCS respondents were *very satisfied* (82%), with two of the others *somewhat satisfied* and one *neither satisfied nor dissatisfied.* Sixty-nine percent of SBDI respondents and 86% of IQS Pilot respondents were *very satisfied,* with the remaining respondents of both programs being *somewhat satisfied.*

Very few participants (up to 14%) indicated any level of dissatisfaction, and of those who were dissatisfied, only one gave a rating of *very dissatisfied* on a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied* for one program aspect.

When asked to rate the program overall on the same scale, Of the aspects related to all programs, the highest satisfaction ratings on the same scale came from the aspects related to the energy assessment—*the quality of work performed by the contractor/energy auditor* and the *recommendations from the energy assessment.* No customer was dissatisfied with either aspect. The *program participation process* and *program staff* also yielded high satisfaction, both only garnering one *somewhat dissatisfied* participant from the SBDI program. The *performance of the equipment* was also highly satisfactory for respondents of all programs apart from one *very dissatisfied* participant from the IQS Pilot program.

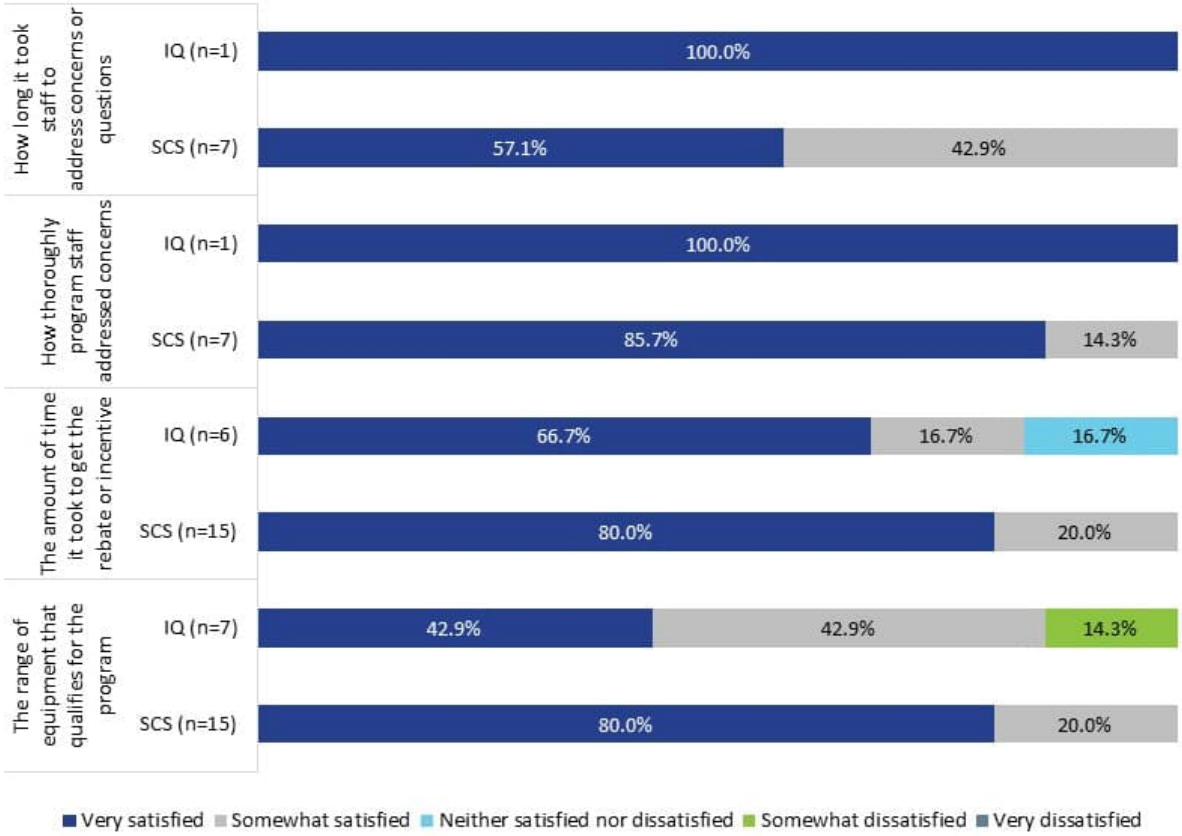
Table 180. Small Commercial Solutions—Participant Satisfaction with Program Aspects—Aspects of All Programs



Source: Participant Survey Question Q30A, Q30B, Q30E, Q30F, Q30G, Q30J

Figure 52 shows satisfaction related to program aspects that only applied to the SCS and IQS Pilot programs. On a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied,* participants who raised questions were all either *somewhat satisfied* or *very satisfied* with *the time it took program staff to address the concerns*, as well as *how thoroughly they addressed them*. The *amount of time it took to receive the rebate or incentive* was similar, apart from one IQS Pilot customer who was *neither satisfied nor dissatisfied,* as was the *range of equipment that qualifies for the program*, which left one respondent from the IQS Pilot program *somewhat dissatisfied.*

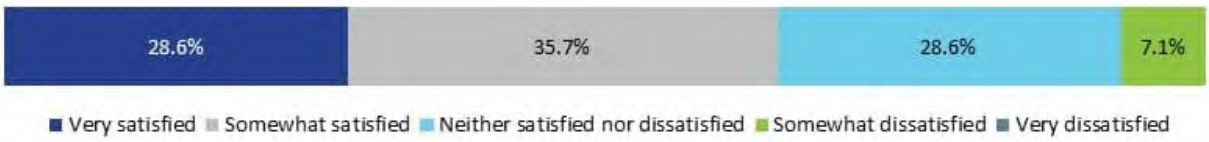
Figure 52. Small Commercial Solutions—Participant Satisfaction with Program Aspects



Source: Participant Survey Questions Q30C, Q30D, Q30H, Q30I

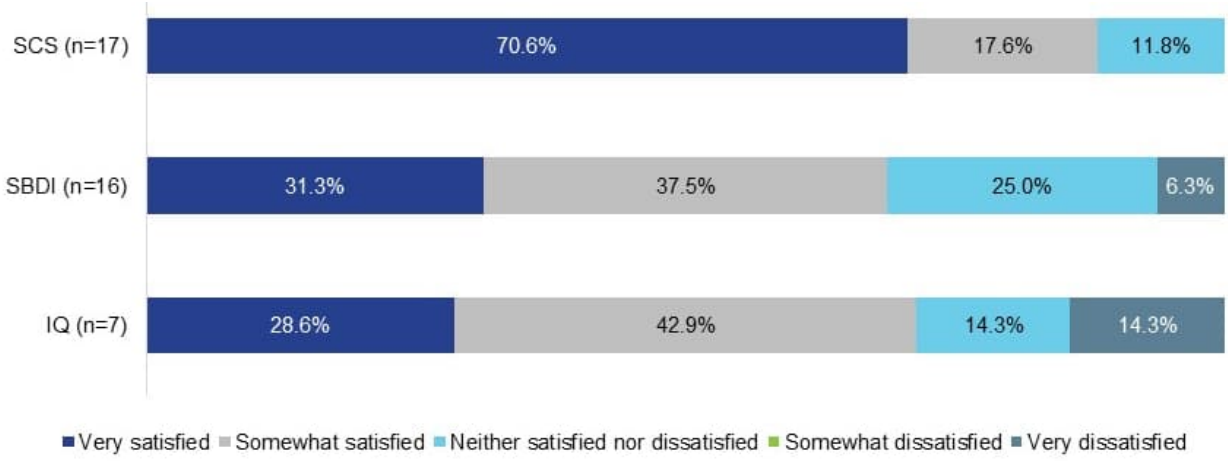
Only SBDI respondents were asked to rate the satisfaction of one program aspect, *the energy savings on their utility bills*, as shown in Figure 53. This was the aspect with the most mixed reviews, with 4 of 14 respondents *neither satisfied nor dissatisfied* and one *somewhat dissatisfied* on a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied.* This aspect also yielded the lowest amount of *very satisfied* responses, at 29 percent.

Figure 53. Small Commercial Solutions—Participant Satisfaction with Program Aspects—Energy Savings on Utility Bill (SBDI Only, n=14)



Source: Participant Survey Question Q30K

Figure 54. Small Commercial Solutions—Participant Satisfaction with ELL as a Service Provider

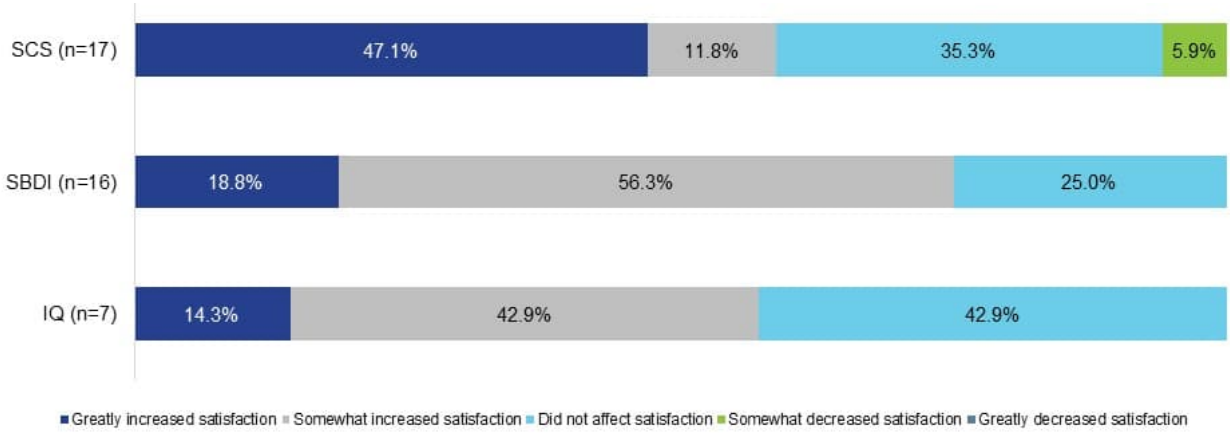


Source: Participant Survey Question Q32

Participants were also asked about their satisfaction with ELL as a service provider on a scale of *very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied,* or *very dissatisfied*. Responses were generally highly satisfactory: 88 percent of SCS respondents, 69 percent of SBDI respondents, and 72 percent of IQS Pilot respondents were either *somewhat satisfied* or *very satisfied.* One SBDI respondent and one IQS Pilot respondent reported being *very dissatisfied* with ELL. The distribution of respondents can be seen in Figure 54 above.

The three programs had an overall positive impact on customer satisfaction with ELL. More than one-half of all respondents (at least 57 percent) from each program reported some amount of increased satisfaction, with 47 percent of SCS customers reporting *greatly improved satisfaction* on a scale of *greatly increased satisfaction, somewhat increased satisfaction, did not affect satisfaction, somewhat decreased satisfaction,* or *greatly decreased satisfaction.* Only one respondent reported *somewhat decreased satisfaction* as a result of participating in the SCS program, as shown in Figure 55 below.

Figure 55. Small Commercial Solutions—Effect of Program Participation on Satisfaction with ELL



Source: Participant Survey Question Q33

12.4.5 Participant Characteristics

Participants were asked a series of questions regarding their company. Most (77 percent) SCS respondents *work at one of the locations owned by their company*. Most SBDI (69 percent) and IQS Pilot (71 percent) respondents *work at their company's only location*. Most respondents (73 percent overall) reported that their *company owns the building they work out of*. About one-third of all respondents across the programs (34 percent) are the *proprietor or owner of the company*. Other common roles among respondents were *managers* (17 percent) or *facilities manager* (12 percent). Results are summarized in Table 181.

Table 181. Small Commercial Solutions—Participant Characteristics

Characteristic	SCS	SBDI	IQS	Overall
Facility description				
Your company's only location	23.5%	68.8%	71.4%	50.0%
One of several locations owned by your company	76.5%	12.5%	28.6%	42.5%
The headquarter location of a company with several locations	0.0%	18.8%	0.0%	7.5%
Respondents (n)	**17**	**16**	**7**	**40**
Building ownership				
Rent	17.6%	31.3%	28.6%	25.0%
Own and occupy	76.5%	68.8%	71.4%	72.5%
Own and rent to someone else	5.9%	0.0%	0.0%	2.5%
Respondents (n)	**17**	**16**	**7**	**40**
Job title				
Proprietor/owner	35.3%	31.3%	37.5%	34.1%
Manager	23.5%	12.5%	12.5%	17.1%
Facilities manager	17.6%	6.3%	12.5%	12.2%
Other (please specify)	11.8%	6.3%	25.0%	12.2%
Other financial/administrative position	0.0%	18.8%	12.5%	9.8%
President/CEO	0.0%	18.8%	0.0%	7.3%
Energy manager	11.8%	0.0%	0.0%	4.9%
Chief financial officer	0.0%	6.3%	0.0%	2.4%
Respondents (n)	**17**	**16**	**8**	**41**

Source: Participant Survey Questions Q36, Q37, Q4

12.5 OVERALL SAVINGS ESTIMATES

Conducting desk reviews and independent verifications to calculate the program-level savings was in the EM&V team's scope for PY10 so realization rates calculated by the previous evaluator in PY9 were applied across all projects in PY10.

Table 182. PY10 Small Commercial Solutions Reported and Evaluated Savings*

Measure category	Reported savings		Evaluated savings		Realization rate^	
	kWh	kW	kWh	kW	kWh	kW
Administrative	16,134	1.4	13,756	1.2	85.3%	86.3%
Custom	6,499,921	305.2	5,541,921	263.3	85.3%	86.3%
Domestic hot water	4,506	1.0	3,842	0.8	85.3%	86.3%
Food service	71,988	13.9	61,378	12.0	85.3%	86.3%
HVAC	359,784	117.4	306,757	101.3	85.3%	86.3%
Lighting	1,678,663	314.8	1,431,251	271.5	85.3%	86.3%
Motors	111,013	12.4	94,651	10.7	85.3%	86.3%
Other	1,408	-	1,200	-	85.3%	-
Refrigeration	211,064	23.0	179,956	19.8	85.3%	86.3%
Tune-up	269,796	131.3	230,032	113.3	85.3%	86.3%
Total	**9,224,278**	**920.4**	**7,864,744**	**793.9**	**85.3%**	**86.3%**

*A dashed line indicates no savings.
^Realization rates calculated by the previous evaluator from PY2023.

13.0 COST EFFECTIVENESS

This section provides an overview of each program's participation, verified reduction in peak load, verified kilowatt-hour savings, total program costs, and a summary of the cost-effectiveness analysis.

The methods used for performing the cost-effectiveness tests are in line with the California Standard Practice Manual[43] and represent estimates of each program's costs and benefits from different perspectives. These include the *total resource cost test* (TRC), the *program administrator cost test* (PACT), the *ratepayer impact measure* (RIM), and the *participant cost test* (PCT).

The TRC test estimates the balance between the avoided costs of energy production and demand reduction against the costs of implementing the program, including the program implementation and installation and equipment costs. The PACT examines cost-effectiveness from the program administration point of view and estimates the avoided costs of energy against the program implementation costs and the incentives given to customers. The RIM compares the avoided costs of energy against the implementation costs, incentives, and the amount that energy bills will be reduced because of participation in the program. From the point of view of the program, the reduced energy bills are lost revenue and are treated as a cost of the program. From the participants' perspective, the PCT measures the incentives and the bill savings as benefits, with costs coming from the installation and equipment costs.

13.1 KEY FINDINGS

In PY10, residential programs showed good benefit-to-cost ratios for most of the standard tests. The TRC, PACT, and PCT were greater than one for every residential program in the portfolio. All residential projects were used to calculate cost-effectiveness: the Income Qualified Lighting Pilot was included with the Income Qualified Solutions, and the Residential New Construction Pilot was included with the Home Performance with ENERGY STAR program. The overall residential program showed a TRC benefit-to-cost ratio of 2.52, demonstrating that the residential programs were cost-effective in PY10.

The Small Commercial Solutions program, excluding projects in the Income Qualified subprogram, showed program costs that outweighed the avoided costs, leading to a TRC benefit-to-cost ratio of 0.96. The Small Commercial Income Qualified projects on their own had a TRC of 0.38Overall, the commercial and residential programs combined had a TRC benefit-to-cost ratio of 1.71, which implies that the entire portfolio was cost-effective in PY10.

A line loss factor of 2.685% was applied to the verified savings to produce savings at the generator. For each measure, the measure life, installation and equipment costs, and verified energy savings and demand reductions are taken from program tracking data. Program costs were provided by Entergy Louisiana, LLC (ELL) and APTIM at the program level. For the purposes of separating the Income Qualified projects from the Small Commercial Solutions program, the program expenditures were divided proportionally among the two programs, using the incentives to determine the proportions.

[43] California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects, October 2001. Retrieved from https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/cpuc-standard-practice-manual.pdf on March 11, 2025.

Table 183 presents the final verified savings estimates, total expenditures, and the TRC and PACT benefit-to-cost ratios. Table 184 lists the benefit-to-cost ratios for each of the four cost-effectiveness tests presented by program. Finally, Table 185 shows the net benefits in PY10 for each test and program.

Table 183. Realized Savings, Program Expenditures, and Cost-Effectiveness by Program, PY10

Program Name	Verified Annual Energy Savings (kWh)	Verified Demand Reduction (kW)	Total Program Expenditures	Total Resource Cost Test (TRC)	Program Administrator Cost Test (PACT)
AC Solutions	7,083,623	1,627.4	$1,130,849	4.90	2.36
Home Performance with ENERGY STAR	7,979,381	1,703.7	$1,574,144	4.98	1.84
Income Qualified Solutions	9,859,197	2,281.9	$3,427,570	2.35	1.05
Manufactured Homes	3,763,887	582.7	$942,435	3.42	1.40
Multifamily Solutions	6,931,109	988.4	$1,075,550	5.34	2.09
Retail Lighting & Appliances	9,458,087	502.4	$1,223,161	1.04	1.93
School Kits & Education	1,828,340	237.3	$452,081	1.12	1.12
Residential Programs	**46,903,624**	**7,923.8**	**$9,825,790**	**2.52**	**1.59**
Large Commercial & Industrial Solutions	24,688,990	3,241.4	$5,489,470	1.22	1.29
Small Commercial Solutions	7,864,136	793.8	$2,523,466	0.88	0.95
Small Commercial – Not Income Qualified	*7,424,053*	*682.3*	*a/*	*0.96*	*1.18*
Small Commercial - Income Qualified	*440,692*	*111.6*	*a/*	*0.38*	*0.24*
Commercial Programs	**32,553,735**	**4,035.3**	**$8,012,936**	**1.11**	**1.19**
Total	**79,456,358**	**11,959.1**	**$17,838,726**	**1.71**	**1.41**

a/ The Small Commercial – Income Qualified and the non-Income Qualified program expenditures are combined in the Small Commercial Solutions expenditures. For the purposes of cost-effectiveness testing, these expenditures were divided among the two groups proportionally by percentage of incentives paid.

Table 184. Cost-Effectiveness Benefit-Cost Ratios by Program, PY10

Program name	TRC	PACT	RIM	PCT
AC Solutions	4.90	2.36	0.23	40.58
Home Performance with ENERGY STAR	4.98	1.84	0.23	76.93
Income Qualified Solutions	2.35	1.05	0.22	40.93
Manufactured Homes	3.42	1.40	0.21	42.85
Multifamily Solutions	5.34	2.09	0.22	66.95
Retail Lighting and Appliances	1.04	1.93	0.30	3.67

Program name	TRC	PACT	RIM	PCT
School Kits and Education	1.12	1.12	0.20	8.18
Residential programs	**2.52**	**1.59**	**0.23**	**18.56**
Large Commercial and Industrial Solutions	1.22	1.29	0.21	9.01
Small Commercial Solutions	0.88	0.95	0.17	7.67
Small Commercial – Not Income Qualified	*0.96*	*1.18*	*0.17*	*7.74*
Small Commercial – Income Qualified	*0.38*	*0.24*	*0.12*	*6.93*
Commercial programs	**1.11**	**1.19**	**0.20**	**8.57**
Total	**1.71**	**1.41**	**0.22**	**12.62**

Table 185. Cost-Effectiveness Net Benefits by Program, PY10

Program Name	TRC Net Benefits	PACT Net Benefits	RIM Net Benefits	PCT Net Benefits
AC Solutions	2,122,085	1,536,957	-8,844,079	11,029,771
Home Performance with ENERGY STAR	2,318,984	1,329,099	-9,717,222	12,101,052
Income Qualified Solutions	2,071,534	187,629	-13,182,581	15,332,306
Manufactured Homes	936,710	375,901	-5,085,555	6,054,584
Multifamily Solutions	1,826,731	1,174,102	-7,991,191	9,870,427
Retail Lighting & Appliances	95,246	1,134,193	-5,591,314	5,712,529
School Kits & Education	54,201	54,201	-1,966,511	2,028,971
Residential Programs	**9,425,491**	**5,792,083**	**-52,378,453**	**62,129,640**
Large Commercial & Industrial Solutions	1,286,245	1,609,408	-26,392,362	27,811,365
Small Commercial Solutions	-331,358	-120,633	-11,714,375	11,441,369
Small Commercial - Not Income Qualified	*-99,020*	*332,787*	*-10,659,401*	*10,616,075*
Small Commercial - Income Qualified	*-228,009*	*-449,092*	*-1,050,644*	*825,293*
Commercial Programs	**954,887**	**1,488,774**	**-38,106,737**	**39,252,734**
Total	**9,911,487**	**6,811,965**	**-88,536,653**	**98,954,199**

APPENDIX A: PARTICIPANT SURVEY MATERIALS

Below are copies of the postcards and emails used to solicit survey participation for both the residential and commercial web surveys.

A.1 RESIDENTIAL SURVEY INVITATIONS

Figure 56. Residential Participant Survey Advance Postcard Invitation—Front Side

Figure 57. Residential Participant Survey Advance Postcard Invitation—Back Side

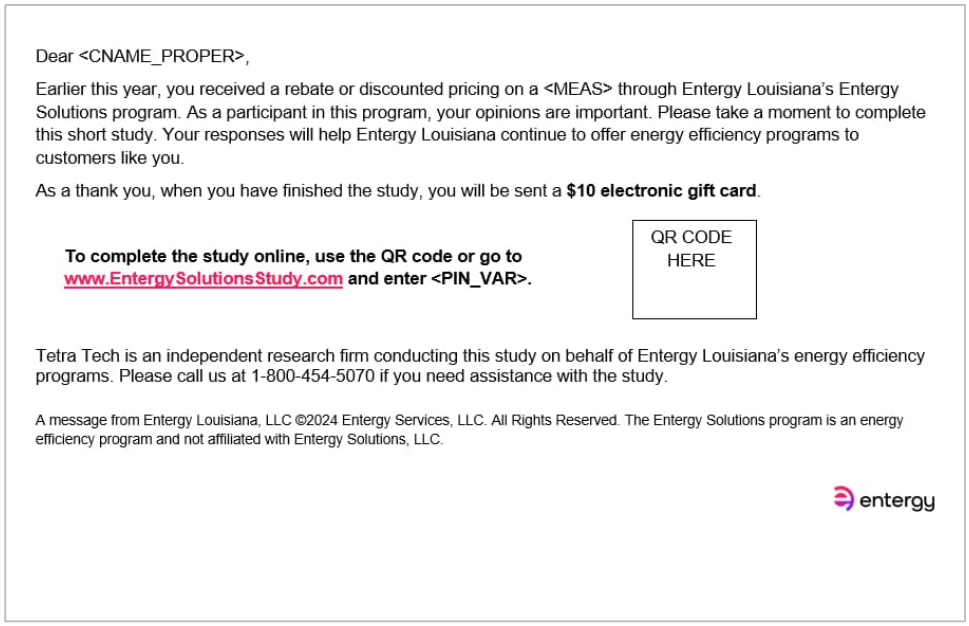
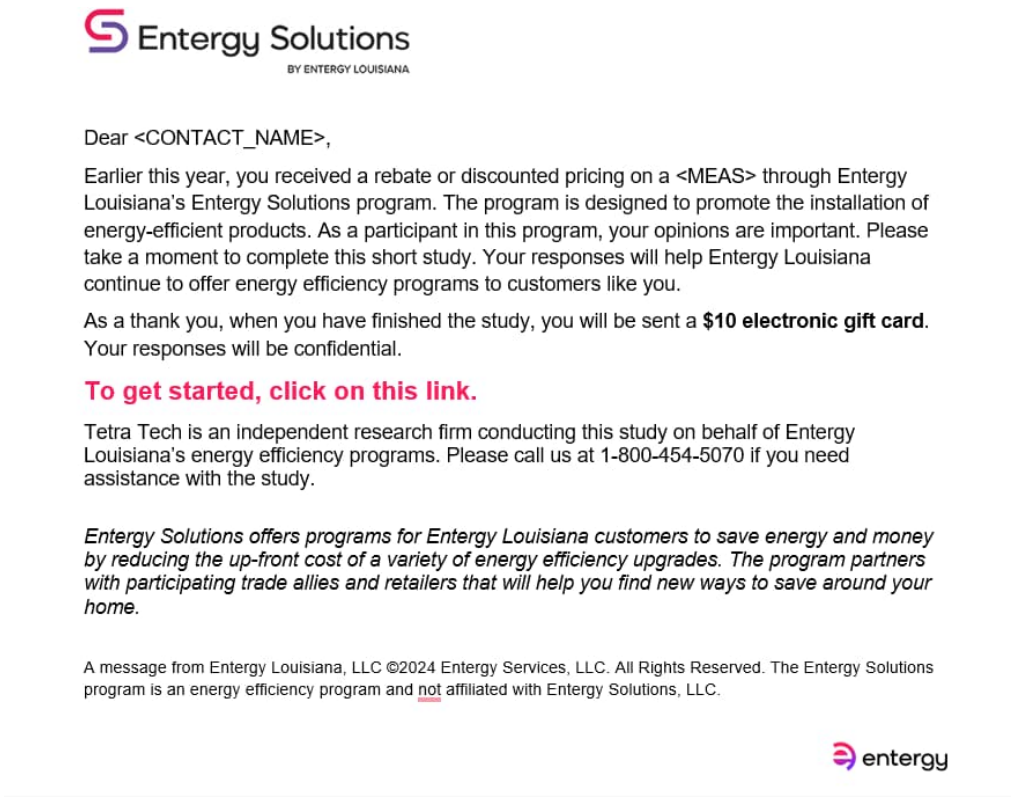


Figure 58. Residential Participant Survey Advance Email Invitation



Entergy Solutions
BY ENTERGY LOUISIANA

Dear <CONTACT_NAME>,

Earlier this year, you received a rebate or discounted pricing on a <MEAS> through Entergy Louisiana's Entergy Solutions program. The program is designed to promote the installation of energy-efficient products. As a participant in this program, your opinions are important. Please take a moment to complete this short study. Your responses will help Entergy Louisiana continue to offer energy efficiency programs to customers like you.

As a thank you, when you have finished the study, you will be sent a **$10 electronic gift card**. Your responses will be confidential.

To get started, click on this link.

Tetra Tech is an independent research firm conducting this study on behalf of Entergy Louisiana's energy efficiency programs. Please call us at 1-800-454-5070 if you need assistance with the study.

Entergy Solutions offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program partners with participating trade allies and retailers that will help you find new ways to save around your home.

A message from Entergy Louisiana, LLC ©2024 Entergy Services, LLC. All Rights Reserved. The Entergy Solutions program is an energy efficiency program and not affiliated with Entergy Solutions, LLC.

entergy

A.2 RESIDENTIAL SURVEY INSTRUMENT

Entergy Louisiana, LLC
Residential Program Participant Survey (PY10)
(AC Solutions, Home Performance with ENERGY STAR®, Income Qualified, Manufactured Homes, Multifamily Homes, and Retail Lighting and Appliances, including Online Marketplace)[44]

This survey instrument will be used for a web-based computer-assisted survey with customers who participated in Entergy Solutions by Entergy Louisiana's residential programs to support the PY10 process evaluation for the program.

SAMPLE VARIABLES

CASEID Unique case identifier

CONTACT_NAME Customer contact name listed on the account

ADDRESS Customer street address
CITY Customer city
STATE Customer state
ZIP Customer zip
EMAIL Customer email address

PHONE_NUM Customer contact phone number

PROGRAM Program name

1 AC Solutions
2 Home Performance with ENERGY STAR® (HPwES)
3 Income Qualified Weatherization (IQW)
4 Manufactured Homes (Manufactured)
5 Multifamily Solutions (MF)
6 Retail Lighting and Appliances, including Online Marketplace

Flags for Equipment received (direct install only – HPwES, IQW, MF, Manufactured)

LB LED bulbs
SH Showerhead
FA Faucet aerator
PS Smart power strip
ST Smart thermostat
AC Air conditioner tune-up
HP Heat pump tune-up
DS Duct sealing
AS Air sealing
CI Ceiling insulation
PW Pipe wrap

[44] Completion targets: AC Solutions (20), HPwES (20), LI (20), MF (5), Manufactured (5), OLM (20)

CR Cool roof
PP Pool pump

1 Received
0 Not Received

MEAS Sampled measure (only one per participant, excluding direct install)

1 Advanced power strip
2 LED bulb
3 Smart thermostat
4 Faucet aerator
5 A/C unit
6 Electric resistant heat
7 Dehumidifier
8 Heat pump water heater
9 Refrigerator
10 Pool pump
11 Window air conditioner
12 Duct sealing
13 AC tune-up
14 Heat pump tune-up
15 Heat pump
16 Pipe insulation
17 Home energy assessment, along with no-cost direct-installed items
18 Air purifier
19 Low-flow showerhead

MEASDESC Detailed measure description

TYPE Type of measure
1 Purchased
2 Received

STAFF Type of applicable program staff
1 Program trady ally)
2 Home energy auditor

REBATE Rebate amount for sampled rebated measure (rounded to nearest dollar)

QTY Number of measures

DATE Installation date for MEASURE

YEAR Program year

REP Sample replicate for managing response rate

QUOTA Sample management for survey completions

1 AC Solutions
2 Home Performance with ENERGY STAR
3 Income Qualified Weatherization
4 Manufactured Homes
5 Multifamily Solutions
6 Retail Lighting and Appliances, including Online Marketplace

SURVEY LANDING PAGE

Entergy Solutions
BY ENTERGY LOUISIANA

Thank you in advance for sharing your experience with Entergy Solutions Louisiana program. Your responses will help Entergy Louisiana continue to offer energy-efficiency programs to customers like you.

If you are qualified for the survey, it should take about ten minutes to complete. **You can stop the survey at any time and return to it later.** Your earlier responses will be saved.

As a thank you, when you have finished the survey, Tetra Tech will send you a $10 electronic gift card. Your responses will be confidential. Tetra Tech will combine your responses with those of others who have participated in the Entergy Solutions program and report the cumulative totals.

Click 'Continue'

Tetra Tech is an independent research firm conducting this study on behalf of Entergy Louisiana's energy efficiency programs. Please call us at 1-800-454-5070 if you need assistance with the survey.

Please use the survey's navigational buttons to move between questions.
Do not use your browser's "Back" and "Forward" buttons.

Entergy Solutions offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program partners with participating trade allies and retailers, who will help you find new ways to save around your home.

SCREENING

Q1 Do you or any member of your household currently work for Entergy? *(SELECT ONE)*

1 Yes [SKIP TO THANK YOU; TERMINATE SURVEY]
2 No

Q2 Program records indicate that your household participated in the Entergy Solutions program <program> by receiving <measure> at <address>. Is this correct? *(SELECT ONE)*

1 Yes
2 Yes, but information is incorrect
3 No [SKIP TO THANK YOU; TERMINATE SURVEY]

Q3 What is incorrect about our records? *(ENTER BELOW)*

INSTALLATION VERIFICATION (ALL PROGRAMS)

Q4 Prior to learning about the Entergy Solutions program <program>, did you have plans to purchase the <meas>? *(SELECT ONE)*

1 Yes
2 No [SKIP TO Q8]
98 Don't know

[ASK FOR ALL NON-DI MEASURES; DI SKIP TO Q16]
Q5 Why did you select this model or type of <meas>? *(SELECT ALL THAT APPLY)*

1 It was a good price / fit within my budget
2 There was a rebate for it
3 It costs less to operate it
4 It's good for the environment
5 It was all that was available / only choice
6 The contractor / retailer recommended it
7 It had features I wanted
8 It was the right size, color
9 I wanted that brand
10 It had an ENERGY STAR label
96 Other (please specify):_____
98 Don't know

Q6 When you were deciding to purchase the <meas>, from where did you receive information about what to buy? *(SELECT ALL THAT APPLY)*

1 Retailers
2 Installation contractors
3 Friend, neighbor, relative, or co-worker
4 Entergy
5 Internet
6 Consumer reports or other product magazines
7 Newspaper
8 Radio
9 Television
96 Other (please specify):_____
98 Don't know
99 I did not look for any information about what to buy

Q7 From what type of store or contractor did you purchase the <meas>? *(SELECT ONE)*

1 Program trade ally
2 Appliance store
3 Home improvement store
4 Heating/ cooling contractor
5 Swimming pool contractor/store
6 Local hardware store
7 Online retailer
8 The Entergy Marketplace
96 Other (please specify):_____
98 Don't know

[SKIP TO NEXT SECTION IF AIR SEALING OR DUCT SEALING]
Q8 Was this <meas> a new installation or did you replace existing equipment? *(SELECT ONE)*

1 New installation [SKIP TO NEXT SECTION]
2 Replaced previous <meas>
3 The <meas> was part of a new construction project [SKIP TO NEXT SECTION]
98 Don't know [SKIP TO NEXT SECTION]

Q9 Which of the following best describes the working condition of the <meas> that you replaced? *(SELECT ONE)*

1 Fully working and not in need of repair
2 Working, but needed minor repairs
3 Working, but needed major repairs
4 Not working
98 Don't know

Q10 How old was the existing <meas> at the time you replaced it? Your best guess is okay. *(ENTER BELOW)*

1 # years _____
98 Don't know

ALL PROGRAMS (EXCLUDING R&A (OLM))

Q12 [AC ONLY] Has your home ever received an in-home energy assessment? *(SELECT ONE)*

1 Yes
2 No [SKIP TO Q14]
98 Don't know [SKIP TO Q14]

Q13 [AC ONLY] How long after the in-home energy assessment did you purchase the <meas>? *(ENTER BELOW)*

1 # months _____
98 Don't know

Q14 How did you first get in touch with the <staff> you worked with? *(SELECT ONE)*

1 The <staff> contacted the me first
2 You contacted the <staff> first
98 Don't know

Q15 Where did you find the contact information for the <staff> that implemented the <measure>? *(SELECT ONE)*

1 The Entergy Solutions program website
2 The Home Energy Auditor who did the assessment recommended the contractor
3 An Entergy Solutions' program representative referred me to a <staff>
4 The <staff> was someone you worked with before
5 Internet search
6 Other (please specify):_____
98 Don't know

Q16 Did the <staff> discuss the energy savings you were receiving through the Entergy <program> for implementing the <measure>? *(SELECT ONE)*

1 Yes
2 No
98 Don't know

Q17 Please indicate your agreement with each of the following statements below. *(SELECT ONE FOR EACH)*

1 Strongly disagree
2 Somewhat disagree
3 Somewhat agree
4 Strongly agree
98 Don't know

Q17a The <staff> was courteous and professional
Q17b The work was scheduled in a reasonable amount of time
Q17c The time it took to complete the work was reasonable

AC AND HEAT PUMP TUNE-UPS ONLY

[ASK IF MEAS= AC OR HP TUNE-UP; ELSE SKIP TO DIRECT INSTALL SECTION]

Q18 Prior to participating in the program, did you have regular tune-ups conducted by a heating and cooling contractor? *(SELECT ONE)*

1 Yes
2 No [SKIP TO Q21]
98 Don't know [SKIP TO Q21]

Q19 Did you have those tune-ups completed as part of a maintenance agreement or plan? *(SELECT ONE)*

1 Yes
2 No [SKIP TO Q21]
98 Don't know [SKIP TO Q21]

Q20 Approximately how often do you get a tune-up? *(SELECT ONE)*

1 Every 6 months or more frequently
2 Once every year
3 Once every 2 years
4 Once every 2 to 5 years
5 Once every 5 years or more
6 Only as needed for repairs
7 Other (please specify): _____
98 Don't know

Q21 Not including the tune-up you received as a part of the <program>, when, if ever, was your last tune-up? *(SELECT ONE)*

1 Less than 1 year ago
2 1-2 years ago
3 3-5 years ago
4 More than 5 years ago
5 Never had a tune-up
98 Don't know

Q23 What did they say that was different about the Entergy Solutions' <tune-up type> tune-up from a standard tune-up? *(SELECT ALL THAT APPLY)*

1 More energy efficient
2 Condenser coil cleaning
3 Evaporator coil cleaning
4 Cleaned blower
5 Verify airflow
6 More accurate refrigerant recharge
7 Other (please specify): _____
98 Don't know

DIRECT INSTALL (INCLUDES HPWES, IQS, MANUFACTURED HOMES, MULTIFAMILY)

Q24 According to program records you received the following energy saving items through the Entergy <program>. Is that correct? *(SELECT ONE)*

Display all DI measures received.

For each of the following measure(s) please tell me how many were installed in your home? *(ENTER BELOW)*

	Quantity Installed
[insert DI measure 1]	
[insert DI measure 2]	
[insert DI measure 3]	
[insert DI measure 4], etc	

Q25 Have any of the installed measure(s) been removed? *(SELECT ONE)*

1 Yes
2 No [SKIP TO NEXT SECTION]
98 Don't know [SKIP TO NEXT SECTION]

Q26 How many of the following measure(s) were removed? *(ENTER BELOW)*

	Quantity Removed
[insert DI measure 1]	
[insert DI measure 2]	
[insert DI measure 3]	
[insert DI measure 4], etc	

Q27 Why were these measures removed? *(SELECT ONE)* [ask for each measure mentioned]

1 They were no longer working properly
2 Purchased new items that I liked better
3 I liked my old items better, so I reinstalled them
4 I performed some remodeling or maintenance that required the removal of these items
5 Other
6 Don't know

Q28 Please explain the "Other" reason you removed or replaced these items. *(ENTER BELOW)*

PROGRAM AWARENESS

Q29 How did you first learn about the Entergy Solutions program <program>? *(SELECT ALL THAT APPLY)*

1 Mailed information from Entergy Solutions
2 Email from Entergy Solutions
3 Print advertisement
4 Contractor
5 Word-of-mouth (family, friend, colleague, etc.)
6 Radio or TV advertisement
7 Bill inserts or utility mailer
8 Entergy Solutions website
9 Other website
10 Social media (Facebook, Twitter, Instagram, etc.)
11 Retailer
12 Internet search (e.g. Google search)

13 Internet advertisement
14 In-store display
15 Home energy consultant
16 Program representative
17 Other (please specify): _____
98 Don't know

Q30 Why did you decide to participate in the <program>? *(SELECT ALL THAT APPLY)*

1 Save money on energy bills.
2 Improve the comfort of my home.
3 Conserve energy and/or protect the environment.
4 Become as energy efficient as my friends or neighbors.
5 Get the free or discounted equipment or service.
6 Recommendation from a friend, relative, neighbor, or colleague.
7 Recommendation from contractor.
8 Recommendation from Entergy.
9 Improve the value of the residence.
10 Other (please specify): _____
98 Don't know.

Q31 Of those, what would you say is the main reason for your participation in the program? *(SELECT ONE)*

[ONLY SHOW THOSE SELECTED IN Q30]

1 Save money on energy bills.
2 Improve the comfort of my home.
3 Conserve energy and/or protect the environment.
4 Become as energy efficient as my friends or neighbors.
5 Get the free or discounted equipment or service.
6 Recommendation from a friend, relative, neighbor, or colleague.
7 Recommendation from contractor.
8 Recommendation from Entergy.
9 Improve the value of the residence.
10 Other (please specify): _____
98 Don't know.

SATISFACTION

Q32 Prior to participating in the Entergy Solutions program, how familiar were you with the benefits of installing various energy efficiency improvements similar to those offered by the program? *(SELECT ONE)*

1 Not familiar
2 Somewhat familiar
3 Very familiar
4 Extremely familiar
98 Don't know

Q33 How interested are you in making additional improvements to your home that would…
1 Not at all interested
2 Somewhat interested
3 Very interested
4 Extremely interested

Q33a Increase its energy efficiency?
Q33b Improve your comfort?
Q33c Improve your health and safety?

Q34 Have you visited Entergy's website for information on their programs or other ways to save energy? *(SELECT ONE)*

1 Yes
2 No [SKIP TO NEXT SECTION]
98 Don't know [SKIP TO NEXT SECTION]

Q35 How easy was it to find the information you were looking for? *(SELECT ONE)*
1 Very difficult
2 Somewhat difficult
3 Easy
4 Very easy

Q36 Did you contact Entergy Solutions' program staff with questions at any time? *(SELECT ONE)*

1 Yes
2 No
98 Don't know

Q37 These next few questions ask about your satisfaction with several aspects of the program. How satisfied are you with each of the following:
1 Very dissatisfied
2 Somewhat dissatisfied
3 Neither satisfied nor dissatisfied
4 Somewhat satisfied
5 Very satisfied
97 Not applicable

Q37a **The program overall**
Q37b Interactions with program staff
Q37c How long it took program staff to address your questions or concerns
Q37d [ASK IF NOT DI OR OLM] The time it took to receive the rebate
Q37e The program participation process
Q37f The energy savings on your utility bill
Q37g [ASK IF NOT DI] The rebate or discount amount
Q37h The quality of the work completed by your contractor/energy auditor
Q37i The performance of the equipment
Q37j [ASK IF NOT DI OR OLM] The effort required for the application process

Q38 Why were you dissatisfied with <INSERT Q37 SELECTIONS>? *(ENTER BELOW)*

Q39 Using the same scale, how satisfied are you with Entergy Louisiana as your electricity service provider? *(SELECT ONE)*

1 Very dissatisfied
2 Somewhat dissatisfied
3 Neither satisfied nor dissatisfied
4 Somewhat satisfied
5 Very satisfied

Q40 How has your participation in the <program> affected your satisfaction with Entergy Louisiana? *(SELECT ONE)*

1 Greatly decreased satisfaction
2 Somewhat decreased satisfaction
3 Did not affect satisfaction
4 Somewhat increased satisfaction
5 Greatly increased satisfaction

Q41 How likely are you to recommend Entergy to a friend, relative or colleague? *(SELECT ONE)*

1 Not at all likely (Why do you say that?)
2
3
4
5
6
7
8
9
10 Extremely likely

Q42 What recommendations do you have for program improvement? *(ENTER BELOW)*

DEMOGRAPHICS AND HOUSEHOLD CHARACTERISTICS

Q43 Finally, we have a few questions about you and your home. Like all your responses, they will be kept confidential.

Do you own, rent, or own but rent to someone else the property located at <address>? *(SELECT ONE)*

1 Rent
2 Own
3 Own but rent to someone else
99 Prefer not to answer

Q44 Which of the following best describes your home? *(SELECT ONE)*

1 Single-family home
2 Manufactured or mobile home
3 Duplex or townhome
4 Apartment or condominium
5 Other (please specify): _____
99 Prefer not to answer

Q45 Approximately when was your home built? *(SELECT ONE)*

1 Before 1960
2 1960 to 1969
3 1970 to 1979
4 1980 to 1989
5 1990 to 1999
6 2000 to 2009
7 2010 or 2019
8 2020 or later
98 Don't know
99 Prefer not to answer

Q46 About how many square feet is your home? If you're unsure, an estimate is okay. *(SELECT ONE)*

1 Less than 1,000 square feet
2 1,000 to 1,999 square feet
3 2,000 to 2,999 square feet
4 3,000 to 3,999 square feet
5 4,000 square feet or more
98 Don't know
99 Prefer not to answer

Q47 What is the main fuel used for heating your home? *(SELECT ONE)*

1 Natural gas
2 Electricity
3 Propane
4 Don't heat the home
5 Other (please specify): _____
98 Don't know
99 Prefer not to answer

Q48 What is the main type of heating equipment used to provide heat for your home? *(SELECT ONE)*

1 Heat pump
2 Central forced air furnace
3 Built-in baseboard heater
4 Built-in wall heater
5 Portable heater
6 Other (please specify): _____
98 Don't know
99 Prefer not to answer

Q49 What type of air conditioning do you currently have in your home? *(SELECT ONE)*

1 Central AC
2 Heat pump
3 Mini-split (ductless heat pump)
4 Wall or window mounted air conditioning unit
5 Don't use air conditioning
6 Other (please specify): _____
98 Don't know
99 Prefer not to answer

Q50 [ASK IF OWN] What type of water heater does this residence have? *(SELECT ONE)*

1 Natural gas water heater
2 Electric water heater
3 Propane water heater
4 Other (please specify): _____
98 Don't know
99 Prefer not to answer

Q51 How many people, including yourself, live in your home? *(SELECT ONE)*

1 1 person
2 2 people
3 3 people
4 4 people
5 5 people
6 6 people
7 7 people
8 8+ people
99 Prefer not to answer

Q53 Which of the following best describes your household annual income? *(SELECT ONE)*

1	Less than $15,000
2	$15,000 to less than $25,000
3	$25,000 to less than $35,000
4	$35,000 to less than $50,000
5	$50,000 to less than $75,000
6	$75,000 to less than $100,000
7	$100,000 to less than $150,000
8	More than $150,000
98	Don't know
99	Prefer not to answer

[FOR THOSE WHO DO NOT QUALIFY FOR THE SURVEY, ELSE SKIP TO EMAIL]

THANK YOU Based on your responses, you do not qualify to complete this survey at this time, but we thank you very much for your interest and welcome your feedback in future surveys should you be selected.

Please hit “Next” to be taken to Entergy Solutions program page for more information about their current program offerings.

[Exit survey to https://www.entergy-louisiana.com/energy-efficiency-program/]

EMAIL Thank you for completing the survey. To what email address should we send the electronic gift card? *(ENTER BELOW)*
Format: johndoe@gmail.com

COMPLETE Thank you. You can expect to receive your electronic gift card within the next 1-2 weeks. If you would like to follow up on the status, please call us at 1-800-454-5070.

Please hit "Submit" to exit the survey.

[Exit survey to https://www.entergy-louisiana.com/energy-efficiency-program/]

A.3 COMMERCIAL SURVEY INVITATIONS

Figure 59. Commercial Participant Survey Advance Postcard Invitation—Front Side

Figure 60. Commercial Participant Survey Advance Postcard Invitation—Back Side

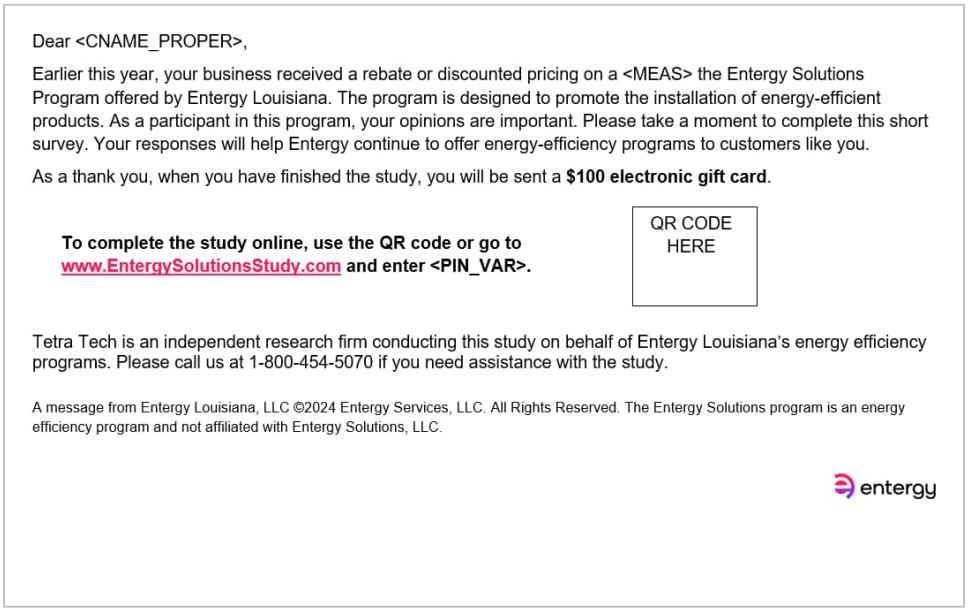
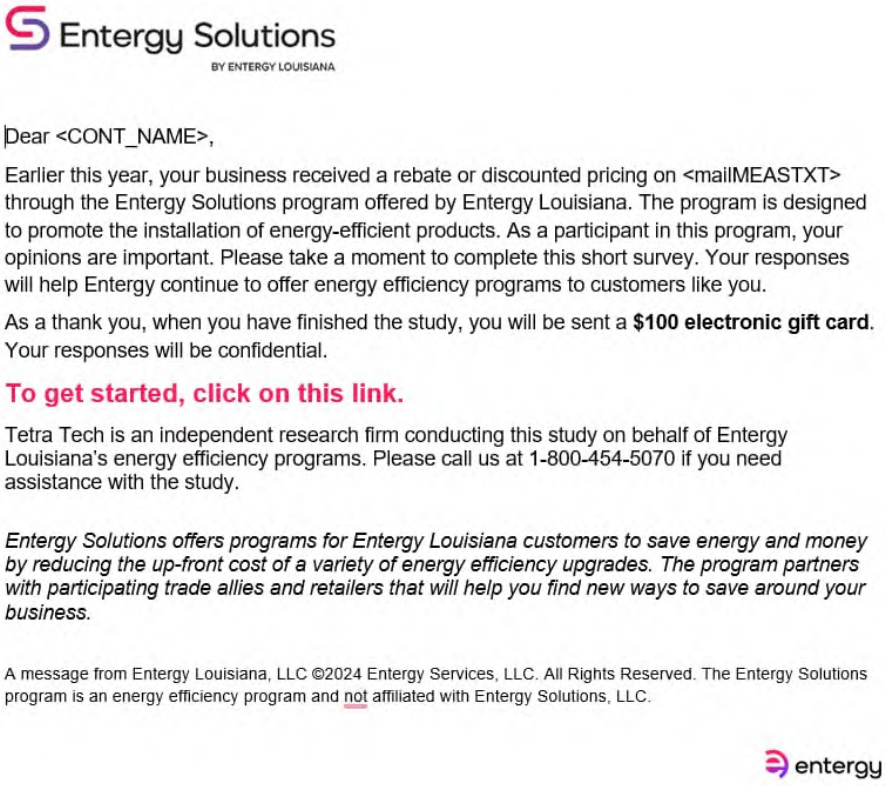


Figure 61. Commercial Participant Survey Advance Email Invitation



Entergy Solutions
BY ENTERGY LOUISIANA

Dear <CONT_NAME>,

Earlier this year, your business received a rebate or discounted pricing on <mailMEASTXT> through the Entergy Solutions program offered by Entergy Louisiana. The program is designed to promote the installation of energy-efficient products. As a participant in this program, your opinions are important. Please take a moment to complete this short survey. Your responses will help Entergy continue to offer energy efficiency programs to customers like you.

As a thank you, when you have finished the study, you will be sent a **$100 electronic gift card**. Your responses will be confidential.

To get started, click on this link.

Tetra Tech is an independent research firm conducting this study on behalf of Entergy Louisiana's energy efficiency programs. Please call us at 1-800-454-5070 if you need assistance with the study.

Entergy Solutions offers programs for Entergy Louisiana customers to save energy and money by reducing the up-front cost of a variety of energy efficiency upgrades. The program partners with participating trade allies and retailers that will help you find new ways to save around your business.

entergy

A.4 COMMERCIAL SURVEY INSTRUMENT

Entergy Louisiana, LLC
Commercial Program Participant Survey (PY10)
(Large Commercial & Industrial, Large Commercial & Industrial New Construction Pilot, Small Business Energy Assessment, Small Commercial Income Qualified, Small Commercial Solutions, and Small Commercial Solutions New Construction Pilot)

This survey instrument will be used for a web-based computer-assisted survey with customers who participated in Entergy Solutions by Entergy Louisiana's commercial programs to support the PY10 process evaluation for the program.

SAMPLE VARIABLES

CASEID Unique case identifier

COMPANY Company name

CONTACT_NAME Customer contact name listed on the account

ADDRESS Customer street address
CITY Customer city
STATE Customer state
ZIP Customer zip
EMAIL Customer email address

PHONE_NUM Customer contact phone number

PROGRAM Program name
1 Large Commercial & Industrial Solutions
2 Large Commercial & Industrial Solutions Higher Education Pilot
3 Large Commercial & Industrial Solutions New Construction Pilot
4 Small Commercial Solutions New Construction Pilot
5 Small Business Energy Assessment
6 Small Commercial – Income-Qualified Weatherization
7 Small Commercial Solutions

Flags for Equipment received (direct install only)

LB LED bulbs
FA Faucet aerator
PS Smart power strip
ST Smart thermostat

1 Received
0 Not received

MEAS Sampled measure (only one per participant)

1	A/C tune-up
2	A/C unit
3	Air cooled chiller
4	Air handler coil cleaning
5	Chiller tune-up
6	Heat pump
7	HVAC controls
8	LED exit sign
9	LED fixture
10	LED kit
11	LEDs
12	Lighting controls
13	Refrigeration
14	VFD

MEASDESC Detailed measure description

REBATE Rebate amount for sampled rebated measure (rounded to nearest dollar)

QTY Number of measures

DATE Installation date for measure

YEAR Program year

REP Sample replicate for managing response rate

QUOTA Sample management for survey completions

1	Large Commercial & Industrial Solutions
2	Large Commercial & Industrial Solutions Higher Education Pilot
3	Large Commercial & Industrial Solutions New Construction Pilot
4	Small Commercial Solutions New Construction Pilot
5	Small Business Energy Assessment
6	Small Commercial – Income-Qualified Weatherization
7	Small Commercial Solutions

SURVEY LANDING PAGE

Entergy Solutions
BY ENTERGY LOUISIANA

Thank you in advance for sharing your experience with the Entergy Solutions Louisiana program. Your responses will help Entergy Louisiana continue to offer energy-efficiency programs to customers like you.

If you are qualified for the survey, it should take about 10 minutes to complete. **You can stop the survey at any time and return to it later.** Your earlier responses will be saved.

As a thank you, when you have finished the survey, Tetra Tech will send you a $100 electronic gift card. Your responses will be confidential. Tetra Tech will combine them with those of others who have participated in the Entergy Solutions program and report the totals.

Click 'Continue'

Tetra Tech is an independent research firm conducting this study on behalf of Entergy Louisiana's energy efficiency programs. Please call us at 1-800-454-5070 if you need assistance with the survey.

Please use the survey's navigational buttons to move between questions.
Do not use your browser's "Back" and "Forward" buttons.

Entergy Louisiana provides solutions for Entergy Louisiana businesses of all sizes to lower their energy bills. Through standard and customized programs, there are plenty of ways to improve your facility's energy efficiency, helping you save energy, and increase your bottom line.

SCREENING

Q1 Did your organization receive an incentive or rebate through the Entergy Solutions program for implementing the <meas> improvements at <address>? (SELECT ONE)

1 Yes.
2 No. [SKIP TO THANK YOU; TERMINATE SURVEY]
3 I don't know.

Q2 Our records indicate you are the main contact for the energy efficiency project(s) completed at <address> in <year>. Several of the following questions are about your organization's decision to complete this project and participate in the program. Were you involved in the decision to complete this project? *(SELECT ONE)*

1 Yes, I was involved in the decision to complete the project. [SKIP TO Q4]
2 No, I was involved in the project but not the decision to complete the project.
3 No, I do not work for <company>, but provided services for the project.
[SKIP TO THANK YOU; TERMINATE SURVEY]

Q3 Could you please provide the contact information of the person most knowledgeable about the decision to complete this project? (*ENTER BELOW*)

1 Contact name: _____
2 Contact phone: _____
3 Contact email: _____

ROGRAM AWARENESS AND PARTICIPATION

Q4 Which of the following best describes your current job title or role? (*SELECT ONE*)

1 Facilities manager.
2 Energy manager.
3 Other facilities management / maintenance position.
4 Chief financial officer.
5 Other financial/administrative position.
6 Proprietor/owner.
7 President/CEO.
8 Manager.
9 Other (please specify):_____

Q5 How did you learn about the Entergy Solutions program? (*SELECT ALL THAT APPLY*)

1 From an Entergy Louisiana account representative.
2 From a contractor.
3 Word of mouth (e.g., family, friends, colleagues, etc.).
4 From Entergy's website.
5 Social media post (e.g., Facebook, Twitter, Instagram).
6 From an Entergy customer service representative.
7 Through an internet search (e.g., Google).
8 Through an internet advertisement.
9 Other (please specify):_____
10 I don't know.

Q6 What are the best ways to reach companies like yours with information about incentives for energy savings opportunities? (*SELECT ALL THAT APPLY*)

1 Visits from contractors or program staff.
2 Target owners/upper management.
3 Bill inserts.
4 Email.
5 Direct mail.
6 Phone.
7 Other (please specify):_____
8 I don't know.

PROJECT DECISION MAKING

Q7 What drove your decision to participate in the program? (*SELECT ALL THAT APPLY*)

1 Saving money on energy bills.
2 Saving energy.
3 Protecting the environment.
4 Recommendation from a contractor.
5 Recommendation from program staff.
6 Financial incentive.
7 Replacing equipment that was broken.
8 Participation was very easy.
9 Other (please specify):_____
10 I don't know.

[IF PROGRAM=DIRECT INSTALL, SKIP TO NEXT SECTION]
Q8 Did you receive any technical services such as a facility assessment or assistance with identifying and selecting equipment for an energy-saving project from an Entergy Solutions' program representative? (*SELECT ONE*)

1 Yes.
2 No.
3 I don't know.

[ASK IF Q8 = 1]
Q9 Did the Entergy Solutions' program representative recommend the <meas> that you installed? (*SELECT ONE*)

1 Yes.
2 No.
3 I don't know.

[ASK IF Q10 = 1]
Q10 If the <program> program representative had not recommended the <meas> how likely is it that you would have installed it anyway? (*SELECT ONE*)

1 Definitely would not have installed.
2 Probably would not have installed.
3 Probably would have installed.
4 Definitely would have installed.
5 I don't know.

Q11 If the financial incentive from the <program> program had not been available, how likely is it that you would have installed the <meas>? (*SELECT ONE*)

1 Definitely would not have installed.
2 Probably would not have installed.
3 Probably would have installed.
4 Definitely would have installed.
5 I don't know.

PROGRAM DELIVERY EFFICIENCY

Q12 Did you have any concerns about participating in the program, or was it an easy decision? (*SELECT ONE*)

1 I had some concerns.
2 It was an easy decision. [SKIP TO NEXT SECTION]
3 I don't know. [SKIP TO NEXT SECTION]

Q13 What were your concerns? (*ENTER BELOW*)

Q14 Why did you decide to participate despite your concerns? (*ENTER BELOW*)

DIRECT INSTALL ONLY

[ASK IF PROGRAM=SMALL BUSINESS ENERGY ASSESSMENT; ELSE SKIP TO SATISFACTION]
Q15 According to program records you received the following energy saving items through the Entergy Solutions <program> program. Is that correct? *(SELECT ONE)*

Display all DI measures received.

For each of the following measure(s) please tell me how many were installed in your business? *(ENTER BELOW)*

	Quantity installed
[insert DI measure 1]	
[insert DI measure 2]	
[insert DI measure 3]	
[insert DI measure 4], etc	

Q16 Have any of the installed measure(s) been removed? *(SELECT ONE)*

1 Yes.
2 No. [SKIP TO NEXT SECTION]
98 Don't know. [SKIP TO NEXT SECTION]

Q17 How many of the following measure(s) were removed? *(ENTER BELOW)*

	Quantity removed
[insert DI measure 1]	
[insert DI measure 2]	
[insert DI measure 3]	
[insert DI measure 4], etc	

Q18 Why were these measures removed? *(SELECT ONE)* [ask for each measure mentioned]

1 They were no longer working properly.
2 Purchased new items that I liked better .
3 I liked my old items better, so I reinstalled them.
4 I performed some remodeling or maintenance that required the removal of these items.
5 Other.
6 Don't know.

Q19 Please explain the "Other" reason you removed or replaced these items. *(ENTER BELOW)*

Q20 If the measures installed by the energy auditor had not been provided at no cost, how likely is it that you would have installed these measures on your own? (*SELECT ONE*)

1 Definitely would not have installed.
2 Probably would not have installed.
3 Probably would have installed.
4 Definitely would have installed.
5 I don't know.

PROGRAM IMPLEMENTATION

[IF PROGRAM = SMALL BUSINESS ENERGY ASSESSMENT SKIP TO NEXT SECTION]
Q21 The next few questions are about the program participation process. Which of the following people helped complete the application for program incentives - including gathering the required documentation? (*SELECT ALL THAT APPLY*)

1 Yourself.
2 An Entergy Louisiana representative.
3 Another member of your company.
4 A contractor.
5 An equipment vendor.
6 A designer or architect.
7 Other (please specify):_____
8 I don't know.

[ASK IF Q21 = 1]
Q22 Thinking back to the application process, please rate the clarity of information on how to complete the application. (*SELECT ONE*)

1 Very difficult to follow.
2 Somewhat difficult to follow.
3 Neither difficult nor easy to follow.
4 Somewhat easy to follow.
5 Very easy to follow.
98 I don't know.

[ASK IF Q22 = 1, 2]

Q23 What information, including instructions on forms, needs to be further clarified? (*ENTER BELOW)*

Q24 Did you have a clear sense of whom you could go to for assistance with the application process? (*SELECT ONE*)

1 Yes.
2 No.
3 I don't know.

Q25 Once you submitted your completed project application package, how long did it take your organization to receive the program pre-approval documentation necessary to move forward with your project? (*SELECT ONE*)

1 Less than 2 weeks.
2 2 to 4 weeks.
3 More than 4 weeks to 6 weeks.
4 More than 6 weeks to 8 weeks.
5 More than 8 weeks.
6 I don’t know.

Q26 How did final incentive payment compare to what you were expecting when you submitted the final application materials? (*SELECT ONE*)

1 It was much less than the amount expected.
2 It was somewhat less than the amount expected.
3 It was about the amount expected.
4 It was somewhat more than the amount expected.
5 It was much more than the amount expected.
6 I don’t know.

Q27 Once you submitted the project completion notice and final invoice, how much time passed until your organization received the incentive payment? (*SELECT ONE*)

1 Less than 2 weeks.
2 2 to 4 weeks.
3 More than 4 weeks to 6 weeks.
4 More than 6 weeks to 8 weeks.
5 More than 8 weeks.
6 I don’t know.

CONTRACTOR SATISFACTION

[IF PROGRAM = SMALL BUSINESS ENERGY ASSESSMENT SKIP TO Q30]
Q28 While completing this project, did you contact program staff with questions about the program or the participation process? (*SELECT ONE*)

1 Yes.
2 No. [SKIP TO Q30]
3 I don't know. [SKIP TO Q30]

[ASK IF Q28 = 1]
Q29 Did you speak with an Entergy Solutions' staff member or a trade ally? (*SELECT ONE*)

1 Entergy Louisiana staff.
2 Trade ally.
3 Both.
4 I don't know.

Q30 These next few questions ask about your satisfaction with several aspects of the program. How satisfied are you with each of the following (*SELECT ONE*):
6 Very dissatisfied.
7 Somewhat dissatisfied.
8 Neither satisfied nor dissatisfied.
9 Somewhat satisfied.
10 Very satisfied.

Q30a **The program overall**
Q30b interactions with program staff
Q30c [ASK IF Q23 = 1] how long it took program staff to address your questions or concerns
Q30d [ASK IF Q23 = 1] how thoroughly they addressed your question or concern
Q30e the program participation process
Q30f [ASK IF NOT DI] the quality of the work completed by your contractor/energy auditor
Q30g The performance of the equipment
Q30h [ASK IF NOT DI] the amount of time it took to get the rebate or incentive
Q30i [ASK IF NOT DI] the range of equipment that qualifies for the program
Q30j [DI or Q9=1] the recommendations provided from the energy assessment
Q30k [DI ONLY] the energy savings on your utility bill

Q31 Why were you dissatisfied with <INSERT Q30 SELECTIONS>? *(ENTER BELOW)*

Q32 Using the same scale, how satisfied are you with Entergy Louisiana as your electricity service provider? *(SELECT ONE)*
6 Very dissatisfied.
7 Somewhat dissatisfied.
8 Neither satisfied nor dissatisfied.
9 Somewhat satisfied.
10 Very satisfied.

Q33 How has your participation in the Entergy Solutions <program> affected your satisfaction with Entergy Louisiana? *(SELECT ONE)*

1 Greatly decreased satisfaction.
2 Somewhat decreased satisfaction.
3 Did not affect satisfaction.
4 Somewhat increased satisfaction.
5 Greatly increased satisfaction.

Q34 How likely are you to recommend Entergy to a friend or colleague? *(SELECT ONE)*

1 Not at all likely (Why do you say that?)
2
3
4
5
6
7
8
9
10 Extremely likely

Q35 What recommendations do you have for program improvement? *(ENTER BELOW)*

FIRMOGRAPHICS

Q36 Thank you for your responses thus far. There are a few more questions about your facility. Which of the following best describes your facility located at <address>? (*SELECT ONE*)

1 Your company's only location.
2 One of several locations owned by your company.
3 The headquarter location of a company with several locations.
4 I don't know.
5 Prefer not to answer.

Q37 Does your company rent, own and occupy, or own and rent the facility to someone else at this location? (*SELECT ONE*)

1 Rent.
2 Own and occupy.
3 Own and rent to someone else.
4 I don't know.
5 Prefer not to answer.

Q38 Do you have any other comments that you would like to relay to Entergy Louisiana about energy efficiency in the commercial and industrial sector or about their programs? (*SELECT ONE*)

1 Yes, (please specify):_____
2 No.

THANK YOU Based on your responses, you do not qualify to complete this survey at this time, but we thank you very much for your interest and welcome your feedback in future surveys should you be selected.

Please hit “Next” to be taken to Entergy Solutions program page for more information about their current program offerings.

[Exit survey to https://www.entergy-louisiana.com/energy-efficiency-program/]

EMAIL Thank you for completing the survey! To what email address should we send the electronic gift card? *(ENTER BELOW)*
Format: johndoe@gmail.com

COMPLETE Thank you. You can expect to receive your electronic gift card within the next 1-2 weeks. If you would like to follow up on the status, please call us at 1-800-454-5070.

Please hit "Submit" to exit the survey.

[Exit survey to https://www.entergy-louisiana.com/energy-efficiency-program/]

APPENDIX B: C&I TUNE-UP METHODOLOGY MEMO

The C&I Tune-Up Methodology Memo is provided below.

ELL C&I AIR CONDITIONING AND HEAT PUMP TUNE-UP

1.1 MEASURE DESCRIPTION

This measure applies to commercial and industrial air conditioning and heat pump systems. An AC tune-up, in general terms, involves checking, adjusting, and resetting the equipment to factory conditions such that it operates closer to the performance level of a new unit. For this measure, the service technician must complete HVAC tune-up and maintenance tasks according to industry best practices. ENERGY STAR lists the following actions as part of a typical HVAC unit maintenance/tune-up.[45]

Air Conditioner Inspection and Tune-Up Checklist

- **Check thermostat settings** to ensure the cooling and heating system keeps you comfortable when you are home and saves energy while you are away.
- **Tighten all electrical connections** and measure voltage and current on motors. Faulty electrical connections can cause unsafe operation of your system and reduce the life of major components.
- **Lubricate all moving parts.** Parts that lack lubrication cause friction in motors and increases the amount of electricity you use.
- **Check and inspect the condensate drain** in your central air conditioner, furnace and/or heat pump (when in cooling mode). A plugged drain can cause water damage in the house and affect indoor humidity levels.
- **Check controls of the system** to ensure proper and safe operation. Check the starting cycle of the equipment to assure the system starts, operates, and shuts off properly.
- **Clean evaporator and condenser air conditioning coils**. Dirty coils reduce the system's ability to cool your home and cause the system to run longer, increasing energy costs and reducing the life of the equipment.
- **Check your central air conditioner's refrigerant level and adjust if necessary**. Too much or too little refrigerant will make your system less efficient increasing energy costs and reducing the life of the equipment.
- **Clean and adjust blower components** to provide proper system airflow for greater comfort levels. Airflow problems can reduce your system's efficiency by up to 15 percent.

[45] https://www.energystar.gov/saveathome/heating-cooling/maintenance-checklist

1.2 BASELINE AND EFFICIENT CONDITION

The baseline is a system with one or more of the following: dirty evaporator coils, dirty condenser coils, dirty filters, dirty blower components, and improper refrigerant charge. The baseline efficiency level will be determined depending on the actions taken during the tune-up.

The efficient condition refers to a system that meets the manufacturer's airflow and refrigerant requirements. To ensure the most significant savings when conducting tune-up services, the eligibility minimum requirement for airflow is the manufacturer-specified design flow rate, or 350 CFM/ton, if unknown. Also, the refrigerant charge must be within +/- 3 degrees of target sub-cooling for units with thermal expansion valves (TXV) and +/- 5 degrees of target superheat for units with fixed orifices or a capillary. The efficiency standard after the tune-up is assumed to be the manufacturer-specified energy efficiency ratio (EER) of the existing central air conditioner or heat pump.

1.3 ESTIMATED USEFUL LIFE

The estimated useful life for a tune-up with a refrigerant charge adjustment is 10 years[46], while a tune-up without a refrigerant charge adjustment is 3 years[47].

1.4 SAVINGS METHODOLOGY

1.4.1 Tune-Ups without Refrigerant Charge Adjustments

Energy and demand savings for AC tune-ups without refrigerant charge adjustments (RCA) should follow the following algorithms:

$$kWh_{AC} = \frac{Capacity_C}{1000} \times EFLH_c \times \left(\frac{1}{EER_{pre}} - \frac{1}{EER_{post}}\right)$$

$$kW_{AC} = \frac{Capacity_C}{1000} \times \left(\frac{1}{EER_{pre}} - \frac{1}{EER_{post}}\right) \times CF$$

$$EER_{pre} = EER_{post} \times (1 - EL)$$

Where:

- $Capacity_C$ = Rated cooling capacity of the unit (Btu/hr)
- $EFLH_c$ = Equivalent full load cooling hours (hr) – See deemed hours for HVAC systems
- EER_{post} = Rated efficiency of the HVAC equipment being tuned up (Btu/W-hr)
- EER_{pre} = Assumed efficiency of HVAC equipment before being tuned up (Btu/W-hr)
- CF = Coincidence factor – See deemed CF for HVAC systems
- EL = Efficiency loss factor (see Table 1 below)

[46] Arkansas TRM v9.2
[47] Illinois TRM v12

Energy and demand savings from heat pump tune-ups should follow the following algorithms:

$$kWh_{HP} = \frac{Capacity_C}{1000} \times EFLH_c \times \left(\frac{1}{EER_{pre}} - \frac{1}{EER_{post}}\right) + \frac{Capacity_H}{1000} \times EFLH_H \times \left(\frac{1}{HSPF_{pre}} - \frac{1}{HSPF_{post}}\right)$$

$$kW_{HP\ (Summer)} = \frac{Capacity_C}{1000} \times \left(\frac{1}{EER_{pre}} - \frac{1}{EER_{post}}\right) \times CF$$

$$EER_{pre} = EER_{post} \times (1 - EL)$$

$$HSPF_{pre} = HSPF_{post} \times (1 - EL)$$

Where:

- $Capacity_C$ = Rated cooling capacity of the unit (Btu/hr)
- $Capacity_H$ = Rated heating capacity of the unit (Btu/hr)
- $EFLH_c$ = Equivalent full-load cooling hours (hr) – See deemed hours for HVAC systems
- $EFLH_H$ = Equivalent full-load heating hours (hr) – See deemed hours for HVAC systems
- EER_{post} = Rated cooling efficiency of the HVAC equipment being tuned up (Btu/W-hr)
- EER_{pre} = Assumed cooling efficiency of HVAC equipment before being tuned up (Btu/W-hr)
- $HSPF_{post}$ = Rated heating efficiency of the HVAC equipment being tuned up (Btu/W-hr)
- $HSPF_{pre}$ = Assumed heating efficiency of HVAC equipment before being tuned up (Btu/W-hr)
- CF = Coincidence factor – See deemed CF for HVAC systems
- EL = Efficiency loss factor (see Table 1 below)

For *tune-up* projects where an RCA was not completed, the following table should be used to determine the efficiency loss, based on the components completed in the tune-up. This table stems from New Orleans TRM Table 2-53.

Table 1. Tune-up without RCA Efficiency Loss Values[48]

Tune-Up Component	Efficiency Loss (EL)
Condenser Cleaning only	6.1%
Evaporator Cleaning only	0.22%
Condenser and Evaporator Cleaning	6.32%

1.4.2 Tune-Ups with Refrigerant Charge Adjustments

For *tune-up* projects that completed RCA, the following deemed savings tables (from New Orleans TRM Tables 2-44 and 2-45) can be used to determine energy and demand savings.

[48] New Orleans TRM Table 2-53

Table 2. AC Tune-Up (with RCA) Deemed Savings by Building Type

Building Type	kWh/Ton	kW/Ton
Fast Food	457	0.1502
Grocery	294	0.1733
Health Clinic	383	0.1636
Large Office	285	0.1617
Lodging	403	0.1482
Full Menu Restaurant	384	0.1636
Retail	614	0.1694
School	448	0.1367
Small Office	397	0.1617
University	291	0.1617
Unknown	396	0.159
Assembly	396	0.159
Religious Worship	396	0.159

Table 3. Heat Pump Tune-Up (with RCA) Deemed Savings by Building Type

Building Type	kWh/Ton	kW/Ton
Fast Food	538	0.1529
Grocery	340	0.1765
Health Clinic	420	0.1667
Large Office	395	0.1647
Lodging	519	0.151
Full Menu Restaurant	436	0.1667
Retail	761	0.1725
School	494	0.1392
Small Office	471	0.1647
University	456	0.1647
Unknown	483	0.162
Assembly	483	0.162
Religious Worship	483	0.162

APPENDIX C: RESIDENTIAL MEASURES

Most measures within the tracking system used assumptions inconsistently between programs. The residential measures should use consistent assumptions and calculation methodologies across the various residential programs. This appendix identifies calculation methodologies, current assumptions used by the implementer, and evaluation recommendations for future program years.

C.1 AC/HP REPLACEMENT

The AC/HP Replacement measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh = kWh_c + kWh_h$$

$$kWh_c = Cap_c * \frac{1}{1{,}000} * EFLH_c * \left(\frac{1}{SEER_{pre}} - \frac{1}{SEER_{post}}\right)$$

$$kWh_h = Cap_h * \frac{1}{1{,}000} * EFLH_h * \left(\frac{1}{HSPF_{pre}} - \frac{1}{HSPF_{post}}\right)$$

$$kW = Cap_c * \frac{1}{1{,}000} * \left(\frac{1}{EER_{pre}} - \frac{1}{EER_{post}}\right) * CF$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 186. AC/HP Replacement—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Cooling capacity (Cap_c in Btu/hr)	• A/C Solutions: 65,000 Btu/hr • Res NC Pilot: Unknown	For A/C Solutions, the default value can be found in the A/C Solutions source calculations for PY8 in the *Central A-C Replacement* and *Heat Pump Replacement* tabs. The Res NC Pilot cooling capacity could not be confirmed.	Cooling capacity is a critical component to estimate the energy consumption of an HVAC system. This value should be tracked, although the PY11 implementation may continue to use a deemed cooling capacity assumption. However, the cooling capacity should be around 3 tons.
Effective full load hours for cooling ($EFLH_c$)	• A/C Solutions: 2,089 • Res NC Pilot: Unknown	For A/C Solutions, the default value for $EFLH_c$ can be found in the A/C Solutions source calculations for PY8 in the *EFLHc* tab. The Res NC Pilot $EFLH_c$ could not be confirmed. However, the savings in the tracking system indicate the same value was used for $EFLH_c$ across each measure within the program.	Consistent application of EFLH values is critical. The evaluation team recommends using 2,089 hours for all projects to simplify the measure. Alternatively, the $EFLH_c$ may be applied by weather zone for each AC/HP Replacement measure.

Reported input	Reported value	Input source	Notes/recommendation
Heating capacity (Cap_h in Btu/hr)	• A/C Solutions: 65,000 Btu/hr • Res NC Pilot: Unknown	For A/C Solutions, the default value can be found in the A/C Solutions source calculations for PY8 in the *Central A-C Replacement* and *Heat Pump Replacement* tabs. The Res NC Pilot heating capacity could not be confirmed.	Heating capacity is a critical component to estimate the energy consumption of the HVAC system. This value should be tracked, although the implementer may continue to use a deemed heating capacity assumption. However, the heating capacity should be around 3 tons.
Effective full load hours for heating ($EFLH_h$)	• A/C Solutions: 1,159 • Res NC Pilot: Unknown	For A/C Solutions, the default value for $EFLH_h$ can be found in the A/C Solutions source calculations for PY8 in the *EFLHh* tab. The Res NC Pilot $EFLH_h$ could not be confirmed. However, the savings in the tracking system indicate the same value was used for $EFLH_h$ across each measure within the program.	Consistent application of EFLH values is critical. The evaluation team recommends to use 1,159 hours for all projects to simplify the measure. Alternatively, the $EFLH_h$ may be applied by weather zone for each HP Replacement measure.
$SEER_{post}$	Determined based on the applied measure description.	Tracking system.	Values should be updated from SEER to SEER2.
$HSPF_{post}$	Determined based on the applied measure description.	Tracking system.	Values should be updated from HSPF to HPSF2.
EER_{post}	Determined based on the applied measure description.	Tracking system.	Values should be updated from EER to EER2.
$SEER_{pre}$	• A/C Solutions: Based on the old minimum federal requirements. • Res NC Pilot: Based on the current minimum federal requirements.	PY8 A/C Solutions source calculations for the A/C Solutions program. For the Res NC Pilot, the source calculations from the *ELL Res NC Savings Inputs_FES Source Doc* (Res NC Savings Inputs Workbook) were used.	All pre-efficiency values should be updated to the current minimum federal standard.
$HSPF_{pre}$	• A/C Solutions: Based on the old minimum federal requirements. • Res NC Pilot: Based on the current minimum federal requirements.	PY8 A/C Solutions source calculations for the A/C Solutions program. For the Res NC Pilot, the source calculations from the Res NC Savings Inputs Workbook was used.	All pre-efficiency values should be updated to the current minimum federal standard.

Reported input	Reported value	Input source	Notes/recommendation
EER_{pre}	• A/C Solutions: Based on the old minimum federal requirements. • Res NC Pilot: Based on the current minimum federal requirements.	PY8 A/C Solutions source calculations for the A/C Solutions program. For the Res NC Pilot, the source calculations from the Res NC Savings Inputs Workbook were used.	All pre-efficiency values should be updated to the current minimum federal standard.
CF	87 percent	PY8 A/C Solutions source calculations	This assumption is acceptable.

C.2 ADVANCED POWER STRIP

The advanced power strip measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh_{Tier\ 1} = \frac{(W_i * HOU)}{1{,}000}$$

$$kWh_{Tier\ 2} = kWh_{factor} * ERP * ISR$$

$$kW_{Tier\ 1} = \frac{kWh_{Tier\ 1}}{HOU} * CF$$

$$kW_{Tier\ 2} = \frac{kWh_{Tier\ 2}}{HOU} * CF$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 187. Advanced Power Strip—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Weighted watts per hour (W_i)	Value determined based on the system type (*home entertainment* vs. *home office*)	Tracking system	This assumption is acceptable.
Hours per year (HOU)	• Tier 1: Value determined based on the system type (*home entertainment* vs. *home office*) • Tier 2: 4,380	Tracking system	This assumption is acceptable.
kWh_{factor}	Value determined based on the system type (*home entertainment* vs. *home office*)	Tracking system	This assumption is acceptable.

Reported input	Reported value	Input source	Notes/recommendation
ERP	51 percent	Arkansas TRM v7	This assumption is acceptable.
ISR	83 percent	Arkansas TRM v7	This assumption is acceptable.

C.3 AIR INFILTRATION

The air infiltration measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh = \Delta CFM * ESF$$

$$kW = \Delta CFM * DSF$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 188. Air Infiltration—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Change in CFM (ΔCFM)	User input	Tracking system	This assumption is acceptable.
Energy savings factor (ESF)	ESF was determined based on the reported heating type and weather zone for the HPwES and IQS programs. For the Multifamily Solutions program, ESF was determined based on the reported heating type; an average weather zone value was used to calculate the ESF for each of the heating types. Lastly, the Manufactured Homes program used a default value of 0.8.	Res NC Savings Inputs Workbook	Consistent application of the energy savings factor values is critical. The evaluation team recommends updating all values based on the weather zone and heating type of the home.

Reported input	Reported value	Input source	Notes/recommendation
Demand savings factor (DSF)	DSF was determined based on the reported heating type and weather zone for the HPwES and IQS programs. For the Multifamily Solutions program, DSF was determined based on the reported heating type; an average weather zone value was used to calculate the DSF for each of the heating types. Lastly, the Manufactured Homes program used a default value of 0.000143.	Res NC Savings Inputs Workbook	Consistent application of the demand savings factor values is critical. The evaluation team recommends updating all values based on the weather zone and heating type of the home.

C.4 AIR PURIFIERS

The air purifier measures are currently calculated using the Arkansas TRM v9.2 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$\Delta kWh = kWh_{base} - kWh_{eff}$$

$$kWh_{base} = \left[Hours_{Standby} * \frac{PartialOnMode_{base}}{1{,}000}\right] + \left[HOU * \frac{CADR_{base}}{\left(\frac{CADR}{W}\right)_{base} * 1{,}000}\right]$$

$$kWh_{eff} = \left[Hours_{Standby} * \frac{PartialOnMode_{eff}}{1{,}000}\right] + \left[HOU * \frac{CADR_{eff}}{\left(\frac{CADR}{W}\right)_{eff} * 1{,}000}\right]$$

$$kW = \frac{\Delta kWh}{HOU} * CF$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 189. Air Purifiers—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Hours on standby ($Hours_{standby}$)	2,920	Arkansas TRM v9.2	This assumption is acceptable.
Wattage when conventional unit is in partial on mode ($PartialOnMode_{base}$)	1.0	Arkansas TRM v9.2	This assumption is acceptable.

Reported input	Reported value	Input source	Notes/recommendation
Total hours of use (HOU)	5,840	Arkansas TRM v9.2	This assumption is acceptable.
Conventional unit clean air delivery rate ($CADR_{base}$)	• 30≤CADR<100: 50 • 100≤CADR<150: 120 • CADR≥150: 180	Arkansas TRM v9.2	This assumption is acceptable.
Clean air delivery rate per watt for conventional unit ($[CADR/W]_{base}$)	1	Arkansas TRM v9.2	This assumption is acceptable.
Wattage when efficient unit is in partial on mode ($PartialOnMode_{base}$)	0.56	Arkansas TRM v9.2	This assumption is acceptable.
Efficient unit clean air delivery rate ($CADR_{eff}$)	• 30≤CADR<100: 50 • 100≤CADR<150: 120 • CADR≥150: 180	Arkansas TRM v9.2	This assumption is acceptable.
Clean air delivery rate per watt for efficient unit ($[CADR/W]_{eff}$)	• 30≤CADR<100: 1.9 • 100≤CADR<150: 2.4 • CADR≥150: 2.9	Arkansas TRM v9.2	This assumption is acceptable.
CF	0.67	Arkansas TRM v9.2	This assumption is acceptable.

C.5 CEILING INSULATION

The *ceiling insulation* measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh = Area_{Ceiling} * kWh_{Factor}$$

$$kW = Area_{Ceiling} * kW_{Factor}$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 190. Ceiling Insulation—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Ceiling Area ($Area_{Ceiling}$)	User input	Tracking system	This assumption is acceptable.
kWh_{factor}	Lookup value based on the weather zone and household heating type	Res NC Savings Inputs Workbook	This assumption is acceptable.

Reported input	Reported value	Input source	Notes/recommendation
kW_{factor}	Lookup value based on the weather zone and household heating type	Res NC Savings Inputs Workbook	This assumption is acceptable.

C.6 COOL ROOFS

The cool roof measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh = \text{A} * kWh\ per\ sqft$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 191. Cool Roofs—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Area of the roof (A)	User input	Tracking system	This assumption is acceptable.
kWh per sqft	• A/C with gas heat: 0.362 • Heat pump: 0.318 • A/C with electric resistance: 0.256	Manufactured Homes Calculation Workbook	This assumption is acceptable.

C.7 DUCT SEALING

The duct sealing measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh = kWh_c + kWh_h$$

$$kWh_c = \frac{(DL_{pre} - DL_{post}) * EFLH_c * (h_{out} * \rho_{out} - h_{in} * \rho_{in}) * 60}{1{,}000 * SEER}$$

$$kWh_h = \frac{(DL_{pre} - DL_{post}) * 60 * HDD * 24 * 0.018}{1{,}000 * \eta_{heat}}$$

$$kW = \frac{kWh_c}{EFLH_c} * CF$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 192. Duct Sealing—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Pre-duct leakage (DL_{pre})	User input	Tracking system	This assumption is acceptable.
Post-duct leakage (DL_{post})	User input	Tracking system	This assumption is acceptable.
Effective full load hours for cooling ($EFLH_c$)	• A/C Solutions: 2,089 • HPwES: lookup value based on weather zone • IQS: lookup value based on weather zone • Manufactured Homes: 2,089 • Multifamily Solutions: 2,089	For A/C Solutions, Manufactured Homes, and Multifamily Solutions, the default value can be found in the A/C Solutions source calculations for PY8 in the *Duct Sealing* tab. For HPwES and IQS, the values are based on the EFLH values in the *Duct Sealing* sheet within the Res NC Savings Inputs Workbook.	Consistent application of EFLH values is critical. The evaluation team recommends to use 2,089 hours for all projects to simplify the measure. Alternatively, the EFLH may be applied by weather zone for each duct sealing measure.
Outside enthalpy (h_{out})	40	PY8 A/C Solutions source calculations	This assumption is acceptable.
Indoor enthalpy (h_{in})	30	PY8 A/C Solutions source calculations	This assumption is acceptable.
Outside air density (ρ_{out})	0.074	PY8 A/C Solutions source calculations	This assumption is acceptable.
Indoor air density (ρ_{in})	0.076	PY8 A/C Solutions source calculations	This assumption is acceptable.
SEER	11.5	PY8 A/C Solutions source calculations	This assumption is acceptable.
Heating degree days (HDD)	• A/C Solutions: 1,763 • HPwES: Lookup value based on weather zone • IQS: Lookup value based on weather zone • Manufactured Homes: 1,763 • Multifamily Solutions: 1,763	For A/C Solutions, Manufactured Homes, and Multifamily Solutions, the default value can be found in the A/C Solutions source calculations for PY8 in the *Duct Sealing* tab. For HPwES and IQS, the values are based on the HDD values in the *Duct Sealing* sheet within the Res NC Savings Inputs Workbook.	Consistent application of HDD values is critical. The evaluation team recommends to use 1,763 hours for all projects to simplify the measure. Alternatively, the HDD may be applied by weather zone for each duct sealing measure.

Reported input	Reported value	Input source	Notes/recommendation
Heating efficiency (η_{heat})	• All programs: o Electric resistance: 3.412 • A/C Solutions: o Heat pump: 10 • HPwES: o Heat pump: 7.3 • IQS: o Heat pump: 10 • Manufactured Homes: o Heat pump: 10 • Multifamily Solutions: o Heat pump: 10	PY8 A/C Solutions source calculations except for HPwES. The HPwES value was based on the Res NC Savings Inputs workbook within the *Duct Sealing* sheet.	Consistent application of the heating efficiency based on the household heating type is critical. All households with electric resistance heating should have an efficiency value of 3.412, and all heat pump values should be 7.3 based on Arkansas TRM v7.
CF	87 percent	PY8 A/C Solutions source calculations	This assumption is acceptable.

C.8 ENERGY STAR® DEHUMIDIFIER

The ENERGY STAR dehumidifier measure is currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh_{Savings} = \left[\left(\frac{CAP * 0.473}{24}\right) * Hours\right] * \left[\frac{1}{L/kWh_{base}} - \frac{1}{L/kWh_{eff}}\right]$$

$$kW = \frac{kWh_{Savings}}{Hours} * CF$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 193. ENERGY STAR Dehumidifier—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Average capacity of the unit (CAP)	For some of the measures, the measure description contained the capacity. For measure descriptions that did not specify a capacity, capacity could not be determined within the tracking system.	Tracking system.	Consistent application of the average capacity is critical. The evaluation team recommends tracking the average capacity for all units.

Reported input	Reported value	Input source	Notes/recommendation
Run hours per year (hours)	1,632	Arkansas TRM v7	This assumption is acceptable.
Liters of water per kWh consumed for base unit (L/kWh_{base})	It was not confirmed how the value was obtained. The Arkansas TRM shows that value should be determined based on the minimum federal requirements.	Arkansas TRM v7	Confirm the L/kWh_{base} was determined based on the minimum federal requirements.
Liters of water per kWh consumed for efficient unit (L/kWh_{eff})	It was not confirmed how the value was obtained. The value should be obtained based on the energy factor from ENERGY STAR.	Arkansas TRM v7	Consistent application of the average capacity is critical. The evaluation team recommends tracking the energy factor of efficient unit based on the ENERGY STAR certificate.
Coincidence factor (CF)	0.37	Arkansas TRM v7	This assumption is acceptable.

C.9 ENERGY STAR REFRIGERATOR

The ENERGY STAR refrigerator measure is currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh_{Savings} = kWh_{baseline} - kWh_{ES}$$

$$kW = \frac{kWh_{Savings}}{8{,}760} * TAF * LSAF$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 194. ENERGY STAR Refrigerator—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Baseline energy savings ($kWh_{baseline}$)	The evaluation team could not verify how baseline kWh was being applied by the implementer.	N/A	The evaluation team recommends to track the $kWh_{baseline}$ for each project. This value should be adjusted based on minimum federal requirements, which includes the specific product category as well as the adjusted volume of the unit.

Reported input	Reported value	Input source	Notes/recommendation
ENERGY STAR energy savings (kWh_{es})	The evaluation team could not verify how ENERGY STAR kWh was being applied by the implementer.	N/A	The evaluation team recommends tracking the kWh_{es} for each project. This value should be adjusted based on ENERGY STAR requirements, which includes the specific product category as well as the adjusted volume of the unit.
Temperature adjustment factor (TAF)	1.188	Arkansas TRM v7	This assumption is acceptable.
Load shape adjustment factor (LSAF)	1.074	Arkansas TRM v7	This assumption is acceptable.

C.10 HEAT PUMP WATER HEATER

The heat pump water heater measure is currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh_{Savings} = \frac{\rho * c_p * V * \left(T_{SetPoint} - T_{Supply}\right) * \left(\frac{1}{EF_{pre}} - \left(\frac{Adj}{EF_{post} * (1 + PA\%)}\right)\right)}{3{,}412}$$

$$kW = kWh_{Savings} * Ratio_{kW}$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 195. Heat Pump Water Heater—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Density (ρ)	8.33	Arkansas TRM v7	This assumption is acceptable.
Specific heat of water (C_p)	1.0	Arkansas TRM v7	This assumption is acceptable.
Annual hot water use (V)	It was not determined how the value was obtained. The Arkansas TRM shows that value should be confirmed based on the reported weather zone and tank size of the baseline water heater.	Arkansas TRM v7	Consistent application of the annual hot water use is critical. The evaluation team recommends updating all values based on the weather zone and heating type of the home.

Reported input	Reported value	Input source	Notes/recommendation
Set point temperature of the hot water unit ($T_{setpoint}$)	120	Arkansas TRM v7	This assumption is acceptable.
Supply temperature of the hot water unit (T_{supply})	It was not determined how the supply water temperature was determined. The Arkansas TRM shows that the supply water temperature is determined by the reported weather zone.	Arkansas TRM v7	Consistent application of the supply water temperature is critical. The evaluation team recommends updating all values based on the weather zone of the home.
Baseline energy factor (EF_{pre})	It was not determined how the baseline energy factor was determined. The Arkansas TRM determines value based on the baseline minimum federal requirements.	Arkansas TRM v7	Confirm value is determined based on minimum federal requirements for the specific unit installed.
Energy factor of new water heater (EF_{post})	It was not determined how the baseline energy factor was determined. The value should be determined based on the actual energy factor of the unit.	Arkansas TRM v7	Confirm value is determined based on the actual value of the new unit.
HPWH specific adjustment factor (Adj)	It was not determined how the HPWH-specific adjustment factor was determined, but the value should follow Arkansas TRM.	Arkansas TRM v7	The EM&V team recommends to lookup the HPWH specific adjustment factor based on weather zone, while the HPWH specific adjustment factor should be averaged out for the possible heating types. The implementer may also use an average HPWH specific adjustment factor default value instead of a lookup value.
Performance adjustment to adjust the HPWH EF relative to ambient air (PA%)	It was not determined how the PA% factor was determined, but the value should follow Arkansas TRM.	Arkansas TRM v7	The EM&V team recommends using the average value of 1.77 percent.
kWh to kW Conversion factor ($Ratio_{kW}$)	0.0000877	Arkansas TRM v7	This assumption is acceptable.

C.11 LIGHTING

The lighting measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh = \frac{(W_{base} - W_{post})}{1{,}000} * Hours * ISR * IEF_E$$

$$kW = \frac{(W_{base} - W_{post})}{1{,}000} * CF * ISR * IEF_D$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 196. Lighting—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Baseline watts (W_{base})	Value determined based on the applied measure description. This value is further determined based on the installed lamp type and wattage using EISA Tier 1 assumptions.	Tracking system	Update *baseline watt* values to EISA Tier 2 assumptions.
Proposed watts (W_{post})	Value determined based on the applied measure description	Tracking system	This assumption is acceptable.
Hours	792.6	Arkansas TRM v7	This assumption is acceptable.
ISR	97 percent	Arkansas TRM v7	This assumption is acceptable.
IEF_e	Lookup value based on heating type	Arkansas TRM v7	This assumption is acceptable.
CF	87 percent	Arkansas TRM v7	This assumption is acceptable.
IEF_d	Lookup value based on heating type	Arkansas TRM v7	This assumption is acceptable.

C.12 LOW-FLOW FAUCET AERATOR

The low-flow faucet aerator measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh = \frac{\rho * C_p * V * (T_{Mixed} - T_{Supply}) * \left(\frac{1}{RE}\right)}{Conversion\ Factor}$$

$$kW = kWh * Ratio_{kW}$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 197. Low-Flow Faucet Aerator—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Density (ρ)	8.33	Res NC Savings Inputs Workbook	This assumption is acceptable.
Specific heat of water (C_p)	1	Res NC Savings Inputs Workbook	This assumption is acceptable.
Volume (V)	• HPwES: o 1.5 gpm: 381 o 1.0 gpm: 636 • IQS: o 1.5 gpm: 381 o 1.0 gpm: 636 • Manufactured Homes: o All faucets: 381 • Multifamily Solutions: o 1.5 gpm: 381 o 1.0 gpm: 636 • Retail Lighting & Appliances: o All faucets: 381	Res NC Savings Inputs Workbook	Consistent application of volume values is critical. The evaluation team recommends updating all values to 381 for 1.5 gpm faucet aerators and 636 for 1.0 gpm faucet aerators. However, the volume can be updated to 381 for all measures.
Mixed water temperature (T_{Mixed})	• HPwES: Lookup value based on weather zone • IQS: Lookup value based on weather zone • Manufactured Homes: 104.2 • Multifamily Solutions: Lookup value based on weather zone. • Retail Lighting & Appliances: 104.2	Res NC Savings Inputs Workbook	Consistent application of the mixed water temperature values is critical. The evaluation team recommends updating all values based on the weather zone of the home. However, the mixed water temperature can be updated to 104.2 for all measures.

Reported input	Reported value	Input source	Notes/recommendation
Supply water temperature (T_{Supply})	• HPwES: Lookup value based on weather zone • IQS: Lookup value based on weather zone • Manufactured Homes: 72.3 • Multifamily Solutions: Lookup value based on weather zone • Retail Lighting & Appliances: 72.3	Res NC Savings Inputs Workbook	Consistent application of the supply water temperature values is critical. The evaluation team recommends updating all values based on the weather zone of the home. However, the supply water temperature can be updated to 72.4 for all measures.
Recovery factor (RE)	• Heat pump: 2.2 • Electric (default): 0.98 • Natural gas: 0.78	Res NC Savings Inputs Workbook	This assumption is acceptable.
Conversion factor	Heat pump and electric (default): 3,412 Btu/kWh Natural gas: 100,000 Btu/therm	Res NC Savings Inputs Workbook	This assumption is acceptable.
$Ratio_{kW}$	0.000104	Res NC Savings Inputs Workbook	This assumption is acceptable.

C.13 LOW-FLOW SHOWERHEAD

The *low-flow showerhead* measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh = \frac{\rho * C_p * V * \left(T_{Mixed} - T_{Supply}\right) * \left(\frac{1}{RE}\right)}{Conversion\ Factor}$$

$$kW = kWh * Ratio_{kW}$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 198. Low-Flow Showerhead—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Density (ρ)	8.33	Res NC Savings Inputs Workbook	This assumption is acceptable
Specific heat of water (C_p)	1	Res NC Savings Inputs Workbook	This assumption is acceptable

Reported input	Reported value	Input source	Notes/recommendation
Volume (V)	3,246	Res NC Savings Inputs Workbook	This assumption is acceptable
Mixed water temperature (T_{Mixed})	• HPwES: Lookup value based on weather zone • IQS: Lookup value based on weather zone • Manufactured Homes: 104.2 • Multifamily Solutions: Lookup value based on weather zone. • Retail Lighting & Appliances: 104.2	Res NC Savings Inputs Workbook	Consistent application of the mixed water temperature values is critical. The evaluation team recommends updating all values based on the weather zone of the home. However, the mixed water temperature can be updated to 104.2 for all measures.
Supply water temperature (T_{Supply})	• HPwES: Lookup value based on weather zone • IQS: Lookup value based on weather zone • Manufactured Homes: 72.3 • Multifamily Solutions: Lookup value based on weather zone • Retail Lighting & Appliances: 72.3	Res NC Savings Inputs Workbook	Consistent application of the supply water temperature values is critical. The evaluation team recommends updating all values based on the weather zone of the home. However, the supply water temperature can be updated to 72.4 for all measures.
Recovery factor (RE)	• Heat Pump: 2.2 • Electric (default): 0.98 • Natural Gas: 0.78	Res NC Savings Inputs Workbook	This assumption is acceptable.
Conversion factor	• Heat pump and electric (default): 3,412 Btu/kWh • Natural gas: 100,000 Btu/therm	Res NC Savings Inputs Workbook	This assumption is acceptable.
$Ratio_{kW}$	0.000104	Res NC Savings Inputs Workbook	This assumption is acceptable.

C.14 PIPE WRAP INSULATION

The pipe wrap insulation measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm mostly acceptable. The EM&V team was unable to determine the methodology used for the demand savings calculation in the Residential Retail & Appliance program, and should be updated to match the methodology shown below. Below are the savings algorithms used.

$$kWh = (U_{pre} - U_{post}) * A * \frac{(T_{pipe} - T_{ambient})}{RE} * \frac{Hours_{Total}}{Conversion\ Factor}$$

$$kW = (U_{pre} - U_{post}) * A * \frac{(T_{pipe} - T_{ambient})}{RE} * \frac{1}{Conversion\ Factor}$$

$$U_{post} = \frac{1}{(2.03 + R_{Ins})}$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 199. Pipe Wrap Insulation—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Baseline U-value (U_{pre})	0.49	Res NC Savings Inputs Workbook	This assumption is acceptable.
Insulation R-value (R_{ins})	4	Res NC Savings Inputs Workbook	This assumption is acceptable.
Surface area of insulation (A)	0.19634	Res NC Savings Inputs Workbook	This assumption is acceptable.
Pipe water temperature (T_{pipe})	90	Arkansas TRM v7	This assumption is acceptable.
Ambient air temperature ($T_{ambient}$)	64.1	Arkansas TRM v7	This assumption is acceptable.
Recovery factor (RE)	• Heat pump: 2.2 • Electric (default): 0.98 • Natural gas: 0.78	Res NC Savings Inputs Workbook	This assumption is acceptable.
$Hours_{total}$	8,760	Res NC Savings Inputs Workbook	This assumption is acceptable.
• Conversion factor	• Heat pump and electric (default): 3,412 Btu/kWh • Natural gas: 100,000 Btu/therm	Res NC Savings Inputs Workbook	This assumption is acceptable.

C.15 POOL PUMPS

The pool pumps measure is currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh_{Savings} = kWh_{conv} - kWh_{ES}$$

$$kWh_{conv} = \frac{PFR_{conv} * 60 * hours_{conv} * days}{EF_{conv} * 1{,}000}$$

$$hours_{conv} = \frac{V_{pool} * PT}{PFR_{conv} * 60}$$

$$kWh_{ES} = kWh_{HS} + kWh_{LS}$$

$$kWh_{HS} = \frac{PFR_{HS} * 60 * hours_{HS} * days}{EF_{HS} * 1{,}000}$$

$$kWh_{LS} = \frac{PFR_{LS} * 60 * hours_{LS} * days}{EF_{LS} * 1{,}000}$$

$$PFR_{LS} = \frac{V_{pool}}{t_{turnover} * 60}$$

$$kW_{Savings} = \left[\frac{kWh_{conv}}{hours_{conv}} - \left(\frac{kWh_{ES}}{hours_{HS} + hours_{LS}}\right)\right] * \frac{CF}{days}$$

Table 200. Pool Pumps—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Conventional single-speed pump flow rate (PFR_{conv})	The evaluation team could not verify how the conventional PFR was being applied by the implementer.	N/A	Ensure the conventional PFR is applied based on the size of the pool pump.
Operating days per year (days)	212.8	Arkansas TRM v7	This assumption is acceptable.
Conventional single-speed pump energy factor (EF_{conv})	The evaluation team could not verify how the conventional PFR was being applied by the implementer.	N/A	Ensure the conventional PFR is applied based on the size of the pool pump.
Volume of the pool (V_{pool})	22,000	Arkansas TRM v7	This assumption is acceptable.
Pool turnovers per day (PT)	1.5	Arkansas TRM v7	This assumption is acceptable.
ENERGY STAR variable speed pump high-speed flow rate (PFR_{HS})	50	Arkansas TRM v7	This assumption is acceptable.

Reported input	Reported value	Input source	Notes/recommendation
ENERGY STAR variable speed pump high-speed daily operating hours ($hours_{HS}$)	2	Arkansas TRM v7	This assumption is acceptable.
ENERGY STAR variable speed pump high-speed energy factor (EF_{HS})	3.75	Arkansas TRM v7	This assumption is acceptable.
ENERGY STAR variable speed pump low-speed flow rate (PFR_{LS})	30.6	Arkansas TRM v7	This assumption is acceptable.
ENERGY STAR variable speed pump low-speed daily operating hours ($hours_{LS}$)	10	Arkansas TRM v7	This assumption is acceptable.
ENERGY STAR variable speed pump low-speed energy factor (EF_{LS})	7.26	Arkansas TRM v7	This assumption is acceptable.
Time to filter entire pool ($t_{turnover}$)	12.0	Arkansas TRM v7	This assumption is acceptable.
Coincidence factor (CF)	0.31	Arkansas TRM v7	This assumption is acceptable.

C.16 RESIDENTIAL LEVEL-ONE TUNE-UPS

The level-one tune-up measures are currently calculated using the Illinois Technical Reference Manual (TRM) v5.3.10 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used:

$$kWh = kWh_c + kWh_h$$

$$kWh_c = Cap_c * \frac{12{,}000}{1{,}000} * EFLH_c * \frac{1}{SEER} * MF_e$$

$$kWh_h = Cap_h * \frac{12{,}000}{1{,}000} * EFLH_h * \frac{1}{HSPF} * MF_e$$

$$kW = Cap_c * \frac{12{,}000}{1{,}000} * \frac{1}{EER} * MF_d * CF$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 201. Residential Level-One Tune-Ups—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Cooling capacity (Cap_c in tons)	• A/C Solutions: 3 tons • HPwES: user input in nominal tons • IQS: User input in nominal tons • Manufactured Homes: 3 tons • Multifamily Solutions: 3 tons	For A/C Solutions, Manufactured Homes, and Multifamily Solutions, the default value can be found in the A/C Solutions source calculations for program year (PY) 8 (PY8) in the *tune-ups* tab. For HPwES and IQS, the value is tracked in the application.	Cooling capacity is a critical component in estimating the energy consumption of an HVAC system. This value should be tracked, although the PY11 implementation may continue to use a deemed cooling capacity assumption.
Effective full load hours for cooling ($EFLH_c$)	• A/C Solutions: 2,241 • HPwES: 2,089 • IQS: 2,089 • Manufactured Homes: 2,241 • Multifamily Solutions: 2,241	For A/C Solutions, Manufactured Homes, and Multifamily Solutions, the default value can be found in the A/C Solutions source calculations for PY8 in the *tune-ups* tab. For HPwES and IQS, the value can also be found in the A/C Solutions source calculations on the *EFLH* sheet.	Consistent application of EFLH values is critical. To simplify the measure, the evaluation team recommends using 2,089 hours for all projects. Alternatively, the EFLH may be applied by weather zone for each *tune-up* measure.
SEER	10	PY8 A/C Solutions source calculations	Update the value to 14 to match the SEER in Arkansas TRM v10 (this value is 11.8 EER converted to SEER).
Maintenance energy savings factor (MF_e)	5 percent	PY8 A/C Solutions source calculations	Update to 6.32 percent to match the commercial tune-up assumption.
Heating capacity (Cap_h in tons)	• A/C Solutions: 3 tons • HPwES: User input in nominal tons • IQS: User input in nominal tons • Manufactured Homes: 3 tons • Multifamily Solutions: 3 tons	For A/C Solutions, Manufactured Homes, and Multifamily Solutions, the default value can be found in the A/C Solutions source calculations for PY8 in the *tune-ups* tab. For HPwES and IQS, the value is tracked in the application.	Heating capacity is a critical component in estimating the energy consumption of the HVAC system. This value should be tracked, although the implementer may continue to use a deemed heating capacity assumption.
Effective full load hours for heating ($EFLH_h$)	• A/C Solutions: 1,175 • HPwES: 1,159 • IQS: 1,159 • Manufactured Homes: 1,175	For A/C Solutions, Manufactured Homes, and Multifamily Solutions, the default value can be found in the A/C Solutions source calculations for PY8 in the	Consistent application of EFLH values is critical. To simplify the measure, the evaluation team recommends using 1,159 hours for all projects. Alternatively, the

Reported input	Reported value	Input source	Notes/recommendation
	• Multifamily Solutions: 1,175	*tune-ups* tab. For HPwES and IQS, the value can also be found in the A/C Solutions source calculations on the *EFLH* sheet.	EFLH may be applied by weather zone for each *tune-up* measure.
HSPF	6.8	PY8 A/C Solutions source calculations	Update the value to 7.7 to match the EER in Arkansas TRM v10.
EER	9.2	PY8 A/C Solutions source calculations	Update the value to 11.8 to match the EER in Arkansas TRM v10.
Maintenance demand savings factor (MF_d)	2 percent	PY8 A/C Solutions source calculations	Update to 6.32 percent to match the commercial tune-up assumption
CF	87 percent	PY8 A/C Solutions source calculations	This assumption is acceptable.

C.17 RESIDENTIAL LEVEL-TWO TUNE-UPS

The *level-two tune-up* measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team recommends to adjust the savings algorithm. The EM&V team recommends updating the $HSPF_{pre}$ calculation to use the efficiency loss calculation. Below are the recommended savings algorithms.

$$kWh = kWh_c + kWh_h$$

$$kWh_c = Cap_c * \frac{12{,}000}{1{,}000} * EFLH_c * \left(\frac{1}{EER_{pre}} - \frac{1}{EER_{post}}\right)$$

$$kWh_h = Cap_h * \frac{12{,}000}{1{,}000} * EFLH_h * \left(\frac{1}{HSPF_{pre}} - \frac{1}{HSPF_{post}}\right)$$

$$kW = Cap_c * \frac{12{,}000}{1{,}000} * \left(\frac{1}{EER_{pre}} - \frac{1}{EER_{post}}\right) * CF$$

$$EER_{pre} = (1 - EL) * EER_{post}$$

$$HSPF_{pre} = (1 - EL) * HSPF_{post}$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 202. Residential Level-Two Tune-Ups—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Cooling capacity (Cap_c in tons)	• A/C Solutions: 3 tons • HPwES: user input in nominal tons • IQS: user input in nominal tons • Manufactured Homes: 3 tons • Multifamily Solutions: 3 tons	For A/C Solutions, Manufactured Homes, and Multifamily Solutions, the default value can be found in the A/C Solutions source calculations for PY8 in the *tune-ups* tab. For HPwES and IQS, the value is tracked in the application.	Cooling capacity is a critical component in estimating the energy consumption of an HVAC system. This value should be tracked, although the PY11 implementation may continue to use a deemed cooling capacity assumption.
Effective full load hours for cooling ($EFLH_c$)	• A/C Solutions: 2,241 • HPwES: 2,089 • IQS: 2,089 • Manufactured Homes: 2,241 • Multifamily Solutions: 2,241	For A/C Solutions, Manufactured Homes, and Multifamily Solutions, the default value can be found in the A/C Solutions source calculations for PY8 in the *tune-ups* tab. For HPwES and IQS, the value can also be found in the A/C Solutions source calculations on the *EFLH* sheet.	Consistent application of EFLH values is critical. To simplify the measure, the evaluation team recommends using 2,089 hours for all projects. Alternatively, the EFLH may be applied by weather zone for each *tune-up* measure.
Heating capacity (Cap_h in tons)	• A/C Solutions: 3 tons • HPwES: User input in nominal tons • IQS: User input in nominal tons • Manufactured Homes: 3 tons • Multifamily Solutions: 3 tons	For A/C Solutions, Manufactured Homes, and Multifamily Solutions, the default value can be found in the A/C Solutions source calculations for PY8 in the *tune-ups* tab. For HPwES and IQS, the value is tracked in the application.	Heating capacity is a critical component in estimating the energy consumption of the HVAC system. This value should be tracked, although the implementer may continue to use a deemed heating capacity assumption.
Effective full load hours for heating ($EFLH_h$)	• A/C Solutions: 1,175 • HPwES: 1,159 • IQS: 1,159 • Manufactured Homes: 1,175 • Multifamily Solutions: 1,175	For A/C Solutions, Manufactured Homes, and Multifamily Solutions, the default value can be found in the A/C Solutions source calculations for PY8 in the *tune-ups* tab. For HPwES and IQS, the value can also be found in the A/C Solutions source calculations on the *EFLH* sheet.	Consistent application of EFLH values is critical. To simplify the measure, the evaluation team recommends using 1,159 hours for all projects. Alternatively, the EFLH may be applied by weather zone for each *tune-up* measure.
$HSPF_{post}$	7.7	PY8 A/C Solutions source calculations	This assumption is acceptable.

Reported input	Reported value	Input source	Notes/recommendation
EER_{post}	11.2	PY8 A/C Solutions source calculations	Update the value to 11.8 to match the EER in Arkansas TRM v10.
Efficiency Loss (EL)	6.81 percent	PY8 A/C Solutions source calculations	Update the value to 9.81 percent based on the weighted average efficiency loss from PY10 measures.
$HSPF_{pre}$	$HSPF_{post}$ x(1–0.03)^10	PY8 A/C Solutions source calculations	Update the formula to the following: $HSPF_{post}$ x(1-EL)
CF	87 percent	PY8 A/C Solutions source calculations	This assumption is acceptable.

C.18 SMART THERMOSTATS

The smart thermostat measures are currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh = Area * kWh_{factor}$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 203. Smart Thermostats—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Area	1,484	PY8 A/C Solutions source calculations	This assumption is acceptable.
kWh_{factor}	The factor is based on the heating type of the building.	The A/C Solutions program used PY8 A/C Solutions source calculations. The Res NC Pilot used the Res NC inputs calculation workbook. The HPwES, IQS, Multifamily Solutions, and Retail Lighting & Appliances programs could not be determined.	Consistent application of kWh_{factor} values is critical. The evaluation team recommends using the values from the A/C Solutions PY8 workbook.

C.19 TANKLESS WATER HEATER

The tankless water heater replacement measure is currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh_{Savings} = \frac{\rho * c_p * V * \left(T_{SetPoint} - T_{Supply}\right) * \left(\frac{1}{EF_{pre}} - \frac{1}{EF_{post}}\right)}{3{,}412}$$

$$kW = kWh_{Savings} * Ratio_{kW}$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 204. Tankless Water Heater—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Density (ρ)	8.33	Arkansas TRM v7	This assumption is acceptable.
Specific heat of water (C_p)	1.0	Arkansas TRM v7	This assumption is acceptable.
Annual hot water use (V)	It was not confirmed how the value was obtained. The Arkansas TRM shows that value should be confirmed based on the reported weather zone and tank size of the baseline water heater.	Arkansas TRM v7	Consistent application of the annual hot water use is critical. The evaluation team recommends updating all values based on the weather zone and heating type of the home.
Set point temperature of the hot water unit ($T_{setpoint}$)	120	Arkansas TRM v7	This assumption is acceptable.
Supply temperature of the hot water unit (T_{supply})	It was not confirmed how the supply water temperature was determined. The Arkansas TRM shows that the supply water temperature is determined by the reported weather zone.	Arkansas TRM v7	Consistent application of the supply water temperature is critical. The evaluation team recommends updating all values based on the weather zone of the home.

Reported input	Reported value	Input source	Notes/recommendation
Baseline energy factor (EF_{pre})	It was not confirmed how the baseline energy factor was determined. The Arkansas TRM determines value based on the baseline minimum federal requirements.	Arkansas TRM v7	Confirm that the value is determined based on minimum federal requirements for the specific unit installed.
Energy factor of new water heater (EF_{post})	It was not confirmed how the energy factor for the new unit was determined. The value should be determined based on the actual energy factor of the unit.	Arkansas TRM v7	Confirm that the value is determined based on the actual value of the new unit.
kWh to kW conversion factor ($Ratio_{kW}$)	0.0000877	Arkansas TRM v7	This assumption is acceptable.

C.20 WINDOW A/C

The window A/C measure is currently calculated using the Arkansas TRM v7 savings methodology, and the EM&V team finds the savings algorithm acceptable. Below are the savings algorithms used.

$$kWh_{Savings} = CAP * \frac{1}{1{,}000} * RAF * EFLH_C * \left(\frac{1}{\eta_{base}} - \frac{1}{\eta_{post}}\right)$$

$$kW = CAP * \frac{1}{1{,}000} * CF * \left(\frac{1}{\eta_{base}} - \frac{1}{\eta_{post}}\right)$$

The table below outlines the evaluated review for each of the algorithm inputs and assumptions.

Table 205. Window A/C—Evaluated Review for Each Algorithm Input and Assumption

Reported input	Reported value	Input source	Notes/recommendation
Capacity of the window A/C (CAP)	For some of the measures, the measure description contained the capacity. For measure descriptions that did not specify a capacity, capacity could not be determined within the tracking system.	Tracking system	Cooling capacity of the window A/C should be tracked for all units.
Room AC adjustment factor (RAF)	0.40	Res NC Inputs Calculation Workbook	This assumption is acceptable.

Reported input	Reported value	Input source	Notes/recommendation
Effective full load cooling hours ($EFLH_c$)	It was not confirmed how the value was obtained. The Arkansas TRM shows that value should be confirmed based on the reported weather zone of the household.	Arkansas TRM v7	Confirm the EFLHc was determined based on the reported weather zone of the household.
Baseline efficiency (η_{base})	It was not confirmed how the value was obtained. The Arkansas TRM shows that value should be determined based on the minimum federal requirements.	Arkansas TRM v7	Confirm the baseline efficiency was determined based on the minimum federal requirements.
Efficient efficiency (η_{post})	It was not confirmed how the value was obtained. The value should be determined based on the actual new unit efficiency.	Arkansas TRM v7	Confirm the efficient unit efficiency was determined based on the actual efficiency of the unit.
Coincidence factor (CF)	0.87	Arkansas TRM v7	This assumption is acceptable.

Arkansas Public Service Commission

Standardized Annual Reporting Workbook *v3.0 September 2013*

General	Energy Efficiency Portfolio Data and Information		
Instructions	PY10: JAN 2024 - DEC 2024 EE Portfolio Information	PY10: JAN 2024 - DEC 2024 Program Year Evaluation	PY1: NOV 2014 - OCT 2015, PY2: NOV 2015 - OCT 2016, PY3: NOV 2016 - DEC 2017, PY4 2018, PY5 2019, PY6 2020, PY7 2021, PY8 2022, PY9 2023
Glossary			

Annual Report Tables					Reports			Data	
EE Portfolio Summary	EE Portfolio Cost by Program	EE Portfolio Summary by Cost Type	Company Statistics	Program Budget, Energy Savings &	Portfolio Results Detail by Program	Portfolio Results Detail by Sector	Not used	Program Year Data	Next Annual Report Load Data
View	View	View	View	View	View	View		View	View

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Instructions

This workbook is designed to be used by the Investor Owned Utilities in Arkansas to track and report savings and cost related to its Energy Efficiency Portfolios.

The workbook is organized so that all the worksheets work from left to right in order of completion. For ease of use each section is accessible by the use of an action button.

There are three main sections to the workbook:
-General: Contains Instructions and Glossary.
-Energy Efficiency Portfolio Data and Information: Contains all input requirements.
-Tables/Reports/Data: Contains the tables that are required for the narrative report. Also contains additional reports and data summaries.

The 'Energy Efficiency Portfolio Data and Information contains three actions buttons:
-EE Portfolio Information: Here the user can provide information such as Program Descriptions and the Plan Budgets and Savings.
-Current Program Year Evaluation: Here the user can provide information such as the actual Program Year Expenses and Savings.
-Prior Program Year Data: Here the user can provide actual information from the prior two Program Years. This data is available in the prior years annual report workbook.

Each tab in the workbook uses a menu bar at the top that has action buttons that the user can use to navigate through the various options. The 'yellow' shaded cells are cells that require data from the user. All other cells contain formulas and are locked to prevent the user from overwriting the formulas. You can only enter data in the yellow cells. Input the requested units as indicated by the workbook, for example if the request is kWh provide the data in kWh or if it is MWh provide the data in MWh's.

Unprotecting
If for some reason you need to unlock the spreadsheet the password is "APSC". Once you make the correction, lock the workbook back to protect any errors from occurring.

Dropdown List
Some of the required inputs are selected from dropdown list. You can view those list from here: List

Cost Categories
There are six 'Cost Categories' used for tracking EE cost. They are divided into the following:
- Planning / Design
- Marketing & Delivery
- Incentives / Direct Install Costs
- EM&V
- Administration
- Regulatory
A complete list for each Cost Category can be viewed here: Cost

Main Menu

Glossary

Term	Definition
Abudget (Approved Budget)	This is the budget most recently approved by the Commission.
Annual Energy Savings	Energy savings realized for a full year. (8,760 hours)
Benefit Cost Ratio	The ratio of the total benefits of the program to the total costs over the life of the measure discounted as appropriate.
Customer Savings	Savings that are derived from custom measures where deemed savings are not addressed in the currently approved TRM.
Deemed Savings	A "book" estimate of the gross energy savings (kWh or therms) or gross demand savings (kW or therms) for a single unit of an installed EE measure that (a) has been developed from data sources and analytical methods that are widely considered acceptable for the measure and purpose and (b) is applicable to the set of measures undergoing evaluation. This information is found in the TRM on the APSC website and is subject to updates effective for estimation of EE savings associated with measures installed since the beginning of the year in which the updated version is approved. See Volume 2, Section 1.6.
Demand	The time rate of energy flow. Demand usually refers to electric power measured in kW but can also refer to natural gas, usually as Btu/hr or therms/day, etc.. The level at which electricity or natural gas is delivered to users at a given point in time.
Demand Savings	Demand that did not occur due to the installation of an EE measure. (non-coincident peak)
Energy Sales	Energy sold by the utility in the calendar year.
Energy Savings	Energy use that did not occur due to the installation of an EE measure.
Gross Savings	The change in energy consumption and/or demand that results directly from program-related actions taken by participants in an efficiency program, regardless of why they participated.
kW	A Kilowatt is a measure of electric demand - 1000 watts.
kWh	The basic unit of electric energy usage over time. One kWh is equal to one kW of power supplied to a circuit for a period of one hour.
LCFC Energy Savings	For the current Program Year, the sum of eligible net energy savings from (1) measures installed in prior Program Years (8,760 hours) and (2) measures installed in current Program Year as adjusted for time of installation, weather, etc. (less than 8,760 hours). Clarification of item (1) above: The savings reported in the current year should only reflect the current year impact of measures installed in prior years but, should not include the savings claimed and reported in prior years.
Lifetime	The expected useful life, in years, that an installed measure will be in service and producing savings.
Lifetime Energy Savings	The sum of the energy savings through the measure's useful life.
Measures	Specific technology or practice that produces energy and/or demand savings as a result of a ratepayer's participation in a Utility/TPA EE Program.
Net Benefits	The program benefits minus the program costs discounted at the appropriate rate.
Net Savings	The total change in load (energy or demand) that is attributable to an EE Program. This change in load may include, implicitly or explicitly, the effects of free drivers, free riders, EE standards, changes in the level of energy service, and other causes of changes in energy consumption or demand.
Net-to-Gross Ratio (NTGR)	A factor representing net program savings divided by gross program savings that is applied to gross program impacts, converting them into net program load impacts.
Other Savings	Savings for which no deemed savings exist and no custom M&V was performed.
Participant Cost Test (PCT)	A cost-effectiveness test that measures the economic impact to the participating customer of adopting an EE measure.

Main Menu

Glossary

Term	Definition
Participant	A consumer that received a service offered through the subject efficiency program, in a given Program Year. The term "service" is used in this definition to suggest that the service can be a wide variety of services, including financial rebates, technical assistance, product installations, training, EE information or other services, items, or conditions. Each evaluation plan should define "participant" as it applies to the specific evaluation and in accordance with the C&EE Rules and/or State law.
Plan Savings	Annual energy savings budgeted by the utility for the Program Year.
Portfolio	Either (a) a collection of similar programs addressing the same market (e.g., a portfolio of residential programs), technology (e.g., motor-efficiency programs), or mechanisms (e.g., loan programs) or (b) the set of all programs conducted by one organization, such as a utility (and which could include programs that cover multiple markets, technologies, etc..).
Program Administrator Cost (PAC) Test	The Program Administrator Cost Test measures the net costs of a demand-side management program as a resource option based on the costs incurred by the program administrator (including incentives costs) and excluding any net costs incurred by the participant.
Program Year	The Year in which programs are administered and delivered, for the purposes of planning and reporting, a Program Year shall be considered a calendar year, January 1 - December 31.
Program	A group of projects, with similar characteristics and installed in similar applications. Examples could include a utility program to install energy-efficiency lighting in commercial buildings, a developer's program to build a subdivision of homes that have photovoltaic systems, or a state residential EE code program.
Ratepayer Impact Measure (RIM) Test	The Ratepayer Impact Measure test measures what happens to customer bills or rates due to changes in utility revenues and operating costs caused by the program.
RBudget (Revised Budget)	This is the Budget the utility used for the Program Year. This budget may be different from the Approved Budget (ABudget), if the Commission has granted the utility the flexibility to modify its program budgets.
Sales as Adjusted for SD Exemptions	The utility's 2010 Annual Energy Sales minus the 2010 Annual Energy Sales of the customers granted self-direct exemptions by Commission Order.
Total Resource Cost (TRC) Test	The Total Resource Cost Test measures the net costs of a demand-side management program as a resource option based on the total costs of the program, including both the participants' and the utility's costs.
TRC Levelized Cost	The total costs of the program to the utility and its ratepayers on a per kWh or per them basis levelized over the life of the program.

Instructions: Fill in all cells. Select Company's Utility Type from the dropdown menu.

Utility Information

1. Utility Name	Entergy Louisiana, LLC	
2. Program Year	PY10: JAN 2024 - DEC 2024	
3. Docket	R-31106	
4. Date Filed	May 1, 2025	
5. Name of Contact	Heather LeBlanc	
6. Email Address	hgabler@entergy.com	
7. Telephone Number	225.763.5128	

Utility Type: Electric

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Program Detail

Definitions - Residential

Definitions - C&I

Definitions - Cross Sector

Instructions: Select all that apply.

Program Name	Residential																			
	N/A	Behavioral/Education	CPR - Appliances	CPR - Electronics	CPR - Lighting	CPR - Appliance Recycling	DR - Load Control	DR - Price/Time Base	Financing	Manufactured Homes	M/TF - HVAC/Furnace	M/TF - Insulation	M/TF - Pool Pumps	M/TF - Water Heater	M/TF - Windows	Multi-family	Other	WH - Audits	WH - Direct Install	WH - Retrofit
1. AC Solutions											X					X				
2. Home Performance with ENERGY STAR				X								X		X				X	X	
3. Income Qualified Solutions				X	X							X		X				X	X	
4. Manufactured Homes				X						X		X		X					X	
5. Multifamily Solutions				X								X		X		X			X	
6. Retail Lighting & Appliances			X										X							
7. School Kits & Education		X	X		X															
8. Large Commercial & Industrial Solutions																				
9. Small Commercial Solutions																				

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Definitions - Residential

Definitions - C&I

Definitions - Cross Sector

Instructions: Select all that apply.

Program Name	Commercial & Industrial (Small Business, Commercial, Industrial, and Agriculture)																		
	Audit	Custom	Custom/Agriculture	Custom/Data Centers	Custom/Industrial Processes	Custom/Refrigerator Warehouses	DR - Load Control	DR - Price/Time Base	Financing	Govt/Nonprofit/MUSH	Other	Prescriptive/Grocery	Prescriptive/HVAC	Prescriptive/IT or Office	Prescriptive/Industrial	Prescriptive/Lighting	Prescriptive/Motors	Prescriptive/Small Commercial	Street Lighting
1. AC Solutions																			
2. Home Performance with ENERGY STAR																			
3. Income Qualified Solutions																			
4. Manufactured Homes																			
5. Multifamily Solutions																			
6. Retail Lighting & Appliances																			
7. School Kits & Education																			
8. Large Commercial & Industrial Solutions		X	X	X	X	X				X	X	X	X	X	X	X	X		
9. Small Commercial Solutions		X	X	X	X	X				X	X	X	X	X	X	X	X	X	

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Definitions - Residential

Definitions - C&I

Definitions - Cross Sector

Instructions: Select all that apply.

Program Name	Cross-Sector								
	Codes & Standards	Market Transformation	Marketing, Education, Outreach	Multi-Sector Rebates	Other	Research	Shading/Cool Roofs	Voltage Reduction	Workforce Development
1. AC Solutions									
2. Home Performance with ENERGY STAR									
3. Income Qualified Solutions									
4. Manufactured Homes							X		
5. Multifamily Solutions									
6. Retail Lighting & Appliances									
7. School Kits & Education									
8. Large Commercial & Industrial Solutions	X		X	X	X		X		X
9. Small Commercial Solutions	X		X	X	X		X		X

Utility Information | Program Descriptions | Budgets | Savings & Participants | Training | Best Practices

Main Menu

Entergy Louisiana, LLC - PY10: JAN 2024 - DEC 2024 EE Portfolio Information

Program Descriptions

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Instructions: List Program names and the other required detail. Provide additional detail for each program by clicking on the "View Program Detail" button.

Definitions

View Program Detail

	Program Name	Target Sector	Program Type	Delivery Channel
1.	AC Solutions	Residential	Prescriptive/Standard Offer	Trade Ally
2.	Home Performance with ENERGY STAR	Residential	Whole Home	Trade Ally
3.	Income Qualified Solutions	Residential	Market Specific/Hard to Reach	Implementing Contractor
4.	Manufactured Homes	Residential	Market Specific/Hard to Reach	Trade Ally
5.	Multifamily Solutions	Residential	Market Specific/Hard to Reach	Implementing Contractor
6.	Retail Lighting & Appliances	Residential	Consumer Product Rebate	Retail Outlets
7.	School Kits & Education	Residential	Behavior/Education	Implementing Contractor
8.	Large Commercial & Industrial Solutions	Commercial & Industrial	Prescriptive/Standard Offer	Trade Ally
9.	Small Commercial Solutions	Small Business/C&I	Prescriptive/Standard Offer	Trade Ally

Utility Information | Program Descriptions | Budgets | Savings & Participants | Training | Best Practices

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Budgets

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Instructions: Provide RBudget amount for each cost category, including Regulatory at bottom. Provide budget reconciliation by clicking on the "Budget Reconciliation" button.

Budget Reconciliation

Program Name	Planning / Design	Marketing & Delivery	Incentives / Direct Install Costs	EM&V	Administration	Total
1. AC Solutions	$ 221,911		$ 1,012,825	$ 32,707	$ 34,443	$ 1,301,886
2. Home Performance with ENERGY STAR	$ 372,694		$ 1,100,000	$ 35,076	$ 37,044	$ 1,544,814
3. Income Qualified Solutions	$ 1,070,855		$ 1,980,063	$ 83,074	$ 37,968	$ 3,171,960
4. Manufactured Homes	$ 215,161		$ 911,063	$ 25,325	$ 22,251	$ 1,173,800
5. Multifamily Solutions	$ 239,529		$ 1,117,512	$ 18,516	$ 31,433	$ 1,406,990
6. Retail Lighting & Appliances	$ 76,392		$ 1,200,000	$ 24,129	$ 30,793	$ 1,331,314
7. School Kits & Education	$ 153,816		$ 297,913	$ 10,719	$ 7,986	$ 470,434
8. Large Commercial & Industrial Solutions	$ 2,284,792		$ 3,660,018	$ 80,532	$ 164,597	$ 6,189,939
9. Small Commercial Solutions	$ 879,417		$ 1,319,834	$ 76,127	$ 33,486	$ 2,308,864
10. Training - Residential			$ -	$ -	$ -	$ -
11. Training - Commercial			$ -	$ -	$ -	$ -
Total:	$ 5,514,567	$ -	$ 12,599,228	$ 386,205	$ 400,000	$ 18,900,000
					Regulatory	$ -
					Total Portfolio Budget:	$ 18,900,000

Entergy Louisiana, LLC - PY10: JAN 2024 - DEC 2024 EE Portfolio Information

Savings & Participants

Instructions: Provide planned demand savings, planned energy savings, planned number of participants and the participant definition for each program.

Program Name	Demand Savings (kW)	Energy Savings (kWh)	Participants	Participant Definition
1. AC Solutions	0	7,843,506	1,243	Count of unique utility accounts
2. Home Performance with ENERGY STAR	0	8,435,882	2,513	Count of unique utility accounts
3. Income Qualified Solutions	0	8,646,190	1,173	Count of unique utility accounts
4. Manufactured Homes	0	5,067,053	894	Count of unique utility accounts
5. Multifamily Solutions	0	7,158,147	16	Count of properties
6. Retail Lighting & Appliances	0	7,012,258	21,248	Count of unique utility accounts
7. School Kits & Education	0	1,818,675	11,240	Count of school/event
8. Large Commercial & Industrial Solutions	0	37,482,934	239	Count of unique utility accounts
9. Small Commercial Solutions	0	7,625,683	229	Count of unique utility accounts
Total:	0	91,090,328	38,796	

Entergy Louisiana, LLC - PY10: JAN 2024 - DEC 2024 Program Year Evaluation
Evaluated Savings

Instructions: Provide evaluated net savings and participant results. Provide the methodology for energy savings by clicking the "Methodology for Energy Savings" button.

Methodology for Energy Savings

Program Name	Demand Savings (kW)	Energy Savings (kWh)	Participants	Participant Definition
1. AC Solutions	1,627	7,083,623	1,146	Count of unique utility accounts
2. Home Performance with ENERGY STAR	1,704	7,979,381	2,304	Count of unique utility accounts
3. Income Qualified Solutions	2,282	9,859,197	1,294	Count of unique utility accounts
4. Manufactured Homes	583	3,763,887	678	Count of unique utility accounts
5. Multifamily Solutions	988	6,931,109	16	Count of properties
6. Retail Lighting & Appliances	502	9,458,087	10,496	Count of unique utility accounts
7. School Kits & Education	237	1,828,340	11,300	Count of school/event
8. Large Commercial & Industrial Solutions	3,241	24,688,990	179	Count of unique utility accounts
9. Small Commercial Solutions	794	7,864,744	277	Count of unique utility accounts
Total:	11,959	79,457,358	27,690	

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Entergy Louisiana, LLC - PY10: JAN 2024 - DEC 2024 EE Portfolio

Training

Instructions: Provide details for both External and Internal Training by clicking the "Details" button. Provide the Cost associated with the training.

	Sessions	Attendees	Man Hours	Certificates	Cost
External Training	167	212	160	0	$ -

Details

	Sessions	Attendees	Man Hours	Certificates	Cost
Internal Training	8	60	64	2	$ -

Details

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External Training (contractors, trade allies, consumer groups, ect.)

Event No.	**Start Date**	Class	Class Description	Training Location	Sponsor	No. of Attendees (A)	Length of Session (B)	Training Session Man-Hours (A x B)	Any Certificates Awarded? (Y or N)	# of Certificates Awarded
3.	4/3/2024	Retail Training	--- - ENERGY STAR - Program Eligibility - Product Knowledge - Sales Process	Lowes #1054	Franklin Energy	1	0.25	0.25	N	N/A
4.	4/3/2024	Retail Training	--- - ENERGY STAR - Program Overview - Sales Process - Program Eligibility	Home Depot #349	Franklin Energy	1	0.5	0.5	N	N/A
5.	4/4/2024	Retail Training	--- - Program Eligibility - Product Knowledge - Sales Process - ENERGY STAR - Program Overview	Home Depot #347	Franklin Energy	1	0.5	0.5	N	N/A
6.	4/4/2024	Retail Training	--- - Program Overview - ENERGY STAR - Program Eligibility - Product Knowledge - Sales Process	Lowes #1070	Franklin Energy	2	0.5	1	N	N/A
7.	4/4/2024	Retail Training	--- - Program Overview - ENERGY STAR - Program Eligibility - Product Knowledge - Sales Process	Home Depot #378	Franklin Energy	1	0.5	0.5	N	N/A
8.	4/8/2024	Retail Training	--- - ENERGY STAR - Program Overview - Program Eligibility - Sales Process - Product Knowledge	Lowes #1085	Franklin Energy	1	0.5	0.5	N	N/A

9.	4/9/2024	Retail Training	--- - ENERGY STAR - Program Eligibility - Sales Process - Product Knowledge - Program Overview	Lowes #2975	Franklin Energy	1	0.5	0.5	N	N/A
10.	4/9/2024	Retail Training	--- - ENERGY STAR - Program Eligibility - Product Knowledge - Sales Process	Home Depot #359	Franklin Energy	1	0.5	0.5	N	N/A
11.	4/9/2024	Retail Training	--- - Program Eligibility - ENERGY STAR - Product Knowledge - Sales Process - Product Recognition - Program Overview	Home Depot #373	Franklin Energy	2	0.5	1	N	N/A
12.	4/11/2024	Retail Training	--- - Program Overview - ENERGY STAR - Program Eligibility - Product Knowledge - Sales Process	Lowes #1877	Franklin Energy	1	0.25	0.25	N	N/A
13.	4/11/2024	Retail Training	--- - ENERGY STAR - Program Overview - Program Eligibility - Product Knowledge - Sales Process	Home Depot #362	Franklin Energy	1	0.5	0.5	N	N/A
14.	4/16/2024	Retail Training	---- Program Overview	Walmart #386	Franklin Energy	1	0.25	0.25	N	N/A
15.	4/17/2024	Retail Training	--- - Program Eligibility - Product Knowledge - Sales Process - Program Overview - ENERGY STAR	Leslies Pool Supplies #821	Franklin Energy	1	0.25	0.25	N	N/A

16.	4/17/2024	Retail Training	--- - ENERGY STAR - Program Updates - Sales Process - Program Eligibility	Leslies Pool Supplies #618	Franklin Energy	1	0.25	0.25	N	N/A
17.	4/17/2024	Retail Training	--- - Program Overview - Program Eligibility - Product Knowledge - Sales Process	Lowes #2484	Franklin Energy	1	0.25	0.25	N	N/A
18.	4/18/2024	Retail Training	--- - Product Knowledge - Program Eligibility - ENERGY STAR - Product Recognition	Leslies Pool Supplies #774	Franklin Energy	1	0.5	0.5	N	N/A
19.	4/18/2024	Retail Training	--- - ENERGY STAR - Program Eligibility - Sales Process - Product Knowledge - Program Overview	Lowes #461	Franklin Energy	1	0.25	0.25	N	N/A
20.	4/18/2024	Retail Training	--- - Program Overview - ENERGY STAR - Program Eligibility - Product Knowledge - Sales Process	Leslies Pool Supplies #44	Franklin Energy	1	0.25	0.25	N	N/A
21.	4/18/2024	Retail Training	--- - ENERGY STAR - Program Eligibility - Product Knowledge - Sales Process - Program Overview	Home Depot #383	Franklin Energy	1	0.25	0.25	N	N/A
22.	4/18/2024	Retail Training	--- - ENERGY STAR - Program Eligibility - Product Knowledge - Sales Process - Program Overview	Lowes #2645	Franklin Energy	1	0.25	0.25	N	N/A
23.	4/22/2024	Retail Training	---- Program Overview	Home Depot #366	Franklin Energy	1	0.25	0.25	N	N/A

24.	4/22/2024	Retail Training	--- - Program Overview	Dollar Tree #4800	Franklin Energy	1	0.25	0.25	N	N/A
25.	4/22/2024	Retail Training	--- - Program Overview	Walmart #1109	Franklin Energy	1	0.25	0.25	N	N/A
26.	4/22/2024	Retail Training	---- Program Overview	Lowes #450	Franklin Energy	1	0.25	0.25	N	N/A
27.	4/23/2024	Retail Training	--- - ENERGY STAR - Program Overview - Program Eligibility - Product Knowledge - Sales Process	Lowes #2596	Franklin Energy	1	0.5	0.5	N	N/A
28.	4/23/2024	Retail Training	--- - Program Overview	Walmart #307	Franklin Energy	1	0.25	0.25	N	N/A
29.	4/23/2024	Retail Training	--- - Program Overview	Lowes #2418	Franklin Energy	1	0.25	0.25	N	N/A
30.	4/24/2024	Retail Training	ım Eligibility- Product Knowledge	Home Depot #389	Franklin Energy	1	0.5	0.5	N	N/A
31.	5/2/2024	Retail Training	---- Program Overview	Walmart #7301	Franklin Energy	1	0.25	0.25	N	N/A
32.	5/2/2024	Retail Training	--- - Program Overview	Dollar Tree #1761	Franklin Energy	1	0.25	0.25	N	N/A
33.	5/2/2024	Retail Training	--- - Program Overview	Dollar Tree #8015	Franklin Energy	1	0.25	0.25	N	N/A
34.	5/3/2024	Retail Training	--- - Program Overview	Dollar Tree #6299	Franklin Energy	1	0.25	0.25	N	N/A
35.	5/3/2024	Retail Training	--- - Program Overview	Lowes #2484	Franklin Energy	1	0.25	0.25	N	N/A
36.	5/3/2024	Retail Training	--- - Program Overview	Home Depot #357	Franklin Energy	1	0.25	0.25	N	N/A
37.	5/6/2024	Retail Training	--- - Program Overview	Dollar Tree #529	Franklin Energy	1	0.25	0.25	N	N/A
38.	5/6/2024	Retail Training	---- Program Overview	Lowes #1070	Franklin Energy	1	0.25	0.25	N	N/A
39.	5/6/2024	Retail Training	---- Program Overview	Home Depot #378	Franklin Energy	1	0.25	0.25	N	N/A
40.	5/6/2024	Retail Training	---- Program Overview	Home Depot #349	Franklin Energy	1	0.25	0.25	N	N/A
41.	5/6/2024	Retail Training	--- - Program Overview	Home Depot #347	Franklin Energy	1	0.25	0.25	N	N/A

42.	5/6/2024	Retail Training	--- - Program Overview	Walmart #989	Franklin Energy	1	0.25	0.25	N	N/A
43.	5/6/2024	Retail Training	--- - Program Overview	Dollar Tree #389	Franklin Energy	1	0.25	0.25	N	N/A
44.	5/6/2024	Retail Training	--- - Program Overview	Walmart #489	Franklin Energy	1	0.25	0.25	N	N/A
45.	5/7/2024	Retail Training	--- - Program Overview	Home Depot #373	Franklin Energy	1	0.25	0.25	N	N/A
46.	5/7/2024	Retail Training	--- - Program Overview	Dollar Tree #4854	Franklin Energy	1	0.25	0.25	N	N/A
47.	5/7/2024	Retail Training	--- - Program Overview	Walmart #2706	Franklin Energy	1	0.25	0.25	N	N/A
48.	5/7/2024	Retail Training	--- - Program Overview	Lowes #1085	Franklin Energy	1	0.25	0.25	N	N/A
49.	5/7/2024	Retail Training	--- - Program Overview	Dollar Tree #4907	Franklin Energy	1	0.25	0.25	N	N/A
50.	5/9/2024	Retail Training	--- - Program Overview	Lowes #186	Franklin Energy	1	0.25	0.25	N	N/A
51.	5/9/2024	Retail Training	--- - Program Overview	Pinch A Penny Pool Patio Spa #221	Franklin Energy	1	0.25	0.25	N	N/A
52.	5/9/2024	Retail Training	--- - Program Overview	Dollar Tree #3889	Franklin Energy	1	0.25	0.25	N	N/A
53.	5/9/2024	Retail Training	--- - Program Overview	Home Depot #370	Franklin Energy	1	0.25	0.25	N	N/A
54.	5/9/2024	Retail Training	---- Program Overview	Home Depot #367	Franklin Energy	1	0.25	0.25	N	N/A
55.	5/9/2024	Retail Training	--- - Program Overview	Walmart #1206	Franklin Energy	1	0.25	0.25	N	N/A
56.	5/9/2024	Retail Training	--- - Program Overview	Pinch A Penny Pool Patio Spa	Franklin Energy	1	0.25	0.25	N	N/A
57.	5/9/2024	Retail Training	--- - Program Overview	Lowes #2645	Franklin Energy	1	0.25	0.25	N	N/A
58.	5/13/2024	Retail Training	--- - Program Overview	Home Depot #383	Franklin Energy	2	0.25	0.5	N	N/A
59.	5/14/2024	Retail Training	--- - Program Overview	Walmart #307	Franklin Energy	1	0.25	0.25	N	N/A
60.	5/14/2024	Retail Training	--- - Program Overview	Home Depot #366	Franklin Energy	1	0.25	0.25	N	N/A
61.	5/14/2024	Retail Training	---- Program Overview	Lowes #450	Franklin Energy	1	0.25	0.25	N	N/A

62.	5/14/2024	Retail Training	---- Program Overview	Lowes #2418	Franklin Energy	1	0.25	0.25	N	N/A
1.	5/20/2024	Trade Ally Sales Training	Sales Strategies for energy efficiency	The Executive Center	Aptim	30	3	90	N	
63.	6/3/2024	Retail Training	---- Program Overview	Home Depot #347	Franklin Energy	1	0.25	0.25	N	N/A
64.	6/3/2024	Retail Training	--- - Program Overview	Walmart #489	Franklin Energy	1	0.25	0.25	N	N/A
65.	6/3/2024	Retail Training	--- - Program Overview	Lowes #1070	Franklin Energy	1	0.25	0.25	N	N/A
66.	6/10/2024	Retail Training	--- - Program Overview	Home Depot #378	Franklin Energy	1	0.25	0.25	N	N/A
67.	6/10/2024	Retail Training	---- Program Overview	Lowes #186	Franklin Energy	1	0.25	0.25	N	N/A
68.	6/10/2024	Retail Training	--- - Program Overview	Home Depot #383	Franklin Energy	1	0.25	0.25	N	N/A
69.	6/10/2024	Retail Training	---- Program Overview	Walmart #1206	Franklin Energy	1	0.25	0.25	N	N/A
70.	6/10/2024	Retail Training	--- - Program Overview	Lowes #2484	Franklin Energy	1	0.25	0.25	N	N/A
71.	6/10/2024	Retail Training	--- - Program Overview	Lowes #2645	Franklin Energy	1	0.25	0.25	N	N/A
72.	6/10/2024	Retail Training	--- - Program Overview	Home Depot #357	Franklin Energy	1	0.25	0.25	N	N/A
73.	6/10/2024	Retail Training	--- - Program Overview	Home Depot #367	Franklin Energy	1	0.25	0.25	N	N/A
74.	6/10/2024	Retail Training	--- - Program Overview	Lowes #461	Franklin Energy	1	0.25	0.25	N	N/A
75.	6/10/2024	Retail Training	--- - Program Overview	Home Depot #370	Franklin Energy	1	0.25	0.25	N	N/A
76.	6/13/2024	Retail Training	--- - Program Overview	Home Depot #349	Franklin Energy	1	0.25	0.25	N	N/A
77.	6/13/2024	Retail Training	--- - Program Overview	Lowes #2596	Franklin Energy	2	0.25	0.5	N	N/A
78.	6/13/2024	Retail Training	--- - Program Overview	Lowes #1085	Franklin Energy	1	0.25	0.25	N	N/A
79.	6/18/2024	Retail Training	--- - Program Overview	Walmart #386	Franklin Energy	1	0.25	0.25	N	N/A
80.	6/20/2024	Retail Training	--- - Program Updates	Leslies Pool Supplies #449	Franklin Energy	1	0.25	0.25	N	N/A
81.	6/20/2024	Retail Training	--- - Program Overview	Pinch A Penny Pool Patio Spa	Franklin Energy	1	0.25	0.25	N	N/A

82.	6/20/2024	Retail Training	--- - Program Updates	Pinch A Penny Pool Patio Spa	Franklin Energy	1	0.25	0.25	N	N/A
83.	6/20/2024	Retail Training	--- - Program Updates	Leslies Pool Supplies #774	Franklin Energy	1	0.25	0.25	N	N/A
84.	6/20/2024	Retail Training	--- - Program Overview	Pinch A Penny Pool Patio Spa	Franklin Energy	1	0.25	0.25	N	N/A
85.	6/24/2024	Retail Training	--- - Program Overview	Home Depot #373	Franklin Energy	1	0.25	0.25	N	N/A
86.	6/24/2024	Retail Training	--- - Program Updates	Leslies Pool Supplies #872	Franklin Energy	1	0.25	0.25	N	N/A
87.	7/11/2024	Retail Training	--- - Program Overview	Home Depot #373	Franklin Energy	1	0.25	0.25	N	N/A
88.	7/15/2024	Retail Training	--- - Program Overview	Walmart #7301	Franklin Energy	1	0.25	0.25	N	N/A
89.	7/16/2024	Retail Training	--- - Program Overview	Home Depot #366	Franklin Energy	1	0.25	0.25	N	N/A
90.	7/16/2024	Retail Training	--- - Program Overview	Lowes #2418	Franklin Energy	1	0.25	0.25	N	N/A
91.	7/16/2024	Retail Training	--- - Program Overview	Dollar Tree #5329	Franklin Energy	1	0.25	0.25	N	N/A
92.	7/16/2024	Retail Training	--- - Program Overview	Walmart #307	Franklin Energy	1	0.25	0.25	N	N/A
93.	7/16/2024	Retail Training	--- - Program Overview	Lowes #450	Franklin Energy	1	0.25	0.25	N	N/A
94.	7/16/2024	Retail Training	--- - Program Overview	Walmart #1109	Franklin Energy	1	0.25	0.25	N	N/A
95.	7/16/2024	Retail Training	--- - Program Overview	Pinch A Penny Pool Patio Spa	Franklin Energy	1	0.25	0.25	N	N/A
96.	7/17/2024	Retail Training	--- - Program Overview	Dollar Tree #1182	Franklin Energy	1	0.25	0.25	N	N/A
97.	7/17/2024	Retail Training	--- - Program Updates	Leslies Pool Supplies #896	Franklin Energy	1	0.25	0.25	N	N/A
98.	7/23/2024	Retail Training	--- - Program Overview	Dollar Tree #6299	Franklin Energy	1	0.25	0.25	N	N/A
99.	7/23/2024	Retail Training	--- - Program Overview	Walmart #489	Franklin Energy	1	0.25	0.25	N	N/A
100.	7/23/2024	Retail Training	--- - Program Overview	Home Depot #347	Franklin Energy	1	0.25	0.25	N	N/A
101.	7/23/2024	Retail Training	--- - Program Overview	Lowes #1070	Franklin Energy	1	0.25	0.25	N	N/A
102.	7/23/2024	Retail Training	--- - Program Overview	Home Depot #357	Franklin Energy	1	0.25	0.25	N	N/A

103.	7/23/2024	Retail Training	--- - Program Overview	Dollar Tree #529	Franklin Energy	1	0.25	0.25	N	N/A
104.	7/23/2024	Retail Training	--- - Program Overview	Lowes #2484	Franklin Energy	2	0.25	0.5	N	N/A
105.	7/23/2024	Retail Training	--- - Program Overview	Leslies Pool Supplies #821	Franklin Energy	1	0.25	0.25	N	N/A
106.	7/24/2024	Retail Training	--- - Program Overview	Walmart #1206	Franklin Energy	1	0.25	0.25	N	N/A
107.	7/24/2024	Retail Training	--- - Program Overview	Home Depot #383	Franklin Energy	1	0.25	0.25	N	N/A
108.	7/24/2024	Retail Training	--- - Program Overview	Lowes #186	Franklin Energy	1	0.25	0.25	N	N/A
109.	7/24/2024	Retail Training	--- - Program Overview	Lowes #461	Franklin Energy	1	0.25	0.25	N	N/A
110.	7/24/2024	Retail Training	--- - Program Updates	Leslies Pool Supplies #44	Franklin Energy	1	0.25	0.25	N	N/A
111.	7/24/2024	Retail Training	--- - Program Updates	Leslies Pool Supplies #618	Franklin Energy	1	0.25	0.25	N	N/A
112.	7/24/2024	Retail Training	--- - Program Overview	Home Depot #370	Franklin Energy	1	0.25	0.25	N	N/A
113.	7/24/2024	Retail Training	--- - Program Overview	Home Depot #367	Franklin Energy	1	0.25	0.25	N	N/A
114.	7/24/2024	Retail Training	--- - Program Overview	Leslies Pool Supplies #774	Franklin Energy	1	0.25	0.25	N	N/A
115.	7/24/2024	Retail Training	--- - Program Overview	Home Depot #378	Franklin Energy	1	0.25	0.25	N	N/A
116.	7/25/2024	Retail Training	--- - Program Overview	Walmart #2706	Franklin Energy	1	0.25	0.25	N	N/A
117.	7/25/2024	Retail Training	--- - Program Overview	Lowes #2596	Franklin Energy	1	0.25	0.25	N	N/A
118.	7/25/2024	Retail Training	--- - Program Overview	Lowes #1085	Franklin Energy	1	0.25	0.25	N	N/A
119.	7/29/2024	Retail Training	--- - Program Overview	Lowes #1877	Franklin Energy	1	0.25	0.25	N	N/A
120.	7/29/2024	Retail Training	--- - Program Updates	Leslies Pool Supplies #37	Franklin Energy	1	0.25	0.25	N	N/A
121.	7/29/2024	Retail Training	--- - Program Overview	Lowes #1054	Franklin Energy	1	0.25	0.25	N	N/A
122.	7/29/2024	Retail Training	--- - Program Overview	Home Depot #349	Franklin Energy	1	0.25	0.25	N	N/A
123.	7/29/2024	Retail Training	--- - Program Overview	Walmart #989	Franklin Energy	1	0.25	0.25	N	N/A

124.	7/29/2024	Retail Training	--- - Program Overview	Home Depot #362	Franklin Energy	1	0.25	0.25	N	N/A
125.	9/16/2024	Retail Training	--- - Program Overview	Lowes #2596	Franklin Energy	1	0.25	0.25	N	N/A
126.	9/16/2024	Retail Training	--- - Program Overview	Lowes #2975	Franklin Energy	1	0.25	0.25	N	N/A
127.	9/17/2024	Retail Training	--- - Program Overview	Home Depot #357	Franklin Energy	1	0.25	0.25	N	N/A
128.	9/17/2024	Retail Training	--- - Program Overview	Lowes #461	Franklin Energy	1	0.25	0.25	N	N/A
129.	9/17/2024	Retail Training	--- - Program Overview	Home Depot #367	Franklin Energy	1	0.25	0.25	N	N/A
130.	9/17/2024	Retail Training	--- - Program Overview	Lowes #2484	Franklin Energy	1	0.25	0.25	N	N/A
131.	9/17/2024	Retail Training	--- - Program Overview	Lowes #1070	Franklin Energy	1	0.25	0.25	N	N/A
132.	9/17/2024	Retail Training	--- - Program Overview	Home Depot #347	Franklin Energy	1	0.25	0.25	N	N/A
133.	9/18/2024	Retail Training	--- - Program Overview	Home Depot #370	Franklin Energy	1	0.25	0.25	N	N/A
134.	9/18/2024	Retail Training	--- - Program Overview	Home Depot #383	Franklin Energy	1	0.25	0.25	N	N/A
135.	9/18/2024	Retail Training	--- - Program Overview	Lowes #186	Franklin Energy	1	0.25	0.25	N	N/A
136.	9/18/2024	Retail Training	--- - Program Overview	Home Depot #378	Franklin Energy	1	0.25	0.25	N	N/A
137.	9/18/2024	Retail Training	--- - Program Overview	Lowes #2645	Franklin Energy	1	0.25	0.25	N	N/A
138.	9/20/2024	Retail Training	--- - Program Overview	Home Depot #349	Franklin Energy	1	0.25	0.25	N	N/A
139.	9/20/2024	Retail Training	--- - Program Overview	Home Depot #368	Franklin Energy	1	0.25	0.25	N	N/A
140.	9/20/2024	Retail Training	--- - Program Overview	Lowes #1085	Franklin Energy	1	0.25	0.25	N	N/A
141.	9/20/2024	Retail Training	--- - Program Overview	Home Depot #359	Franklin Energy	1	0.25	0.25	N	N/A
142.	9/26/2024	Retail Training	--- - Program Overview	Home Depot #373	Franklin Energy	1	0.25	0.25	N	N/A
143.	10/21/2024	Retail Training	--- - Program Overview	Dollar Tree #1182	Franklin Energy	1	0.25	0.25	N	N/A
144.	10/21/2024	Retail Training	--- - Program Overview	Dollar Tree #4800	Franklin Energy	1	0.25	0.25	N	N/A

145.	10/21/2024	Retail Training	--- - Program Overview	Home Depot #366	Franklin Energy	1	0.25	0.25	N	N/A
146.	10/21/2024	Retail Training	--- - Program Overview	Dollar Tree #5329	Franklin Energy	1	0.25	0.25	N	N/A
147.	10/21/2024	Retail Training	--- - Program Overview	Lowes #450	Franklin Energy	1	0.25	0.25	N	N/A
148.	10/21/2024	Retail Training	--- - Program Overview	Lowes #2418	Franklin Energy	1	0.25	0.25	N	N/A
149.	10/23/2024	Retail Training	--- - Program Overview	Dollar Tree #529	Franklin Energy	1	0.25	0.25	N	N/A
150.	10/28/2024	Retail Training	--- - Program Overview	Home Depot #373	Franklin Energy	1	0.25	0.25	N	N/A
151.	10/28/2024	Retail Training	--- - Program Overview	Dollar Tree #389	Franklin Energy	1	0.25	0.25	N	N/A
152.	10/28/2024	Retail Training	--- - Program Overview	Home Depot #362	Franklin Energy	1	0.25	0.25	N	N/A
153.	10/28/2024	Retail Training	--- - Program Overview	Lowes #1054	Franklin Energy	1	0.25	0.25	N	N/A
154.	10/28/2024	Retail Training	--- - Program Overview	Lowes #1877	Franklin Energy	1	0.25	0.25	N	N/A
2.	11/13/2024	Trade Ally Digital Literacy	Increased knowledge of using cloud base technology	New Orleans Career Center	Aptim	12	2	24	N	
155.	11/13/2024	Retail Training	--- - Program Overview	Lowes #2596	Franklin Energy	1	0.25	0.25	N	N/A
156.	11/20/2024	Retail Training	--- - Program Overview	Lowes #1085	Franklin Energy	1	0.25	0.25	N	N/A
157.	11/20/2024	Retail Training	--- - Program Overview	Home Depot #368	Franklin Energy	1	0.25	0.25	N	N/A
158.	11/20/2024	Retail Training	--- - Program Overview	Home Depot #349	Franklin Energy	1	0.25	0.25	N	N/A
159.	11/20/2024	Retail Training	--- - Program Overview	Home Depot #359	Franklin Energy	1	0.25	0.25	N	N/A
160.	11/20/2024	Retail Training	--- - Program Overview	Lowes #2975	Franklin Energy	1	0.25	0.25	N	N/A
161.	11/25/2024	Retail Training	--- - Program Overview	Home Depot #347	Franklin Energy	1	0.25	0.25	N	N/A
162.	11/25/2024	Retail Training	--- - Program Overview	Lowes #1070	Franklin Energy	1	0.25	0.25	N	N/A
163.	11/25/2024	Retail Training	--- - Program Overview	Lowes #186	Franklin Energy	1	0.25	0.25	N	N/A
164.	11/25/2024	Retail Training	--- - Program Overview	Lowes #2645	Franklin Energy	1	0.25	0.25	N	N/A

165.	11/25/2024	Retail Training	--- - Program Overview	Home Depot #378	Franklin Energy	1	0.25	0.25	N	N/A
166.	11/25/2024	Retail Training	--- - Program Overview	Home Depot #370	Franklin Energy	1	0.25	0.25	N	N/A
167.	11/26/2024	Retail Training	--- - Program Overview	Home Depot #383	Franklin Energy	1	0.25	0.25	N	N/A
								0		
								0		
								0		
								0		
						212		160		0

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Internal Training (Utility or Administrator Staff)

Event No.	Start Date	Class	Class Description	Training Location	Sponsor	No. of Attendees (A)	Length of Session (B)	Training Session Man-Hours (A x B)	Any Certificates Awarded? (Y or N)	# of Certificates Awarded
1.	1/31/24	Entergy Compliance Training	FERC Standards of Conduct and Affiliate Restrictions Training	Online	Entergy	1	2	2	Y	1
2.	2/28/24	Entergy Safety Training 101 Final.v30	Yearly Entergy Required Training for Securty	Online	Entergy	1	1	1	Y	1
3.	7/19/24	EM2.0/Econtact Training	CS team training on Salesforce (EM2.0), the customer CRM, and NGAGE (EContact), the scheduling tool for IQW.	Online	APTIM	4	1	4	N	
4.	8/20/24	Customer Support Training	CS team training on Emanager platform.	Online	APTIM	5	1	3	N	
5.	9/10/24	Customer Support Training	CS team training on Zendesk emailing.	Online	APTIM	5	0	1	N	
6.	10/7/24	Midwest Energy Efficiency 101	Intro to MW EE	Online	MEEA	10	2	20	N	
7.	12/16/24	Entergy Compliance Training	Compliance Training	Online	Stephanie O'Toole	21	1	21	N	
8.	12/17/24	Entergy Compliance Training	Compliance Training	Online	Stephanie O'Toole	13	1	13	N	
								0		
								0		
Totals:	Events:	8				60		64		2

Entergy Louisiana, LLC - PY10: JAN 2024 - DEC 2024 Program Year Evaluation

Company Statistics

Instructions: Provide all required data. Note - Report program year data, when available. This should not report forecasted data.

Revenue and Expenses

Program Year	Total Revenue (a) ($000's)	Portfolio Budget (b) ($000's)	Budget as % of Revenue (%=b/a)	Actual Expenses (c) ($000's)	Expenses as % of Revenue (%=c/a)
PY1: NOV 2014 - OCT 2015	$ 1,892,482,563	$ 6,407,112	0.34%	$ 5,817,784	0.31%
PY2: NOV 2015 - OCT 2016	$ 1,892,482,563	$ 7,257,351	0.38%	$ 6,367,542	0.34%
PY3: NOV 2016 - DEC 2017	$ 1,892,482,563	$ 8,057,732	0.43%	$ 7,335,392	0.39%
PY4: JAN 2018 - DEC 2018	$ 1,892,482,563	$ 6,647,899	0.35%	$ 4,146,310	0.22%
PY5: JAN 2019 - DEC 2019	$ 1,892,482,563	$ 8,971,803	0.47%	$ 8,546,231	0.45%
PY6: JAN 2020 - DEC 2020	$ 1,892,482,563	$ 9,450,608	0.50%	$ 8,832,017	0.47%
PY7: JAN 2021 - DEC 2021	$ 1,892,482,563	$ 9,450,610	0.50%	$ 9,230,063	0.49%
PY8: JAN 2022 - DEC 2022	$ 1,892,482,563	$ 11,504,892	0.61%	$ 10,446,257	0.55%
PY9: JAN 2023 - DEC 2023	$ 1,892,482,563	$ 13,397,377	0.71%	$ 12,263,409	0.65%
PY10: JAN 2024 - DEC 2024	$ 1,892,482,563	$ 18,900,000	1.00%	$ 17,800,819	0.94%

Energy

Program Year	Total Energy Sales (d) (MWh)	Planned Energy Savings (e) (MWh)	Planned Savings as % of Sales (%=e/d)	Evaluated Energy Savings (f) (MWh)	Evaluated Savings as % of Sales (%=f/d)
PY1: NOV 2014 - OCT 2015	38,821,038	22,548	0.06%	25,811	0.07%
PY2: NOV 2015 - OCT 2016	40,547,434	30,501	0.08%	43,692	0.11%
PY3: NOV 2016 - DEC 2017	46,073,125	33,595	0.07%	45,514	0.10%
PY4: JAN 2018 - DEC 2018	41,757,669	30,210	0.07%	17,869	0.04%
PY5: JAN 2019 - DEC 2019	42,319,106	30,210	0.07%	48,301	0.11%
PY6: JAN 2020 - DEC 2020	41,061,562	44,000	0.11%	48,463	0.12%
PY7: JAN 2021 - DEC 2021	40,716,416	44,003	0.11%	56,083	0.14%
PY8: JAN 2022 - DEC 2022	42,743,637	53,668	0.13%	64,846	0.15%
PY9: JAN 2023 - DEC 2023	43,425,733	62,931	0.14%	70,900	0.16%
PY10: JAN 2024 - DEC 2024	45,679,457	91,090	0.20%	79,457	0.17%

Entergy Louisiana, LLC - PY10: JAN 2024 - DEC 2024 Program Year Evaluation
Actual Expenses

Instructions: Provide actual PY expenses, including Regulatory at bottom. Provide an EECR Cost Reconciliation by clicking the "EECR Reconciliation" button.

EECR Reconciliation

Program Name	Planning / Design	Marketing & Delivery	Incentives / Direct Install	EM&V	Administration	Total
1. AC Solutions	$ 196,220	$ 19,430	$ 863,790	$ 32,707	$ 16,664	$ 1,128,811
Utility					$ 16,664	$ 16,664
Affiliate						$ -
3rd Party	$ 196,220	$ 19,430	$ 863,790	$ 32,707		$ 1,112,147
2. Home Performance with ENERGY STAR	$ 342,361	$ 27,757	$ 1,149,256	$ 35,076	$ 18,771	$ 1,573,221
Utility					$ 18,771	$ 18,771
Affiliate						$ -
3rd Party	$ 342,361	$ 27,757	$ 1,149,256	$ 35,076		$ 1,554,450
3. Income Qualified Solutions	$ 996,699	$ 52,739	$ 2,267,845	$ 83,074	$ 23,193	$ 3,423,550
Utility					$ 23,193	$ 23,193
Affiliate						$ -
3rd Party	$ 996,699	$ 52,739	$ 2,267,845	$ 83,074		$ 3,400,357
4. Manufactured Homes	$ 190,900	$ 16,654	$ 705,481	$ 25,325	$ 8,854	$ 947,215
Utility					$ 8,854	$ 8,854
Affiliate						$ -
3rd Party	$ 190,900	$ 16,654	$ 705,481	$ 25,325		$ 938,360
5. Multifamily Solutions	$ 216,903	$ 19,430	$ 802,293	$ 18,516	$ 16,305	$ 1,073,447
Utility					$ 16,305	$ 16,305
Affiliate						$ -
3rd Party	$ 216,903	$ 19,430	$ 802,293	$ 18,516		$ 1,057,143
6. Retail Lighting & Appliances	$ 49,153	$ 24,982	$ 1,099,992	$ 24,129	$ 22,249	$ 1,220,505
Utility					$ 22,249	$ 22,249
Affiliate						$ -
3rd Party	$ 49,153	$ 24,982	$ 1,099,992	$ 24,129		$ 1,198,256
7. School Kits & Education	$ 148,264	$ 5,551	$ 282,500	$ 10,719	$ 4,301	$ 451,335
Utility					$ 4,301	$ 4,301
Affiliate						$ -
3rd Party	$ 148,264	$ 5,551	$ 282,500	$ 10,719		$ 447,034
8. Large Commercial & Industrial Solutions	$ 2,142,331	$ 74,945	$ 3,149,204	$ 80,532	$ 58,079	$ 5,505,091
Utility					$ 58,079	$ 58,079
Affiliate						$ -
3rd Party	$ 2,142,331	$ 74,945	$ 3,149,204	$ 80,532		$ 5,447,012

Program Name	Planning / Design	Marketing & Delivery	Incentives / Direct Install	EM&V	Administration	Total
9. Small Commercial Solutions	$ 843,333	$ 36,085	$ 1,503,597	$ 76,127	$ 18,501	$ 2,477,644
Utility					$ 18,501	$ 18,501
Affiliate						$ -
3rd Party	$ 843,333	$ 36,085	$ 1,503,597	$ 76,127		$ 2,459,142
10. Training - Residential	$ -	$ -		$ -	$ -	$ -
Utility						$ -
Affiliate						$ -
3rd Party						$ -
11. Training - Commercial	$ -	$ -		$ -	$ -	$ -
Utility						$ -
Affiliate						$ -
3rd Party						$ -

Portfolio Total	Planning / Design	Marketing & Delivery	Incentives / Direct Install Costs	EM&V	Administration	Regulatory	Total
Utility	$ -	$ -	$ -	$ -	$ 186,918	$ -	$ 186,918
Affiliate	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3rd Party	$ 5,126,164	$ 277,574	$ 11,823,959	$ 386,205	$ -	$ -	$ 17,613,902
Total:	$ 5,126,164	$ 277,574	$ 11,823,959	$ 386,205	$ 186,918	$ -	$ 17,800,819

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Methodology for Calculating Net Energy Savings

Program Name	Deemed Savings (kWh)	Custom Savings (kWh)	Other Savings (kWh)	Total Savings (kWh)
1. AC Solutions	7,083,623	0	0	7,083,623
2. Home Performance with ENERGY STAR	7,979,381	0	0	7,979,381
3. Income Qualified Solutions	9,859,197	0	0	9,859,197
4. Manufactured Homes	3,763,887	0	0	3,763,887
5. Multifamily Solutions	6,931,109	0	0	6,931,109
6. Retail Lighting & Appliances	9,458,087	0	0	9,458,087
7. School Kits & Education	1,828,340	0	0	1,828,340
8. Large Commercial & Industrial Solutions	13,719,401	10,969,589	0	24,688,990
9. Small Commercial Solutions	2,309,067	5,555,677	0	7,864,744
10. Empty	0	0	0	0
11. Empty	0	0	0	0
12. Empty	0	0	0	0
13. Empty	0	0	0	0
14. Empty	0	0	0	0
15. Empty	0	0	0	0
16. Empty	0	0	0	0
17. Empty	0	0	0	0
18. Empty	0	0	0	0
19. Empty	0	0	0	0
20. Empty	0	0	0	0
Total Portfolio:	62,932,092	16,525,266	0	79,457,358

Company Statistics | Actual Expenses | Evaluated Savings | Cost-Benefits | LCFC | Incentives

Main Menu

Entergy Louisiana, LLC - PY10: JAN 2024 - DEC 2024 Program Year Evaluation
Cost-Benefits

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Instructions: Provide the required TRC components. Provide "Key Assumptions" and "Other Cost-Benefit Test" by clicking on the action buttons.

Other Cost-Benefit Test

Key Assumptions

Program Name	Net Energy Savings			Total Resource Cost Test (TRC)				
	Annualized Energy Saved (kWh)	Effective NTGR Ratio	Lifetime Energy Savings (MWh)	Total Cost ($000's)	Total Benefits ($000's)	Total Net Benefits ($000's)	TRC Ratio	TRC Levelized Cost ($/kWh)
1. AC Solutions	7,083,623	1.00	118,564	$ 544	$ 2,666	$ 2,122	4.90	$0.017
2. Home Performance with ENERGY STAR	7,979,381	1.00	127,429	$ 583	$ 2,902	$ 2,319	4.98	$0.021
3. Income Qualified Solutions	9,859,197	1.00	156,227	$ 1,536	$ 3,611	$ 2,075	2.35	$0.045
4. Manufactured Homes	3,763,887	1.00	61,655	$ 386	$ 1,323	$ 937	3.42	$0.021
5. Multifamily Solutions	6,931,109	1.00	103,924	$ 421	$ 2,248	$ 1,827	5.34	$0.022
6. Retail Lighting & Appliances	9,458,087	1.00	103,056	$ 2,259	$ 2,355	$ 95	1.04	$0.014
7. School Kits & Education	1,828,340	1.00	21,026	$ 451	$ 506	$ 54	1.12	$0.029
8. Large Commercial & Industrial Solutions	24,688,990	1.00	314,530	$ 5,828	$ 7,114	$ 1,286	1.22	$0.017
9. Small Commercial Solutions	7,864,744	1.00	107,938	$ 2,688	$ 2,357	$ (331)	0.88	$0.036
10. Empty	0	0.00	0	$ -	$ -	$ -	n/a	$0.000
11. Empty	0	0.00	0	$ -	$ -	$ -	n/a	$0.000
Total:	79,457,358	1.00	1,114,348	$ 14,698	$ 25,081	$ 10,384	1.71	$0.020

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Cost-Effectiveness Test

Program Name	Other Test UCT (PACT) Net Benefits ($000's)	Other Test UCT (PACT) Ratio	PCT Ratio	RIM Ratio
1. AC Solutions	$ 1,536,957	2.36	40.58	0.23
2. Home Performance with ENERGY STAR	$ 1,329,099	1.84	76.93	0.23
3. Income Qualified Solutions	$ 187,629	1.05	40.93	0.22
4. Manufactured Homes	$ 375,901	1.40	42.85	0.21
5. Multifamily Solutions	$ 1,174,102	2.09	66.95	0.22
6. Retail Lighting & Appliances	$ 1,134,193	1.93	3.67	0.30
7. School Kits & Education	$ 54,201	1.12	8.18	0.20
8. Large Commercial & Industrial Solutions	$ 1,609,408	1.29	9.01	0.21
9. Small Commercial Solutions	$ (120,633)	0.95	7.67	0.17
10. Empty				
11. Empty				
Total:	$ 7,280,857	1.39	12.52	0.22

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Key Assumptions

Discount Rate 6.81%

Methodology for calculating the TRC Benefit Cost Results

The California Manual was followed in computing the benefit cost results.

Discount Rates	Percentage
Utility (TRC)	6.81%
Utility (PACT)	6.81%
Utility (RIM)	6.81%
Societal (SCT)	2.00%
Participant (PCT)	6.72%
Line Losses	
Line Losses (demand)	2.69%
Line Losses (energy)	2.69%
Escalators	
Avoided Cost Escalator	0.96%

Year	Measure	Value
2024	$/kWh avoided cost	$ 0.0277
2024	$/kW avoided cost	$ 25.21
2024	$/kWh Commercial Bill Reduction	$ 0.11687
2024	$/kWh Residential Bill Reduction	$ 0.10413

Entergy Louisiana, LLC - PY10: JAN 2024 - DEC 2024 Program Year Evaluation

Lost Contributions to Fixed Cost

Instructions: Provide the LCFC Energy Savings and Cost Recovery for the PY's . The LCFC Cost Recovery should be directly related to the LCFC Energy Savings.

LCFC Energy Savings (MWh)

Program Name	PY10: JAN 2024 - DEC 2024	PY9: JAN 2023 - DEC 2023	PY8: JAN 2022 - DEC 2022	PY7: JAN 2021 - DEC 2021	PY6: JAN 2020 - DEC 2020	PY5: JAN 2019 - DEC 2019	PY4: JAN 2018 - DEC 2018	PY3: NOV 2016 - DEC 2017	PY2: NOV 2015 - OCT 2016	PY1: NOV 2014 - OCT 2015
1. AC Solutions	7,084	7,913	6,696	6,379	4,625	3,453	3,224	5,879	4,305	2,664
2. Home Performance with ENERGY STAR	7,979	6,770	5,853	5,686	3,413	2,854	351	13,328	9,512	5,186
3. Income Qualified Solutions	9,859	3,395	2,148	1,516	1,128	1,147	184	2,159	1,496	970
4. Manufactured Homes	3,764	5,092	3,679	3,208	3,273	1,710	2	0	0	0
5. Multifamily Solutions	6,931	3,544	2,497	1,892	776	1,561	1,106	0	0	0
6. Retail Lighting & Appliances	9,458	12,276	12,941	7,751	8,695	6,447	8,116	7,156	7,258	5,006
7. School Kits & Education	1,828	1,738	1,616	1,507	1,411	1,184	374	0	0	0
8. Large Commercial & Industrial Solutions	24,689	27,180	20,145	19,084	16,746	21,794	2,855	12,482	12,927	6,751
9. Small Commercial Solutions	7,865	5,454	9,271	9,059	8,396	8,151	1,657	4,511	3,926	4,607
Total:	79,457	73,363	64,846	56,082	48,464	48,300	17,869	45,515	39,424	25,184

LCFC Cost Recovery ($)

PY10: JAN 2024 - DEC 2024	PY9: JAN 2023 - DEC 2023	PY8: JAN 2022 - DEC 2022	PY7: JAN 2021 - DEC 2021	PY6: JAN 2020 - DEC 2020	PY5: JAN 2019 - DEC 2019	PY4: JAN 2018 - DEC 2018	PY3: NOV 2016 - DEC 2017	PY2: NOV 2015 - OCT 2016	PY1: NOV 2014 - OCT 2015
$ 549,689	$ 626,941	$ 482,893	$ 455,846	$ 319,365	$ 247,586	$ 179,282	$ 339,404	$ 238,966	$ 150,419
$ 619,200	$ 536,376	$ 419,853	$ 409,660	$ 233,907	$ 278,523	$ 19,472	$ 775,181	$ 537,954	$ 296,654
$ 765,074	$ 269,019	$ 154,597	$ 108,439	$ 78,018	$ 75,151	$ 10,963	$ 125,060	$ 84,617	$ 55,394
$ 292,078	$ 403,465	$ 263,327	$ 230,282	$ 227,053	$ 126,881	$ 112	$ -	$ -	$ -
$ 537,854	$ 280,829	$ 179,877	$ 134,833	$ 53,517	$ 121,881	$ 66,658	$ -	$ -	$ -
$ 733,948	$ 972,656	$ 930,029	$ 558,972	$ 595,906	$ 277,890	$ 474,318	$ 411,541	$ 405,941	$ 284,080
$ 141,879	$ 137,721	$ 116,836	$ 109,331	$ 98,803	$ 77,877	$ 22,130	$ -	$ -	$ -
$ 979,412	$ 993,641	$ 729,893	$ 693,099	$ 603,952	$ 550,864	$ 84,919	$ 402,209	$ 387,691	$ 280,856
$ 311,994	$ 208,037	$ 336,840	$ 329,744	$ 303,210	$ 458,694	$ 50,049	$ 146,524	$ 117,763	$ 88,677
$ 4,931,128	$ 4,428,685	$ 3,614,145	$ 3,030,206	$ 2,513,730	$ 2,215,348	$ 907,903	$ 2,199,918	$ 1,772,932	$ 1,156,080

Total LCFC Recovery for Program Year 1-9 $ 26,770,076

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Target Sectors and Program-Type Names

Target Sector	Program Type	Delivery Channel
N/A	Audit - C&I	Coupon Redemption
******Single-Class******	Behavior/Education	Direct Install
Residential	Consumer Product Rebate	Implementing Contractor
Small Business	Custom	Retail Outlets
Commercial & Industrial	Demand Response	Self-Install
Municipalities/Schools	Financing	Statewide Administrator
Agriculture	Market Specific/Hard to Reach	Trade Ally
Other	New Construction	Utility Outreach (email/direct mail)
******Multi-Class******	Other	Website
Res/Small Business	Prescriptive/Standard Offer	
Res/C&I	Measure/Technology Focus	
Small Business/C&I	Whole Home	
All Classes		

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Historical Data (Current Year & Prior Years)

Annual Budget & Actual Cost

	PY10: JAN 2024 - DEC 2024		PY9: JAN 2023 - DEC 2023		PY8: JAN 2022 - DEC 2022		PY7: JAN 2021 - DEC 2021	
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
1. AC Solutions	$ 1,267,443	$ 1,128,811	$ 1,344,303	$ 1,345,596	$ 1,190,655	$ 1,130,956	$ 888,718	$ 908,629
2. Home Performance with ENERGY STAR	$ 1,507,770	$ 1,573,221	$ 1,558,690	$ 1,332,909	$ 1,273,522	$ 1,193,729	$ 1,054,472	$ 1,152,089
3. Income Qualified Solutions	$ 3,133,992	$ 3,423,550	$ 1,056,211	$ 1,265,870	$ 883,869	$ 919,885	$ 599,549	$ 717,603
4. Manufactured Homes	$ 1,151,549	$ 947,215	$ 1,200,409	$ 1,113,954	$ 916,055	$ 886,336	$ 757,707	$ 767,060
5. Multifamily Solutions	$ 1,375,557	$ 1,073,447	$ 712,184	$ 647,858	$ 668,009	$ 622,248	$ 639,060	$ 465,728
6. Retail Lighting & Appliances	$ 1,300,521	$ 1,220,505	$ 992,609	$ 997,970	$ 912,378	$ 921,291	$ 897,885	$ 840,338
7. School Kits & Education	$ 462,448	$ 451,335	$ 442,795	$ 373,463	$ 389,994	$ 336,876	$ 323,822	$ 285,566
8. Large Commercial & Industrial Solutions	$ 6,025,342	$ 5,505,091	$ 3,442,430	$ 3,281,378	$ 3,014,451	$ 2,461,826	$ 2,333,260	$ 2,358,743
9. Small Commercial Solutions	$ 2,275,378	$ 2,477,644	$ 2,503,811	$ 1,760,476	$ 2,132,587	$ 1,849,737	$ 1,853,325	$ 1,631,480
10. Commercial Market Development	$ -	$ -	$ 73,242	$ 73,242	$ 88,604	$ 88,604	$ 73,839	$ 73,848
11. Residential Market Development	$ -	$ -	$ 70,693	$ 70,693	$ 34,768	$ 34,768	$ 28,973	$ 28,980
Regulatory								
Total	$ 18,500,000	$ 17,800,819	$ 13,397,377	$ 12,263,409	$ 11,504,892	$ 10,446,256	$ 9,450,610	$ 9,230,064

Annual Net Energy Savings (kWh)

	PY10: JAN 2024 - DEC 2024		PY9: JAN 2023 - DEC 2023		PY8: JAN 2022 - DEC 2022		PY7: JAN 2021 - DEC 2021	
	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated
1. AC Solutions	7,843,506	7,083,623	4,949,526	7,912,924	4,315,510	6,696,343	3,203,000	6,378,723
2. Home Performance with ENERGY STAR	8,435,882	7,979,381	5,287,784	6,769,854	4,255,983	5,853,450	3,597,050	5,685,795
3. Income Qualified Solutions	8,646,190	9,859,197	2,091,472	3,395,415	1,715,963	2,148,419	1,145,750	1,516,483
4. Manufactured Homes	5,067,053	3,763,887	3,454,269	5,092,329	2,589,909	3,679,020	2,197,725	3,208,231
5. Multifamily Solutions	7,158,147	6,931,109	1,824,327	3,544,484	1,686,397	2,496,968	1,576,235	1,891,956
6. Retail Lighting & Appliances	7,012,258	9,458,087	8,098,821	12,276,360	7,295,648	12,941,220	6,267,225	7,750,877
7. School Kits & Education	1,818,675	1,828,340	1,564,708	1,738,248	1,417,655	1,615,337	1,313,550	1,506,700
8. Large Commercial & Industrial Solutions	37,482,934	24,688,990	23,672,725	27,179,771	20,312,006	20,143,823	16,161,700	19,084,321
9. Small Commercial Solutions	7,625,683	7,864,744	11,987,527	5,454,067	10,079,625	9,271,088	8,541,000	9,059,399
10. Commercial Market Development	0	0	0	0	0	0	0	0
11. Residential Market Development	0	0	0	0	0	0	0	0
Total	91,090,328	79,457,358	62,931,159	73,363,452	53,668,696	64,845,668	44,003,235	56,082,485

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Historical Data (Current Year & Prior Years)

Annual Net Demand Savings (kW)

	PY10: JAN 2024 - DEC 2024		PY9: JAN 2023 - DEC 2023		PY8: JAN 2022 - DEC 2022		PY7: JAN 2021 - DEC 2021	
	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated
1. AC Solutions	0	1,627	0	1,851	0	1,864	0	1,290
2. Home Performance with ENERGY STAR	0	1,704	0	1,524	0	1,002	0	727
3. Income Qualified Solutions	0	2,282	0	792	0	517	0	403
4. Manufactured Homes	0	583	0	796	0	545	0	356
5. Multifamily Solutions	0	988	0	523	0	338	0	231
6. Retail Lighting & Appliances	0	502	0	2,004	0	1,479	0	692
7. School Kits & Education	0	237	0	254	0	233	0	112
8. Large Commercial & Industrial Solutions	0	3,241	0	2,771	0	2,189	0	1,797
9. Small Commercial Solutions	0	794	0	655	0	1,594	0	1,385
10. Commercial Market Development	0	0	0	0	0	0	0	0
11. Residential Market Development	0	0	0	0	0	0	0	0
Total	0	11,959	0	11,170	0	9,761	0	6,992

Number of Participants

	PY10: JAN 2024 - DEC 2024		PY9: JAN 2023 - DEC 2023		PY8: JAN 2022 - DEC 2022		PY7: JAN 2021 - DEC 2021	
	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated
1. AC Solutions	1,243	1,146	4,763	3,020	4,152	2,431	2,504	1,422
2. Home Performance with ENERGY STAR	2,513	2,304	13,175	8,493	10,604	1,194	6,028	580
3. Income Qualified Solutions	1,173	1,294	2,977	3,982	2,443	720	1,334	354
4. Manufactured Homes	894	678	113	3,183	87	476	84	328
5. Multifamily Solutions	16	16	2,262	4,236	2,091	16	1,554	10
6. Retail Lighting & Appliances	21,248	10,496	334,205	9,352	301,061	66,351	185,714	37,920
7. School Kits & Education	11,240	11,300	4,142	6,274	3,704	5,772	1,880	2,602
8. Large Commercial & Industrial Solutions	239	179	108,091	608	92,745	109	57,636	90
9. Small Commercial Solutions	229	277	36,250	507	30,481	5,047	20,512	740
10. Commercial Market Development	0	0	0	0	0	0	0	0
11. Residential Market Development	0	0	0	0	0	0	0	0
Total	38,796	27,690	505,978	39,655	447,368	82,116	277,246	44,046

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Annual Budget & Actual Cost

	PY6: JAN 2020 - DEC 2020		PY5: JAN 2019 - DEC 2019		PY4: JAN 2018 - DEC 2018		PY3: NOV 2016 - DEC 2017	
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
1. AC Solutions	$ 888,718	$ 890,618	$ 528,694	$ 533,142	$ 484,046	$ 520,940	$ 970,287	$ 831,500
2. Home Performance with ENERGY STAR	$ 1,054,472	$ 957,252	$ 1,468,092	$ 890,166	$ 983,049	$ 433,909	$ 1,979,887	$ 1,842,079
3. Income Qualified Solutions	$ 599,549	$ 564,408	$ 506,211	$ 716,761	$ 438,664	$ 266,006	$ 685,686	$ 617,169
4. Manufactured Homes	$ 757,707	$ 761,730	$ 564,020	$ 555,261	$ 377,042	$ 165,647	$ -	$ -
5. Multifamily Solutions	$ 639,060	$ 355,899	$ 619,260	$ 667,074	$ 488,829	$ 330,923	$ -	$ -
6. Retail Lighting & Appliances	$ 897,885	$ 998,316	$ 653,084	$ 729,202	$ 633,845	$ 640,529	$ 995,287	$ 930,962
7. School Kits & Education	$ 323,822	$ 330,270	$ 308,520	$ 302,850	$ 269,823	$ 214,817	$ -	$ -
8. Large Commercial & Industrial Solutions	$ 2,333,259	$ 2,279,717	$ 2,792,138	$ 2,527,236	$ 1,831,104	$ 855,887	$ 2,036,604	$ 1,884,894
9. Small Commercial Solutions	$ 1,853,324	$ 1,619,069	$ 1,531,784	$ 1,624,538	$ 1,141,497	$ 717,652	$ 1,043,633	$ 947,379
10. Commercial Market Development	$ 73,839	$ 53,677	$ -	$ -	$ -	$ -	$ 145,176	$ 97,601
11. Residential Market Development	$ 28,973	$ 21,062	$ -	$ -	$ -	$ -	$ 201,172	$ 183,809
Regulatory								
Total	$ 9,450,608	$ 8,832,017	$ 8,971,803	$ 8,546,230	$ 6,647,899	$ 4,146,310	$ 8,057,732	$ 7,335,392

Annual Net Energy Savings (kWh)

	PY6: JAN 2020 - DEC 2020		PY5: JAN 2019 - DEC 2019		PY4: JAN 2018 - DEC 2018		PY3: NOV 2016 - DEC 2017	
	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated
1. AC Solutions	3,768,891	4,624,511	1,680,577	3,452,513	1,680,577	3,223,932	4,179,195	5,879,037
2. Home Performance with ENERGY STAR	3,415,005	3,413,856	2,207,537	2,854,017	2,207,537	350,890	6,572,564	13,327,325
3. Income Qualified Solutions	857,576	1,128,055	526,940	1,147,393	526,940	183,812	1,113,145	2,158,806
4. Manufactured Homes	1,939,777	3,273,143	918,446	1,709,806	918,446	2,105	0	0
5. Multifamily Solutions	1,523,786	775,848	1,645,258	1,560,917	1,645,258	1,105,617	0	0
6. Retail Lighting & Appliances	7,032,458	8,695,446	5,646,313	6,446,982	5,646,313	8,116,905	5,872,139	7,155,477
7. School Kits & Education	1,260,627	1,410,874	567,899	1,183,979	567,899	374,152	0	0
8. Large Commercial & Industrial Solutions	15,828,766	16,745,963	12,077,519	21,794,282	12,077,519	2,854,937	11,541,894	12,481,366
9. Small Commercial Solutions	8,372,787	8,395,399	4,939,572	8,150,518	4,939,572	1,656,682	4,316,306	4,511,523
10. Commercial Market Development	0	0	0	0	0	0	0	0
11. Residential Market Development	0	0	0	0	0	0	0	0
Total	43,999,673	48,463,095	30,210,061	48,300,407	30,210,061	17,869,032	33,595,243	45,513,534

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Annual Net Demand Savings (kW)

	PY6: JAN 2020 - DEC 2020		PY5: JAN 2019 - DEC 2019		PY4: JAN 2018 - DEC 2018		PY3: NOV 2016 - DEC 2017	
	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated
1. AC Solutions	0	1,588	0	842	0	663	1,450	1,461
2. Home Performance with ENERGY STAR	0	815	0	597	0	43	1,740	3,854
3. Income Qualified Solutions	0	292	0	286	0	27	288	480
4. Manufactured Homes	0	457	0	277	0	0	0	0
5. Multifamily Solutions	0	113	0	287	0	164	0	0
6. Retail Lighting & Appliances	0	1,081	0	1,373	0	1,319	1,456	1,429
7. School Kits & Education	0	199	0	157	0	51	0	0
8. Large Commercial & Industrial Solutions	0	2,729	0	3,837	0	184	2,161	1,796
9. Small Commercial Solutions	0	1,392	0	1,618	0	307	771	726
10. Commercial Market Development	0	0	0	0	0	0	0	0
11. Residential Market Development	0	0	0	0	0	0	0	0
Total	0	8,665	0	9,274	0	2,759	7,866	9,746

Number of Participants

	PY6: JAN 2020 - DEC 2020		PY5: JAN 2019 - DEC 2019		PY4: JAN 2018 - DEC 2018		PY3: NOV 2016 - DEC 2017	
	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated	Plan	Evaluated
1. AC Solutions	3,626	1,733	1,617	1,515	1,617	609	2,571	2,324
2. Home Performance with ENERGY STAR	8,508	1,095	5,500	3,611	5,500	1,626	20,227	2,192
3. Income Qualified Solutions	1,221	326	750	461	750	36	1,995	199
4. Manufactured Homes	66	335	30	246	30	6	0	0
5. Multifamily Solutions	1,889	7	2,040	28	2,040	8	0	0
6. Retail Lighting & Appliances	290,200	62,558	233,000	85,212	233,000	85,126	333,501	103,305
7. School Kits & Education	3,283	4,620	1,500	3,236	1,500	1,500	0	0
8. Large Commercial & Industrial Solutions	72,276	108	55,147	126	55,147	19	27,411	93
9. Small Commercial Solutions	25,319	465	14,937	204	14,937	51	13,798	176
10. Commercial Market Development	0	0	0	0	0	0	0	0
11. Residential Market Development	0	0	0	0	0	0	0	0
Total	406,388	71,247	314,521	94,639	314,521	88,981	399,503	108,289

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Annual Budget & Actual Cost

	PY2: NOV 2015 - OCT 2016		PY1: NOV 2015 - OCT 2016	
	Budget	Actual	Budget	Actual
1. AC Solutions	$ 734,511	$ 609,278	$ 555,153	$ 531,416
2. Home Performance with ENERGY STAR	$ 1,496,598	$ 1,347,209	$ 1,343,876	$ 1,219,841
3. Income Qualified Solutions	$ 604,117	$ 497,584	$ 561,239	$ 505,359
4. Manufactured Homes	$ -	$ -	$ -	$ -
5. Multifamily Solutions	$ -	$ -	$ -	$ -
6. Retail Lighting & Appliances	$ 991,636	$ 807,528	$ 806,079	$ 714,917
7. School Kits & Education	$ -	$ -	$ -	$ -
8. Large Commercial & Industrial Solutions	$ 2,037,103	$ 1,869,926	$ 1,808,305	$ 1,638,468
9. Small Commercial Solutions	$ 1,044,313	$ 951,489	$ 873,751	$ 790,792
10. Commercial Market Development	$ 147,654	$ 98,267	$ 169,443	$ 154,038
11. Residential Market Development	$ 201,419	$ 186,260	$ 289,266	$ 262,970
Regulatory				
Total	$ 7,257,351	$ 6,367,542	$ 6,407,112	$ 5,817,801

Annual Net Energy Savings (kWh)

	PY2: NOV 2015 - OCT 2016		PY1: NOV 2015 - OCT 2016	
	Plan	Evaluated	Plan	Evaluated
1. AC Solutions	3,352,933	4,304,525	2,289,863	2,663,891
2. Home Performance with ENERGY STAR	4,462,046	9,512,650	3,739,081	5,185,756
3. Income Qualified Solutions	847,076	1,496,786	511,439	970,327
4. Manufactured Homes	0	0	0	0
5. Multifamily Solutions	0	0	0	0
6. Retail Lighting & Appliances	5,895,653	7,257,859	4,326,101	5,006,482
7. School Kits & Education	0	0	0	0
8. Large Commercial & Industrial Solutions	11,615,685	12,927,687	8,342,994	9,108,491
9. Small Commercial Solutions	4,328,080	3,926,349	3,068,620	2,875,813
10. Commercial Market Development	0	0	0	0
11. Residential Market Development	0	0	0	0
Total	30,501,473	39,425,856	22,278,098	25,810,760

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Annual Net Demand Savings (kW)	PY2: NOV 2015 - OCT 2016		PY1: NOV 2015 - OCT 2016	
	Plan	Evaluated	Plan	Evaluated
1. AC Solutions	1,270	994	859	790
2. Home Performance with ENERGY STAR	1,266	2,592	1,074	1,110
3. Income Qualified Solutions	214	343	169	155
4. Manufactured Homes	0	0	0	0
5. Multifamily Solutions	0	0	0	0
6. Retail Lighting & Appliances	1,477	1,227	1,044	1,101
7. School Kits & Education	0	0	0	0
8. Large Commercial & Industrial Solutions	1,885	1,553	1,685	1,313
9. Small Commercial Solutions	779	446	559	492
10. Commercial Market Development	0	0	0	0
11. Residential Market Development	0	0	0	0
Total	6,891	7,155	5,390	4,961

Number of Participants	PY2: NOV 2015 - OCT 2016		PY1: NOV 2015 - OCT 2016	
	Plan	Evaluated	Plan	Evaluated
1. AC Solutions	2,539	1,857	1,707	1,231
2. Home Performance with ENERGY STAR	20,597	2,129	16,840	2,322
3. Income Qualified Solutions	1,861	271	1,409	250
4. Manufactured Homes	0	0	0	0
5. Multifamily Solutions	0	0	0	0
6. Retail Lighting & Appliances	332,965	88,373	244,763	73,703
7. School Kits & Education	0	0	0	0
8. Large Commercial & Industrial Solutions	25,538	185	20,166	75
9. Small Commercial Solutions	13,750	529	10,612	937
10. Commercial Market Development	0	0	0	0
11. Residential Market Development	0	0	0	0
Total	397,250	93,344	295,497	78,518

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Program Cost Type

Planning / Design

Program planning cost
Program design cost
Research and development cost
Request for proposal preparation and evaluation
Consultants used for program design and planning
Company employee costs relating to program design, planning and research and development

Incentives / Direct Install Costs

Rebates
Water conservation kits
Interruptible credits or payments
Payments to CADC (AWP) for weatherization of homes
Payments to contractors for weatherization services
Direct install costs for all programs with direct install provisions
Coupons and upstream program incentives
Residential energy audits

Administration

Utility company personnel training costs
Utility company EE personnel salary and benefits not charged elsewhere
Overhead costs (office space, vehicles, etc.)

Marketing & Delivery

Advertising costs including, but not limited to, educational/promotional materials, website development and updates
TV/Radio ads
Payment to AEO for EEA program
Commercial and Industrial energy audits
Personnel costs for performing marketing and delivery functions
Costs of processing rebates
Database development/update costs
Trade ally training events
Costs to support other EE related events and organizations
Measurement and Verification costs as related to direct program/project/measure costs to validate savings within the utility program (i.e. customer projects) and outside of independent EM&V

EM&V

Payments to consultants for preparation/update of Deemed Savings and Technical Reference Manual
Consultants costs for IEM and independent third party evaluations

Regulatory

Outside counsel legal fees for EE dockets
Travel costs related to EE dockets
Costs for preparing annual reports and EECR filings, including costs related to performing the required cost effectiveness tests
Costs related to regulatory specific collaborative meetings and events

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Table 1

PY10: JAN 2024 - DEC 2024 Portfolio Summary

Net Energy Savings		Cost			Cost-Benefits	
Demand MW	**Energy** MWh	**Actual Expenses**	**LCFC**	**Performance Incentives**	**TRC Net Benefits**	**TRC Ratio**
12.0	79,457	$ 17,800,819	$ 4,931,128	$0	$ 10,384	1.71

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Table 2

EE Portfolio Cost by Program

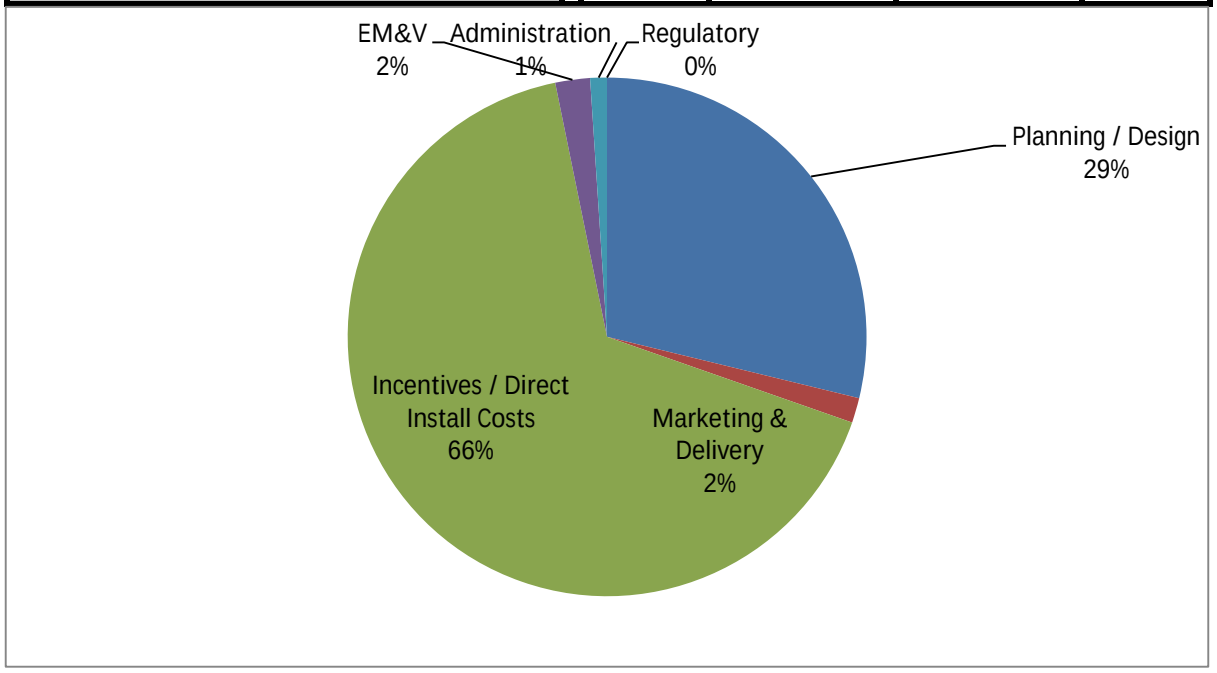
Program Name	Target Sector	Program Type	PY10: JAN 2024 - DEC 2024 Budget ($)	PY10: JAN 2024 - DEC 2024 Actual ($)	% of Budget
AC Solutions	Residential	Prescriptive/Standard Offer	1,301,886	1,128,811	87%
Home Performance with ENERGY STAR	Residential	Whole Home	1,544,814	1,573,221	102%
Income Qualified Solutions	Residential	Market Specific/Hard to Reach	3,171,960	3,423,550	108%
Manufactured Homes	Residential	Market Specific/Hard to Reach	1,173,800	947,215	81%
Multifamily Solutions	Residential	Market Specific/Hard to Reach	1,406,990	1,073,447	76%
Retail Lighting & Appliances	Residential	Consumer Product Rebate	1,331,314	1,220,505	92%
School Kits & Education	Residential	Behavior/Education	470,434	451,335	96%
Large Commercial & Industrial Solutions	Commercial & Industrial	Prescriptive/Standard Offer	6,189,939	5,505,091	89%
Small Commercial Solutions	Small Business/C&I	Prescriptive/Standard Offer	2,308,864	2,477,644	107%
Hide	-	-	-	-	-
Hide	-	-	-	-	-
Regulatory	-	-	-	-	-
		Total	**18,900,000**	**17,800,819**	**94%**

Main Menu

Table 3

EE Portfolio Summary by Cost Type

EE Program Cost Summary Cost Type	PY10: JAN 2024 - DEC 2024 Total Cost			
	% of Total	Budget ($)	Actual ($)	% of Total
Planning / Design	29%	5,514,567	5,126,164	29%
Marketing & Delivery	0%	-	277,574	2%
Incentives / Direct Install Costs	67%	12,599,228	11,823,959	66%
EM&V	2%	386,205	386,205	2%
Administration	2%	400,000	186,918	1%
Regulatory	0%	-	-	0%
	100%	**18,900,000**	**17,800,819**	100%

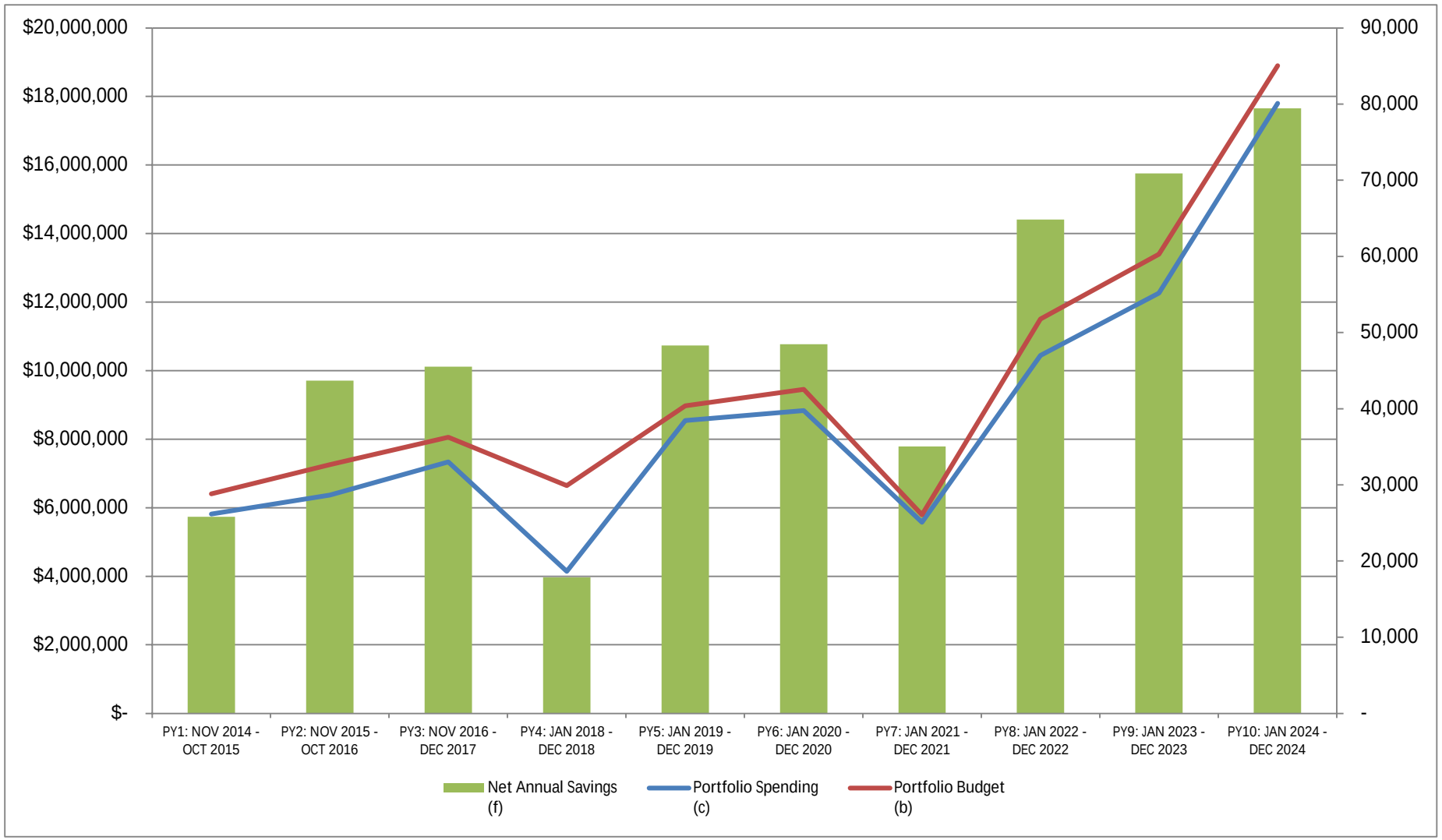


Main Menu

Table 4

Company Statistics

Program Year	Revenue and Expenses					Energy				
		Budget		Actual			Plan		Evaluated	
	Total Revenue (a) ($000's)	Portfolio Budget (b) ($000's)	% of Revenue (%=b/a)	Portfolio Spending (c) ($000's)	% of Revenue (%=b/a)	Total Annual Energy Sales (d) (MWh)	Net Annual Savings (e) (MWh)	% of Energy Sales (%=b/a)	Net Annual Savings (f) (MWh)	% of Energy Sales (%=b/a)
PY1: NOV 2014 OCT 2015	$ 1,892,482,563	$ 6,407,112	0.34%	$ 5,817,784	0.31%	38,821,038	22,548	0.06%	25,811	0.07%
PY2: NOV 2015 OCT 2016	$ 1,892,482,563	$ 7,257,351	0.38%	$ 6,367,542	0.34%	40,547,434	30,501	0.08%	43,692	0.11%
PY3: NOV 2016 DEC 2017	$ 1,892,482,563	$ 8,057,732	0.43%	$ 7,335,392	0.39%	46,073,125	33,595	0.07%	45,514	0.10%
PY4: JAN 2018 - DEC 2018	$ 1,892,482,563	$ 6,647,899	0.35%	$ 4,146,310	0.22%	41,757,669	30,210	0.07%	17,869	0.04%
PY5: JAN 2019 - DEC 2019	$ 1,892,482,563	$ 8,971,803	0.47%	$ 8,546,231	0.45%	42,319,106	30,210	0.07%	48,301	0.11%
PY6: JAN 2020 - DEC 2020	$ 1,892,482,563	$ 9,450,608	0.50%	$ 8,832,017	0.47%	41,061,562	44,000	0.11%	48,463	0.12%
PY7: JAN 2021 - DEC 2021	$ 1,892,482,563	$ 5,800,200	0.50%	$ 5,578,416	0.48%	40,716,416	27,168	0.12%	35,035	0.16%
PY8: JAN 2022 - DEC 2022	$ 1,892,482,563	$ 11,504,892	0.61%	$ 10,446,257	0.55%	42,743,637	53,668	0.13%	64,846	0.15%
PY9: JAN 2023 - DEC 2023	$ 1,892,482,563	$ 13,397,377	0.71%	$ 12,263,409	0.65%	43,425,733	62,931	0.14%	70,900	0.16%
PY10: JAN 2024 - DEC 2024	$ 1,892,482,563	$ 18,900,000	1.00%	$ 17,800,819	0.94%	45,679,457	91,090	0.20%	79,457	0.17%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60,000
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PY1: NOV 2014 - OCT 2015
PY2: NOV 2015 - OCT 2016
PY3: NOV 2016 - DEC 2017
PY4: JAN 2018 - DEC 2018
PY5: JAN 2019 - DEC 2019
PY6: JAN 2020 - DEC 2020
PY7: JAN 2021 - DEC 2021
PY8: JAN 2022 - DEC 2022
PY9: JAN 2023 - DEC 2023
PY10: JAN 2024 - DEC 2024
Net Annual Savings (f)
Portfolio Spending (c)
Portfolio Budget (b)

Main Menu

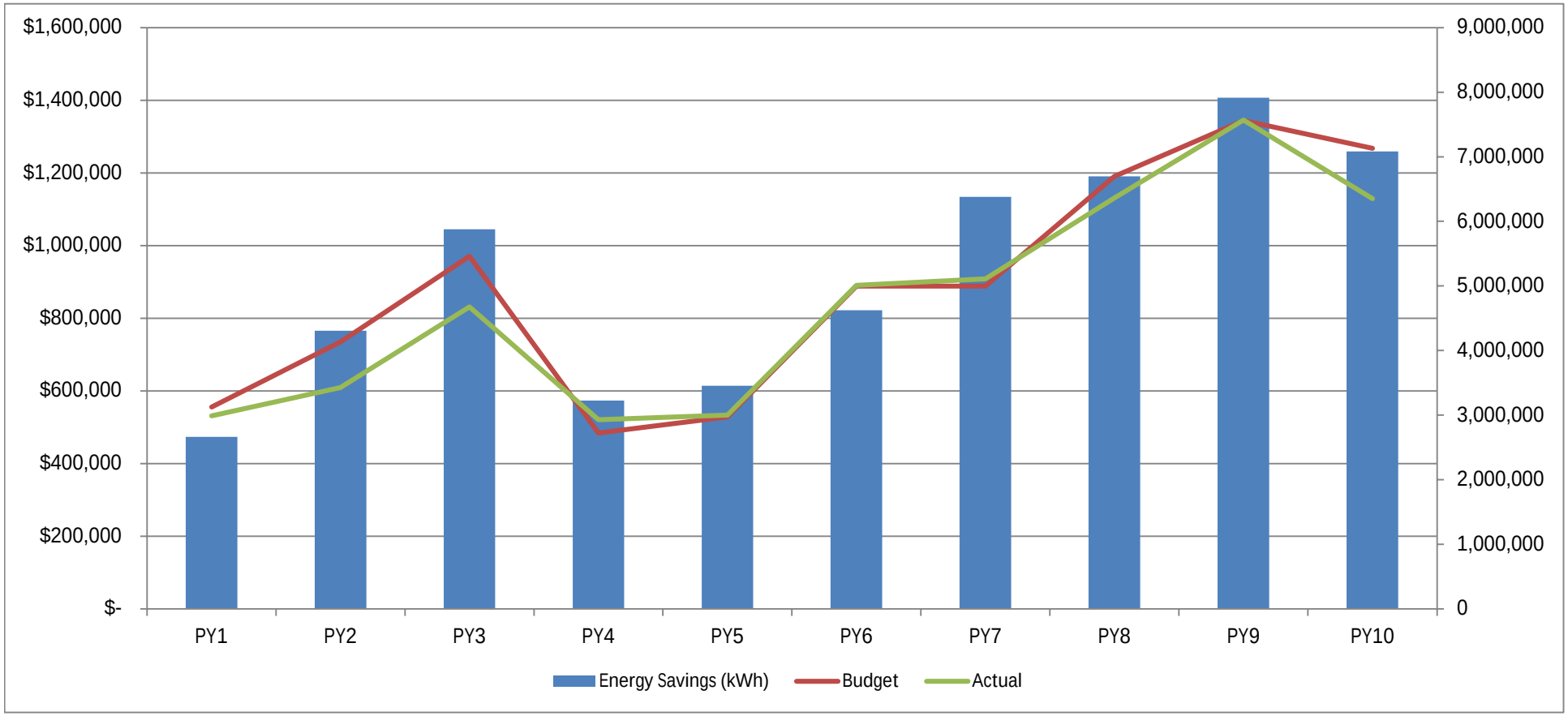
Table 5a

AC Solutions

Select program from dropdown menu to view details.

AC Solutions

	Cost			Energy Savings (kWh)			Demand Savings (kW)			Participants		
Program	Budget	Actual	%	Plan	Evaluated	%	Plan	Evaluated	%	Plan	Actual	%
PY1	$ 555,153	$ 531,416	96%	2,289,863	2,663,891	116%	859	790	92%	1,707	1,231	72%
PY2	$ 734,511	$ 609,278	83%	3,352,933	4,304,525	128%	1,270	994	78%	2,539	1,857	73%
PY3	$ 970,287	$ 831,500	86%	4,179,195	5,879,037	141%	1,450	1,461	101%	2,571	2,324	90%
PY4	$ 484,046	$ 520,940	108%	1,680,577	3,223,932	192%	0	663	-	1,617	609	38%
PY5	$ 528,694	$ 533,142	101%	1,680,577	3,452,513	205%	0	842	-	1,617	1,515	94%
PY6	$ 888,718	$ 890,618	100%	3,768,891	4,624,511	123%	0	1,588	-	3,626	1,733	48%
PY7	$ 888,718	$ 908,629	102%	3,203,000	6,378,723	199%	0	1,290	-	2,504	1,422	57%
PY8	$ 1,190,655	$ 1,130,956	95%	4,315,510	6,696,343	155%	0	1,864	-	4,152	2,431	59%
PY9	$ 1,344,303	$ 1,345,596	100%	4,949,526	7,912,924	160%	0	1,851	-	4,763	3,020	63%
PY10	$ 1,267,443	$ 1,128,811	89%	7,843,506	7,083,623	90%	0	1,627	-	1,243	1,146	92%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PY1
PY2
PY3
PY4
PY5
PY6
PY7
PY8
PY9
PY10
Energy Savings (kWh)
Budget
Actual

Main Menu

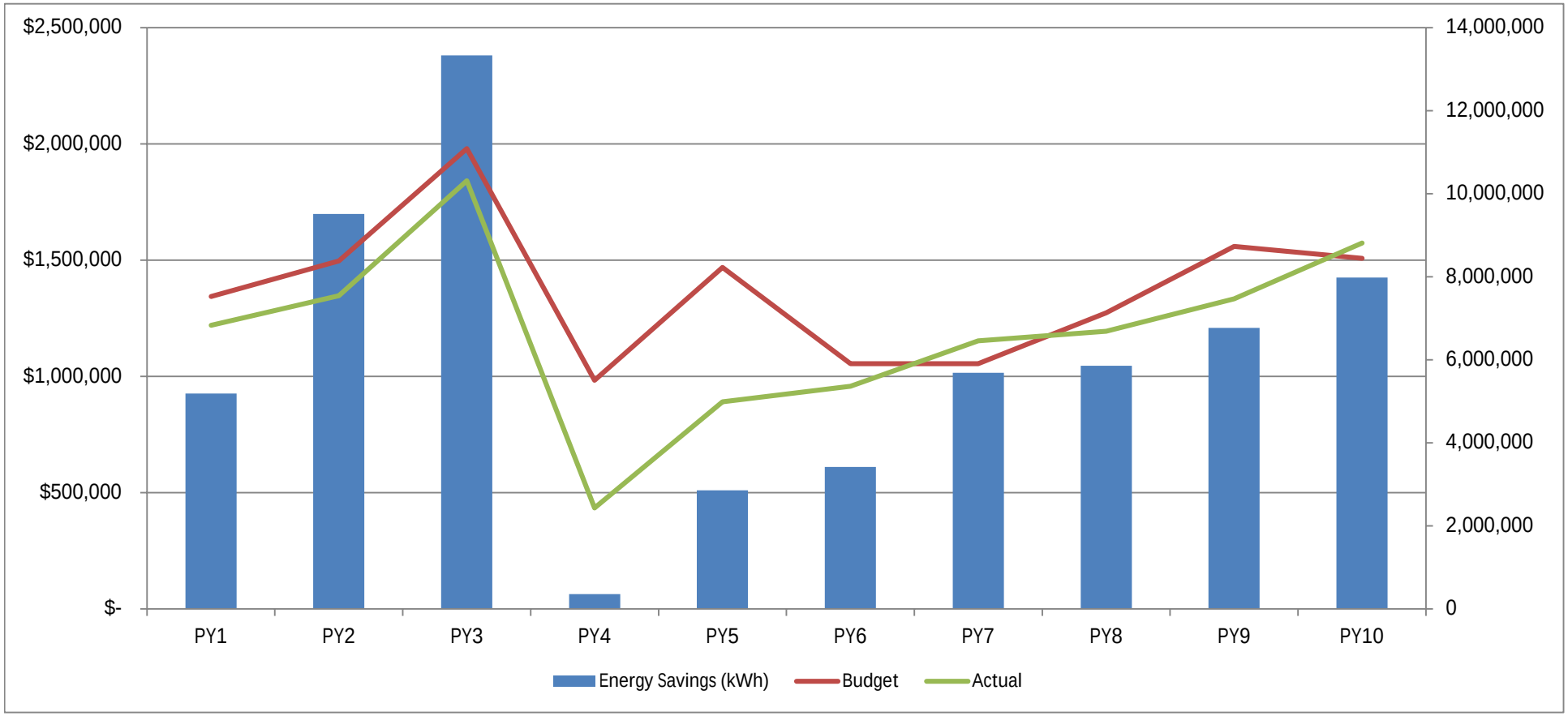
Table 5b

Home Performance with ENERGY STAR

Select program from dropdown menu to view details.

Home Performance with ENERGY STAR

	Cost			Energy Savings (kWh)			Demand Savings (kW)			Participants		
Program	Budget	Actual	%	Plan	Evaluated	%	Plan	Evaluated	%	Plan	Actual	%
PY1	$ 1,343,876	$ 1,219,841	91%	3,739,081	5,185,756	139%	1,074	1,110	103%	16,840	2,322	14%
PY2	$ 1,496,598	$ 1,347,209	90%	4,462,046	9,512,650	213%	1,266	2,592	205%	20,597	2,129	10%
PY3	$ 1,979,887	$ 1,842,079	93%	6,572,564	13,327,325	203%	1,740	3,854	221%	20,227	2,192	11%
PY4	$ 983,049	$ 433,909	44%	2,207,537	350,890	16%	0	43	-	5,500	1,626	30%
PY5	$ 1,468,092	$ 890,166	61%	2,207,537	2,854,017	129%	0	597	-	5,500	3,611	66%
PY6	$ 1,054,472	$ 957,252	91%	3,415,005	3,413,856	100%	0	815	-	8,508	1,095	13%
PY7	$ 1,054,472	$ 1,152,089	109%	3,597,050	5,685,795	158%	0	727	-	6,028	580	10%
PY8	$ 1,273,522	$ 1,193,729	94%	4,255,983	5,853,450	138%	0	1,002	-	10,604	1,194	11%
PY9	$ 1,558,690	$ 1,332,909	86%	5,287,784	6,769,854	128%	0	1,524	-	13,175	8,493	64%
PY10	$ 1,507,770	$ 1,573,221	104%	8,435,882	7,979,381	95%	0	1,704	-	2,513	2,304	92%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PY1
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PY5
PY6
PY7
PY8
PY9
PY10
Energy Savings (kWh)
Budget
Actual

Main Menu

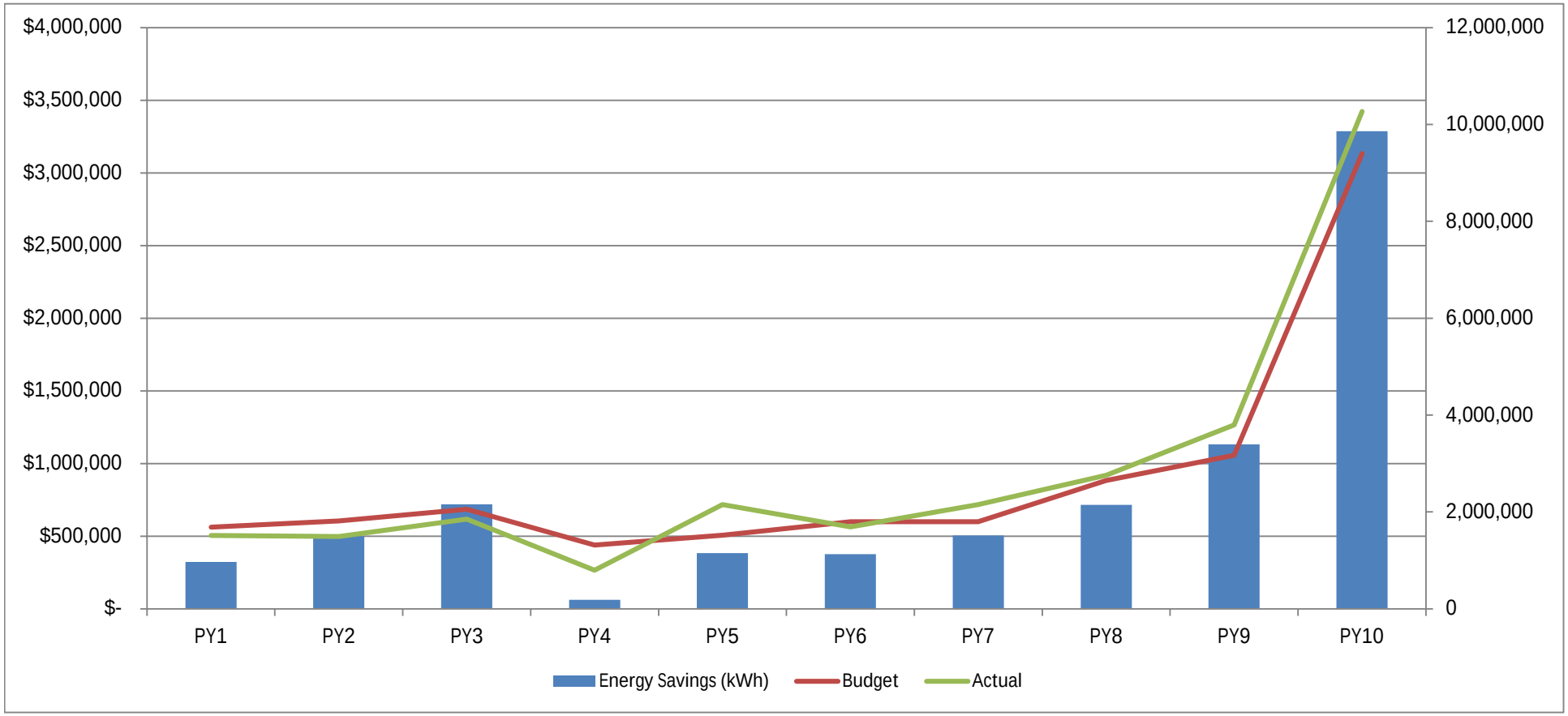
Table 5c

Income Qualified Solutions

Select program from dropdown menu to view details.

Income Qualified Solutions

	Cost			Energy Savings (kWh)			Demand Savings (kW)			Participants		
Program	Budget	Actual	%	Plan	Evaluated	%	Plan	Evaluated	%	Plan	Actual	%
PY1	$ 561,239	$ 505,359	90%	511,439	970,327	190%	169	155	92%	1,409	250	18%
PY2	$ 604,117	$ 497,584	82%	847,076	1,496,786	177%	214	343	160%	1,861	271	15%
PY3	$ 685,686	$ 617,169	90%	1,113,145	2,158,806	194%	288	480	167%	1,995	199	10%
PY4	$ 438,664	$ 266,006	61%	526,940	183,812	35%	0	27	-	750	36	5%
PY5	$ 506,211	$ 716,761	142%	526,940	1,147,393	218%	0	286	-	750	461	61%
PY6	$ 599,549	$ 564,408	94%	857,576	1,128,055	132%	0	292	-	1,221	326	27%
PY7	$ 599,549	$ 717,603	120%	1,145,750	1,516,483	132%	0	403	-	1,334	354	27%
PY8	$ 883,869	$ 919,885	104%	1,715,963	2,148,419	125%	0	517	-	2,443	720	29%
PY9	$ 1,056,211	$ 1,265,870	120%	2,091,472	3,395,415	162%	0	792	-	2,977	3,982	134%
PY10	$ 3,133,992	$ 3,423,550	109%	8,646,190	9,859,197	114%	0	2,282	-	1,173	1,294	110%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PY1
PY2
PY3
PY4
PY5
PY6
PY7
PY8
PY9
PY10
Energy Savings (kWh)
Budget
Actual

Main Menu

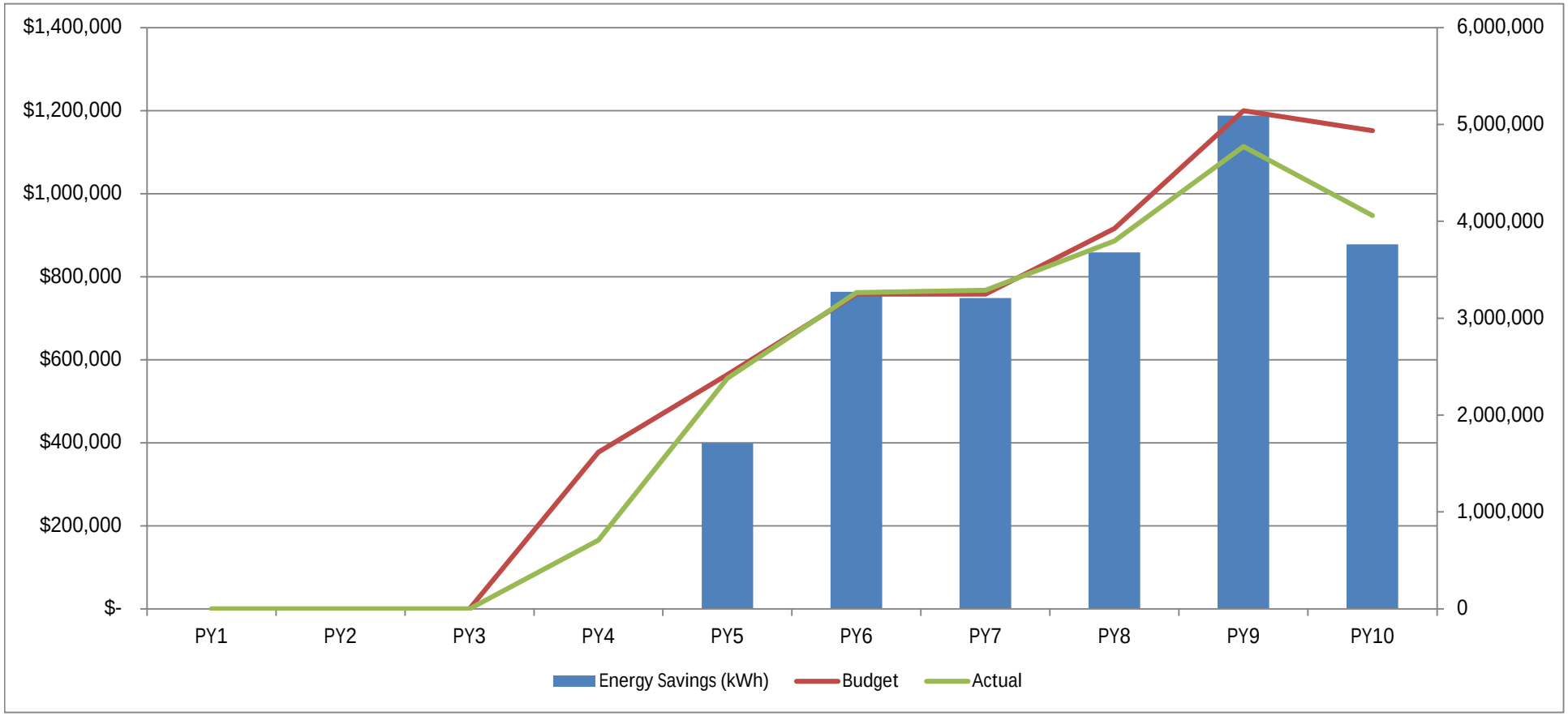
Table 5d

Manufactured Homes

Select program from dropdown menu to view details.

Manufactured Homes

	Cost			Energy Savings (kWh)			Demand Savings (kW)			Participants		
Program	Budget	Actual	%	Plan	Evaluated	%	Plan	Evaluated	%	Plan	Actual	%
PY1	$ -	$ -	-	0	0	-	0	0	-	0	0	-
PY2	$ -	$ -	-	0	0	-	0	0	-	0	0	-
PY3	$ -	$ -	-	0	0	-	0	0	-	0	0	-
PY4	$ 377,042	$ 165,647	44%	918,446	2,105	0%	0	0	-	30	6	20%
PY5	$ 564,020	$ 555,261	98%	918,446	1,709,806	186%	0	277	-	30	246	820%
PY6	$ 757,707	$ 761,730	101%	1,939,777	3,273,143	169%	0	457	-	66	335	508%
PY7	$ 757,707	$ 767,060	101%	2,197,725	3,208,231	146%	0	356	-	84	328	390%
PY8	$ 916,055	$ 886,336	97%	2,589,909	3,679,020	142%	0	545	-	87	476	547%
PY9	$ 1,200,409	$ 1,113,954	93%	3,454,269	5,092,329	147%	0	796	-	113	3,183	2817%
PY10	$ 1,151,549	$ 947,215	82%	5,067,053	3,763,887	74%	0	583	-	894	678	76%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PY1
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PY3
PY4
PY5
PY6
PY7
PY8
PY9
PY10
Energy Savings (kWh)
Budget
Actual

Main Menu

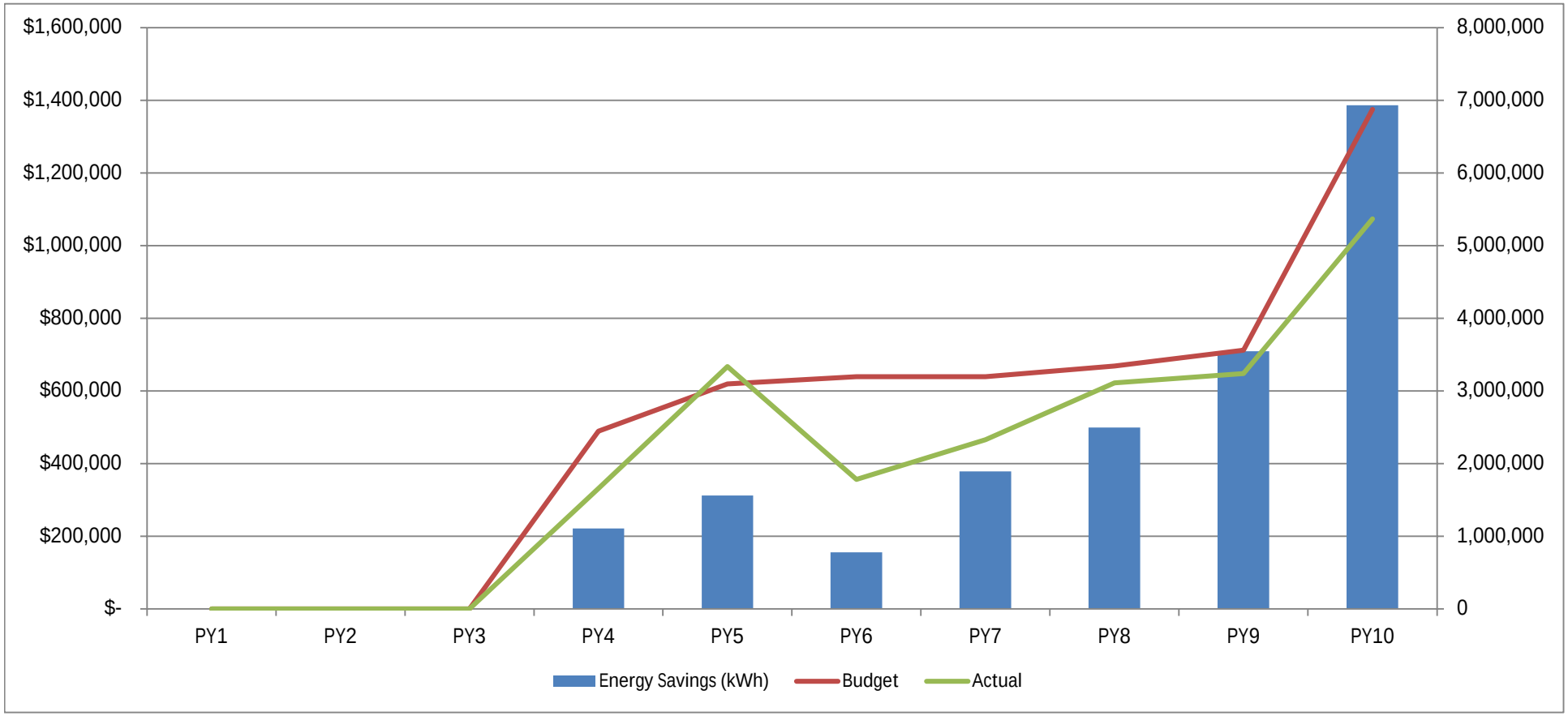
Table 5e

Multifamily Solutions

Select program from dropdown menu to view details.

Multifamily Solutions

	Cost			Energy Savings (kWh)			Demand Savings (kW)			Participants		
Program	Budget	Actual	%	Plan	Evaluated	%	Plan	Evaluated	%	Plan	Actual	%
PY1	$ -	$ -	-	0	0	-	0	0	-	0	0	-
PY2	$ -	$ -	-	0	0	-	0	0	-	0	0	-
PY3	$ -	$ -	-	0	0	-	0	0	-	0	0	-
PY4	$ 488,829	$ 330,923	68%	1,645,258	1,105,617	67%	0	164	-	2,040	8	0%
PY5	$ 619,260	$ 667,074	108%	1,645,258	1,560,917	95%	0	287	-	2,040	28	1%
PY6	$ 639,060	$ 355,899	56%	1,523,786	775,848	51%	0	113	-	1,889	7	0%
PY7	$ 639,060	$ 465,728	73%	1,576,235	1,891,956	120%	0	231	-	1,554	10	1%
PY8	$ 668,009	$ 622,248	93%	1,686,397	2,496,968	148%	0	338	-	2,091	16	1%
PY9	$ 712,184	$ 647,858	91%	1,824,327	3,544,484	194%	0	523	-	2,262	4,236	187%
PY10	$ 1,375,557	$ 1,073,447	78%	7,158,147	6,931,109	97%	0	988	-	16	16	100%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PY1
PY2
PY3
PY4
PY5
PY6
PY7
PY8
PY9
PY10
Energy Savings (kWh)
Budget
Actual

Main Menu

Table 5f

Retail Lighting & Appliances

Select program from dropdown menu to view details.

Retail Lighting & Appliances

	Cost			Energy Savings (kWh)			Demand Savings (kW)			Participants		
Program	Budget	Actual	%	Plan	Evaluated	%	Plan	Evaluated	%	Plan	Actual	%
PY1	$ 806,079	$ 714,917	89%	4,326,101	5,006,482	116%	1,044	1,101	105%	244,763	73,703	30%
PY2	$ 991,636	$ 807,528	81%	5,895,653	7,257,859	123%	1,477	1,227	83%	332,965	88,373	27%
PY3	$ 995,287	$ 930,962	94%	5,872,139	7,155,477	122%	1,456	1,429	98%	333,501	103,305	31%
PY4	$ 633,845	$ 640,529	101%	5,646,313	8,116,905	144%	0	1,319	-	233,000	85,126	37%
PY5	$ 653,084	$ 729,202	112%	5,646,313	6,446,982	114%	0	1,373	-	233,000	85,212	37%
PY6	$ 897,885	$ 998,316	111%	7,032,458	8,695,446	124%	0	1,081	-	290,200	62,558	22%
PY7	$ 897,885	$ 840,338	94%	6,267,225	7,750,877	124%	0	692	-	185,714	37,920	20%
PY8	$ 912,378	$ 921,291	101%	7,295,648	12,941,220	177%	0	1,479	-	301,061	66,351	22%
PY9	$ 992,609	$ 997,970	101%	8,098,821	12,276,360	152%	0	2,004	-	334,205	9,352	3%
PY10	$ 1,300,521	$ 1,220,505	94%	7,012,258	9,458,087	135%	0	502	-	21,248	10,496	49%


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PY1
PY2
PY3
PY4
PY5
PY6
PY7
PY8
PY9
PY10
Energy Savings (kWh)
Budget
Actual

Main Menu

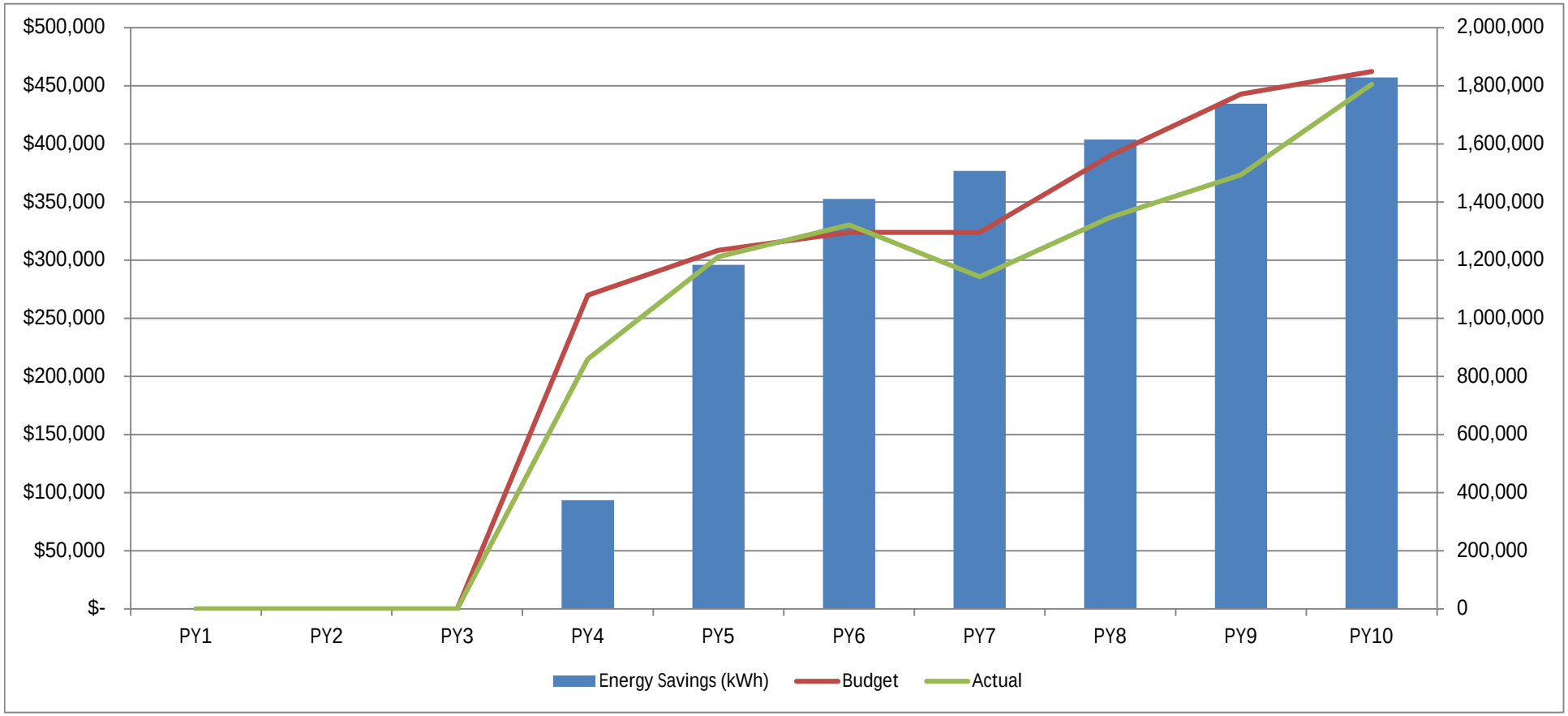
Table 5g

School Kits & Education

Select program from dropdown menu to view details.

School Kits & Education

	Cost			Energy Savings (kWh)			Demand Savings (kW)			Participants		
Program	Budget	Actual	%	Plan	Evaluated	%	Plan	Evaluated	%	Plan	Actual	%
PY1	$ -	$ -	-	0	0	-	0	0	-	0	0	-
PY2	$ -	$ -	-	0	0	-	0	0	-	0	0	-
PY3	$ -	$ -	-	0	0	-	0	0	-	0	0	-
PY4	$ 269,823	$ 214,817	80%	567,899	374,152	66%	0	51	-	1,500	1,500	100%
PY5	$ 308,520	$ 302,850	98%	567,899	1,183,979	208%	0	157	-	1,500	3,236	216%
PY6	$ 323,822	$ 330,270	102%	1,260,627	1,410,874	112%	0	199	-	3,283	4,620	141%
PY7	$ 323,822	$ 285,566	88%	1,313,550	1,506,700	115%	0	112	-	1,880	2,602	138%
PY8	$ 389,994	$ 336,876	86%	1,417,655	1,615,337	114%	0	233	-	3,704	5,772	156%
PY9	$ 442,795	$ 373,463	84%	1,564,708	1,738,248	111%	0	254	-	4,142	6,274	151%
PY10	$ 462,448	$ 451,335	98%	1,818,675	1,828,340	101%	0	237	-	11,240	11,300	101%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PY1
PY2
PY3
PY4
PY5
PY6
PY7
PY8
PY9
PY10
Energy Savings (kWh)
Budget
Actual

Main Menu

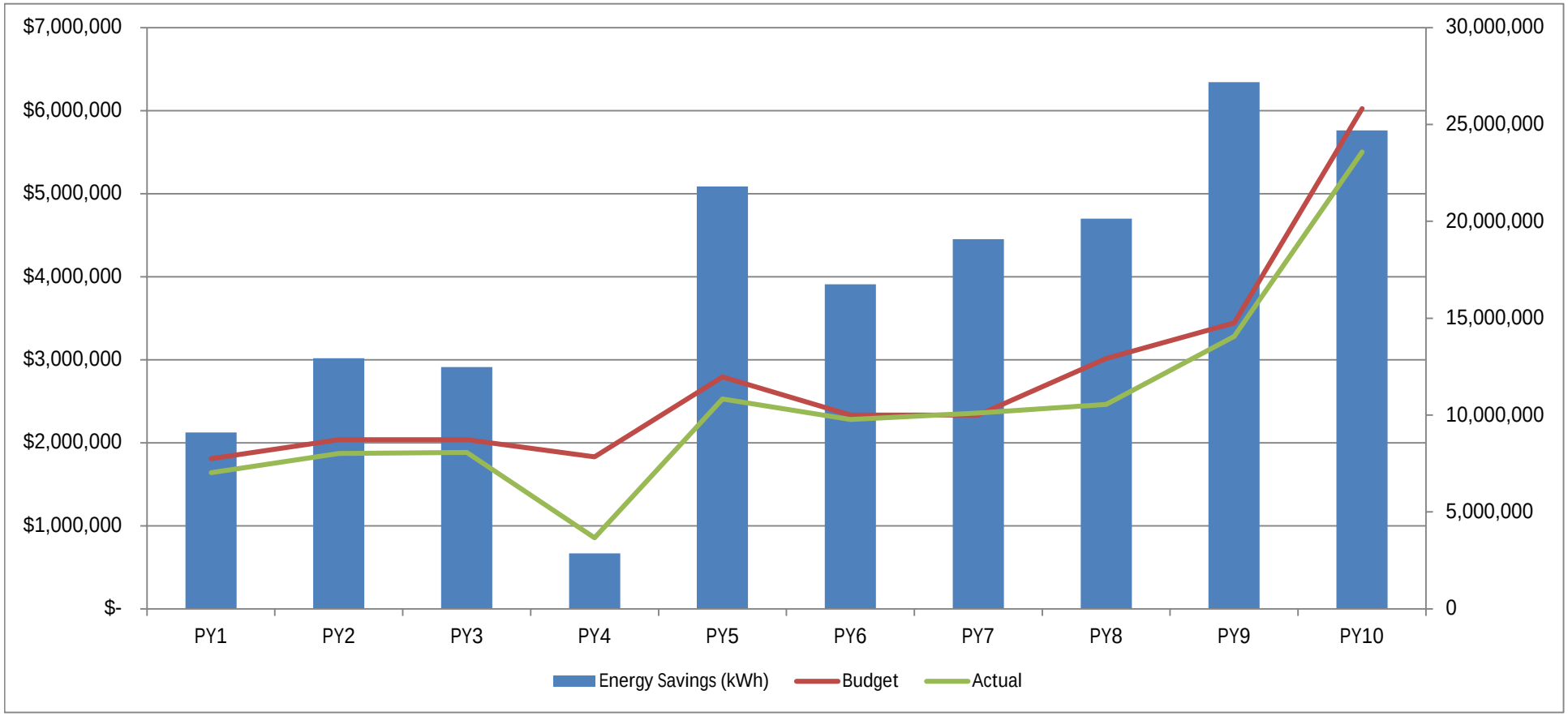
Table 5h

Large Commercial & Industrial Solutions

Select program from dropdown menu to view details.

Large Commercial & Industrial Solutions

	Cost			Energy Savings (kWh)			Demand Savings (kW)			Participants		
Program	Budget	Actual	%	Plan	Evaluated	%	Plan	Evaluated	%	Plan	Actual	%
PY1	$ 1,808,305	$ 1,638,468	91%	8,342,994	9,108,491	109%	1,685	1,313	78%	20,166	75	0%
PY2	$ 2,037,103	$ 1,869,926	92%	11,615,685	12,927,687	111%	1,885	1,553	82%	25,538	185	1%
PY3	$ 2,036,604	$ 1,884,894	93%	11,541,894	12,481,366	108%	2,161	1,796	83%	27,411	93	0%
PY4	$ 1,831,104	$ 855,887	47%	12,077,519	2,854,937	24%	0	184	-	55,147	19	0%
PY5	$ 2,792,138	$ 2,527,236	91%	12,077,519	21,794,282	180%	0	3,837	-	55,147	126	0%
PY6	$ 2,333,259	$ 2,279,717	98%	15,828,766	16,745,963	106%	0	2,729	-	72,276	108	0%
PY7	$ 2,333,260	$ 2,358,743	101%	16,161,700	19,084,321	118%	0	1,797	-	57,636	90	0%
PY8	$ 3,014,451	$ 2,461,826	82%	20,312,006	20,143,823	99%	0	2,189	-	92,745	109	0%
PY9	$ 3,442,430	$ 3,281,378	95%	23,672,725	27,179,771	115%	0	2,771	-	108,091	608	1%
PY10	$ 6,025,342	$ 5,505,091	91%	37,482,934	24,688,990	66%	0	3,241	-	239	179	75%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0
PY1
PY2
PY3
PY4
PY5
PY6
PY7
PY8
PY9
PY10
Energy Savings (kWh)
Budget
Actual

Main Menu

Table 5i

Small Commercial Solutions

Select program from dropdown menu to view details.

Small Commercial Solutions

	Cost			Energy Savings (kWh)			Demand Savings (kW)			Participants		
Program	Budget	Actual	%	Plan	Evaluated	%	Plan	Evaluated	%	Plan	Actual	%
PY1	$ 873,751	$ 790,792	91%	3,068,620	2,875,813	94%	559	492	88%	10,612	937	9%
PY2	$ 1,044,313	$ 951,489	91%	4,328,080	3,926,349	91%	779	446	57%	13,750	529	4%
PY3	$ 1,043,633	$ 947,379	91%	4,316,306	4,511,523	105%	771	726	94%	13,798	176	1%
PY4	$ 1,141,497	$ 717,652	63%	4,939,572	1,656,682	34%	0	307	-	14,937	51	0%
PY5	$ 1,531,784	$ 1,624,538	106%	4,939,572	8,150,518	165%	0	1,618	-	14,937	204	1%
PY6	$ 1,853,324	$ 1,619,069	87%	8,372,787	8,395,399	100%	0	1,392	-	25,319	465	2%
PY7	$ 1,853,325	$ 1,631,480	88%	8,541,000	9,059,399	106%	0	1,385	-	20,512	740	4%
PY8	$ 2,132,587	$ 1,849,737	87%	10,079,625	9,271,088	92%	0	1,594	-	30,481	5,047	17%
PY9	$ 2,503,811	$ 1,760,476	70%	11,987,527	5,454,067	45%	0	655	-	36,250	507	1%
PY10	$ 2,275,378	$ 2,477,644	109%	7,625,683	7,864,744	103%	0	794	-	229	277	121%


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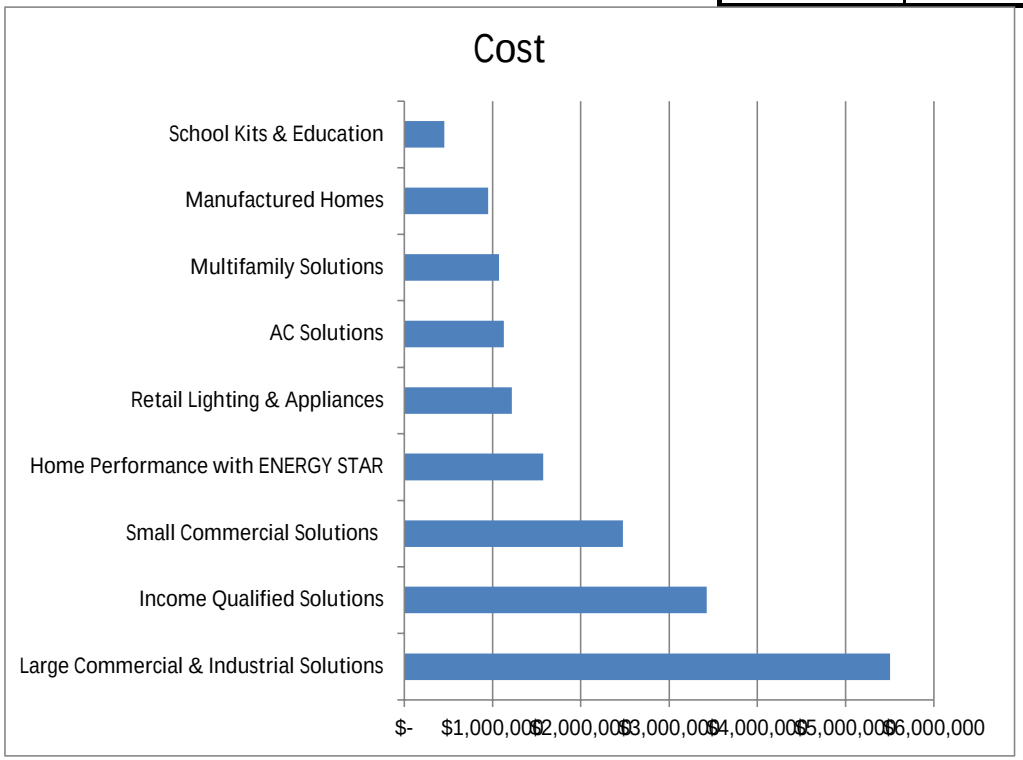
PY1
PY2
PY3
PY4
PY5
PY6
PY7
PY8
PY9
PY10
Energy Savings (kWh)
Budget
Actual

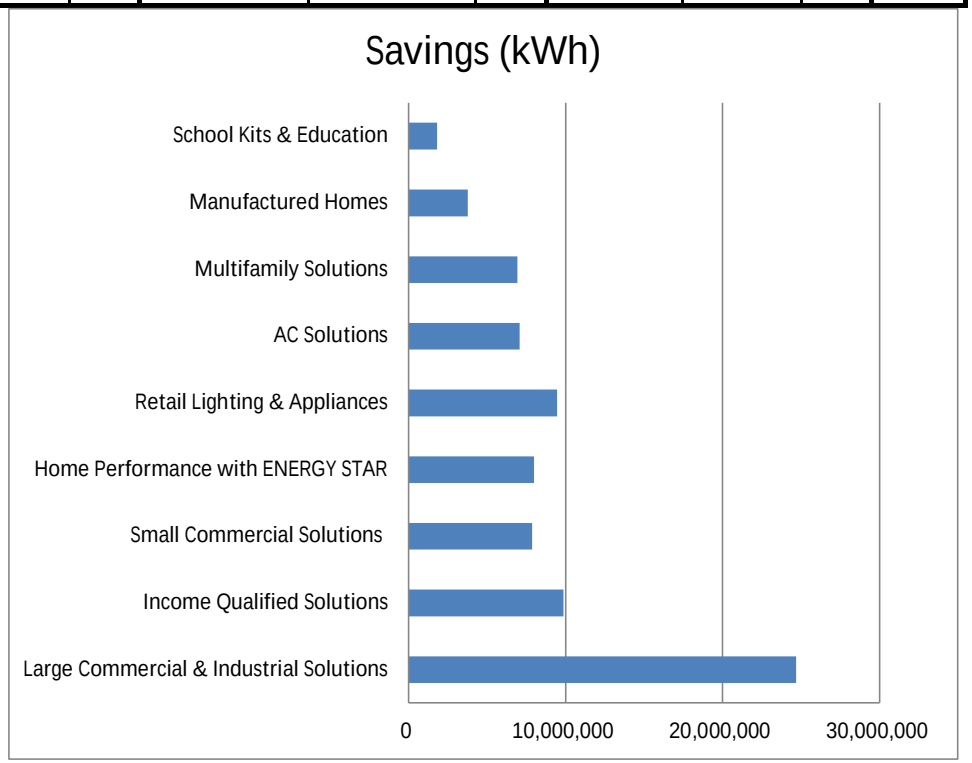
Main Menu

Report 1

PY10: JAN 2024 - DEC 2024 Portfolio Results Detail

Program Name	Target Sector	Cost			Savings (kWh)			Participants			TRC Ratio
		Budget	Actual	%	Plan	Evaluated	%	Plan	Actual	%	
AC Solutions	Residential	$ 1,301,886	$ 1,128,811	87%	7,843,506	7,083,623	90%	1,243	1,146	92%	4.90
Home Performance with ENERGY STAR	Residential	$ 1,544,814	$ 1,573,221	102%	8,435,882	7,979,381	95%	2,513	2,304	92%	4.98
Income Qualified Solutions	Residential	$ 3,171,960	$ 3,423,550	108%	8,646,190	9,859,197	114%	1,173	1,294	110%	2.35
Manufactured Homes	Residential	$ 1,173,800	$ 947,215	81%	5,067,053	3,763,887	74%	894	678	76%	3.42
Multifamily Solutions	Residential	$ 1,406,990	$ 1,073,447	76%	7,158,147	6,931,109	97%	16	16	100%	5.34
Retail Lighting & Appliances	Residential	$ 1,331,314	$ 1,220,505	92%	7,012,258	9,458,087	135%	21,248	10,496	49%	1.04
School Kits & Education	Residential	$ 470,434	$ 451,335	96%	1,818,675	1,828,340	101%	11,240	11,300	101%	1.12
Large Commercial & Industrial Solutions	Commercial & Industrial	$ 6,189,939	$ 5,505,091	89%	37,482,934	24,688,990	66%	239	179	75%	1.22
Small Commercial Solutions	Small Business/C&I	$ 2,308,864	$ 2,477,644	107%	7,625,683	7,864,744	103%	229	277	121%	0.88
Hide	-	-	-	-	-	-	-	-	-	-	-
Hide	-	-	-	-	-	-	-	-	-	-	-
	TOTAL:	**$ 18,900,000**	**$ 17,800,819**	94%	**91,090,328**	**79,457,358**	87%	**38,796**	**27,690**	71%	**1.71**





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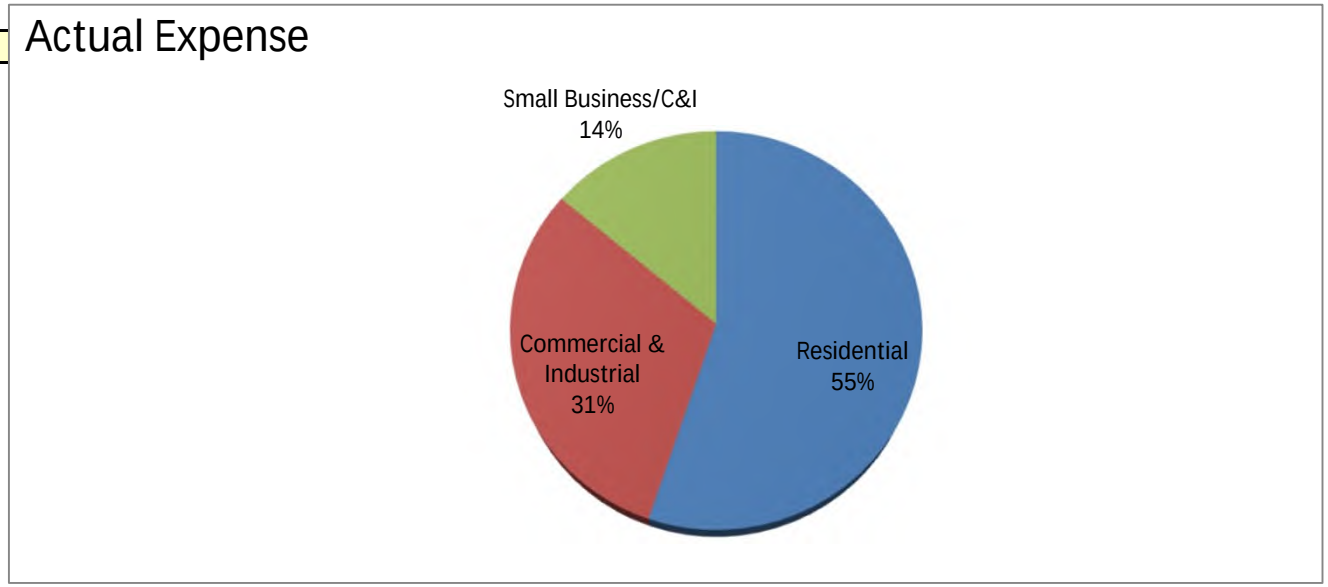
Report 2

PY10: JAN 2024 - DEC 2024 Portfolio Results Detail by Target Sector

Target Sector	Cost			Savings (kWh)			Participants			TRC Ratio
	Budget	Actual	%	Plan	Evaluated	%	Plan	Actual	%	
Residential	$ 10,401,197	$ 9,818,085	94%	45,981,711	46,903,624	102%	38,328	27,234	71%	2.53
Small Business	$ -	$ -	-	0	0	-	0	0	-	n/a
Commercial & Industrial	$ 6,189,939	$ 5,505,091	89%	37,482,934	24,688,990	66%	239	179	75%	1.22
Municipalities/Schools	$ -	$ -	-	0	0	-	0	0	-	n/a
Agriculture	$ -	$ -	-	0	0	-	0	0	-	n/a
Other	$ -	$ -	-	0	0	-	0	0	-	n/a
Res/Small Business	$ -	$ -	-	0	0	-	0	0	-	n/a
Res/C&I	$ -	$ -	-	0	0	-	0	0	-	n/a
Small Business/C&I	$ 2,308,864	$ 2,477,644	107%	7,625,683	7,864,744	103%	229	277	121%	0.88
All Classes	$ -	$ -	-	0	0	-	0	0	-	n/a
	-	-	-	-	-	-	-	-	-	-
TOTAL	**$ 18,900,000**	**$ 17,800,819**	**94%**	**91,090,328**	**79,457,358**	**87%**	**38,796**	**27,690**	**71%**	**1.71**

Select the Data to be Displayed in Chart

Actual Expense



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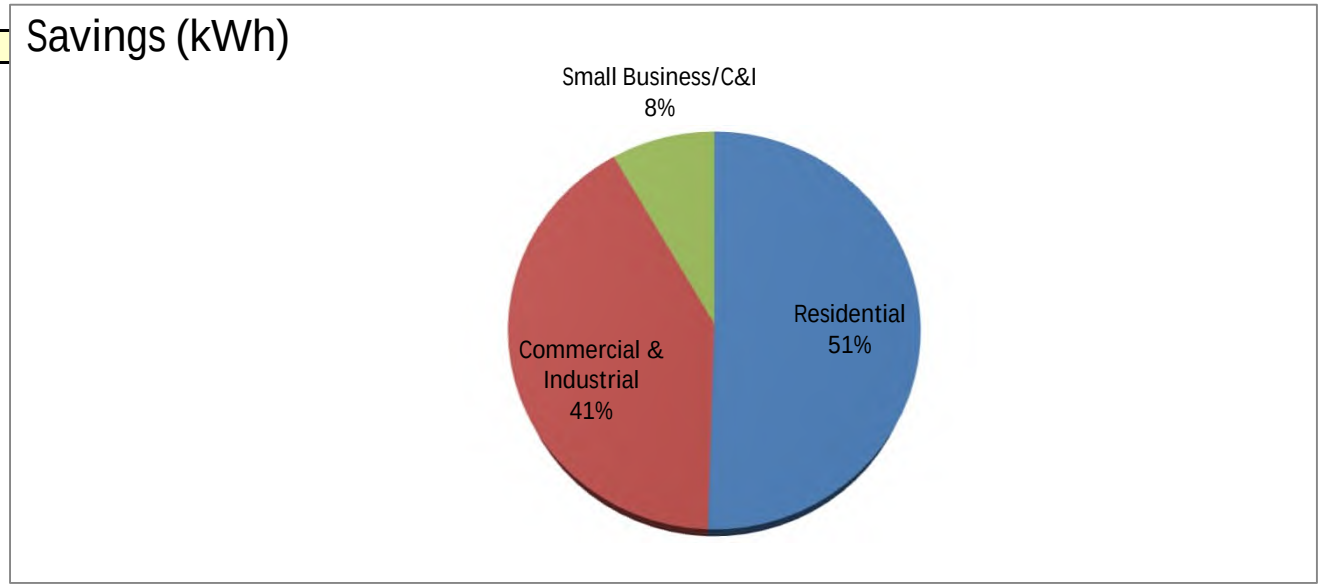
Report 3

PY10: JAN 2024 - DEC 2024 Portfolio Results Detail by Target Sector

Target Sector	Cost			Savings (kWh)			Participants			TRC Ratio
	Budget	Actual	%	Plan	Evaluated	%	Plan	Actual	%	
Residential	$ 10,401,197	$ 9,818,085	94%	45,981,711	46,903,624	102%	38,328	27,234	71%	2.53
Small Business	$ -	$ -	-	0	0	-	0	0	-	n/a
Commercial & Industrial	$ 6,189,939	$ 5,505,091	89%	37,482,934	24,688,990	66%	239	179	75%	1.22
Municipalities/Schools	$ -	$ -	-	0	0	-	0	0	-	n/a
Agriculture	$ -	$ -	-	0	0	-	0	0	-	n/a
Other	$ -	$ -	-	0	0	-	0	0	-	n/a
Res/Small Business	$ -	$ -	-	0	0	-	0	0	-	n/a
Res/C&I	$ -	$ -	-	0	0	-	0	0	-	n/a
Small Business/C&I	$ 2,308,864	$ 2,477,644	107%	7,625,683	7,864,744	103%	229	277	121%	0.88
All Classes	$ -	$ -	-	0	0	-	0	0	-	n/a
	-	-	-	-	-	-	-	-	-	-
TOTAL	**$ 18,900,000**	**$ 17,800,819**	**94%**	**91,090,328**	**79,457,358**	**87%**	**38,796**	**27,690**	**71%**	**1.71**

Select the Data to be Displayed in Chart

Savings (kWh)



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Report 4 - Data

Program Name	Target Sector	Program Type	Delivery Channel
AC Solutions	Residential	Prescriptive/Standard Offer	Trade Ally
Home Performance with ENERGY STAR	Residential	Whole Home	Trade Ally
Income Qualified Solutions	Residential	Market Specific/Hard to Reach	Implementing Contractor
Manufactured Homes	Residential	Market Specific/Hard to Reach	Trade Ally
Multifamily Solutions	Residential	Market Specific/Hard to Reach	Implementing Contractor
Retail Lighting & Appliances	Residential	Consumer Product Rebate	Retail Outlets
School Kits & Education	Residential	Behavior/Education	Implementing Contractor
Large Commercial & Industrial Solutions	Commercial & Industrial	Prescriptive/Standard Offer	Trade Ally
Small Commercial Solutions	Small Business/C&I	Prescriptive/Standard Offer	Trade Ally

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PY10: JAN 2024 - DEC 2024 Portfolio Data

	Expenses		Energy Savings (kWh)		Demand Savings (kW)		Participants	
Program Name	Budget	Actual	Plan	Evaluated	Plan	Evaluated	Plan	Actual
AC Solutions	$ 1,301,886	$ 1,128,811	7,843,506	7,083,623	0	1,627	1,243	1,146
Home Performance with ENERGY STAR	$ 1,544,814	$ 1,573,221	8,435,882	7,979,381	0	1,704	2,513	2,304
Income Qualified Solutions	$ 3,171,960	$ 3,423,550	8,646,190	9,859,197	0	2,282	1,173	1,294
Manufactured Homes	$ 1,173,800	$ 947,215	5,067,053	3,763,887	0	583	894	678
Multifamily Solutions	$ 1,406,990	$ 1,073,447	7,158,147	6,931,109	0	988	16	16
Retail Lighting & Appliances	$ 1,331,314	$ 1,220,505	7,012,258	9,458,087	0	502	21,248	10,496
School Kits & Education	$ 470,434	$ 451,335	1,818,675	1,828,340	0	237	11,240	11,300
Large Commercial & Industrial Solutions	$ 6,189,939	$ 5,505,091	37,482,934	24,688,990	0	3,241	239	179
Small Commercial Solutions	$ 2,308,864	$ 2,477,644	7,625,683	7,864,744	0	794	229	277

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	TRC					
Program Name	Lifetime Savings (MWh)	Total Cost	Total Benefits	Net Benefits	Ratio	Levelized cost
AC Solutions	118,564	$ 544	$ 2,666	$ 2,122	4.9	$ 0.0170
Home Performance with ENERGY STAR	127,429	$ 583	$ 2,902	$ 2,319	5.0	$ 0.0210
Income Qualified Solutions	156,227	$ 1,536	$ 3,611	$ 2,075	2.4	$ 0.0450
Manufactured Homes	61,655	$ 386	$ 1,323	$ 937	3.4	$ 0.0210
Multifamily Solutions	103,924	$ 421	$ 2,248	$ 1,827	5.3	$ 0.0220
Retail Lighting & Appliances	103,056	$ 2,259	$ 2,355	$ 95	1.0	$ 0.0140
School Kits & Education	21,026	$ 451	$ 506	$ 54	1.1	$ 0.0290
Large Commercial & Industrial Solutions	314,530	$ 5,828	$ 7,114	$ 1,286	1.2	$ 0.0170
Small Commercial Solutions	107,938	$ 2,688	$ 2,357	$ (331)	0.9	$ 0.0360