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August 11, 2025

VIA ELECTRONIC MAIL ONLY
Clerk of Council
Council of the City of New Orleans
Room 1E09, City Hall
1300 Perdido Street
New Orleans, Louisiana 70112

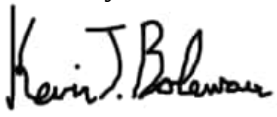
Re: Filing of Entergy New Orleans, LLC's Energy Smart Program Year 14 Annual Report and Evaluation, Measurement and Verification Report (Resolutions R-11-52, R-22-523; UD-08-02, UD-20-02, UD-23-01)

Dear Clerk of Council,

On February 3, 2011, the Council of the City of New Orleans ("Council") adopted Resolution R-11-52 requiring periodic reports regarding Energy Smart to be filed with the Council. Resolution R-22-523, adopted on December 15, 2022, approved the continuance of Energy Smart for Program Years 13 and 14. Council Resolution R-22-523 further approved APTIM, Environmental and Infrastructure ("APTIM"), National Theater for Children ("NTC"), Sagewell, Inc. ("Sagewell") and Honeywell Smart Energy ("Honeywell") as the Third-Party Administrators, and ADM Associates, Inc. as the Third-Party Evaluator for the programs.

On behalf of APTIM, NTC, Sagewell, Honeywell and ADM, Entergy New Orleans, LLC submits this Energy Smart Program Year 14 Annual Report and Annual Evaluation, Measurement and Verification Report for the period of January 1, 2024 to December 31, 2024 and requests that you file this submission in accordance with Council regulations. Should you have any questions regarding this filing, please contact my office at (504) 670-3673.

Sincerely,



Kevin T. Boleware

Enclosure

cc: Official Service List UD-08-02, UD-20-02 and UD-23-01 *(via electronic mail)*

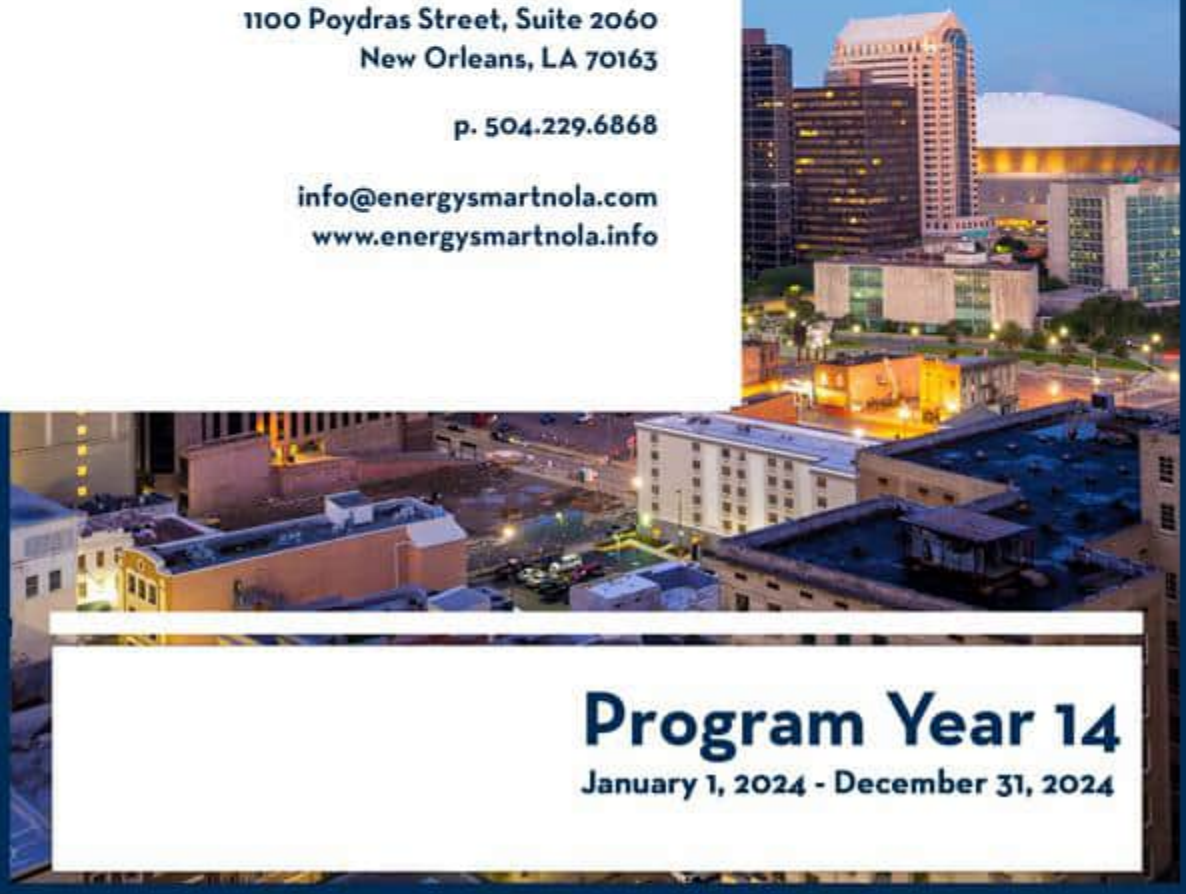
Annual Report

Energy Smart

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Program Year 14

January 1, 2024 - December 31, 2024

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Executive Summary

The Energy Smart Program (Program) was developed by the New Orleans City Council (Council), is administered by Entergy New Orleans, LLC (ENO) and is implemented by APTIM, the Third-Party Administrator (TPA). This report contains performance data and activities for the Program period of January 1, 2024 - December 31, 2024. This report contains data on the Program and evaluation results from ENO's Third-Party Evaluator's (TPE) Evaluation, Measurement and Verification (EM&V) report. This report includes verified gross savings and net savings.

To ensure success in current and future programs, APTIM and ENO have engaged several subcontractors with extensive experience in energy efficiency programs and in the New Orleans market to implement the program, including:

- ILSI Engineering
- Legacy Professional Services
- Melara Enterprises
- Green Coast Enterprises
- Thrive New Orleans
- Franklin Energy Services
- EnergyHub
- Harris Energy Solutions
- Honeywell
- MD Energy Advisors
- Sagewell
- National Theatre for Children (NTC)

This report contains data on the Energy Smart program offerings, including:

- A summary of activities by offering;
- kWh savings achieved, kW reduction and incentives spent;
- Marketing, outreach, and engagement;
- Training and workforce development activities; and
- Supplier diversity highlights.

Staff List

Name	Title	Company	Location
Dan Reese	Director of Energy Programs	APTIM	Portland, OR
Michelle Krueger	Program Director	APTIM	New Orleans, LA
Alicia Renner	Sr. Director of Marketing	APTIM	Remote, MI
Megan Sykes	Marketing Manager	APTIM	Baton Rouge, LA
John Krzystowczyk	Commercial Program Manager	APTIM	New Orleans, LA
Elsie Kuczynski	Residential Program Manager	APTIM	St. Louis, MO
Katie Nash	Operations Manager	APTIM	Pearl River, LA
Dawn Ellerd	Marketing & Outreach Lead	APTIM	New Orleans, LA
Reagan Gill	Marketing Communications Specialist	APTIM	Dallas, TX
Kevin Fitzwilliam	Training & Development Specialist	APTIM	New Orleans, LA
Spencer Kurtz	Sr. Energy Engineer	APTIM	Charlotte, NC
Michael Slaughter	Finance	APTIM	Baton Rouge, LA
Nick Bengtson	Sales Executive	EnergyHub	Brooklyn, NY
Nathan Meadows	Client Success Manager	EnergyHub	Brooklyn, NY
Nate Wolf	Residential Program Manager	Franklin Energy Services	New Orleans, LA
Amber Lindh-Porcaro	Residential Program Manager, Retail	Franklin Energy Services	Milwaukee, WI
Alan Mitchell	Field Manager	Franklin Energy Services	New Orleans, LA
Amanda Welch	Operations Analyst	Franklin Energy Services	Milwaukee, WI
Kathryn Piacentino	Client Marketing Manager	Franklin Energy Services	Rochester, NY
Daniel Franklin	Operations Manager	Franklin Energy Services	New Orleans, LA
James Herman	Operations Analyst	Franklin Energy Services	New Orleans, LA
Dwayne Haley	Energy Advisor	Franklin Energy Services	New Orleans, LA
Jackie Dadakis	Chief Operating Officer	Green Coast Enterprises	New Orleans, LA
Joe Ryan	Director of Energy Services	Green Coast Enterprises	New Orleans, LA
John Eskew	Energy Management Specialist	Green Coast Enterprises	New Orleans, LA
Brandon Brown	Energy Management Specialist	Green Coast Enterprises	New Orleans, LA
Jessica Harris	President	Harris Energy Solutions	Austin, TX
Deng Lin	Director	Harris Energy Solutions	Austin, TX
Iam Tucker	President & CEO	ILSI Engineering	New Orleans, LA
Keeley Evans	Project Specialist	ILSI Engineering	New Orleans, LA
Gill Page	Energy Engineer	ILSI Engineering	New Orleans, LA
Charles Greer	Industrial Energy Advisor	ILSI Engineering	New Orleans, LA
Alcide Tervalon III	Principal	Legacy Professional	New Orleans, LA
Anthony Phillips	Project Analyst	Legacy Professional	New Orleans, LA
Iryell Richard	Small Commercial Project Coordinator	Legacy Professional	New Orleans, LA
Denzel Harry	Energy Advisor	Legacy Professional	New Orleans, LA
Louis Bart	Field Manager	Legacy Professional	New Orleans, LA
Keith Ridgley	Residential QA/QC	Legacy Professional	New Orleans, LA
Derrick Hammond	Energy Advisor	Legacy Professional	New Orleans, LA
Larry Tervalon	Energy Advisor	Legacy Professional	New Orleans, LA
Vindocto Torns	Energy Advisor	Legacy Professional	New Orleans, LA
Brandon Barbre	Energy Advisor	Legacy Professional	New Orleans, LA
Wilbert Curtis	Recycling Specialist	Legacy Professional	New Orleans, LA

Rosane Archery-McGowan	C&I Energy Advisor	MD Energy Advisors	New Orleans, LA
Layne Carroll	C&I Energy Advisor	MD Energy Advisors	New Orleans, LA
Reilly Cavanaugh	C&I Energy Advisor	MD Energy Advisors	New Orleans, LA
Nikki Swoboda	Director, Marketing	NTC	Minneapolis, MN
Leititia Bailey	Director, School Outreach	NTC	Minneapolis, MN
Becca Hanson	Manager, School Outreach	NTC	Minneapolis, MN
John Trones	Director, Creative Services	NTC	Minneapolis, MN
Seth Campbell	Manager, Creative Services	NTC	Minneapolis, MN
Bill Turner	Director, IT	NTC	Minneapolis, MN
Melissa Kim	Data Administrator, Marketing	NTC	Minneapolis, MN
Derek Meyer	Director, School Success	NTC	Minneapolis, MN
Sophie Stenchmann	Actor-Educator, Live Tour	NTC	Meraux, LA
Andrew Wright	Actor-Educator, Live Tour	NTC	New Orleans, LA
Psytia Jordan	Owner, Universal Printing	Universal	New Orleans, LA
Simran Kohli	CFO, Greenlite USA	Greenlite	Atlanta, GA
Gary Smith	President	Sagewell, Inc.	Charlotte, NC
Josh Cantor	Energy Analyst	Sagewell, Inc.	Boston, MA
Jim Sheehan	Senior Data Analyst	Sagewell, Inc.	Boston, MA
Amanda Richards	Program Manager	Honeywell	Boise, ID
Craig Henry	Solutions Manager	Honeywell	San Antonio, TX
Jacqueline Chen	Project Manager	Honeywell	New Haven, CT
Benjamin Cavell	Outreach Manager	Honeywell	New Orleans, LA
Keith Grant	Project Engineer	Honeywell	Northford, CT
Erin Palmintier-Pou	Chief Digital & Strategy Officer	Melara Enterprises	Baton Rouge, LA
Taylor Gust	Director	Melara Enterprises	Baton Rouge, LA
Tim Coles	Creative Director	Melara Enterprises	Baton Rouge, LA
Chuck Morse	Executive Director	Thrive New Orleans	New Orleans, LA
Alexandria Patin	Workforce/Engagement Manager	Thrive New Orleans	New Orleans, LA
Alexis Kyman	Chief Strategy Officer	Thrive New Orleans	New Orleans, LA

Offerings Overview

Residential

Energy Efficiency

- Home Performance with ENERGY STAR®
- Retail Lighting & Appliances
- Income-Qualified Weatherization
- A/C Solutions
- Multifamily Solutions
- Appliance Recycling & Replacement Pilot
- School Kits & Education
- Behavioral Energy Efficiency

Demand Response

- EasyCool, Bring Your Own Thermostat (BYOT)
- Peak Time Rebate Pilot
- Residential Battery Energy Storage Pilot
- EV Charging DR, Bring Your Own Charger (BYOC)

Commercial & Industrial

Energy Efficiency

- Small Commercial & Industrial Solutions
- Large Commercial & Industrial Solutions
- Publicly Funded Institutions
- Commercial & Industrial Construction Solutions

Demand Response

- Large Commercial Automated Demand Response (ADR)



PROGRAM PERFORMANCE & ACTIVITY

Program Performance and Activity

Table 2.1

	kWh SAVINGS	kWh GOAL*	% TO GOAL	kW SAVINGS	kW TARGET*	% TO TARGET	INCENTIVES	BUDGET	% TO BUDGET
Commercial & Industrial - Energy Efficiency	34,747,482	71,971,862	48%	5,486.59	9,787.00	56%	$5,170,237	$9,048,098	57%
Commercial & Industrial - Demand Response	36,961	-	N/A	2,494.77	8,870.00	28%	$146,139	$532,200	27%
Residential - Energy Efficiency	33,671,147	35,802,792	94%	9,589.89	2,779.00	345%	$5,336,235	$5,760,811	93%
Residential - Demand Response	12,796	-	N/A	8,014.38	13,723.00	58%	$359,853	$568,275	63%
Total	68,468,386	107,774,654	63%	25,585.64	35,159.00	73%	$11,012,464	$15,909,384	69%

** Goals are reflective of the Energy Smart Implementation Plan PY13-15.*

Table 2.1 above shows savings achieved and incentives spent from January 1, 2024, through December 31, 2024.

Table 2.2

GROSS DEMAND REDUCTION (KW)	GROSS ANNUAL ENERGY SAVINGS (KWH)	TOTAL PROGRAM EXPENDITURES	TRC (B/C RATIO)	UCT (B/C RATIO)
25,585.27	68,468,386	$18,678,943	1.12	1.23

Residential Summary

The Energy Smart Residential Portfolio achieved 33,683,943 in kWh savings and reached 94% of the energy savings goal. Multifamily Solutions had a strong start in PY14, completing 10 of 14 properties by the mid-year point. Property managers had more flexibility to work with the program team and the trade allies in gaining access to their properties earlier in the year. A/C Solutions began the year with robust participation in single family homes, and A/C tune ups were recommended at several Multifamily Solutions properties which helped provide a strong start to the year in A/C Solutions savings. A/C Solutions also performed well once the warmer weather months took hold through Q3.

The Income-Qualified Weatherization and Home Performance with ENERGY STAR® offerings were closely aligned in performance and ramped up from Q2 through the end of the year. With mild temperatures and lower energy bills, Q1 and early Q2 enrollment was initially slow. The program team anticipated increased demand in the whole-home programs as temperatures and bills increased during the summer months. The program team's focus on Multifamily Solutions in Q1 and Q2 supported better utilization of staffing resources which opened up the second half of the year for strong results in Home Performance with ENERGY STAR® and Income-Qualified Weatherization.

The Behavioral offering reached more customers than ever before with revamped cohorts that were designed for PY14 and beyond. This cohort refresh allowed increased treatment of the Entergy New Orleans customer base by almost triple, which led to higher claimable savings due to larger recipient volume and greater statistically valid dataset for evaluation. This offering sent over 120,000 Home Energy Reports in PY14.

The Retail Lighting and Appliance offering saw a slow start in the first half of the year due to the impact of the Energy Independence and Security Act (EISA) on in-store lighting discounts. Lighting kits were also eliminated due to this change in legislation. In an attempt to make up for those lost savings, the program team shifted to a free air purifier promotion to increase traffic to the Online Marketplace. Due to a strong opportunity through social media, the air purifiers took off in the middle of the year and were very successful through the last campaign that ended in December. Air purifiers helped lift the offering over the goal for the entire year. In addition to air purifiers, smart thermostats also made up a large portion of the goal. Customers had the option to enroll in the EasyCool demand response offering when they purchased a smart thermostat. ENERGY STAR® rated refrigerators were the leading rebate submitted for appliances.

Commercial & Industrial Summary

The Commercial & Industrial (C&I) Portfolio achieved 34,784,443 kWh in verified gross kWh savings and reached 48% of the goal in PY14. While the percentage to the C&I goal decreased, the actual achieved kWh savings increased by more than 8.2 million kWh from PY13. The number of completed C&I projects also saw a very significant increase with 242 C&I projects completed in PY13 and 545 projects completed in PY14. The Energy Smart team was also successful in distributing more incentive dollars to Entergy New Orleans customers with over $2 million more incentive dollars paid in PY14 compared to PY13.

The Energy Smart team focused efforts on: ramping up direct marketing to C&I customers, maintaining consistent incentive levels throughout the program year, increasing the number of Small Business Energy Assessments and providing leads to trade allies who continue to express desire for program outreach assistance in Orleans Parish. The marketing team prioritized increasing overall website inquiry form submissions in PY14, especially amongst small business customers who received targeted communications encouraging them to participate in the Small Business Energy Assessment offering.

PY14 saw C&I webform submissions increase 64% from the previous program year. Small Business Energy Assessment webform submissions increased by 153% in PY14. Marketing staff utilized messaging that resonated with small business customers to successfully increase the number of Small Business Energy Assessments from 130 in PY13 to 241 in PY14. These Small Business Energy Assessments are critical in delivering immediate savings at no cost to small business customers while identifying follow-up measures that can be completed by Energy Smart trade allies. These follow-up measures were documented by Energy Smart staff and distributed to Small Business Direct Install trade allies who may offer these measures to the customer at no cost. In addition to an increase in Small Business Energy Assessments, the Energy Smart team was also able to increase the number of website inquiry form submissions resulting in Large C&I projects by more than 25% over PY13 totals.



RESIDENTIAL OFFERINGS

Residential Portfolio Performance

Table 3.1

RESIDENTIAL OFFERING	kWh SAVINGS	kWh GOAL*	% TO GOAL	kW SAVINGS	kW GOAL*	% TO GOAL	INCENTIVES	BUDGET	% TO BUDGET
HOME PERFORMANCE WITH ENERGY STAR	3,748,121	3,404,313	110%	1,263.71	966	131%	$985,388	$1,201,285	82%
RETAIL LIGHTING & APPLIANCES	2,177,373	1,558,999	140%	232.10	16	1451%	$938,236	$636,916	147%
MULTIFAMILY SOLUTIONS	2,650,261	2,526,471	105%	801.60	145	553%	$612,533	$677,909	90%
INCOME QUALIFIED WEATHERIZATION	3,598,721	3,220,972	112%	2,556.17	66	3873%	$1,954,318	$1,679,571	116%
A/C SOLUTIONS	4,210,803	3,322,555	127%	1,861.19	1,453	128%	$673,431	$1,239,987	54%
APPLIANCE RECYCLING & REPLACEMENT	188,069	1,785,774	11%	23.29	26	90%	$88,450	$226,543	39%
SCHOOL KITS & COMMUNITY OUTREACH	707,601	797,089	89%	86.84	107	81%	$83,880	$98,600	85%
BEHAVIORAL ENERGY EFFICIENCY	16,390,198	19,186,619	85%	2,765.00	0	N/A	$0	$0	N/A
EASYCOOL BYOT	0	0	N/A	6,251.00	11,600	54%	$229,825	$340,000	68%
PEAK TIME REBATE PILOT	12,796	0	N/A	1,283.00	998	129%	$82,100	$67,475	122%
EV CHARGING PILOT	0	0	N/A	97.21	1,125	9%	$13,727	$58,800	23%
RESIDENTIAL BATTERY PILOT	0	53,347	0%	383.17	0	N/A	$34,201	$102,000	34%
TOTAL	33,683,943	35,856,139	94%	17,604.27	16,502	107%	$5,696,088	$6,329,086	90%

**Goals are reflective of the Energy Smart Implementation Plan PY13-15.*

Home Performance with ENERGY STAR®

Offering Description

This offering achieves long term, significant cost-effective electric savings through the use of local auditors and contractors who 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 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 LED lighting, high-efficiency showerheads and water aerators, smart power strips, pipe wrap and smart thermostats. The home energy assessment may recommend follow-up measures which require diagnostic testing to achieve deeper savings in the home. Follow-up measures, completed by an Energy Smart approved trade ally, include attic insulation, air conditioning tune-up, air sealing, and duct sealing. This offering also includes an energy- saving kit component offered through the Online Marketplace, which provides an easy customer entry point.

To meet the needs of New Orleans' unique housing stock of double shot-gun homes and smaller multifamily configurations, the Home Performance offering includes all buildings with four or fewer units. Structures of this size and construction type often behave and function more like single-family homes, with owners often occupying one of the units, thus minimizing the split-incentive barrier.

Offering Highlights

The Home Performance with ENERGY STAR® offering achieved 3,748,121 in kWh savings, reaching 110% of the goal. The Energy Smart team conducted 1,190 assessments throughout the year. Direct-install measures accounted for 22% of these savings, while retrofit measures like attic, air, and duct sealing, implemented by trade allies, generated the remaining 78%. This measure mix resulted in an impressive average savings of 3,154 kWh per customer. Trade ally referrals, community outreach, and organic marketing proved to be strong lead sources. Notably, enrollments surged with rising temperatures and increased cooling demands.

To further optimize performance, the program team introduced a "deferral" tracking system in 2024. This system helps to identify and understand why trade ally follow up measures are not recommended during home energy assessments for deeper energy savings in customer homes. Key reasons for these deferrals included customer refusal, the need for pre-existing building envelope repairs, or instances where a measure did not meet the program's specific thresholds for recommendation.

Table 4.1

Measure	Answer ↓	%
A/C Tune Up	**This measure was recommended during home assessment**	**68.06%**
A/C Tune Up was not recommended because:	Customer Refused	20.00%
	Does Not Meet Program Threshold for Recommendation	8.68%
	No Central A/C	3.10%
	Electrical Repair Needed	0.16%
Air Sealing	**This measure was recommended during home assessment**	**98.45%**
Air Sealing was not recommended because:	Does Not Meet Program Threshold for Recommendation	1.24%
	Customer Refused	0.16%
	Building Envelope Repair Needed	0.16%
Attic Insulation	**This measure was recommended during home assessment**	**70.39%**
Attic Insulation was not recommended because:	Does Not Meet Program Threshold for Recommendation	28.99%
	Health Might be Negatively Affected by Installation	0.31%
	Illegal Activity Concerns	0.16%
	Building Envelope Repair Needed	0.16%
Duct Sealing	**This measure was recommended during home assessment**	**83.10%**
Duct Sealing was not recommended because:	Does Not Meet Program Threshold for Recommendation	13.64%
	Customer Refused	3.10%
	Health Might be Negatively Affected by Installation	0.16%

Offering Budget and Savings

Table 4.2

MEASURE	COUNT OF MEASURES	GROSS kWh SAVINGS	% OF kWh CONTRIBUTION
Advanced Power Strip	1,387	330,479	9%
Air Infiltration	638	975,729	26%
Assessment	1,190	N/A	0%
Ceiling Insulation	41	74,825	2%
Custom	1	N/A	0%
Duct Sealing	750	1,986,872	53%
Faucet Aerator	349	10,669	0%
LED 11W A-Type (Standard)	88	2,873	0%
LED 11W BR30 (Specialty)	862	37,327	1%
LED 15W A-Type (Outdoor) (Standard)	11	2,162	0%
LED 15W PAR38 (Outdoor) (Specialty)	351	75,098	2%
LED 5W Candelabra (Specialty)	1,663	45,360	1%
LED 6W Globe (Specialty)	172	4,642	0%
LED 8W BR30 (Specialty)	159	7,134	0%
LED 9W A-Type (Outdoor) (Standard)	9	1,399	0%
LED 9W A-Type (Standard)	1,708	45,016	1%
Low-Flow Showerhead	265	53,924	1%
Smart Thermostat	217	73,994	2%
Water Heater Pipe Insulation	628	20,617	1%
TOTAL	**10,489**	**3,748,121**	**100%**

Table 4.3

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$985,388	$1,201,285	82%	3,748,121	1,263.71

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

In planning for PY15, the program team had to account for the loss of savings from lighting, which will phase out June 30, 2025. This is due to the Energy Independence and Security Act that sunset LED lighting in the program. Updated calculations in the latest TRM for smart thermostats has drastically increased the savings potential of the measure and it will be a continued focus of the program team to maximize installs and cross promote the EasyCool Demand Response offering.

Retail Lighting & Appliances

Offering Description

The objective of the Retail Lighting and Appliance offering is to increase awareness and sales of efficient lighting and appliances to Entergy New Orleans residential population. This offering provides customers the opportunity to purchase a variety of discounted products that are ENERGY STAR qualified or better. The Energy Smart Online Marketplace features energy efficiency products with discounted prices. This allows ENO customers to purchase energy efficiency products online and have them shipped directly to their homes.

Offering Highlights

- Reached 140% of goal, achieved 2,117,373 kWh
- Achieved 232.10 kW
- 17 stores participated

Table 5.1

PARTICIPATION TYPE	
In-Store	**Count**
Lighting – packs sold	4,432
Online Marketplace	
Advanced Power Strips	111
Air purifiers	4,059
Smart Thermostats	761
Smart Thermostat Accessories	27
Insulation	25
Lighting	22
Water Savers	103
Mail-In Rebates	
Pool Pump	6
Heat Pump Water Heater	11
Refrigerator	177
Window Ac	70
Water Cooler	1
Smart thermostat	141
Freezer	5
Portable dehumidifier	29
Air purifier	15

Table 5.2 Participating Retailer

RETAIL COMPANY	SUPPORTED RETAIL PROGRAMS		ADDRESS
	Lighting	Appliances	
Best Buy		X	1138 S. Clearview Pkwy.
Comeaux Furniture & Appliances		X	3949 Euphrosine St.
Costco		X	3900 Dublin St.

RETAIL COMPANY	SUPPORTED RETAIL PROGRAMS		ADDRESS
	Lighting	Appliances	
Dollar Tree #4948	X		3771 General DeGaulle Dr.
Dollar Tree #5347	X		11701 Morrison Rd.
Dollar Tree #5751	X		4115 S. Carrollton Ave.
Dollar Tree #6333	X		9671 Chef Menteur Hwy
Dollar Tree #6987	X		4023 Behrman Pl.
Habitat for Humanity ReStore	X		2900 Elysian Fields Ave.
Home Depot #352		X	12300 I-10 Service Rd.
Home Depot #385		X	1100 S. Claiborne Ave.
Lowe's		X	2501 Elysian Fields Ave.
The Green Project	X		2831 Marais St.
Walmart #1163		X	4001 Behrman Pl.
Walmart #912		X	6000 Bullard Ave.
Walmart #3167		X	4301 Chef Menteur Hwy
Walmart #5022		X	1901 Tchoupitoulas St.

Offering Budget and Savings

Table 5.3

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	Budget	%	Evaluated	Evaluated
$938,236	$636,916	147%	2,177,373	232.10

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

Incentive amounts for mail-in rebates will be adjusted on air purifiers and refrigerators based on average kWh savings in previous years to keep the program cost-effective while also encouraging higher participation in PY15. Incentives for clothes washers, electric clothes dryers, and heat pump dryers will also be added to the mail-in rebate offering. 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 premium smart thermostat models during the summer months. New thermostat models will also be introduced on the online marketplace in PY15.

Multifamily Solutions

Offering Description

This offering targets multifamily property owners (landlords) and managers, as well as apartment and condo renters. The offering addresses their unique needs through a combination of incentives for both direct install and prescriptive measures, and through property owner and tenant education. A property must have a minimum of five units to qualify for Multifamily Solutions. This allows for the Multifamily Solutions offering to be more focused on the unique needs of owners, managers and renters of larger buildings.

Offering Highlights

The Multifamily Solutions offering achieved 2,650,261 in kWh savings, reaching 105% of the goal. The program team partnered with 14 properties for direct installations and assessments, with trade allies assigned to 11 of these. This year, the Energy Smart team completed 1,261 assessments, with 16% of savings coming from direct-install measures. The remaining 84% of savings for retrofit customers came from deeper savings measures like attic insulation, air sealing, and duct sealing, implemented by our trade allies. This strategic mix resulted in an average savings of 2,258 kWh per customer.

The multifamily sector was a key focus during the first two quarters of PY14. With moderate temperatures and energy bills leading to slower single-family enrollments, the team capitalized on this period to concentrate on multifamily properties. This shift maximized resources and created additional work opportunities for ten participating trade allies. By Q3 and Q4, work was completed on four additional properties, further contributing to exceeding the annual goal.

Table 6.1

MEASURE	COUNT OF MEASURES	GROSS kWh SAVINGS	% OF kWh CONTRIBUTION
Advanced Power Strip	151	38,297	1%
Air Infiltration	1,037	714,368	27%
Duct Sealing	1,017	1,524,279	58%
Faucet Aerator	1,375	46,596	2%
LED 11W A-Type (Standard)	5	142	0%
LED 15W A-Type (Standard)	1	39	0%
LED 5W Candelabra (Specialty)	1,546	36,708	1%
LED 6W Globe (Specialty)	1,210	27,909	1%
LED 8W BR30 (Specialty)	5	193	0%
LED 9W A-Type (Standard)	1,394	32,153	1%
Low-Flow Showerhead	847	179,980	7%
MF Direct Install	1,261	N/A	0%
Smart Thermostat	39	12,088	0%
Water Heater Pipe Insulation	1,615	37,508	1%
TOTAL	**11,503**	**2,650,261**	**100%**

Offering Budget and Savings

Table 6.2

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$612,533	$677,909	90%	2,650,261	801.60

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

In 2025, the Multifamily Solutions program will evolve into two specialized offerings. This includes a dedicated program for Market Rate complexes and a new category specifically for Income-Qualified properties. The goal of this separation is twofold: to more accurately illustrate Energy Smart impact on low-income customers and to strengthen focus on reaching properties where residents require financial assistance. Properties will be evaluated for the Multifamily Income-Qualified program based on the proportion of residents who qualify for rent subsidies.

Income-Qualified Weatherization

Offering Description

The Income-Qualified Weatherization offering is designed to offer qualifying customers free energy efficiency projects ranging from direct install measures, such as LED bulbs and water savings measures, to demand response-enabled smart thermostats and comprehensive envelope measures. Comprehensive measures offered by Energy Smart trade allies include air sealing, duct sealing, ceiling insulation and A/C tune ups.

Offering Highlights

The Income-Qualified Weatherization offering has achieved 3,598,721 in kWh savings, reaching 112% of the goal. The Energy Smart team completed 854 Income Qualified home energy assessments. The Income-Qualified Weatherization offering generated 16% of kWh savings from direct install measures at the time of the home energy assessments. Trade allies performed follow up measures recommended in the energy assessment report, which include attic insulation, air sealing, and duct sealing. Follow up measures generated the remaining 84% of the kWh savings achieved. This measure mix allowed the offering to produce an average of 4,193 kWh reduction per customer.

The Income-Qualified Weatherization program coordinated with local organizations dedicated to supporting income-qualified residents. For example, Nest Health, an in-home healthcare provider, shared Energy Smart information with their patients during home visits. The program also partnered with the Housing Authority of New Orleans (HANO) to prioritize and schedule energy efficiency work at their properties. This collaboration will significantly impact both the Multifamily Solutions and the single-family Income-Qualified Weatherization programs. Additionally, the Louisiana Housing Corporation teamed up with an Energy Smart trade ally to complete upgrades across all single-family properties under their oversight. The team’s enrollment strategy heavily relied on community outreach in income-qualified and senior communities, complemented by strong trade ally referrals and targeted marketing.

Similar to the Home Performance program, the program team introduced a "deferral" tracking system for Income-Qualified Weatherization in 2024. This system helps to identify and understand why trade ally follow up measures are not installed for deeper energy savings in customer homes. Key reasons for these deferrals included customer refusal, the need for pre-existing building envelope repairs, or instances where a measure did not meet the program's specific thresholds for recommendation.

Table 7.1

Measure	Answer ↓	%	Count
A/C Tune Up	**This measure was recommended during home assessment**	**76.57%**	**464**
Deferral A/C Tune Up Primary Reason	Customer Refused	12.54%	76
	No Central A/C	5.12%	31
	Does Not Meet Program Threshold for Recommendation	5.12%	31
	Electrical Repair Needed	0.66%	4
Air Sealing	**This measure was recommended during home assessment**	**96.70%**	**586**
Deferral Air Sealing Primary Reason	Does Not Meet Program Threshold for Recommendation	2.81%	17
	Illegal Activity Concerns	0.17%	1
	Building Envelope Repair Needed	0.17%	1
	Active Remodel that Prevents Weatherization	0.17%	1
Attic Insulation	**This measure was recommended during home assessment**	**75.25%**	**456**
Deferral Attic Insulation Primary Reason	Does Not Meet Program Threshold for Recommendation	21.62%	131
	Electrical Repair Needed	1.16%	7
	Building Envelope Repair Needed	1.16%	7
	Health Might be Negatively Affected by Installation	0.33%	2
	Active Remodel that Prevents Weatherization	0.33%	2
	Threatening or Uncooperative Behavior	0.17%	1
Duct Sealing	**This measure was recommended during home assessment**	**85.15%**	**516**
Deferral Duct Sealing Primary Reason	Does Not Meet Program Threshold for Recommendation	13.70%	83
	Customer Refused	0.99%	6
	Building Envelope Repair Needed	0.17%	1

Table 7.2

MEASURE	COUNT OF MEASURES	GROSS kWh SAVINGS	PERCENT OF kWh CONTRIBUTION
Advanced Power Strip	946	232,140	6%
Air Infiltration	656	781,841	22%
Audit	854	N/A	0%
Ceiling Insulation	478	886,738	25%
Custom Repairs	1	N/A	0%
Duct Sealing	599	1,410,715	39%
Faucet Aerator	413	15,174	0%
LED 11W A-Type (Standard)	47	1,531	0%
LED 11W BR30 (Specialty)	460	20,358	1%
LED 15W A-Type (Outdoor) (Standard)	17	3,777	0%
LED 15W PAR38 (Outdoor) (Specialty)	270	59,994	2%
LED 5W Candelabra (Specialty)	1,216	34,616	1%
LED 6W Globe (Specialty)	173	4,437	0%
LED 8W BR30 (Specialty)	45	2,278	0%
LED 9W A-Type (Outdoor) (Standard)	2	230	0%
LED 9W A-Type (Standard)	1,155	30,409	1%
Low-Flow Showerhead	243	48,676	1%
Smart Thermostat	156	53,194	1%
Water Heater Pipe Insulation	443	12,616	0%
TOTAL	**8,174**	**3,598,721**	**100%**

Offering Budget and Savings

Table 7.3

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$1,954,318	$1,679,571	116%	3,598,721	2,556.17

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

In planning for PY15, the program team had to account for the loss of savings from lighting, which phased out June 30, 2025. This is due to the Energy Independence and Security Act that sunset LED lighting in the program. Updated calculations in the latest TRM for smart thermostats has drastically increased the savings potential of the measure and it will be a continued focus of the program team to maximize installs and cross promote the Bring Your Own Thermostat offering.

In PY15, Energy Smart launched a Neighborhood Based offering which focuses on key areas of the community impacted by poverty, heat island effect, and access to broadband. The targeted neighborhoods receive a direct mail piece and an invitation to a local event for more information. From there Thrive New Orleans, community outreach partner, will conduct canvassing across the identified area. The program team will be looking to convert a high number of customers from the designated area for Energy Smart participation.

A/C Solutions

Offering 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 in the summer. 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 offering also includes the installation of new Demand Response (DR)-enabled smart thermostats. The program works to enhance the ability within the territory's HVAC contractor network to provide value-added services to customers.

Offering Highlights

The A/C Solutions offering achieved 4,210,803 in kWh savings, reaching 127% of the goal. The offering served 1,570 customers. Air conditioner tune-ups provided 62% of the kWh savings, and duct sealing generated 38%. Multifamily recommended A/C tune ups played a large role in the high savings for PY14.

The program team actively recruited new local contractors, sharing with them the upsell benefits of the program and how it could be used to generate new customers. The team focused on limiting barriers, so that it was easy for new trade allies to participate while also meeting the offering expectations and collecting the relevant data for program evaluation.

Table 8.1

MEASURE	COUNT OF MEASURES	GROSS kWh SAVINGS	% OF SAVINGS CONTRIBUTION
Central A/C Replacement	3	2,453	0%
Central A/C Tune-Up	3,120	2,491,089	59%
Duct Sealing	733	1,711,203	41%
Ductless Heat Pump	9	5,382	0%
Smart Thermostat	2	676	0%
TOTAL	**3,867**	**4,210,803**	**100%**

Offering Budget and Savings

Table 8.2

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$673,431	$1,239,987	54%	4,210,803	1,861.19

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

In 2025, the A/C Solutions program strategically split into two distinct offerings: one for Market Rate customers and another specifically for Income-Qualified customers. This division allows Energy Smart to clearly demonstrate the program's impact on low-income households and ensure the team continues to prioritize those most in need of financial assistance for A/C solutions. Income-qualified customers meet the same eligibility requirements as the Income-Qualified Weatherization program.

Appliance Recycling & Replacement Pilot

Offering Description

The Appliance Recycling and Replacement Pilot offering encourages early recycling of qualifying low efficiency appliances, such as refrigerators and freezers, for residential customers. The Pilot also offers a refrigerator replacement option for income-qualified residential customers. This offering goes beyond federal recycling requirements using environmentally friendly best practices for recycling all components of each appliance.

Offering Highlights

A total of 269 appliances were picked up and recycled in PY14 and 100 efficient equipment replacements were provided for income-qualified customers. The program maintained high customer satisfaction with this pilot offering, including specific feedback on ease of participation and the opportunity to recycle a large appliance at no cost. Income-qualified customers who received a new efficient refrigerator replacement were particularly impacted by the superior performance over their old appliance and energy savings on their utility bill.

Offering Budget and Savings

Table 9.1

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$88,450	$226,543	39%	188,069	23.29

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

This offering was removed from the portfolio in 2025. While customers who participated maintained high satisfaction, the pilot offering was not able to garner the scale of participation to maintain cost effective energy savings. Energy Smart program funds will shift to increase cost effective residential program participation in PY15.

School Kits & Education

Offering Description

The NOLAWise School Kits and Education Outreach Program successfully completed its 14th program year (PY14). With the Energy Academy program, ENO and National Theatre for Children (NTC) collaborated to create a comprehensive energy efficiency curriculum for schools in conjunction with the NOLAWise School Kits initiative.

The program includes:

- Live in-school educational performances
- E-learning digital package with bilingual materials
- Teacher training webinars
- Energy savings kit distribution

In PY14, the NOLAWise School Kits and Outreach Program made substantial progress in its mission to empower schools and communities in New Orleans, fostering stronger habits around energy consumption and environmental responsibility.

Offering Highlights

The NOLAWise School Kit program achieved many goals, resulting in:

- 707,601 kWh savings.
- Distribution of 4,104 energy-saving kits to 21 schools (28 elementary schools and 2 middle schools)
- In-school educational performances viewed by 5,277 students, enabling students to implement energy-saving practices at home.
- NTC collected 165 completed Home Energy surveys from residential participants.

School kits were provided to students and teachers in grades 2, 5 and 8.

- 1,502 take-home energy kits went to second graders
- 1,478 take-home energy kits went to fifth graders
- 1,124 take-home energy kits went to eighth graders

Selected comments collected from the home energy surveys:

Products are very useful. I enjoy the insight my child is able to pass on to me.
-New Orleans resident

I thought it was really helpful on how to save energy with the uses of different light bulb as well as showerheads.
-New Orleans resident

I gathered information I plan on using in the near future.
-New Orleans resident

This is an excellent program moving forward saving energy.
-New Orleans resident

It was very thoughtful to receive the items. They are nice. Showerhead works great.
-New Orleans resident

Great program that allowed me to utilize free updated products in my home.

-New Orleans resident

I thought about the whole Energy Academy school performance is amazing because I learn to save light.
-Participating 5th grade student

I think its educational for everyone to learn the value of a product that can help families save.
-New Orleans resident

Educational Outreach

- 53% of the school sites served are classified as "over-burdened and under-served" (verified by CEQ tool developed for Justice40 Initiative, Executive Order 14008)
- NTC collected 34 completed Teacher Surveys from participating schools.
- Educators scored the educational value of the program at 6.32 out of 7 possible with 100% of them wanting to participate in the program again and recommending it to their colleagues, which allows for growth and sustainability of future programming.

Table 10.1

TEACHER SURVEY QUESTION	RANKING ON A SCALE OF 7 (HIGH) TO 1 (LOW)
Did the program stimulate discussion on the topic of energy efficiency?	**94%**
Rank the quality of educational materials	**93%**
Would you participate in the program again?	**100%**
How effective is the program in influencing your students' behavior?	**89%**
Would you recommend the program to your colleagues?	**100%**
Did the parents support the program?	**84%**
Overall educational value	**90%**

Offering Budget and Savings

Table 10.2

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$83,880	$98,600	85%	707,601	86.84

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

NTC recommends updating the assembly event portion of the program to excite recurring schools about further participation. Inspired by teacher comments, the new script will connect energy efficiency further to STEM concepts within state and national standards.

Behavioral Energy Efficiency

Offering Description

The Behavioral offering provides customers Home Energy Reports (HERs) that are complemented by the Entergy Customer Engagement Portal (CEP). Residential customers will receive a HER that compares them to similar and efficient households, shows their usage over time, provides tips for saving energy, and directs them to other program messaging and offerings.

Offering Highlights

The Behavioral offering in PY14 has achieved higher treatment counts and greater overall kWh savings than years previous: over 120,000 customers were treated with either print mailers or monthly emails, 1.16 million reports sent, and a verified 16.4 million kWh saved. These results were backed by operational investments to ensure the effectiveness of the HERs, via revamped aesthetics, revised comparisons, and quarterly behavioral evaluation and forecasts.

Table 11.1: Offering Participation

Month of Data	December		January		February		March		April		May	
Send date | Send count	Send Date	Send Count	Send Date	Send Count	Send Date	Send Count	Send Date	Send Count	Send Date	Send Count	Send Date	Send Count
Print - NC (FE1 refresh)					3/20/24	26,918					6/21/24	25,351
Email - NC (FE1 refresh)	1/18/24	95,293	2/12/24	98,789	3/20/24	95,185	4/19/24	94,376	5/21/24	94,432	6/21/24	87,586
Total HERs		95,293		98,789		122,103		94,376		94,432		112,937

Month of Data	June		July		August		September		October		November	
Send date | Send count	Send Date	Send Count	Send Date	Send Count	Send Date	Send Count	Send Date	Send Count	Send Date	Send Count	Send Date	Send Count
Print - NC (FE1 refresh)						24,765						24,129
Email - NC (FE1 refresh)	8/2/24	86,398	8/16/24	85,413	9/19/24	83,652	10/23/24	80,973	11/19/24	81,695	12/23/24	81,315
Total HERs		86,398		85,413		108,417		80,973		81,695		105,444

Offering Budget and Savings

Table 11.2

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$0	$0	N/A	16,390,198	2,765.00

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

Further investments in PY15 for additional HERs features and content optimizations, and evaluation considerations have been instituted with the idea of maximizing programmatic kWh savings.

EasyCool for Residents

Offering Description

The residential Bring Your Own Thermostat (BYOT) DR offering, EasyCool, taps into the existing installed base of connected thermostats in the ENO territory. Through technical integrations with the leading thermostat manufacturers in the industry, ENO will have the ability to enroll, monitor, and control connected thermostats and leverage the enrolled aggregation as a capacity resource for peak demand reduction. When a DR event is dispatched, targeted devices will experience a temperature adjustment (an “offset” or “setback”) that will in turn curtail HVAC usage during the peak period.

Offering Highlights

EasyCool deployed five events in ENO territory in July and August of 2024. Event details are as shown in Table 12.1.

Table 12.1: EasyCool BYOT Events

SMART THERMOSTAT EVENTS	
Date	7/2/2024
Start Time	16:00:00 CDT
End Time	18:00:00 CDT
# Devices Targeted	7,392
Cooling Offset	3˚ F
Setpoint Ceiling	85˚ F
Pre-cooling	2˚ F for 30 minutes. Ending 0 minutes before the event.

SMART THERMOSTAT EVENTS	
Date	08/01/2024
Start Time	17:00:00 CDT
End Time	19:00:00 CDT
# Devices Targeted	7,561
Cooling Offset	3˚ F
Setpoint Ceiling	85˚ F
Pre-cooling	2˚ F for 30 minutes. Ending 0 minutes before the event.

SMART THERMOSTAT EVENTS	
Date	08/07/2024
Start Time	16:00:00 CDT
End Time	18:00:00 CDT
# Devices Targeted	7,554
Cooling Offset	3˚ F
Setpoint Ceiling	85˚ F
Pre-cooling	2˚ F for 30 minutes. Ending 0 minutes before the event.

SMART THERMOSTAT EVENTS	
Date	08/09/2024
Start Time	16:00:00 CDT
End Time	18:00:00 CDT
# Devices Targeted	7,592
Cooling Offset	3˚ F
Setpoint Ceiling	85˚ F
Pre-cooling	2˚ F for 30 minutes. Ending 0 minutes before the event.

SMART THERMOSTAT EVENTS	
Date	08/14/2024
Start Time	17:00:00 CDT
End Time	19:00:00 CDT
# Devices Targeted	7,587
Cooling Offset	3˚ F
Setpoint Ceiling	85˚ F
Pre-cooling	2˚ F for 30 minutes. Ending 0 minutes before the event.

Offering Budget and Savings

Table 12.2

DEMAND REDUCTION (kW)	ENROLLMENT BUDGET			PARTICIPATION BUDGET		
kW Savings	Incentives Spent	Incentive Budget	% to Budget	Incentives Spent	Incentive Budget	% to Budget
6,251	$80,790	$110,398	73%	$148,975	$205,026	73%

Planned or Proposed Changes

PY15 will see minimal changes to the EasyCool program. Efforts to drive additional enrollments through the Online Marketplace pre-enroll channel will continue. Enrollment bonuses will be considered to support participant target achievement.

Peak Time Rebate Pilot

Offering Description

The Peak Time Rebate (PTR) Pilot offering engages residential customers in behavioral demand response. The opt-in pilot program recruits customers to enroll to receive notifications for peak demand events and offers recommendations on how they can reduce their energy load during event hours. The program calculates load shed for each participant individually using AMI data and setting a baseline using the 10 weekdays prior to event day. The PY14 pilot utilizes two incentive increments to test motivation for behavior changes during event hours - $20 for standard savers and $50 for high savers. The PTR Pilot allows a demand response option for residential customers that is not dependent on a given technology (Wi-Fi, smart thermostat, electric vehicle), but rather provides an incentive to change behaviors for a short period of time to reduce electric use. Participants earn an incentive by simply delaying normal electric use such as clothes washing, dish washing, vacuuming, and bathing or by decreasing load by increasing temperature setting on central air conditioning and turning off lights.

Offering Highlights

The PTR Pilot updated rebate increments and expanded event notification options in the first half of PY14. Feedback from PY13 participating customers indicated the lowest incentive tier of $10 was not enough to motivate behavior change during peak demand events. The Energy Smart team created two incentive tiers for PY14 participant recruitment, beginning at $20 for customers that show energy reduction during peak demand events. High savers, the top 15% of participating customers, received $50 incentive in PY14. In addition, returning and new participants were given the option for text message notification for peak demand events in PY14. A total of 5,194 residential customers participated in the program pilot in PY14 and the demand reduction reached 129% of the kW target.

Table 13.1: Peak Time Rebate Pilot Events

PEAK TIME REBATE PILOT EVENTS					
Date	7/2/24	8/1/24	8/7/24	8/9/24	8/14/24
Start Time	4:00 p.m.	5:00 p.m.	4:00 p.m.	4:00 p.m.	5:00 p.m.
End Time	6:00 p.m.	7:00 p.m.	6:00 p.m.	6:00 p.m.	7:00 p.m.
Total kWh reduction	4,044	3,497	4,392	5,032	4,786

Offering Budget and Savings

Table 13.2

DEMAND REDUCTION (kW)	BUDGET		
kW Savings	**Incentives Spent**	**Incentive Budget**	**% to Budget**
1,283.00	$82,100	$67,475	122%

Planned or Proposed Changes

In PY15 the team expanded SMS communication, a successful PY14 communication channel for PTR customers.

Residential Battery Energy Storage Pilot

Offering Description

The Entergy New Orleans Residential Battery Pilot launched with a phase 2 to enhance energy resilience for residential customers. The program targeted 140 total battery enrollments in phase 2 of the pilot with 125 residential and 15 small commercial batteries. Residential and small commercial customers are enrolled in a turn-key Virtual Power Plant (VPP) solution using EnergyHub for dispatch, control, and optimization. Customers with Tesla and Enphase batteries were eligible to enroll in the program. All customer enrollment occurred through either Tesla or Enphase customer mobile applications. Incentives were paid based on performance in demand response events with residential customers paid at $125/kW delivered averaged over all events in the season with a $600 cap on the incentive. Commercial customers were paid at $250/kW delivered averaged across all events with a $1,800 cap on the incentive.

Offering Highlights

The Residential Battery Energy Storage Pilot program, launched on September 15, 2024, successfully enrolled a total of 78 customers, comprising 66 residential and 12 small commercial participants. The majority of these enrollments, 69, utilized Tesla systems, while 9 were with Enphase. During the demand response season, which ran from September 15 to December 31, 2024, the program conducted 5 demand response events, each lasting two hours. Across these events, the average discharge per battery system was 4.84 kW. The total customer incentives paid out for participation in the program amounted to $34,201.41.

Table 14.1

EVENT DAY	EVENT TIME	DEVICES	AVG DISCHARGE PER DEVICE (KW)	AVG TOTAL DISCHARGE (KW)
10/23/24	3-5 pm	47	5.9	277.3
11/5/24	11:45 am-1:45pm	70	4.2	294
11/12/24	4–6pm	75	5.1	382.5
11/21/24	9–11am	78	4.6	358.8
11/26/24	430-630 pm	78	4.9	382.5

Table 14.2

DEMAND REDUCTION (kW)	BUDGET		
kW Savings	Incentives Spent	Incentive Budget	% to Budget
383.17	$34,201	$102,000	34%

Bring Your Own Charger (BYOC)

Offering Description

The BYOC program shifts Electric Vehicle (EV) charging to off-peak hours with no special hardware or separate meter required. Participants earn incentives by setting their vehicles to charge during off-peak hours every time the vehicle charges, and it takes less than 10 minutes to enroll in the program. Software developed by the program administrator, Sagewell, confirms that off-peak charging is taking place by analyzing ENO utility meter data. BYOC is an "every day" load shifting program, and the program does not need to call events during peak windows. More than 98% of participant charging takes place outside of the system peak hour and 90% of all EV charging occurs off-peak, making the ENO program one of the most effective EV load management programs in the country.

The BYOC program takes advantage of the existing investment in residential Automated Metering Infrastructure (AMI) "smart" meters in ENO territory. EV drivers in Orleans Parish can enroll in the program at no cost regardless of which type of EV or home Level 2 charger they use without having to purchase special chargers or to incur other costs. To enroll, drivers use a charging timer built into all EVs and schedule their vehicle(s) to charge between 9 p.m. and 6 a.m. during the week, and any time on weekends and holidays. Enrolled customers receive a credit of $7 per month, paid quarterly, equivalent to 2,100 miles of free driving per year. Program implementer Sagewell, Inc. provides customer support, verifies applications, monitors EV charging behavior via AMI data using its proprietary data analytics algorithms, and issues incentives for eligible drivers.

Offering Highlights

The BYOC program continues to earn high customer satisfaction scores in survey results. The program tracks satisfaction using Net Promoter Score (NPS) methodology and a survey in November 2024 earned a world-class score of 62. These results are consistent with brands such as Apple, Starbucks, and Costco and are significantly higher than typical utility industry scores that range from minus 15 to 30.

The BYOC program opened for enrollment on July 18, 2023, and by the end of Energy Smart Program Year 14 (2024), 274 vehicles and 258 customers were actively participating. Sixteen participants (6%) have two or more EVs, which is similar to other parts of the country. 173 EVs were added into the program last year, or 170% annual growth rate. During 2024, only one customer left the program entirely- a 99.6% retention rate. This is a significantly better result than a more typical 10% to 20% attrition rate in other EV load management programs nationwide.

There are approximately 2,000 EVs in Energy New Orleans territory and enrollment has reached 14.5% of all EVs, higher than a typical EV load management program which may reach 10% of drivers. This is a notable achievement given that the program offers one of the lowest customer participation incentives in the country. However, even more importantly, because marketing efforts are specifically targeted to "high value" EVs that charge on peak frequently, and charge at a high rate, Sagewell estimates approximately 30% of all high-value EVs are enrolled. Each of these "grid-impacting" vehicles contributes significantly more to the system peak load than an average EV, and they would be likely to stress the distribution infrastructure if not enrolled. This delivers additional power quality improvement benefits and can avoid significant costs involved in having to upgrade transformers and other distribution system components.

Participants earned $13,727 in incentives over the course of PY14.

Offering Budget and Savings

Table 15.1

DEMAND REDUCTION (kW)	BUDGET		
kW Savings	Incentives Spent	Incentive Budget	% to Budget
97.21	$13,727	$58,800	23%

Planned or Proposed Changes

Overall, EV adoption in New Orleans is slower than originally predicted at the launch of the program. As mentioned above, 14.5% of EVs in ENO territory are enrolled in the program, which is among the more successful EV load management programs in the US. The PY14 enrollment target for the program was 700 EVs, or 35% of total EV population, and more than twice as high as what most other programs have achieved nationwide. Sagewell is committed to achieving this result and has, for example, enrolled 25% of EV drivers at nearby JEA into a similar program. Sagewell and ENO staff have agreed to a revised marketing plan for PY 15 that includes dealership and electrical contractor outreach to help ensure new EV drivers are aware of the program.



COMMERCIAL & INDUSTRIAL OFFERINGS

Commercial & Industrial Portfolio Performance

Table 16.1

OFFERING	kWh SAVINGS	kWh GOAL*	% TO GOAL	kW SAVINGS	kW TARGET *	% TO GOAL	INCENTIVES	BUDGET	% TO BUDGET
Small Commercial & Industrial Solutions	4,232,566	6,349,948	67%	792.98	1,112	71%	$704,568	$953,929	74%
Large Commercial & Industrial Solutions	26,810,839	45,589,079	59%	4,207.24	7,291	58%	$4,008,341	$5,609,658	71%
Publicly Funded Institutions	3,620,474	15,730,841	23%	471.95	397	119%	$439,412	$2,320,892	19%
Commercial & Industrial Construction Solutions	83,603	4,301,994	2%	14.42	987	1%	$17,916	$163,619	11%
Large C&I Automated Demand Response	36,961	0	N/A	2,494.77	8,870	28%	$146,139	$532,200	27%
TOTAL	34,784,443	71,971,862	48%	7,981.36	18,657	43%	$5,316,376	$9,580,298	55%

** Goals are reflective of the approved Energy Smart Implementation Plan for PY13-14.*

Small Commercial & Industrial Solutions

Offering Description

The Small Commercial & Industrial Solutions offering provides small businesses (100 kW demand or less) and other qualified non-residential customers the opportunity to achieve electricity savings through strategies designed specifically for this sector. This offering helps small business customers analyze facility energy use and identify energy efficiency improvement projects. Program participants are advised on applicable offerings through the program as well as financial incentives for eligible efficiency measures that are installed in their facilities by trade allies.

Offering Highlights

The Small Commercial & Industrial Solutions offering achieved 4,232,566 kWh in verified gross kWh savings in PY14, reaching 67% of the goal. Increasing participation in the Small Commercial & Industrial offering was a priority for Energy Smart in PY14 and resulted in nearly twice the amount of energy savings claimed in PY14 compared to a total achieved in PY13. Small Commercial trade allies continued to report a lack of labor availability as a barrier to program participation. In response the Energy Smart team prioritized Small Business Energy Assessments as a way to deliver immediate, no-cost energy savings to small business customers while also using the assessment as an opportunity to identify follow-up measures that could be performed by Energy Smart's Small Business Direct Install trade allies.

A total of 224 Small Business Energy Assessments were performed in PY14 which resulted in 849,030 kWh worth of direct install savings, close to double the savings achieved in PY13. Lighting, refrigeration and tune-up trade allies were supplied leads identified during these assessments to help address the trade ally staffing shortage reported in trade ally surveys in PY13. Nearly 400 Small Business Energy Assessments have been completed by the Energy Smart team since the offering was created and Energy Smart will leverage these leads to further increase overall participation and to assist in trade ally recruitment efforts in future program years.

- A total of 20,851 measures were installed during the program year.
- The offering reached 67% of the goal, achieving 4,232,566 kWh.
- The offering reached 71% of the kW target, achieving 792.98 kW.

Table 17.1

PROJECT COMPONENTS	GROSS KWH SAVINGS	% OF SAVINGS CONTRIBUTION
Controls	1,053,319	25%
Hot Water	9,008	0%
HVAC	1,463,368	35%
Lighting	1,414,638	33%
Load Mgmt	6,367	0%
Refrigeration	285,866	7%
Total	4,232,565.96	100%

Table 17.2

PROJECT TYPE	TOTAL INCENTIVES	TOTAL PROJECT COSTS	% COVERED
Custom Lighting	$78,440	$238,223	33%
Custom Non-Lighting	$176,814	$374,489	47%
Prescriptive	$449,315	$1,306,022	34%
Total	$704,568	$1,918,735	36%

Table 17.3

PROGRAM COMPONENT	COUNT OF MEASURES	GROSS KWH SAVINGS
Prescriptive	19,567	1,844,642
Custom*	1,284	2,725,939
Total	20,851	4,570,580

*Custom measure count includes bonus measures

Chart 17.1

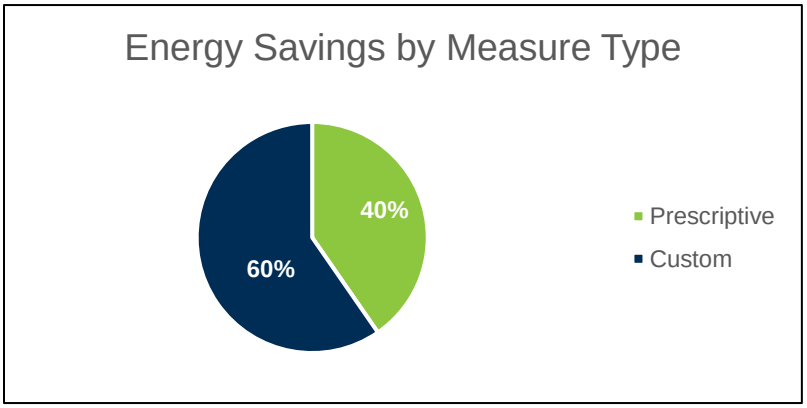
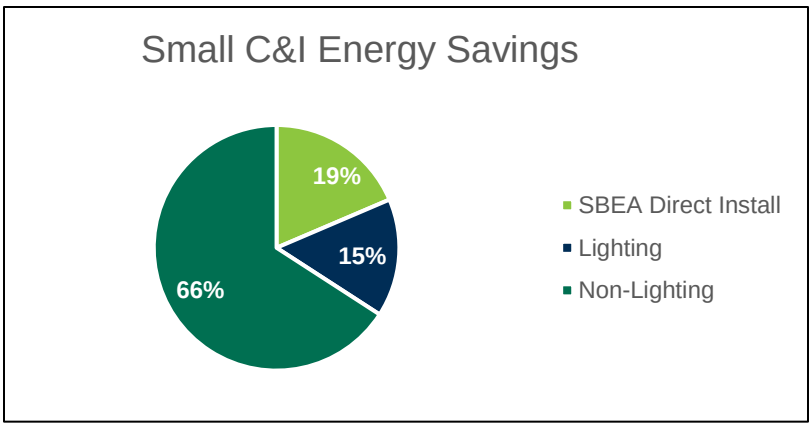


Chart 17.2



Offering Budget and Savings

Table 17.4

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$704,568	$953,929	74%	4,232,566	792.98

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

Energy Smart will seek to improve upon the average kWh achieved per Small Business Energy Assessment by increasing the number of no-cost direct install measures offered to participating small business customers. Participating Small Commercial customers will receive "Small Business Energy Assessment Follow-up" emails to encourage them to adopt additional follow-up measures including HVAC tune-ups, refrigeration measures, exterior lighting and more.

Large Commercial & Industrial Solutions

Offering Description

The primary objective of the Large Commercial and Industrial Solutions offering is to provide a solution for larger (greater than 100 kW demand) non-residential customers interested in energy efficiency through a prescriptive or custom approach. The Large Commercial & Industrial offering is designed to generate significant energy savings, as well as a longer-term market penetration by nurturing delivery channels, such as design professionals, distributors, installation contractors, and Energy Service Companies (ESCOs).

Offering Highlights

The Large Commercial & Industrial offering achieved 26,810,839 kWh in verified gross kWh savings in PY14, reaching 59% of the goal. More than $4 million worth of incentives were paid to Large Commercial & Industrial customers in PY14, a significant increase from the $2.3 million paid to the same customer class in PY13. A total of 161 Large Commercial & Industrial projects were completed in PY14 and of those, 73 projects received an incentive equal to the full project cost. On average, Energy Smart incentives covered 70% of the project costs associated with the Large Commercial & Industrial projects. Non-lighting project measures continue to make up a larger percentage of the Large Commercial & Industrial savings, the share of non-lighting savings jumped from 51% in PY13 to 89% in PY14.

- A total of 92,992 measures were installed during the program year
- The offering reached 59% of the kWh goal, achieving 26,810,839 kWh
- The offering reached 58% of the kW target, achieving 4,207.24 kW

Table 18.1

PROJECT COMPONENTS	GROSS KWH SAVINGS	% OF SAVINGS CONTRIBUTION
Control	9,622,150	36%
HVAC	13,115,286	49%
Lighting	2,744,849	10%
Refrigeration	1,328,553	5%
Total	26,810,839	100%

Table 18.2

PROJECT TYPE	TOTAL INCENTIVES	TOTAL PROJECT COSTS	% COVERED
Custom Lighting	$78,440	$238,223	33%
Custom Non-Lighting	$176,814	$374,490	47%
Prescriptive	$449,315	$1,306,022	34%
Total	$704,569	$1,918,735	37%

Chart 18.1

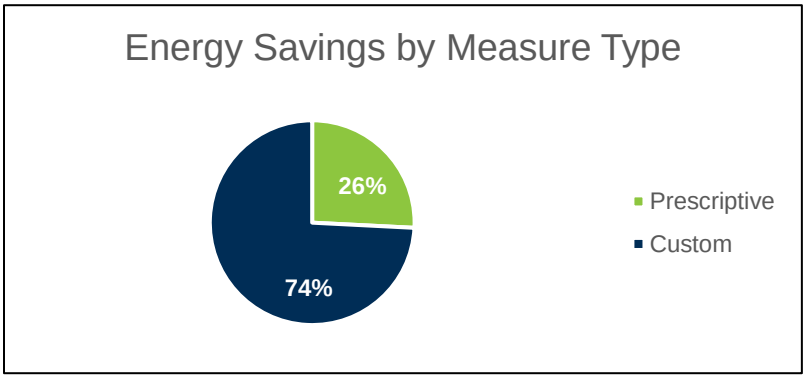
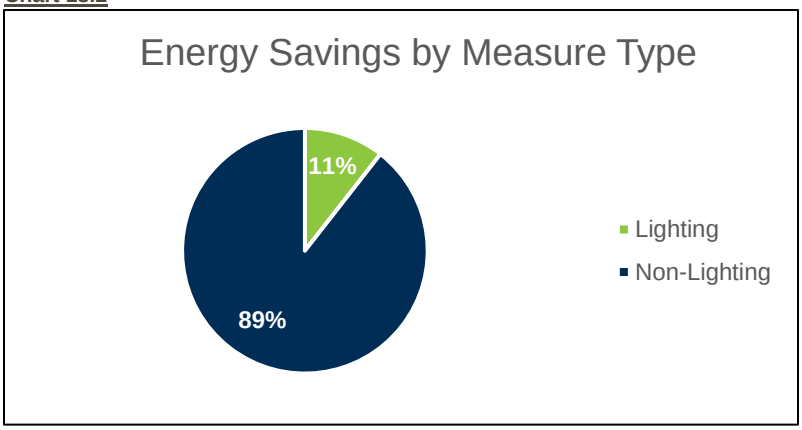


Chart 18.2



Offering Budget and Savings

Table 18.3

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$4,008,341	$5,609,658	71%	26,810,839	4,207.24

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

Energy Smart will implement a Strategic Energy Management offering in PY15 to further engage with Large Commercial & Industrial customers. The Energy Smart outreach team will survey managed accounts to encourage enrollment in the no-cost offering. Large Commercial & Industrial customers that enroll in the Strategic Energy Management offering will receive individual, in-person coaching sessions to better learn about energy saving potential in their facilities that go beyond LED retrofits and prescriptive HVAC replacements. SEM participants will also be provided with energy management software at no-cost and Energy Smart will model the facility and the implemented energy saving measures to accurately quantify the total energy savings achieved in order to maximize the incentives paid to participants.

Publicly Funded Institutions

Offering Description

The Publicly Funded Institutions (PFI) offering is targeted at local publicly funded institutions. The offering assists end-use customers in overcoming barriers that are specific to publicly funded groups. Through hands-on expertise and consulting, the program benchmarks the institution's energy use and identifies a roadmap to success. Customers are given guidance throughout their engagement with the program.

Offering Highlights

The PFI offering achieved 3,620,474 kWh in verified gross kWh savings in PY14, reaching 23% of the goal. A total of 19 Energy Smart projects were completed for PFI customers in PY14 including projects with the New Orleans Sewerage & Water Board, NOLA Public Schools, NORDC, US General Services Administration and more. PFI customers received $439,412 in program incentives, a considerable increase from $300,000 in PY13. Eight projects received an Energy Smart incentive equal to the full project cost and the average percentage of project costs covered by Energy Smart incentive funding was 61%.

Energy Smart worked with major PFI customers in PY14 to identify additional pathways to program participation including the Small Business Direct Install program to overcome some of their specific barriers to participation.

Table 19.1

PROJECT COMPONENTS	GROSS KWH SAVINGS	% OF SAVINGS CONTRIBUTION
Control	1,847,817	51%
HVAC	242,329	7%
Lighting	1,368,970	38%
Refrigeration	161,358	4%
Total	3,620,474	100%

Table 19.2

PROJECT TYPE	TOTAL INCENTIVES	TOTAL PROJECT COSTS	% COVERED
Custom Lighting	$15,796	$90,745	17%
Custom Non-Lighting	$262,956	$1,474,584	18%
Prescriptive	$160,660	$513,867	31%
Total	$439,412	$2,079,196	21%

Chart 19.1

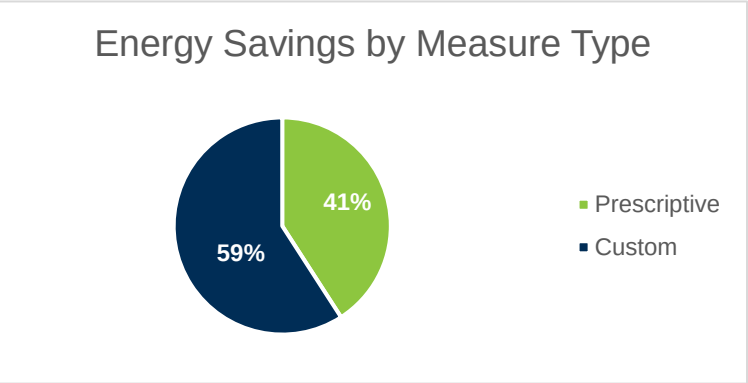


Chart 19.2

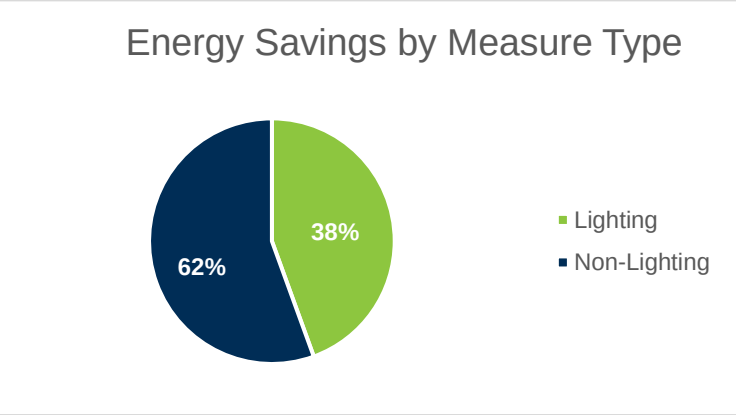


Table 19.3

PROGRAM COMPONENT	COUNT OF MEASURES	GROSS KWH SAVINGS
Prescriptive	12,485	1,518,013
Custom	103	2,195,173
Total	12,588	3,713,186

Offering Budget and Savings

- A total of 12,588 measures were installed during the program year
- The offering reached 23% of the kWh goal, achieving 3,620,474 kWh
- The offering reached 119% of the kW target, achieving 471.95 kW

Table 19.4

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$439,412	$2,320,892	19%	3,620,474	471.95

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

Energy Smart staff will seek to identify and create project “phases” for PFI projects to ensure projects can comply with the bid structure for PFI customers. An increased focus will be placed on engaging with the Procurement Departments. The City of New Orlean’s Property Management Department will be engaged consistently throughout the year to ensure Energy Smart incentives are considered in project scoping to encourage efficient equipment specification and process. Several building automation system upgrades in City-owned commercial buildings have already been identified and Energy Smart staff will prioritize these projects in order to maximize the energy savings associated with the building’s managed by the City of New Orleans’ Property Management Department.

New Construction Code Compliance

Offering Description

The Commercial & Industrial Construction Solutions offering is now the New Construction Code Compliance offering. In July 2023, the State of Louisiana adopted an advanced building energy code. In order to help commercial building owners meet this new code, Energy Smart is offering financial incentives for the installation of high efficiency equipment through the Energy Smart New Construction Code Compliance offering. This offering encourages customers to design and construct higher efficiency facilities and is available to ground-up construction, additions or expansions, building repurposing, and commercial building restorations. The New Construction offering provides incentives for design assistance, prescriptive measures and custom upgrades tailored to the customer's building operations.

Offering Highlights

The New Construction Code Compliance offering achieved 83,603 kWh in verified gross kWh savings in PY14 reaching 2% of the energy savings goal. Three Commercial & Industrial Construction Solutions projects were completed in PY14 including projects at a Hospital, place of worship and a boutique hotel. A total of ten measures were installed in PY14 including interior and exterior LEDs, heat pump replacements, and Energy Star kitchen equipment upgrades.

- A total of 5,658 measures were installed during the program year
- The offering reached 2% of the kWh goal, achieving 83,603 kWh
- The offering reached 1% of the kW goal, achieving 14.42 kW

Table 20.1

PROGRAM COMPONENT	COUNT OF MEASURES	GROSS KWH SAVINGS
HVAC	15,528	19%
Lighting	67,209	80%
Refrigeration	865	1%
Education	-	0%
Total	83,603	100%

Offering Budget and Savings

Table 20.2

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$17,916	$163,619	11%	83,603	14.42

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Planned or Proposed Changes

In PY15, Energy Smart will reclassify what types of projects should be considered eligible for New Construction Code Compliance incentives. Previously there were several types of projects that would be classified as new construction including warm shell upgrades and projects in which major electrical and HVAC systems were replaced. In PY15 Energy Smart will reduce the number of project types that are eligible for New Construction Code Compliance incentives to only ground-up new construction. Energy Smart will continue to engage with program trade allies as well as other stakeholder including construction firms and architectural firms.

Large Commercial & Industrial Demand Response

Offering Description

The Large Commercial & Industrial Demand Response (DR) offering launched with an objective to secure a total of 8.87 megawatts (MW) of commercial demand shed over term of the program cycle (through PY14). Large commercial customers (exceeding 100kW peak demand) are being recruited and enrolled for an automated turn-key DR solution.

An advanced software platform, Concerto®, is utilized for dispatch, control, and optimization of all DR resources enrolled in the offering. Concerto is utilized to advance goals of maximizing customer satisfaction for participants in the offering while being adaptable to new and changing technologies that can provide flexibility and reliability, such as batteries, electric vehicles, and distributed solar.

Concerto® has been integrated with Entergy electrical meters. The integration allows Concerto® to produce same-day consumption and demand baselines to monitor customer performance in the Large C&I DR offering. Daily monitoring allows the customer, and in turn the Program Team, to maximize energy savings.

Offering Highlights

The Program Team conducted 13 site surveys including hospitals, secondary schools, commercial office space, university, and industrial sites totaling 6.07MW. The offering includes 26 enrolled customers totaling 8.23MW. There are three projects in the installation and testing phase totaling 2.56MW.

In addition to directly targeting customers, the outreach team is educating controls contractors on program benefits for both the controls company and their customers. Honeywell has joined local industry organizations to further conduct outreach and promote the multiple benefits of program participation in Energy Smart and the Large C&I DR offering.

Entergy completed its non-summer season at the end of April 2024. No events were called. Enrolled customers received capacity payments based on their nominated values, with a total of $63,210.

Entergy called 5 C&I DR events during the Summer 2024 season (May–September). The average summer performance was 2.93MW and a total of $146,139 in incentives were sent out.

Offering Budget and Savings

Table 21.1

COST			ENERGY SAVINGS (kWh)	DEMAND REDUCTION (kW)
Spend	**Budget**	**%**	**Evaluated**	**Evaluated**
$146,139	$532,200	27%	36,961	2,494.77

Table reflects verified gross energy savings achievement from TPE's EM&V findings.

Marketing, Outreach & Engagement

Energy Smart Website Redesign

The Energy Smart program team redesigned the Energy Smart website to align with the Entergy brand standard and enhance content while simplifying the customer journey.

The project was kicked off in March and the website went live on December 27, 2024. A campaign announcing the launch of the new website kicked off January 27, 2025.

New content incorporated into the redesigned website includes updated imagery of the Energy Smart program team; an interactive quiz to help customers determine the type of home assessment they need; embedded contact forms and pop-ups; links to Energy Smart case studies; Energy Smart program timeline; list of awards; Home Performance with ENERGY STAR® animated video; community events calendar, and a Social Responsibility section with links to additional Entergy and energy-saving resources.

Energy Smart Trade Ally Marketing Incentive Bonus

To provide additional support to the Energy Smart program Trade Ally Network, the Energy Smart program team developed and implemented the first Energy Smart Trade Ally Marketing Incentive Bonus during Q3. This marketing incentive provided a $500 bonus to registered trade allies for co-branded marketing support as a way to jointly promote their business and Energy Smart. The marketing incentive bonus was limited to the first 20 trade allies who completed the application process. To qualify, a trade ally had to be a registered Energy Smart trade ally. The offering was supported with an email and SMS campaign to registered residential and commercial trade allies.

Residential Marketing and Outreach

Highlights

Program Year 14 kicked off in January with a 'New Year' email to customers highlighting the Home Performance with ENERGY STAR® offering and Residential Appliances. The team has focused on messaging that helps educate customers and increase awareness of the health and safety benefits, energy and savings benefits, of energy-efficient environments. The email was sent to 88,544 customers and generated 404 clicks to the landing page.

Table 22.1: Home Performance with ENERGY STAR® Metrics

CHANNEL	IN-MARKET DATE	IMPRESSIONS / SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
'New Year' Email- Drop 1	January 3, 2024	65,178	3,769	5.78%	308	
'New Year' Email – Drop 2	January 4, 2024	23,366	2,344	10.27%	68	
May/ June Bill Insert	May 23- June 21, 2024	110,000	n/a	n/a	n/a	

Customer satisfaction emails launched in February and were sent to customers who participated each month to gain more frequent customer feedback. The survey emails were sent to customers who recently participated in the following Energy Smart program offerings: Home Performance with ENERGY STAR® (HPwES), Income-Qualified Weatherization (IQW), A/C Tune-Up and the Online Marketplace. The results of the surveys will be discussed in the Residential Customer Satisfaction section below.

Throughout the year, the team leveraged Entergy New Orleans' own media platforms to promote Energy Smart, encourage participation in the variety of offerings available to residential customers, and increase awareness overall for energy saving opportunities. A monthly article is published on the Entergy Newsroom and circulated monthly in the Circuit e-newsletter distribution. Articles highlighting the Home Performance with ENERGY STAR name were released in February, March, April and September. These articles have an estimated reach of over 100,000 customers monthly and generated over 312 clicks with 246 home assessments requested.

Table 22.2: Circuit Newsletter Energy Smart topics

MONTH	TOPIC	OFFERINGS
February	Celebrate savings	Rebates, Home Performance with ENERGY STAR® and Income-Qualified Weatherization assessments, Appliance Recycling, Online Marketplace, Multifamily Solutions
March	Spring checkup for your home	Home Performance with ENERGY STAR® and Income-Qualified Weatherization assessments
April	Five ways to make everyday Earth Day	A/C Tune-up, Home Performance with ENERGY STAR® and Income-Qualified Weatherization assessments, Online Marketplace, Rebates, EV BYOC
May	Clean Air Month	A/C Solutions and Rebates
June	Stack savings this summer	Residential rebates, Online Marketplace and Appliance Recycling
July	Boosted pool pump rebates	Residential rebates
August	Keep your cool air inside and reduce energy waste	A/C Solutions
September	Open the door to savings	Home Performance with ENERGY STAR and Income-Qualified Weatherization
October	Recycling old fridges and freezers pay off	Appliance Recycling
November	How energy-efficient devices can spark joy	Residential rebates and Online Marketplace
December	Save your energy for what matters most	

In May, the Energy Smart team produced a bill insert focusing on air quality. The two-sided insert showcased the Home Performance with ENERGY STAR® and Online Marketplace offerings, two ways customers can participate in the Energy Smart program and improve indoor air quality at home. The bill insert was sent to 110,000 customers between May 23 and June 18, 2024.

Table 22.3: May Bill Insert

CHANNEL	IN-MARKET DATE	IMPRESSIONS / SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
May/ June Bill Insert	May 23- June 21, 2024	110,000	n/a	n/a	n/a	

In a new and exciting partnership with the Preservation Resource Center of New Orleans, the Energy Smart team is continuing to expand outreach opportunities. This collaboration aims to increase program awareness and educate community members on simple home solutions to enhance the energy efficiency of older homes. In addition to event sponsorship and in-person tabling, the team published print ads in three issues of the Preservation in Print magazine. These ads highlighted the A/C solutions and Home Performance with ENERGY STAR offerings.

Table 22.4: Preservation Resource Magazine Metrics

CHANNEL	IN-MARKET DATE	AUDIENCE REACH
Preservation Resource Magazine Print Ad – June/July	June 2024	30,000
Preservation Resource Magazine Print Ad – August/September	August 2024	30,000
Preservation Resource Magazine Print Ad – October/November	October 2024	30,000

In October, to kickoff Energy Awareness Month, an email was sent to residential customers highlighting ENERGY STAR Day. The email focused on scheduling a Home Performance with ENERGY STAR assessment and exploring multiple ways ENERGY STAR can help you save energy and make a good impact at home. The email resulted in 158 sessions on the Home Performance with ENERGY STAR landing page and 70 clicks on the 'request an assessment' button.

Table 22.5: ENERGY STAR Day Email

EMAIL NAME	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Lead Generation Email	October 9, 2024	61,296	10,192	17.25%	141	.24%

In 2024 we've expanded our in-person outreach presence to increase engagement with customers and reduce barriers, especially those who may have limited internet access. This includes tabling and presenting at community events, neighborhood canvassing, and partnering with trade allies who have been instrumental to increasing awareness and participation in the Home Performance with ENERGY STAR, Income-Qualified Weatherization and A/C Solutions offerings. Trade ally partnerships contributed to approximately 500 referrals for home energy assessments.

The Q4 Trade Ally newsletter was sent to 17 trade allies on November 13, 2024. The newsletter included information about the program's progress to its goals, updates, best practices, safety tips, and meeting reminders for trainings and the November 2024 Trade Ally Advisory Group meeting.

In December, the team launched a test campaign for the Neighborhood Based Delivery Pilot, a new offering coming in PY15. The campaign focused on 155 homes in the Desire/New Florida neighborhood. Soft launch tactics included a direct mail and email campaign to those households, followed by neighborhood canvassing, distributing door hangers with home assessment messaging.

Table 22.6: Neighborhood Based Delivery Pilot

Channel	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Direct Mail: Postcard	December 6, 2024	155	n/a	n/a	n/a	n/a
Email #1: Pre-event	December 2, 2024	79	9	12%	0	0%
Email #2: Post-event	December 12, 2024	77	11	15%	0	0%

Table 22.7: Residential Customer Satisfaction Survey Emails

EMAIL NAME	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
A/C Tune-Up Survey - January 2024	February 20, 2024	60	23	38.46%	6	10.17%
HPwES Survey - January 2024	February 20, 2024	57	34	60.00%	4	7.14%
IQW Survey - January 2024	February 20, 2024	42	32	76.00%	3	7.14%
OLM Survey - January 2024	February 20, 2024	28	22	80.00%	0	0.00%
A/C Tune-Up Survey - February 2024	February 29, 2024	98	32	33.80%	4	4.17%
HPwES Survey - February 2024	February 29, 2024	64	52	81.25%	13	20.31%
IQW Survey - February 2024	February 29, 2024	72	32	45.83%	10	14.49%
OLM Survey - February 2024	February 29, 2024	23	15	63.64%	0	0.00%
A/C Tune-Up Survey - March 2024	May 1, 2024	52	11	21.95%	3	6.00%
HPwES Survey - March 2024	May 1, 2024	47	19	40.63%	5	10.87%
IQW Survey - March 2024	May 1, 2024	80	20	25.42%	7	8.97%
OLM Survey - March 2024	May 1, 2024	21	11	53.85%	1	4.76%
A/C Tune-Up Survey – April 2024	May 1, 2024	36	6	16.67%	2	5.71%
HPwES Survey – April 2024	May 1, 2024	64	33	51.11%	12	18.75%
IQW Survey – April 2024	May 1, 2024	66	22	34.00%	7	10.94%
OLM Survey – April 2024	May 1, 2024	21	11	53.85%	1	4.76%
A/C Tune-Up Survey – May 2024	June 14, 2024	33	6	26.32%	2	8.70%
HPwES Survey – May 2024	June 14, 2024	88	27	46.34%	7	11.86%
IQW Survey – May 2024	June 14, 2024	44	6	20.83%	0	0.00%
OLM Survey - May 2024	June 14, 2024	21	4	23.08%	1	5.56%
A/C Tune-Up Survey - June 2024	June 25, 2024	40	20	51.28%	4	10.26%
HPwES Survey - June 2024	June 25, 2024	110	48	44.44%	6	5.56%
IQW Survey - June 2024	June 25, 2024	45	19	42.22%	3	6.67%
OLM Survey - June 2024	June 25, 2024	19	13	68.42%	2	10.53%
A/C Tune-Up Survey - July 2024	August 2, 2024	38	15	58.33%	4	8.33%
HPwES Survey – July 2024	August 2, 2024	109	54	50.94%	9	8.49/5
IQW Survey - July 2024	August 2, 2024	86	38	48.1%	9	11.39%
OLM Survey - July 2024	August 2, 2024	504	314	63.18%	27	5.43%
A/C Tune-Up Survey - August 2024	August 28, 2024	21	15	71.43%	4	19.05%
HPwES Survey – August 2024	August 28, 2024	43	28	65.12%	5	11.63%
IQW Survey - August 2024	August 28, 2024	86	38	41.05%	5	5.26%
OLM Survey - August 2024	August 28, 2024	1,928	943	49.76%	89	4.7%
A/C Tune-Up Survey – September 2024	October 4, 2024	44	22	52.38%	5	11.90%
HPwES Survey – September 2024	October 4, 2024	66	45	70.31%	8	12.5%
IQW Survey – September 2024	October 4, 2024	71	37	53.62%	5	7.25%
OLM Survey – September 2024	October 4, 2024	21	11	55%	1	5%
A/C Tune-Up Survey – November 2024	December 4, 2024	30	10	36.73%	1	2.04%
HPwES Survey – November 2024	December 4, 2024	105	28	27.45%	4	3.92%
IQW Survey – November 2024	December 4, 2024	86	29	33.72%	8	9.3%
OLM Survey – November 2024	December 4, 2024	1,297	832	64.8%	111	8.64%

Table 22.8: Circuit Newsletter Metrics

MONTH	SCHEDULED RECIPIENTS	UNIQUE OPENS	OPEN RATE	CLICK-TO-OPEN RATE	UNIQUE CLICKS	CLICK-THROUGH RATE
February	101,690	43,691	43.15%	1.48%	645	.64%
March	102,519	41,342	40.53%	1.36%	562	.55%
April	100,786	38,084	37.89%	1.35%	514	.51%
May	100,630	41,898	41.76%	1.60%	671	.67%
June	101,449	41,883	41.43%	1.50%	627	.62%
July	102,258	48,375	47.67%	1.94%	938	.92%
August	103,111	42,779	41.77%	1.88%	806	.79%
September	103,970	55,629	53.85%	1.58%	877	.85%
October	104,634	54,984	52.77%	2.12%	1167	1.12%
November	104,687	45,020	43.19%	1.73%	777	.75%
December	105,734	46,554	44.20%	1.26%	588	.56%

Table 22.9: Entergy Newsroom Metrics

MONTH	PUBLISHED DATE	MESSAGE/ARTICLE TITLE	VIEWS
May	May 9	New Orleans students get Energy Smart	283
June	June 3	Energy Smart helps New Orleans customers stack savings this summer	301
June	June 18	Trim your bills with essential summer efficiency tips & tools	847
June	June 25	Energy Smart pays to save	1,237
July	July 8	Make a splash with $400 in extra savings this summer	
August	August 5	Keep your cool air inside and reduce energy waste with Energy Smart A/C Solutions	
September	September 19	Open the door to savings and free energy efficient products	
October	October 3	Recycling old fridges or freezers pays off	
November	November 6	How energy-efficient devices can spark joy and save energy	
December	December 3	Save your energy for what matters most	

Appliance Replacement and Recycling

The Energy Smart Appliance Recycling marketing tactics implemented throughout PY14 resulted in the program delivering 168 units recycled. Fifty percent of the recycled units came from zip codes that fall in Entergy New Orleans priority census tracts (70117, 70119, 70115, 70127, 70114, 70126, 70116, 70125, 70129, 70112, 70113).

The offering was supported with email, Google paid search, articles in the Entergy New Orleans Circuit Newsletters, blog posts on the Entergy Newsroom, organic social posts on Entergy New Orleans Facebook and X (formerly Twitter) accounts and a flyer with a QR code that was distributed to customer at community outreach events.

Marketing began in January and February with email campaigns targeting high energy users, followed by an email campaign in March targeting residential customers that previously participated in the Energy Smart program. On March 18, a Google paid search campaign was launched and ran through Dec. 20. On December 1, messaging was added to the landing page and paid search ads alerting customers that the offering was ending on December 20. The Google campaign delivered 92,800 impressions and 1,412 clicks, with a CTR of 2.02%, just shy of the national paid search benchmark of 2.41%. The offering was also featured in three blog posts on the Entergy Newsroom. The first in late June with the additional mentions of EasyCool and Peak Time Rebate and then on August 2 and August 8. The blog posts generated 52 visits to the Appliance Recycling landing page.

The Appliance Recycling landing page remained in the top 10 viewed pages on the Energy Smart website from January – December 2024 with 3,590 views. The top source of traffic to the landing page was Google paid search. The Google campaign delivered 92,800 impressions and 1,412 clicks, with a CTR of 2.02%, just shy of the national paid search benchmark of 2.41%.

The Appliance Recycling offering will be discontinued starting January 1, 2025.

Table 22.10: Appliance Recycling Metrics

CHANNEL	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Email: High Energy Users	January 10, 2024	18,135	9,229	51.30%	47	0.30%
Email: High Energy Users	January 22, 2024	17,939	9,415	53.00%	61	0.30%
Email: High Energy Users	February 12, 2024	18,032	8,935	50.00%	51	0.30%
Email: High Energy Users	February 27, 2024	4,108	2,096	54.60%	9	0.20%
Email: March Madness, Energy Smart Participants	March 19, 2024	4,060	2,404	64.20%	127	3.40%
Email: March Madness Remarket DNC/DNO	March 27, 2024	4,042	2,187	58.60%	24	0.60%
Email: DNO in the past 6 months	June 7, 2024	11,680	3,079	26.70%	199	1.70%
Google Keyword Search Ad	March 18 – December 20, 2024	92,800	N/A	N/A	1,412	2.02%

Peak Time Rebate

In January, the Energy Smart team began planning for the Peak Time Rebate Pilot to proactively prepare for the upcoming demand response season beginning in June. Based on the customer survey data from PY13, the Team worked to improve the online customer experience and offering messaging. The Team provided clear communications and resources with information regarding the offering in email

communications and embedded on the Energy Smart website. In an effort to provide continuous enhancements for this pilot, communication was crafted for previously enrolled customers with the new updates, clarification about how to earn incentives in this offering, and the new FAQ on the program website.

Preparation in March, April, and May included the creation of the following email templates; pre-season notice, eligibility notice, 24-hour event reminder communication, 1-hour event reminder communication, post-season did not qualify for incentives notice and your incentive check is on the way communication. Three text message templates were created: welcome message, 24-hour event notice and a 1-hour event reminder. Previously there were three event communications per event. Due to customer feedback the event notifications have been reduced to two per event.

In April, the Team was awarded a Gold Hermes Award for the Peak Time Rebate Pilot recruitment emails from PY13. Hermes Creative Awards are sponsored by the Association of Marketing and Communication Professionals. The organization assesses submissions from over 200 content categories, including creative electronic media, social media, interactive media, and audio campaigns. This year, over 6,500 entries were submitted by applicants throughout the US, Canada, and other countries.

PY14 recruitment efforts began the first week of May and ended July 3, 2024. During this time, a press release was distributed to local media outlets, eight emails were distributed to different audience segments along with a Google keyword search ad the last week of recruitment. Tactics such as email, press releases and organic social/articles, that strategically targeting certain audiences, outperformed the number of enrollments compared to the Google ad despite the number of impressions and clicks the ad received. The Entergy New Orleans' Residential, monthly e-newsletter featured the pilot enrollment information in May and June with the addition of organic social posts on Entergy New Orleans Facebook and X (formerly Twitter) accounts. Peak Time Rebate Pilot maintained the highest viewed page on the Energy Smart website in May and June.

Despite being a seasonal offering, Google Analytics reporting shows that the Peak Time Rebate Pilot landing page generated the second highest sessions on the Energy Smart website in PY14 with the majority as new users.

Table 22.11: Peak Time Rebate Recruitment Metrics

Channel	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Email drop 1: Census tracks and low income	May 7, 2024	19,867	9,411	46.7%	720	3.6%
Email drop 1: Remarket	May 22, 2024	12,723	3,124	23.5%	217	1.7%
Email drop 2: Energy Smart participants	May 21, 2024	22,842	14,802	63.8%	2,691	11.8%
Email drop 2: Remarket	May 28, 2024	8,462	1,618	18.5%	231	2.7%
Welcome back email	June 3, 2024	1,983	1,235	64.4%	288	15%
Email drop 3: NOLA residents	June 3, 2024	37,800	20,130	52.8%	2071	5.5%
Email drop 4: NOLA residents	June 14, 2024	52,504	33,566	62.4%	3,717	7.1%
Email drop 4: Remarket	June 19, 2024	19,843	4041	20.40%	323	1.60%
Email drop 5: Non-openers from the recruitment season	June 27, 2024	30462	2,236	7.40%	203	0.7%
Google Keyword Search Ad	June 27 – July 3	321,982	2,547	N/A	2,547	0.79%

Table 22.12: Peak Time Rebate Event Communication Metrics

Channel	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Event 1: 24-hour notice email	7/1/24	4379	2874	65.60%	127	2.90%
Event 1: 1-hour notice email	7/2/24	4371	2721	62.30%	90	2.10%
Event 2: 24-hour notice email	7/31/24	4282	2458	57.40%	61	1.40%
Event 2: 1-hour notice email	8/1/24	4274	2648	62.00%	28	0.70%
Event 2: 24-hour notice text	7/31/24	1172	-	-	280	24.00%
Event 2: 1-hour notice text	8/1/24	1714	-	-	-	-
Event 3: 24-hour notice email	8/6/24	4270	2585	60.40%	65	1.50%
Event 3: 1-hour notice email	8/7/24	4265	2465	57.60%	37	0.90%
Event 3: 24-hour notice text	8/6/24	1615	-	-	339	21.00%
Event 3: 1-hour notice text	8/7/24	1705	-	-	-	-
Event 4: 24-hour notice email	8/8/24	4276	2458	57.50%	39	0.90%
Event 4: 1-hour notice email	8/9/24	4273	2411	56.40%	17	0.40%
Event 4: 24-hour notice text	8/8/24	1610	-	-	281	17.00%
Event 4: 1-hour notice text	8/9/24	1699	-	-	-	-
Event 5: 24-hour notice email	8/13/24	4356	2593	59.50%	44	1.00%
Event 5: 1-hour notice email	8/14/24	4354	2496	57.30%	45	1.00%
Event 5: 24-hour notice text	8/13/24	1600	-	-	266	17.00%
Event 5: 1-hour notice text	8/14/24	1720	-	-	-	-

*1-hour notice texts did not include a link for customers to click, therefore no data can be provided for clicks and click-through rate.
*No open or open rate data available for event text messages in PY14.

EasyCool

The EasyCool offering was supported in PY14 through a media mix of email campaigns, banners on the residential online marketplace, blog pots on the Entergy Newsroom, article in the Circuit Newsletter and organic social posts on ENO Facebook and X (formerly Twitter) accounts.

The first tactic deployed was an Earth Day email campaign that was in market April 2-April 30. It consisted of four emails targeting customers that purchased a smart thermostat but did not enroll in the EasyCool Demand Response offering. The four emails averaged an open rate of 47.10% and a click-through rate of 4.80%. Entering the demand response season, a pre-season email communication was sent in May to residential customers that were currently enrolled in the EasyCool offering. Additional email campaigns were deployed in August, September, and October, targeting customers that purchased smart thermostats or received them through home assessments, but did not enroll in EasyCool.

EasyCool is also offered on the residential online marketplace. In addition to a banner ad on the OLM site, customers have the option to get an instant $50 off the price of the thermostat if they choose the thermostat with EasyCool enrollment option at checkout. In addition, the offering was featured in a blog post in late June on the Entergy Newsroom with the additional mentions of Appliance Recycling and Peak Time Rebate, articles in the Circuit Newsletter as well as organic social posts on ENO Facebook and X (formerly Twitter) accounts. EasyCool was included in newsletter content provided for inclusion in City Council constituent newsletters and New Orleans Baptist Ministries newsletters.

Table 22.13: EasyCool Metrics

CHANNEL	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Email: Earth Day Lead Gen	April 2, 2024	840	449	57.90%	56	7.20%
Email: Earth Day DNO Remarket	April 9, 2024	339	64	18.90%	7	2.10%
Email: Earth Day DNC Remarket	April 9, 2024	90	61	67.80%	3	3.30%
Email: Earth Day Bonus New Creative/Messaging	April 24, 2024	850	395	50.30%	43	5.50%
Email: Earth Day Final Reminder	April 29, 2024	689	260	40.60%	38	5.90%
Pre-season letter	May 31, 2024	4,891	3,765	77.90%	71	1.50%
Email: Lead Gen: Circle of Savings	August 17, 2024	164	92	59%	12	8.00%
Email: Lead Gen: Unlock Extra Savings	September 9, 2024	390	138	38%	4	1.00%
Email: DNO Remarket	September 19, 2024	226	75	33.2%	7	3.10%
Email: Lead Gen: Turn your T-Stat into Cash	October 21, 2024	419	176	46%	4	1.00%
Email: DNO Remarket	October 28, 224	213	52	24.4%	4	1.90%

Energy Smart Online Marketplace

Cross promotion and targeted customer audiences were primary focuses of marketing efforts throughout PY14. Primary tactics included email marketing, blog, and newsletter content, Google Shopping ads, digital ads, homepage online store banners, direct mail distribution, and in-person outreach. These tactics created awareness for marketplace promotions, benefits of energy efficient products and educated customers on the Energy Smart portfolio as a whole home solution.

The option to pre-enroll in the EasyCool offering when purchasing an eligible smart thermostat from the online marketplace was added in PY13. In June PY14, the team launched a Customer Research Survey to continuously improve the customer experience and better understand opportunities within the EasyCool pre-enrollment process. The survey was sent to 198 customers and the results provided insights into customer awareness and understanding of the EasyCool option and additional information on the installation experience.

Table 22.14: EasyCool Customer Research Survey Emails

EMAIL NAME	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Lead Generation Email	June 12, 2024	198	75	44.07%	19	11.18%
Remarketing Email	June 19, 2024	177	66	43.4%	19	12.5%

Table 22.15: Online Marketplace Promotions

PROMOTION NAME	RUN DATES	PRODUCTS PROMOTED
WINTER HELPFULNESS PROMOTION	February 14- 29, 2024	Sensi smart thermostat, Sensi Touch 2 Smart Thermostats, Google Nest Thermostat, Google Nest Learning Thermostat
LEAP YEAR SAVINGS PROMOTION	February 15- 29, 2024	Indoor Water Savers and Specialty LEDs
BOGO PROMOTION	March 11- April 9, 2024	Free Simply Conserve Advanced Power Strip with purchase of ecobee or Sensi* thermostat
EARTH DAY PROMOTION	April 8- May 1, 2024	Simply Conserve Advanced Power Strip, Google Nest Thermostat, Google Nest Learning Thermostat, Sensi smart thermostat, Sensi Touch 2, ecobee3 lite, ecobee Enhanced, ecobee Premium, Honeywell Home Color 7 Day Thermostat, Honeywell Home T9 with Sensor Smart Thermostat
GOOGLE NEST LEARNING FOREVER PROMOTION	April 29- August 19, 2024	Google Nest Learning Thermostat
SPRING PROMOTION	May 2- June 12, 2024	Honeywell Home T9 w/ Sensor
MEMORIAL DAY PROMOTION	May 22- June 21, 2024	Sensi smart thermostat, Sensi Lite, Sensi Touch 2, Simply Conserve Tabletop Air Purifier
FATHER'S DAY/FOURTH OF JULY PROMOTION	June 13- July 8, 2024	Sensi smart thermostat, Sensi Lite, Sensi Touch 2
FOURTH OF JULY PROMOTION	July 1- 15, 2024	ecobee3 lite, ecobee Enhanced, ecobee Premium
FREE AIR PURIFIER GIVEAWAY I	June 12- August 19,, 2024	Simply Conserve Tabletop Air Purifier
SUMMER REMARKETING PROMOTION		
BACK TO SCHOOL SAVINGS PROMOTION	August 6- 20, 2024	Simply Conserve Tabletop Air Purifier and Advanced Power Strip
FREE REPLACEMENT FILTER COUPON OFFER	October 1-31,2024	Free Simply Conserve Replacement Air Filter with Purchase of qualifying product
ENERGY AWARENESS MONTH PROMOTION		
FREE AIR PURIFIER GIVEAWAY ||	November 1- December 31, 2024	Simply Conserve Tabletop Air Purifier
BLACK FRIDAY/ CYBER MONDAY PROMOTION	November 11- December 4, 2024	Simply Conserve Advanced Power Strip and Tabletop Air Purifier, Google Nest Thermostat, Google Nest Learning Thermostat, Sensi smart thermostat, Sensi Touch 2, ecobee3 lite, ecobee Enhanced, ecobee Premium, Indoor water savers
HOLIDAY PROMOTION	December 5- 31, 2024	Google Nest Thermostat, Google Nest Learning Thermostat, Sensi smart thermostat, Sensi Touch 2, ecobee3 lite, ecobee Enhanced, ecobee Premium, Standard LEDs

Table 22.16: Online Marketplace Metrics

EMAIL NAME	IN-MARKET DATE	IMPRESSIONS/ SENDS	CLICKS	CLICK-THROUGH RATE
Google Shopping Ads – Group 1	February 1, 2024	162,774	2,342	1.50%
Google Shopping Ads- Group 2	February 1, 2024	203,112	2,094	1.01%
Search Ads- Summer thermostats	June 13, 2024- July 31, 2024	3,636	444	12.21%
Display Ads- Energy Awareness Month				

Direct Mail Postcard- BFCM (Google Only)	November 20, 2024	4,501	n/a	n/a
Display Ads- BFCM (Google only)	November 11- December 3, 2024	1,466,020	1,173	.08%
Search Ads- BFCM (Google only)- Group 1	November 11- December 3, 2024	895	116	12.96%
Search Ads- BFCM (Google only)- Group 2	November 11- December 3, 2024	1,590	146	9.18%
Facebook-carousel Ad- BFCM (Google only)	November 26- December 3, 2024	169,929	1,289	.76%
Instagram-carousel Ad- BFCM (Google only)	November 26- December 3, 2024	23,580	229	.97%
Facebook- Story Ad- BFCM (Google only)	November 26- December 3, 2024	76,354	666	.87%
Instagram-Story Ad- BFCM (Google only)	November 26- December 3, 2024	9,036	88	.97%
Display Ads- Holiday promo		637,716	401	.06%
Paid Social- Holiday Promo	December 24- 30, 2024			

Table 22.17: Online Marketplace Email Metrics

Email	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Leap Year Savings– Lead Generation Email	February 16, 2024	57,045	14,500	25.7%	155	.27%
Leap Year Savings - Remarketing Email	February 22, 2024	9,095	2,211	24.86%	47	.53%
Leap Year Savings– Lead Generation Email	February 27, 2024	54,144	3,933	7.39%	187	.35%
BOGO Campaign – Lead Generation Email	March 26, 2024	56,799	15,389	27.39%	135	.24%
BOGO Campaign – Remarketing Email	April 3, 2024	27,260	3,509	12.93%	53	.2%
BOGO Campaign – Remarketing Email	April 3, 2024	18,177	1,643	9.09%	35	.19%
Earth Day Promo Campaign – Lead Generation Email	April 11, 2024	27,201	1,882	6.95%	82	.3%
Earth Day Promo Campaign – Lead Generation Email	April 11, 2024	18,147	1,466	8.12%	73	.4%
Memorial Day Promo Campaign – Lead Generation Email	May 29, 2024	54,742	3,671	7.96%	266	.49%
Memorial Day Promo Campaign – Lead Generation Email	May 29, 2024	44,233	2,825	7.71%	220	.50%
Summer thermostat Promo Campaign- Lead Generation Email	June 21, 2024	50,160	12,469	25.02%	228	.46%
Summer thermostat Promo Campaign- Remarketing Email	June 29, 2024	46,989	11,547	24.64%	162	.35%
Summer thermostat Promo Campaign- Remarketing Email	July 8, 2024	47,356	11,905	25.24%	395	.84%
Back to School savings– Lead Generation Email	August,15, 2024	14,979	2,890	19.44%	52	.35%
Back to School savings – Remarketing Email	August 20, 2024	14,643	2,634	18.07%	34	.23%
Black Friday/Cyber Monday - Lead Generation Email (Google only)	November 26, 2024	98,740	15,360	15.67%	99	.1%
Black Friday/Cyber Monday- Last Chance Email (Google only)	December 1, 2024	94,855	15,621	16.59%	73	.08%
Holiday promo- Lead Generation Email #1(LEDs only)	December 11, 2024	95,488	17,694	18.64%	144	.15%
Holiday promo- Last Chance Email #2 (LEDs only)	December 17, 2024	93,835	15,603	16.72%	147	.16%
Holiday promo- Lead Generation Email #3 (tStats only)	December 21, 2024	21,475	3,504	16.33%	4	.02%

In June, a free air purifier campaign was launched. The goal of this campaign was to engage with new customers by offering a limited quantity of free ENERGY STAR® certified tabletop air purifiers. This campaign specifically targeted a small audience of 12,233 customers who had not yet had a Home

Performance with ENERGY STAR assessment, were high energy users and lived in single-family homes. The campaign included email, direct mail postcard and handouts for community outreach events including the Hospitality Healthy Fair and National Urban League Conference. Due to the nature of the free air purifier offering and cleaner air health benefits, the promotion and the Energy Smart brand gained visibility to over 20,000 residents and attracted attention from a research study conducted by Tulane University. The promotion gained substantial traction, going viral across social media platforms such as Reddit, Meta, and X in late August leading to approximately 2,800 air purifiers being ordered in 6 days, with a total of 3,980 at the end of the promotion (almost doubling the original goal of offering 2,000 air purifiers. The success of the campaign enabled the team to plan and launch a second campaign in 2024 throughout the holiday season and will continue to be an essential part of strategy for 2025.

Table 22.18: Free Air Purifier I Campaign

CHANNEL	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Hospitality Heath Fair Event	June 12, 2024	500	n/a	n/a	n/a	n/a
Outreach cross promotional flyer	July 27, 2024	300	n/a	n/a	n/a	n/a
Direct Mail Postcard	August 5	2,706	n/a	n/a	n/a	n/a
Lead Generation Email (Group 1 - 2)	July 16, 2024	2,730	716	26.32	113	4.15%
Remarketing Email (Group 1 - 2)	July 18, 2024	2,438	433	17.79%	43	1.77%
Lead Generation Email (Group 3 - 8)	July 18, 2024	1,654	423	25.88%	50	3.04%
Remarketing Email (Group 3 - 8)	July 23, 2024	1,532	357	23.41%	30	1.97%
Lead Generation Email (Group 9 - 10)	July 19, 2024	4,230	1,098	26.53%	190	5.59%
Remarketing Email (Group 9 - 10)	July 25, 2024	3,763	612	16.31%	75	2%
Lead Generation Email (Group 11)	August 15, 2024	914	413	46.04%	126	14.05%
Remarketing Email (did not open)	August 16, 2024	8,647	2,219	25.82%	219	2.55%
Abandoned Cart Email	August 19, 2024	816	334	41.44%	78	9.68%

In July, the teams launched a remarketing campaign to reach customers who have previously had an A/C tune-up but have not yet installed a smart thermostat in their home. The campaign educated customers on the benefits of using an ENERGY STAR® smart thermostat and how using one could improve the home's cooling system. The campaign cross promoted the ways to save with a Home Performance with ENERGY STAR assessment and purchase a thermostat on sale through the online marketplace.

Table 22.19: Summer Remarketing Campaign

CHANNEL	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Direct Mail Postcard	August 9, 2024	3,320			41	
Email #1- Lead Generation	August 15, 2024	1,124	356	31.81%	22	1.88%
Email #2 – Remarketing	August 19, 2024	1,219	321	26.49%	12	.99%
Email #3- Did not open	August 26, 2024	1,032	242	23.68%	7	.68%
Email #4- Remarketing	August 27, 2024	938	192	20.67%	2	.22%

Beginning in October, a remarketing campaign was sent to customers who had claimed their free purifier in June- August. Eligible customers received a unique coupon code for a free replacement filter with purchase of a qualifying product on the marketplace, limited to the first 2,000 customers.

Table 22.20: Coupon offer for free replacement air filter Campaign

EMAIL NAME	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Email #1- Lead Generation	October 1, 2024	1,332	838	65.21%	225	17.51%
Email #2- Lead Generation	October 7, 2024	1,149	673	60.52%	135	12.14%
Email #3- Remarketing	October 15, 2024	1,058	409	38.95%	48	4.57%

In October, to support the Energy Awareness Month promotions, the team launched an email campaign tailored to two different audiences, customers who are eligible to purchase smart thermostats and those who are not. Additionally, each email was deployed with two versions for the subject line, to A/B test the messaging focus; version (a) subject line focused on free shipping, while version (b) focused on Energy Awareness Month. The emails focusing on free shipping, resulted in higher open rates and click-thru-rates.

Table 22.21: Energy Awareness Month Campaign (thermostat eligible customers)

CHANNEL	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Display ads		216,226			218	.10%
Email #1 (a)- Lead Generation	October 8, 2024	29,099	4,990	17.74%	114	.41%
Email #1 (b)- Lead Generation	October 8, 2024	28,267	4,264	15.8%	55	.2%
Email #2 (a)- Remarketing	October 15, 2024	28,842	5,306	18.64%	132	.46%
Email #2 (b)- Remarketing	October 15, 2024	27,951	5,355	19.44%	96	.35%

Table 22.22: Energy Awareness Month Campaign (non-thermostat eligible customers)

CHANNEL	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Email #3 (a)- Lead Generation	October 8, 2024	8,265	2,909	36.9%	27	.34%
Email #3 (b)- Lead Generation	October 8, 2024	6,839	1,440	21.8%	17	.26%
Email #4 (a)- Remarketing	October 15, 2024	7,691	1,544	19.53%	17	.22%
Email #4 (b)- Remarketing	October 15, 2024	6,777	1,424	21.11%	22	.33%

Table 22.23: Free Air Purifier II Campaign

EMAIL NAME	IN-MARKET DATE	IMPRESSIONS/ SENDS	AUDIENCE REACH/ OPENS	OPEN RATE	CLICKS	CLICK-THROUGH RATE
Organic social						
Email #1- Lead Generation (Abandoned cart pre-sale)	October 31, 2024	235	79	34.2%	26	11.26%
Email #2- Lead Generation (pre-sale)	October 31, 2024	2,301	588	25.77%	41	1.8%
Email #3- Lead Generation	November 8, 2024	96,198	19,361	20.21%	2,582	2.7%

Email #4- Remarketing	December 2, 2024	97,894	18,800	19.3%	1,474	1.51%
Email #5- Remarketing	December 19, 2024	78,937	10,599	13.51%	413	.53%
Email #6 – Last Chance	December 31, 2024	7,187	3,731	52.01%	512	7.24%

At the end of 2024, the online marketplace had reached 71,295 visits, an increase of 47.38% vs. PY13. The top 5 products ordered were the Simply Conserve Tabletop Air Purifier- Exclusive, Google Nest Thermostat, Simply Conserve Replacement Air Filter, Honeywell Home T5 Smart Thermostat, and the Simply Conserve Advanced Power Strip. Overall, in PY14 the marketplace reached 5,672 new customers, a 133.51% increase compared to PY13 and achieved a returning customer rate of 25.39% (23.54% in PY13) and a 11.08% conversion-rate average (7% in PY13).

Marketing Collateral

- General Energy Smart Overview Handout (English)
- Rebate Forms
    - A/C Tune-Up Rebate Form
    - Central A/C Rebate Form
    - Duct Efficiency Improvement Rebate Form
    - HPwES and MF Attic Insulation and Air Infiltration Reeducation Rebate Form
    - IQW Attic Insulation and Air Infiltration Reeducation Rebate Form
    - IQW Duct Efficiency Improvement Rebate Form
    - Air Purifier Rebate Form
    - Dehumidifier Rebate Form
    - Freezer Rebate Form
    - Heat Pump Water Heater Rebate Form
    - Pool Pump Rebate Form
    - Refrigerator Rebate Form
    - Smart Thermostat Rebate Form
    - Trade Ally Smart Thermostat Rebate Form
    - Water Cooler Rebate Form
    - Window A/C Rebate Form
- Customer Satisfaction Surveys
    - Home Performance with ENERGY STAR Satisfaction Survey
    - Income-Qualified Weatherization Satisfaction Survey
    - A/C Tune-Up Satisfaction Survey
    - Energy Smart Online Marketplace Satisfaction Survey
- Sensi Smart Thermostat Leave Behind
- HPwES and IQW Sorry We Missed You Door Hanger
- Residential ‘Open the door to savings’ Door Hanger
- Multifamily Sorry We Missed You Door Hanger
- Multifamily Landlord Permission Form
- Multifamily Direct Install Service Agreement
- Multifamily Program Sell Sheet
- Multifamily Tenant Leave Behind
- Multifamily Tenant Notification Flyer
- Retail Employee Education Flyer
- Air Purifier Rebate Landing Page
- Smart Thermostat Rebate Landing Page

- Dehumidifier Rebate Landing Page
- Water Cooler Rebate Landing Page
- Heat Pump Water Heater Landing Page
- Freezer Rebate Landing Page
- Refrigerator Rebate Landing Page
- Pool Pump Rebate Landing Page
- Window A/C Rebate Landing Page
- Trade Ally Rebate Forms Landing Page
- HERs Reports
- CEP Widget
- Vehicle Magnet
- Point of Purchase Signage

Marketing Tactics

- Owned media
    - Energy Smart website content
    - Email
    - Entergy organic social
    - Circuit e-newsletter content
    - Entergy Newsroom content
- Paid media
    - Print ads for Preservation in Print magazine
    - Digital search and display advertising
    - Digital shopping ads
    - Paid social media
- Direct mail
    - Postcards
    - Bill insert
- Community outreach
    - Energy efficiency kit materials
    - Neighborhood canvassing
- Appliance Recycling Campaign materials
- Air purifier Campaign materials
- Home Performance with ENERGY STAR® Campaign Materials
- A/C Solutions Campaign Materials
- Online Marketplace Promotions
- EasyCool Pre-Enrollment Customer Reminder Email
- Trade Ally Emails

Residential Customer Satisfaction

Understanding program performance and customer satisfaction are vital to the success of the Energy Smart program. The team surveyed customers to gauge satisfaction with various elements such as the program in general, process for participating, the staff or trade ally they worked with and their energy-efficient upgrade. The team reviews customer satisfaction survey results quarterly to ensure that program satisfaction remains high and continuously improves the customer journey. Customer satisfaction across all programs showed positive responses, with most customers highly likely to recommend Energy Smart to their friends or colleagues. Detailed customer responses highlighted their appreciation of the professionalism and knowledge of the Energy Advisor, their satisfaction with the offerings and their interest in additional opportunities to lower their bills and save more energy.

Across the residential offerings, customer satisfaction regarding the service, installation and safety averaged scores between seven and ten, with ten indicating very high satisfaction. The team will use the motivational responses received by customers in PY14 to inform strategies to increase customer engagement in PY15. These motivators included saving money on their utility bill, the no-cost direct install items and assessment and helping the environment. Customer home assessment report emails, appointment confirmation, and follow up emails will provide additional opportunities in PY15.

Table 22.24: Customer Satisfaction Survey Results – HPwES/IQW/MF

QUESTION	HPWES	IQW	MF
Overall, how satisfied are you with the offering?	8.3	8.6	9.8
How satisfied were you with the professionalism of the energy advisor?	8.9	8.6	9.8
How satisfied were you with the energy advisor's knowledge about the products installed and ability to answer your questions?	8.8	8.6	9.8
How satisfied are you with the safety measures taken by the energy advisor? (Used ladder, wore gloves, had on safety glasses, etc.).	8.9	8.5	10.0
How likely are you to implement changes recommended by the energy advisor?	8.8	8.9	N/A
How satisfied were you with the enrollment and scheduling process?	8.4	9.4	N/A
How likely is it that you would recommend the program to a friend or colleague?	8.7	9.0	N/A
Top motivation for participating in the offering.	Wanted to reduce my utility bill.	Wanted to reduce my utility bill.	Wanted to reduce my utility bill. Items and audit were free.

**Scoring is based on question response average.*

Table 22.25: EasyCool Customer Satisfaction Survey Results

QUESTION	EASYCOOL SCORES*
Overall, how satisfied are you with the offering?	9.2
How satisfied were you with the enrollment process?	9.6
How satisfied were you with the time it took to receive your incentive?	9.0
How likely is it that you would recommend the offering to a friend or family member?	9.3
What was your top motivation for participating in the offering?	Wanted to reduce my utility bill.

**Scoring is based on question response average*

Table 22.26: A/C Tune-Up Customer Satisfaction Survey Results

QUESTION	A/C TUNE-UP SCORES*
Overall, how satisfied are you with the A/C Tune-Up offering?	8.7
How satisfied were you with the professionalism of the trade ally?	8.8
How satisfied were you with the quality of service provided by your trade ally?	8.8
How satisfied were you with the enrollment and scheduling process?	9.0
How likely is it that you would recommend the program to a friend or colleague?	8.8
How satisfied were you with the trade ally's knowledge and ability to answer your questions?	8.9
How satisfied are you with the safety measures taken by the trade ally? (Used ladder, wore gloves, had on safety glasses, etc.)	9.0
Top motivation for participating in the offering.	Wanted to reduce my utility bill.

Table 22.27: Online Marketplace Customer Satisfaction Survey Results

QUESTION	ONLINE MARKETPLACE SCORES*
Overall, how satisfied were you with your Online Marketplace order and experience?	9.1
How satisfied were you with the item(s) you purchased from the marketplace?	9.2
How satisfied were you with the turnaround time it took to receive your item(s)?	9.2
How satisfied were you with the ordering process?	9.3
How likely is it that you would recommend the program to a friend or colleague?	9.2

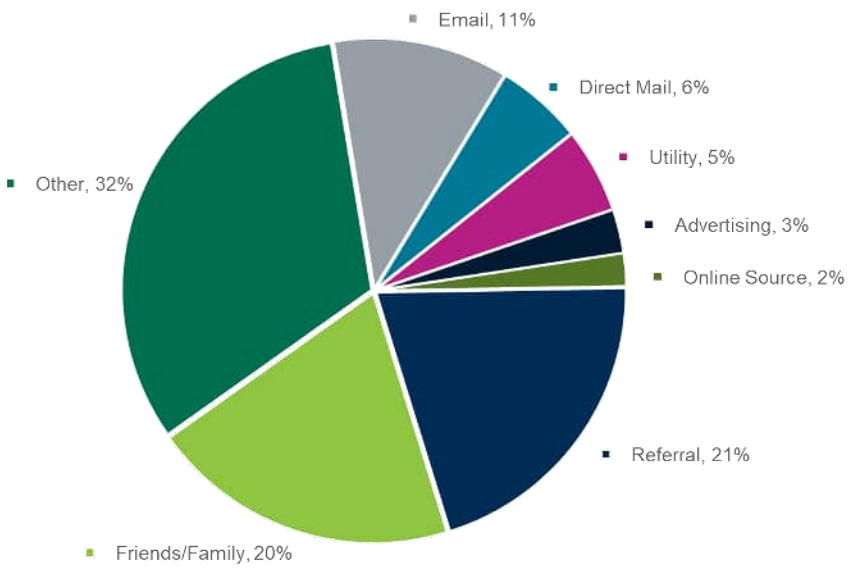
How likely are you to shop on the Energy Smart Online Marketplace again?	9.1
How satisfied were you with the ease of installing the item(s) ordered?	9.2
Top motivation for participating in the offering.	Items ordered were free/discounted.

Table 22.28: Appliance Recycling Customer Satisfaction Survey Results

QUESTION	AR&R SCORES*
Overall, how satisfied were you with your experience with the Energy Smart Appliance Recycling offering?	**8.8**
How satisfied were you with the scheduling process?	**9.4**
How satisfied were you with the team that removed your old refrigerator or freezer?	**9.4**
How likely are you to participate in other Energy Smart residential offerings?	**8.8**
How likely is it that you would recommend the program to a friend or family member?	**8.8**
What motivated you to participate in the offering?	**$50 rebate**

**Scoring is based on question response average.*

Graph 22.1: Lead Sources



*Other is a combination of Other/unidentified (27.37%) Event (1.51%), Community Partner (1.16%), Social Media (0.62%), Telemarketing (0.54%), Newsletter (0.19%), Door to Door Canvassing (0.31%) and TV (0.50%).

The Energy Smart team tracked residential customer participation using identified lead marketing sources for customers that included community events/outreach, tabling at customer care centers, email, friends and family/word-of-mouth marketing, direct mail, utility referrals, social media, the Energy Smart website and traditional advertising. The highest performing lead sources for PY14 included referral sources such as trade ally contractors and family and friends. Email and direct mail continued to be popular and consistent channels through PY14. The team will continue to expand customer reach via outreach, community engagement, and digital channels to drive traffic to the program website.

Planned or Proposed Changes

EasyCool Demand Response offering will be supported via email campaigns to customers who purchased t-stats or received them through free home assessments but have not yet enrolled in the offering; banner ad throughout the year on the residential online marketplace, promoted in residential marketing communications that market smart thermostats and paid/organic social media. A new tactic that will be implemented in PY15 is a post home assessment customer leave-behind with instructions on how to enroll your Sensi thermostat in the EasyCool Demand Response offering.

Appliance Recycling offering will be retired from the portfolio in PY15.

Across all residential offerings, the team will continue to focus on leveraging cross promotional opportunities with owned media platforms and the behavioral offerings as well as new tactics in PY15 such as utilizing a propensity model.

For the Home Performance with ENERGY STAR® and Income Qualified-Weatherization the team will continue to focus on cross promotional opportunities with local and community-based organizations and in person outreach. In addition, the team will be hosting new neighborhood community events. To help

support customers participating in these offerings and the A/C tune-up offering, the team will be implementing new customer communication notifications to help improve the customer journey.

A/C Solutions will be offering a new scheduling request form, allowing customers an additional way to participate to simplify the process.

Residential Appliances offering will continue to utilize point-of-purchase signs for qualified energy-efficient products. New tactics will include the launch of rapid rebates, an online form to simplify and speed up the rebate process for customers.

The Energy Smart Online Marketplace will continue to focus increased energy-saving opportunities with manufacturer promotions and launch new pilot offerings through the personalized offering platform, specifically for income qualified customers.

Community Outreach

The PY14 community outreach strategy consisted of partnering with existing and new community program partners to increase awareness and secure customer leads for program participation. The tactics used included attending live and virtual meetings run by community groups and small business associations, in-person tabling at community events and the two Customer Care Centers and neighborhood canvassing. The team offered flexible content options to community groups, ranging from five-minute briefings to 60-minute energy efficiency lessons for maximum community impact.

PY14 community outreach efforts resulted in Energy Smart participating in 118 events, reaching over 2,427 community members. During Q1 and Q2, community outreach was conducted at 44 events, gaining visibility with over 880 community members. Throughout Q3 and Q4, community outreach was conducted at 74 events, gaining visibility to over 1,557 community members. The Energy Smart team produced 1,000 program branded energy efficiency kits containing two LED Nite lights, two LED bulbs and an insert messaging free home assessment, for distribution at events. During PY14, over 600 kits were distributed. Additional branded promotional items utilized at events included pens, hot/cold packs, Koozies, recyclable notebooks, flower packs, hand sanitizers and jar grippers.

Several nonprofits and community groups hosted Energy Smart community outreach where staff presented at meetings or tabled at events. These groups included Entergy Customer Care Centers, Preservation Resource Center, Hoffman Triangle Neighborhood, HANO/ROSS, the City of New Orleans Office of Neighborhood Engagement, Dillard University, Urban League Health Expo and Baptist Ministries Celebration.

A soft launch of the PY15 Neighborhood Based Delivery Pilot was implemented in late Q4, targeting 155 homes in the Desire/New Florida neighborhood. Soft launch tactics included a direct mail and email campaign to those households, followed by neighborhood canvassing, distributing door hangers with home assessment messaging.

Commercial Marketing and Outreach

Highlights

During Q1 and Q2, the Energy Smart team launched the redesign and optimization of the Energy Smart website, developed new marketing communications and creative assets, rebranded existing collateral and implemented a media strategy focused on utilizing digital media tactics, for enhanced audience

targeting, better data measurements and improved conversion rates. Email campaigns were used to message offerings directly to Entergy New Orleans commercial customers as well as earned media from program partners.

Phase 1 of the Energy Smart website redesign was implemented in Q1 with a website discovery meeting between the agency partner and Energy Smart program team to understand programs needs and identify clear objectives for premium website functionality. The first step within Phase 1 was re-designing and simplifying the content on the business landing page as well as developing a new site map with consolidated pages and content to create an improved user experience.

The media plan in PY14 consists of digital media tactics such as site retargeting, dominant display, pre-roll, streaming TV, Search Engine Marketing (SEM), paid social and digital sponsorship packages with Biz New Orleans and Georges Media Group, Louisiana's largest *media* organization that is home to The Times-Picayune | NOLA.com, The Advocate, Gambit and the Acadiana Advocate.

January through April messaging focused on promoting Small Business Energy Assessments and the $9M Energy Smart fund. A variety of creative assets were developed to support these offerings. The team produced a :60, :30 and :15 animated video promoting the small business energy assessment offering, The :60 video was added to the website and the :30 and :15 videos were used for the April/May pre-roll media buy. In addition to the SBEA video, additional digital ad campaigns targeting small and large commercial customers were developed and rotated into the media schedule-four campaigns for SBEA and three for $9M Energy Smart fund.

In May, customer testimonials were added to the messaging mix. The team produced a :120, :30 and :15 video featuring the owner of Wakin'Bakin' about his positive experience with the Energy Smart program. The two-minute video was placed on the Energy Smart website and included in the sponsored content article on NOLA.com. The :30 video was included in the digital high impact unit that ran on NOLA.com on May 23. Two creative concepts for Wakin'Bakin' were developed for A/B testing purposes. One concept focusing on ease, the other on reducing costs. The concept focusing on ease performed better against the large C&I target while the concept focused on costs performed better against the small C&I target. The last customer testimonial produced and deployed in May was for the Biz New Orleans sponsorship. It was an article featuring the facility director for City Park Conservancy and Energy Smart trade ally Synergy Building Solutions, where they shared their positive experience working with the Energy Smart program for the BAS project completed at the Arbor Room, an event venue in City Park.

At the close of Q2, nine advertising campaigns were developed. The campaigns were:

- Laissez les bons temps rouler
- JoAnn's Café
- Reduce your Operating Costs?
- $9M Energy Smart fund, get your slice
- $9M Energy Smart fund, get your share
- Got time for your bottom line?
- City Park Conservancy testimonial
- Wakin'Bakin' testimonial – Easy concept

- Wakin'Bakin' testimonial – Reduced costs concept

Key takeaways from the month over month Google Analytics reporting shows that the $9M Energy Smart fund and JoAnn's Café campaigns that ran in April generated significant increases in impressions, clicks and conversions. Impressions were up 527.65%; clicks up 78.82%; and conversions up 33.91%. The launch of the Wakin'Bakin' campaign in May generated a month over month increase of 28.53% in conversions. Search Engine Marketing campaign has an average click thru rate of 14.74%, nearly 2.5% higher than the high end of the national average of 2-6%. The NOLA.com sponsored content article that ran in May, drove the most users to the business landing page.

Program marketing collateral assets underwent a refresh as well. New collateral assets such as sector sheets targeting restaurant, retail, grocery, and office commercial accounts were developed. These sector sheets provided content on energy waste per sector and the energy-saving measures and incentives available through the Energy Smart program. With the significant increase in A/C tune-up incentives, the Energy Smart team developed a fillable HVAC Tune-up application and deployed a series of A/C tune-up focused email campaigns in May and June. A Disclaimer of Warranties and Limitation of Liability form was created for commercial customers to sign prior to a direct installation of products from the Energy Smart program team. A customer handout promoting the Small Business Energy Assessment Referral Bonus was created for direct customer outreach. A New Construction Code Compliance overview and new construction prescriptive list launched in July.

The following existing collateral assets were rebranded to reflect the new branding guidelines: Commercial and Industrial Overview; Small Business Energy Assessment; Prescriptive Incentive List; Become a Trade Ally Overview; Tiered Trade Ally List; Small Business Direct Install Application; and the infographic messaging the total number of Entergy New Orleans customers served, kWh saved and total amount in incentives distributed since 2013. The rebranded case study template is currently in progress and will be ready in Q3. The Energy Smart commercial photo library was refreshed with new images from an April photo shoot at select businesses. These images consisted of photographing a small business energy assessment including interior and exterior shots of the businesses including their commercial kitchen and HVAC equipment.

The content for case studies spotlighting projects completed by Lycée Francais New Orleans, Southern University at New Orleans, and the New Orleans Ernest Morial Convention Center is completed and will be dropped into the rebranded case study template and distributed in Q3.

Earned media placements were secured with program partners during Q1 and Q2. Content for program partner websites, e-newsletters and organic social posts were utilized by Entergy New Orleans, New Orleans & Company, Downtown Development District, Mayor's Office of Nighttime Economy and Verite News. Verite News, a new program partner, reposted the Biz New Orleans sponsored content article about the City Park project completed through Energy Smart as well as placing the $9M fund digital creative on their website during the month of June.

Twenty-two targeted email campaigns were deployed throughout Q1 and Q2. During the period of January through April, email messaging focused on promoting the Small Business Energy Assessment and the $9M Energy Smart fund. The target audience for the SBEA focused emails were small C&I accounts. The target for the $9M Energy Smart fund emails were large C&I accounts. In May, with the increase in A/C tune-up incentives, combined with summer on the horizon, the messaging priority shifted to promoting A/C tune-ups. The target audience for this email campaign was both small and large C&I

accounts. Overall, the C&I email open rates exceeded the “all industries category” national benchmark of 37.7%. Seven of the email campaigns click thru rates were on par or exceeded the “all industries category” national benchmark of 2%.

In April, the marketing team added a “How did you hear about this offer?” field to C&I webforms enhancing data tracking capabilities and providing deeper insights into traffic sources and user engagement. Throughout the year, 167 Small Business Energy Assessment webform requests were received, with a notable increase from 67 in the first half of the year to 100 in the second half-an uptick of 33 requests. Email as the primary source of awareness was cited in approximately 110 submissions from April-December. Additionally, the request a call from an Energy Advisor webform totaled 168, rising significantly from 55 in Q1/Q2 to 113 in Q3/Q4, an increase of 58 submissions. Of these, 50 requests originated from email communications, while 48 were driven by word-of-mouth referrals. Meanwhile, the project inquiry forms saw a total of 40 submissions, with 36 in Q1/Q2 and only four in Q3/Q4.

Following Q2, the Energy Smart marketing and outreach team decided to eliminate the project inquiry form, as excessive forms and call-to-action options on the website were leading to higher abandonment rates.

Eighteen targeted email campaigns were deployed throughout Q3 and Q4 aligning and supporting organic and paid media efforts. During the period of July through December, email messaging focused on promoting the Small Business Energy Assessment and the Small Business Energy Assessment Referral Bonus. The target audience for the SBEA focused emails were small C&I accounts. The target for the SBEA referral bonus emails were small C&I accounts that previously completed a SBEA with Energy Smart. During the period of October through December, the team expanded the target audience for email campaigns to both small and large C&I accounts. The messaging shifting to align with Energy Smart’s commercial customer testimonial campaigns for Rayne Church and a countdown of the Energy Smart funds remaining from the original $9M.

The following case studies were completed in Q3: Southern University at New Orleans, Convention Center and the Arbors on the lake. Additional collateral including a New Construction code compliance overview and prescriptive incentive were also created.

Google Analytics reporting shows that the business and small business energy assessment landing pages generated the third and fourth highest sessions on the Energy Smart website in PY14. The landing page reporting shows the first page a visitor lands on when they visit the website and how many visitors land on each page. Key takeaways from quarterly Google Analytics reporting shows that the businesses landing page generated double the sessions in Q3/Q4 from Q1/Q2.

Email Reporting

Table 22.29: Commercial and Industrial Email Results

TARGET	OFFERING	IN-MARKET	IMPRESSIONS/SENDS	REACH/OPENS	OPEN RATE	CLICKS	CTR
Small C&I	SBEA	Jan 15	11,248	4,556	49.3%	89	1.1%
DNO's of 1.15	SBEA	Jan 20	6,430	884		33	
C&I Facility Directors	$9M Energy Smart Fund	Jan 29	437	130	38.5%	9	2.1%
DNO's of 1.29	$9M Energy Smart Fund	Feb 1	304	37		0	
Leads from Applications	$9M Energy Smart Fund	March 4	1,001	405	61.2%	35	6%
DNO's from 3.4	$9M Energy Smart Fund	March 11	451	117		7	
Small C&I	SBEA	March 20	9,797	4,360	54.2%	48	.6%
DNO's of 3.20	SBEA	March 25	5,002	732		9	
Small C&I	SBEA	April 9	9,754	3,763	51.7%	50	.6%
DNO's of 4.9	SBEA	April 16	5,500	1,046		7	
Large C&I	$9M Energy Smart Fund	April 9	203	51	38.5%	5	5%
DNO's of 4.9	$9M Energy Smart Fund	April 16	129	19		4	
Small C&I	SBEA	April 23	9,730	3,622	44%	141	2%
DNO's of 4.23	SBEA	April 30	3,380	435		40	
Facility Contacts; Leads from Applications; Large C&I	$9M Energy Smart Fund	April 23	1,498	465	50.5%	103	16.9%
DNO's of 4.23	$9M Energy Smart Fund	April 30	692	198		118	
C&I	A/C Tune-up Incentives	May 14	4,919	1,514	33.3%	85	1.9%
DNO's of 5.14	A/C Tune-up Incentives	May 21	2,930	670	22.9%	210	7.2%
C&I	A/C Tune-up Incentives	May 28	4,895	1,625	42.7%	222	5.2%
DNO's of 5.28	A/C Tune-up Incentives	May 31	2,943	291		11	
DNO's & clicks of 5.28 and 5.31	A/C Tune-up Incentives	June 4	2,779	482	17.4%	306	11.1%
DNO's of 6.4	A/C Tune-up Incentives	June 11	1,978	98	5%	5	.3%
Small C&I customers that completed a SBEA	SBEA Referral Bonus	July 8	125	73	67%	3	2.8%
Small C&I customers that completed a SBEA	SBEA Referral Bonus Remarket DNC	July 15	124	72	66.7%	5	4.6%

Small C&I customers that completed a SBEA	SBEA Referral Bonus	July 24	124	67	60.9%	1	.9%
Small C&I	SBEA	August 1	336	141	49.5%	7	2.5%
Small C&I	SBEA	August 7	261	135	51.9%	14	5.4%
Small C&I	SBEA Remarket DNO	August 13	147	32	21.8%	9	6.1%
Small C&I	SBEA Remarket + Referral Bonus	August 29	331	137	49.3%	7	2.5%
New Small C&I list	SBEA	September 5	692	304	53.3%	33	5.8%
New Small C&I list	SBEA	September 10	686	204	35.9%	8	1.4%
Small C&I list from Q1/Q2	SBEA	October 4	6,567	3,021	49.3%	80	1.3%
Small C&I list from Q1/Q2	SBEA Remarket + Referral Bonus	October 9	6,623	2,604	40.3%	75	1.20%
Large C&I	Rayne Church	October 11	642	219	38.7%	45	8%
Small C&I	Rayne Church	October 11	6,581	2,603	40.4%	128	2%
Small and Large C&I	Energy Awareness Month	October 16	6,940	2,898	43.1%	349	5.2%
Small and Large C&I	$4M Remaining	November 20	7,101	2,390	34.8%	156	2.3%
Small and Large C&I	$4M Remaining Remarket	November 25	6,888	2,229	33.5%	50	.8%
Small C&I	SBEA Holiday	December 9	6,532	1,923	30.3%	52	.8%
Small C&I	SBEA Holiday	December 16	6,516	2,033	32.1%	46	.7%

Webform Request Reporting

Table 22.30: How did you hear about this offering?

HOW DID YOU HEAR ABOUT THIS OFFERING?	PROJECT REQUEST	REQUEST A CALL FROM AN ENERGY ADVISOR	SMALL BUSINESS ENERGY ASSESSMENT REQUEST
Bill Insert	1	4	
Email	23	48	95
Energy Smart Representative	3	17	19
Entergy Representative	1	-	-
Online ad	1	20	7

Other	5	13	23
Print ad	-	6	2
Social media	1	8	-
Trade Ally/Contractor	-	8	3
TV ad	-	1	
Word of mouth	4	45	23

- Other:
  - Google Search
  - Entergy community meeting
  - Neighbor
  - New Orleans Downtown Development District
  - Landlord
  - Thrive
  - Entergy customer service
  - Entergy online
  - Family member
  - Previously participated with Energy Smart

Table 22.31: Project Site Zip Codes from webform requests

** zip codes were included in priority census tract.*

ZIP CODE	PROJECT REQUEST COUNT	REQUEST A CALL FROM AN ENERGY ADVISOR	SMALL BUSINESS ENERGY ASSESSMENT REQUEST
70112*	2	5	3
70113*	4	9	15
70114*	3	5	5
70115*	1	9	15
70116*	1	7	5
70117*	7	21	18
70118	4	10	8
70119*	8	19	31
70121	0	0	2

70122	3	15	12
70123	0	1	1
70124	0	4	5
70125*	3	7	5
70126*	1	3	5
70127*	0	7	9
70128	0	5	8
70129*	1	3	4
70130	1	15	15
70131	0	2	7
70170	0	1	0
70174	0	1	0

Brand Messaging

Table 22.32: Search Engine Marketing Results

Reporting Period: Launch to June 30, 2024

MONTH	IMPRESSIONS	CLICKS	CTR	CONVERSIONS
March	983	163	16.58%	22
April	1361	166	12.20%	22
May	1,287	213	16.67%	25
June	1,554	227	14.61%	35
Total	*5,176*	*769*	*14.86%*	*104*

Table 22.33: Top 5 Keywords by Clicks

Reporting Period: Launch to June 30, 2024

KEYWORD	CLICKS
energy smart business	368
energy efficiency assessment	61
energy audit	52
energy assessment	48
energy efficiency programs for businesses	38

Table 22.34 Top 5 Keywords by Conversions

Reporting Period: Launch to June 30, 2024

KEYWORD	CLICKS
energy smart business	64
energy efficiency incentives for businesses	9
energy assessment	8
commercial energy rebates	5
energy efficiency assessment	3

Table 22.35: Commercial and Industrial Bill Insert

In-market: September 1-30, 2024

BILL INSERT	QR CODE SCANS
Front: Small Business Energy Assessment	43
Back: General Business	35

Small Commercial
JoAnn's Café

Table 22.36: JoAnn SBEA Paid Media

TACTIC	IMPRESSIONS/VIEWS	CLICKS	CTR	CONVERSIONS
Display				
Dominant Display **Target small biz** **(April 1 – May 19)**	129,887	151	.12%	106
Biz Nola banner ads **(April 1 – May 19)**	60,409	115	.19%	N/A
Video				
Pre-roll **(April 15 – May 15)**	101,998	169	.17%	79
Streaming TV **Large screen** **(June 28 – August 1)**	58,633	26	Missing from agency reporting, we received completion rate.	23
Streaming TV **Small screen** **(June 28 – August 1)**	39,054	70	Missing from agency reporting, we received completion rate.	38

Rayne Memorial United Methodist Church

Table 22.37: Rayne Church Paid Media

September 11 – November 30

TACTIC	IMPRESSIONS/VIEWS	CLICKS	CTR	CONVERSIONS
Display & Retargeting				
Dominant Display **Target small biz** ***(September 24 – October 31)***	58,385	97	.17%	84
Dominant Display **Target C&I Businesses - $9M messaging** **(October)**	58, 217	96	.16%	N/A
Dominant Display Retargeting **(October)**	50,322	103	.2%	N/A
Biz Nola Banner Ads ***(October)***	64,930	146	.22%	N/A
Sponsored Content Ads				
24 Hour High Impact Unit w/ :30 video ***(September 30)***	81,617	171	.21%	N/A
Article Promo NOLA.com banner ads ***(September 18 – October 17)***	100,882	92	.09%	N/A
Business Insider Newsletter Banner Ads ***(Sep 23 – Oct 9)*** ***(Oct 31 – Nov 30)***	159,114	21,428	1.5%	N/A

On-page Banner Ads on NOLA.com ***(September 18)***	9,653 impressions	18	.19%	N/A
Co-branded Email ***(November 11)***	8,905 views	1,076	2.15%	N/A
Biz New Orleans **Target C&I Businesses** **(November 20)**	Missing from agency reporting	Missing from agency reporting	82	N/A
Sponsored Content				
Sponsored Article	3,600+ article reads	23	N/A	N/A
Facebook Article Promo ***(September 19)***	49,163 views	1,642	3.34%	N/A
Quarter Page Ad and Article in the Times Picayune **(September 11)**	32,056	23	N/A	N/A
Quarter Page Ad and Article in the Times Picayune **(September 22)**	32,056	Missing from agency reporting	N/A	N/A

Table 22.38: Rayne Church Organic Media

SOURCE	MESSAGING	MEDIUM/PLATFORM	IN-MARKET
Entergy Newsroom	Historic New Orleans church sees cost savings with smart thermostats	Article/Blog	September 18, 2024
Entergy New Orleans	Historic New Orleans church sees cost savings with smart thermostats	Facebook	September 18, 2024
Entergy Newsroom	Energy Awareness Month: Energy Smart offers $5M in energy-saving upgrades to local businesses	Press Release	October 9, 2024
Entergy New Orleans	Energy Smart is offering $5 million dollars in energy-saving upgrades for businesses in Orleans Parish	Facebook	October 9-30, 2024

Entergy New Orleans	Energy Awareness Month: Energy Smart is offering $5M remaining for energy-efficiency upgrades for local businesses	Facebook	October 9-30, 2024

Table 22.39: Rayne Church Earned Media

SOURCE	MESSAGING	MEDIUM/PLATFORM	IN-MARKET
EE Online	Historic New Orleans church sees cost savings with smart thermostats	Press Release	October 9, 2024
Market Screener	Historic New Orleans church sees cost savings with smart thermostats	Press Release	October 9, 2024
Public.com	Historic New Orleans church sees cost savings with smart thermostats	Press Release	October 9, 2024

Large Commercial

City Park

Table 22.40: City Park Case Study Paid Media

TACTIC	IMPRESSIONS/VIEWS	CLICKS	CTR	CONVERSIONS
Sponsored Content Ads				
Article deployed in Biz Nola e-newsletter **(June 7 & June 14)**	12,686	104	.08%	N/A
Sponsored Content				
Facebook Article Promo **(6/5 & 6/21)**	323 738 LinkedIn, 467 Facebook	N/A	N/A	N/A

Beat the Heat

Table 22.41: Beat the Heat Display Paid Media

TACTIC	IMPRESSIONS	CLICKS	CTR	CONVERSIONS
Dominant Display **Target small biz** *(July – September)*	118,285	171	.14%	166
Biz Nola banner ads *(July – September)*	108,932	387	.2%	N/A
Retarget "Beat Heat" (June 7 – Sept. 23)	145,538	285	.20%	N/A

$9M Remaining

Table 22.42: 9M Energy Smart Fund Paid Media

TACTIC	IMPRESSIONS	CLICKS	CTR	CONVERSIONS
Dominant Display **Target C&I** ***(April 1 – May 17)***	129,893	124	.1%	N/A
Biz Nola banner ads ***(April 1 – May 19)***	59,149	121	.2%	N/A
Retarget ***(March 1 – June 6)***	130,885	306	.23%	N/A

Wakin' Bakin

Table 22.43: Wakin Bakin Paid Media

TACTIC	IMPRESSIONS/VIEWS	CLICKS	CTR	CONVERSIONS
Sponsored Content Ads				
24 Hour High Impact Unit Ad w/ :30 video **(May 28)**	109,236	185	.17%	N/A
Article Promo NOLA.com banner ads **(May 19- June 19)**	101,004	497	.49%	N/A
Business Insider Newsletter Banner Ads **(May 19-June 19)**	194,358	39	Missing from agency reporting, they gave the open rate. Need CTR.	N/A
On-page Banner Ads on NOLA.com **(Posted May 19)**	9,653	18	.19%	N/A
Co-branded Email **(Deployed May 20)**	7,781 views	1,168	2.34%	N/A
Sponsored Content				
Sponsored Facebook Article Promotion **(Posted May 24)**	1,234 article reads 58,912 Facebook post views	3,470	5.89%	N/A
Sponsored Quarter Page Ad and Article in the Times Picayune **(Published May 19)**	32,056 circulation	N/A	N/A	N/A

Display – A/B Testing				
Dominant Display "Easier" – Best Performer **(May 17- June)**	60,691	116	.19%	N/A
Dominant Display **"Lower Cost"** **(May 17 – June)**	60,854	91	.15%	N/A
Biz Nola "Easier" **(May – June)**	42,291	84	.19%	N/A
Biz Nola "Lower Cost"- Best Performer **(May – June)**	45,796	97	.2%	N/A
Streaming TV				
Big Screen **(June)**	51,987	6	Missing from agency reporting, we received completion rate. Need CTR	5
Small Screen **(June)**	34,633	50	Missing from agency reporting, we received completion rate. Need CTR	15

Trade Ally

Table 22.44: Trade Ally Newsletters and Emails

MESSAGE	IN-MKT DATE	SENDS	OPENS	OPEN RATE	CLICKS	CLCK-THRU RATE
Increase Incentives	January 17	1,360	532	53.5%	50	4.5%
Increased Incentives to DNO's of Jan 17	January 20	754	141		6	
Dialed-up Incentives	April 2	453	161	49.9%	14	4.1%
Dialed-up Incentives to DNO's of April 2	April 9	276	57		4	
May 28 Sales Training	May 7	205	89	44.5%	8	4%
Reminder: May 28 Sales Training	May 14	205	88	56.5%	4	8.5%
Resend of May 14 to DNO's	May 21	114	26		13	
High-Performance HVAC System Training	June 4	185	103	64.4%	4	22,8%
Resend of June 4 to DNO's	June 7	78	14		0	
Q2 Newsletter	June 17	200	100	57.5%	22	13%
Resend of June 17 to DNO's	June 20	114	13		0	
New Construction Code Compliance Update Announcement	July 16	183	90	50.6%	6	3.4%
New Construction Code Compliance Update Announcement Remarket	July 24	182	67	37.9%	2	1.1%

Q3 Newsletter	September 25	162	91	57.6%	8	5.1%
Q3 Newsletter Reminder	September 30	162	76	48.4%	13	8.3
Building Automation Invitation	October 15	350	164	49.1%	27	8.1%
Marketing Incentive Launch	October 31	93	61	67.8%	17	18.9%
End of Year Closeout Reminder	December 17	102	44	44%	0	0%
Q4 Newsletter/ 2025 Kick-off awards invitation	January 3	120	60	52.2%	5	4.3%

Marketing Tactics

- Animations/Video
- Behavioral pre-roll
- Bill insert
- Customer testimonials
- Email
    - Co-branded
    - Owned
    - Paid
- Print ads
    - Entergy New Orleans bill insert
    - Sponsored article
- Digital ads
    - Banner
    - E-Newsletter
    - Display
    - Site retargeting
    - Sponsored article
    - Streaming TV
- Social posts
    - Organic
    - Paid
- Press releases
- Paid sponsorships
    - Love Your City
    - FORWARD green sponsorship
    - President’s cup sponsorship
- Search Engine Marketing
- Earned media
    - Entergy New Orleans

- Organic social
- Newsroom blog posts

Commercial Customer Outreach

In PY14 the Energy Smart commercial outreach team conducted customer outreach with 425 large and small commercial customers. That number represents a 18% increase compared to PY13. Customers came from a segment mix of hotels, universities, city government, economic development organizations, industrial service providers, contractors/real estate developers, food and beverage and retail stores.

Commercial customers were reached through multiple outreach tactics that included Energy Smart hosted seminars and lunch and learns, attending local workshops and business conferences, speaking engagements at business association and city government organization meetings and continuous engagement with ENO Customer Service Managers. In the first half of PY14, the Energy Smart team hosted the Energy & Water Conservation Summit designed for facility directors and trade allies. The summit was held on March 13 and had guest speakers from Powers, Ochsner, S&WB, Tulane, Eskew DumezRipple and Harris Energy. On March 27, the Energy Smart team spoke at the Greater New Orleans Hotel and Lodging Association annual meeting. On June 27, the Energy Smart team hosted a High-Performance HVAC training, led by Harris Energy, for facility directors and trade allies. In the second half of PY14, the Energy Smart team attended workshops such as Finance New Orleans Resilient New Orleans Innovation Challenge on July 1, GNO Inc. Clean Energy Funding Seminar on July 12 and the City Building Energy Benchmarking Forum on August 27. The Energy Smart team hosted a lunch and learn on September 18 for the Orleans Parish School Board and then another on October 4 for the American Institute of Architects, New Orleans Chapter. Throughout the year, the Energy Smart team attended and presented program updates during the monthly City of New Orleans Economic Development calls which were attended by representatives from various city organizations.

As a sponsor of Love Your City's 2025 Work for the Future campaign, the Energy Smart team participated in three business targeted events throughout PY14. The first event, the Work for the Future Kickoff campaign, was held on April 21 where the Energy Smart team attended the Impact Officer meeting and tabled at the Earth Day Celebration. The remaining Officer Impact Roundtable events were held on July 30 and October 17. In addition to the Love Your City Sponsorship, Energy Smart sponsored the October 4 Association Builders and Contractors President's Cup Golf Tournament at Bayou Oaks, located in City Park. The sponsorship package provided the Energy Smart commercial outreach team to table at this event and interact with potential business customers.

In Q4, the Energy Smart program team officially launched a local chapter of the Association of Energy Engineers (AEE) on December 9, called the Bayou Chapter. The AEE Bayou Chapter is a clean energy networking group bringing together energy professionals that work in energy efficiency and renewable energy, with a mission to help move Louisiana towards a clean energy future.

Table 22.45: Customer Outreach

DATE	CUSTOMER
1/3/2024	City of New Orleans Economic Development
1/8/2024	Heroes of New Orleans
1/9/2024	Thrive NOLA
1/9/2024	Green Coast
1/10/2024	The Capulet

1/12/2024	Define Your Dwelling
1/17/2024	David Rack
1/18/2024	Energy Smart Trade Ally Kickoff and Awards
1/22/2024	Circle Auto Electric
1/23/2024	New Orleans & Company
1/23/2024	Georgetown Apartments
1/23/2024	Greater Asia Baptist Church
1/24/2024	Hotel Storyville
1/25/2024	St Augustine High School
1/26/2024	St. Bernard Drugs
1/30/2024	One Canal Place
1/31/2024	EMR - Southern Recycling
1/31/2024	Xavier University
2/1/2024	Marriot Warehouse Arts District
2/1/2024	LSU IAC Carrollton Water Plant
2/5/2024	Hilton Riverside
2/5/2024	Trinity Episcopal
2/6/2024	Crown of Life Lutheran
2/6/2024	Life of Christ Christian Academy
2/7/2024	City of New Orleans Economic Development
2/7/2024	Café Bon Ami
2/7/2024	Merchant House
2/8/2024	Alliance for Multispecialty Research
2/14/2024	Durio's House of Style
2/15/2024	Fair Zone 2
2/16/2024	GSA - Ameresco
2/16/2024	The 8th Wonder Barbershop
2/19/2024	Louisiana Pizza Kitchen
2/20/2024	Mayer Building Company
2/22/2024	Textron
2/23/2024	Split Second Foundation
2/27/2024	Reily Foods
2/27/2024	Touro Synagogue
2/27/2024	Spin Zone
2/28/2024	Q & C Hotel
2/29/2024	Desire Square Community Housing
3/1/2024	Dalkia - Hilton Riverside RCx Study
3/1/2024	Louisiana Pizza Kitchen UPT
3/4/2024	Thrive 9th Ward
3/5/2024	City of New Orleans Economic Development
3/6/2024	Original Liuzza's
3/7/2024	Homewood Suites
3/12/2024	CCS Realty
3/12/2024	People Program
3/13/2024	Energy and Water Conservation Summit

3/13/2024	Undergrowth Coffee
3/14/2024	Multi-Studio
3/14/2024	The Rink
3/15/2024	GSA - Ameresco
3/18/2024	Homewood Suites New Orleans
3/18/2024	New Orleans & Company
3/18/2024	Advanced Allergy Associates
3/18/2024	Perch
3/20/2024	HNOC Williams Research Center
3/20/2024	Fire Station Training Facility
3/26/2024	New Orleans & Company
3/27/2024	Greater New Orleans Hotel and Lodging Association Annual Meeting
3/28/2024	Xavier University
3/29/2024	GSA - Ameresco
4/1/2024	Danny's Creole Kitchen LLC
4/2/2024	City of New Orleans Economic Development
4/2/2024	Cotton Mill Condos
4/3/2024	Louisiana Specialty Drinks
4/3/2024	Le Parc Salon
4/4/2024	528 No. Rampart St. Condominium Association
4/5/2024	Star Service Meeting
4/5/2024	Blue Dot Donuts
4/5/2024	Cut Loose Hair Studio
4/8/2024	Skin Body Health Inc.
4/8/2024	Mom's Mini Mart
4/8/2024	Smoothie King
4/9/2024	The Windsor Court Hotel
4/11/2024	Hotel Provincial
4/11/2024	COTE Happy Hour
4/11/2024	Together New Orleans
4/11/2024	Salem Church
4/12/2024	Multi-Studio
4/12/2024	GSA - Ameresco
4/12/2024	Odyssey House
4/17/2024	Eclectic Home
4/17/2024	Ricard's INC
4/18/2024	Apollo Marine Specialties, Inc
4/19/2024	Euclid Records
4/22/2024	LYC & Hilton Riverside - Earth Day Event
4/22/2024	Touches by Tircuit - The Hair Studio
4/23/2024	Breads on Oak
4/23/2024	Downman Urgent Healthcare Clinic
4/23/2024	St. Peter Claver School
4/24/2024	Benson Tower
4/26/2024	GSA - Ameresco

4/26/2024	Cambria Hotel
4/29/2024	Bomb Azz Nailz
4/30/2024	Marriott Hotel
4/30/2024	Mount Olivet Episcopal Church
5/1/2024	Ace Hotel
5/1/2024	Hotel Santa Maria
5/2/2024	BelleGarde Bakery
5/3/2024	Vote
5/6/2024	Hilton Riverside
5/6/2024	Derma Lounge LLC
5/7/2024	City of New Orleans Economic Development
5/7/2024	Swoop's
5/9/2024	Audubon Condos
5/9/2024	111 Audubon St Common Areas / River District Operations Manager
5/9/2024	Restore Louisiana Grant - Public Hearing
5/9/2024	Nonnos
5/9/2024	Star Plus Barber and Beauty
5/10/2024	GSA - Ameresco
5/13/2024	Xavier University
5/13/2024	201 St Charles Office Tower
5/13/2024	Juan's Flying Burrito
5/15/2024	Cabrini HS
5/15/2024	Community Book Center
5/15/2024	Jolly Kids Academy
5/16/2024	Greater Salvation
5/16/2024	Catahoula Tattoo
5/20/2024	The Bottle Factory Hotel
5/20/2024	HS Beverage Inc / NOLA Distillery
5/23/2024	Federal Reserve Bank
5/23/2024	New Orleans Office of Economic Development
5/28/2024	Nola Baptist Seminary
5/28/2024	Sales Training - Delgado
5/28/2024	SWBNO
5/29/2024	St Paul’s Lutheran
5/29/2024	Loyola University
5/29/2024	The Nieux Company
5/29/2024	Adam's Food Store
5/29/2024	Hahn Enterprises Inc
5/30/2024	St Mary’s Dominican HS
6/5/2024	City of New Orleans Economic Development
6/5/2024	NOLA Business Ecosystem
6/6/2024	Dillard University
6/7/2024	BlueGreen Club la Pension
6/10/2024	Hilton Riverside
6/10/2024	Muriel's

6/14/2024	GSA - Ameresco
6/14/2024	The Daily Beet Restaurants
6/17/2024	Wasabi
6/18/2024	Chamber of Commerce Event
6/20/2024	Hilton Riverside
6/26/2024	Chamber of Commerce Event
6/27/2024	High Performance HVAC Training
6/28/2024	Federal Reserve Bank
6/28/2024	Fischer Gambino
7/1/2024	Finance New Orleans - Resilient New Orleans Innovation Challenge
7/1/2024	M&J Soul food
7/1/2024	Swanson Insurance
7/1/2024	Beauty and Beyond
7/2/2024	Verrets Lounge
7/3/2024	Maison
7/3/2024	Innocence Project New Orleans
7/3/2024	Dragon's Den
7/5/2024	LAB Harris
7/8/2024	Moses Engineers
7/8/2024	Gentilly Mail & Copy
7/8/2024	Superior Fades
7/9/2024	The Nieux Company
7/10/2024	City of New Orleans Economic Development
7/10/2024	NOLA Business Ecosystem
7/10/2024	Acme Oyster
7/11/2024	Hilton Riverside
7/11/2024	Cayman Holdings
7/11/2024	Motel 6
7/11/2024	Med-Pro Pharmacy
7/12/2024	GSA - Ameresco
7/12/2024	GNO Inc. Clean Energy Funding Seminar
7/17/2024	Windsert secondary window manufacturer
7/18/2024	Bernhard Engineers
7/19/2024	Stem NOLA
7/24/2024	Seimens
7/25/2024	Multi-Studio
7/25/2024	Windsert Secondary Window manufacturer
7/26/2024	AEE - Chapter Intro Meeting
7/30/2024	Seimens
7/30/2024	LYC Impact Officer Roundtable
7/30/2024	111 Audubon St. Condominium Association
7/30/2024	Mes Amis Quilt Shop
7/31/2024	Office of Resiliance and Sustainability
8/1/2024	Danielle Lesslie (Property Mgr at 1615 Poydras and 1340 Poydras)

8/1/2024	Chamber of Commerce Event
8/1/2024	Amera Inc
8/1/2024	Zesty Creole
8/2/2024	New Orleans Exchange Office Tower - meeting with assist Chief Engineer
8/2/2024	Etta Holding
8/2/2024	Propeller
8/5/2024	Lagniappe Fitness
8/6/2024	Lagniappe Consulting Engineers
8/7/2024	Entergy CSM's
8/7/2024	City of New Orleans Economic Development
8/7/2024	NOLA Business Ecosystem
8/8/2024	NOFD Warehouse
8/8/2024	St. John Lutheran School
8/9/2024	GSA - Ameresco
8/9/2024	Dodie's Jazz Club
8/9/2024	The Building
8/12/2024	Quarter House Resort
8/13/2024	Bayou Beer Garden
8/13/2024	Oak & Ale
8/13/2024	Holy Ground Irish Pub
8/14/2024	P&J Oyster Company
8/14/2024	Headquarters Barbershop
8/15/2024	ReNew Orleans Construction
8/15/2024	Henry Howard Hotel
8/15/2024	First Evangelist MBC
8/16/2024	Urban Express
8/19/2024	VIET
8/19/2024	Best Way Inn & Suites
8/20/2024	Bobby Schoegel VP of Hertz Group
8/22/2024	Christina Donahue- Property Manager 400 Poydras
8/22/2024	Danny's Seafood
8/22/2024	Blackburn Tots & Toddlers
8/23/2024	Crescent City Pharmacy
8/23/2024	English Turn Property Owners Association
8/26/2024	AEE - Chapter Intro
8/27/2024	ENO CSM Meeting
8/27/2024	City of NO Building Energy Benchmarking Forum
8/27/2024	Dr. Burkenstock
8/28/2024	Barry Banquer & Katherine Randall (Audubon Project Engineer)
8/28/2024	St. Peter Claver Church
8/29/2024	HNOC - Williams Research Center
8/30/2024	Galilee Baptist Church
8/30/2024	Taqueria Guerrero
8/30/2024	Saint Charles Ave Baptist Church

9/4/2024	City of New Orleans Economic Development
9/4/2024	Gulf Gateway Terminal
9/4/2024	NOLA Business Ecosystem
9/4/2024	Jazz Auto Glass
9/4/2024	First Evangelist Housing and Community Development Corp
9/5/2024	Youth Empowerment Project
9/5/2024	Ashe Cultural Art Center
9/6/2024	Stein's Market and Deli
9/8/2024	Dillard University
9/9/2024	Dennis's Barbershop
9/9/2024	Marseilles Homeowners Condominium Association
9/11/2024	Varsity Sports Uptown
9/13/2024	GSA - Ameresco
9/17/2024	St Louis Cathedral
9/18/2024	Xavier University
9/18/2024	Entergy Lunch & Learn for Schools
9/18/2024	Tuxedo Dat
9/18/2024	My Next Electric
9/23/2024	STEMNOLA Innovation Hub
9/23/2024	The Bike Shop Nola
9/23/2024	A&J's Mart
9/24/2024	Hype Kitchen
9/24/2024	Edinburgh Williams Beauty Salon
9/25/2024	Marine Reserve Headquarters
9/25/2024	St. Maria Goretti Church
9/26/2024	Central MBC
9/26/2024	Twin's Seafood
9/27/2024	Saloy Dental
10/1/2024	Trade Ally Advisory Group Meeting
10/1/2024	IMC Consulting Engineers
10/1/2024	General De Gaulle Storage
10/1/2024	Calvary Tabernacle
10/2/2024	City of New Orleans Economic Development
10/2/2024	NOLA Business Ecosystem
10/4/2024	Lunch & Learn Event with AIA
10/4/2024	ABC President’s Cup Golf Tournament
10/4/2024	Cabinets by Design
10/7/2024	Katherine Randall (Audubon Project Engineer)
10/8/2024	WDSU
10/9/2024	OPA Graphics Inc
10/9/2024	Lawson's Grocery and Deli
10/11/2024	Touro Synagogue
10/11/2024	AEE Chapter start-up mtg
10/11/2024	Smile Shop Dentistry
10/14/2024	Caire Restaurant Supply

10/14/2024	Search LLC.
10/14/2024	Good Bird
10/14/2024	Greater Ebenezer Baptist Church
10/14/2024	Kajuns Karaoke Bar
10/14/2024	Arabella Casa Di Pasta
10/15/2024	Luke Assembly of God
10/16/2024	Iron Tribe Fitness
10/16/2024	Boswell's Jamaican Grill
10/16/2024	Cut Loose Hair Studio
10/17/2024	Love Your City Impact Officer Roundtable
10/18/2024	Fleur de Paris
10/18/2024	Too Tuff Hair Salon
10/21/2024	Honey Baked Ham
10/21/2024	Willie Mae's Nola
10/22/2024	Mount Zion Lutheran Church
10/22/2024	T&T Management and Consulting
10/23/2024	Artivism Dance Theatre
10/24/2024	Coco Hut
10/24/2024	King and Queen Emporium
10/24/2024	Nonno's Creole Cuisine
10/24/2024	African American Bookstore
10/24/2024	Trilly
10/24/2024	Old Road Coffee
10/25/2024	Building Automation Deep Dive Training
10/25/2024	Sankofa
10/25/2024	High Hat
10/25/2024	Katys
10/25/2024	Liuzza's
10/25/2024	Brocatas
10/25/2024	Mattress Direct
10/25/2024	Taqueria Guerrero
10/25/2024	Jefferson Feed
10/25/2024	Office Depot
10/25/2024	Panera's
10/25/2024	Vans
10/25/2024	Subway
10/25/2024	Simply Cannabis
10/25/2024	Five Guys
10/25/2024	Orange Theory
10/25/2024	Pizza Hut
10/25/2024	Felipe’s
10/25/2024	Verizon
10/25/2024	On Path
10/25/2024	Jimmy Johns
10/28/2024	Marriot Warehouse Arts District

10/28/2024	SWBNO
10/28/2024	Lil Dizzy's
10/28/2024	Ayu Bakehouse
10/28/2024	The John
10/28/2024	Ruby Slipper
10/28/2024	Bladwin
10/28/2024	Wasabi Sushi
10/28/2024	Rocket Science Salon
10/28/2024	Suko Thai
10/28/2024	Starbucks
10/28/2024	Phoenix Br
10/28/2024	Wille Mays Chicken
10/28/2024	Madison Lounge
10/29/2024	Naat Boutique
10/29/2024	Empanola
10/29/2024	Sabai Jewelry
10/29/2024	Elevate
10/29/2024	Lush
10/29/2024	Fleurity Girl
10/29/2024	Bahn Mi PoBoys
10/29/2024	El Paso
10/29/2024	Daily Beet
10/29/2024	Nola Culture
10/29/2024	Hemline
10/29/2024	Lucy Rose
10/29/2024	GonCha
10/29/2024	Collection Clothing
10/29/2024	Pack Rat Shipping
10/29/2024	Sterling
10/29/2024	Orient Express
10/29/2024	Mahoney’s
10/29/2024	Pigment Custom Tatts
10/29/2024	Africa Love Gift
10/29/2024	168 Spa Massage
10/29/2024	Triangle Chinese
10/29/2024	MKM Creations
10/29/2024	Pete’s Barber Shop
10/29/2024	Nola Tshirt Club
10/29/2024	Terrence Osbourne Gallery
10/29/2024	Rendezous Tavern
10/29/2024	The Recovery Wellness Spa
10/29/2024	The Vintage
10/29/2024	Alice and Amelia
10/29/2024	Miss Smarty Pants
10/29/2024	Kevin Gillentine

10/29/2024	La Petite Grocery
10/29/2024	Magazine Pawn Shop
10/29/2024	Terrell House
10/29/2024	Boil
10/29/2024	Love Weld
10/29/2024	Tracey's
10/30/2024	NOFD Museum
10/30/2024	Pentecost Baptist Church
10/30/2024	Treme Coffee House
10/30/2024	Esplanade Food Store
10/30/2024	Leos Bread
10/30/2024	Signs by Ralph
10/30/2024	Addis Restaurant
10/30/2024	Pagoda
10/30/2024	Boss Status
10/30/2024	Manchu
10/30/2024	Short Cat Snowballs
10/30/2024	Careful Awakening
10/30/2024	Bayou Road Vet Clinic
10/30/2024	Lil General Store
10/30/2024	FGR Reality
10/31/2024	City of NO Director of Capital Projects and Leadership mtg
11/1/2024	Capital Cardiology Clinic
11/1/2024	Cupcake Fairies
11/6/2024	City of New Orleans Economic Development
11/6/2024	Kern Studios Mardi Gras World
11/6/2024	NOLA Business Ecosystem
11/6/2024	Immaculate Touch Hair Studio
11/7/2024	Kehoe Automotive
11/7/2024	Origami
11/7/2024	Mr. B's Bakery
11/8/2024	GSA - Ameresco
11/8/2024	TA training meeting w/ CSSI Services (Tax 179d)
11/8/2024	Betsy's Pancake House
11/8/2024	JCEL
11/11/2024	New Orleans Photo Alliance
11/12/2024	Marine Reserve Headquarters Walkthrough
11/12/2024	North Roman Street Snowballs
11/12/2024	Algiers Senior Center
11/13/2024	Little Caesars
11/15/2024	SWBNO Garage 1
11/18/2024	Ursuline Academy
11/18/2024	Early Partners
11/19/2024	Quality Used Cars
11/22/2024	Parker Dental Center

11/25/2024	Alta Max
12/4/2024	Bobby Schoegel VP of Hertz Group
12/6/2024	610 Baronne Street
12/9/2024	3535 Magazine St
12/11/2024	Trinity School & Church
12/11/2024	NOLA Business Ecosystem
12/13/2024	GSA - Ameresco
12/16/2024	Bobby Schoegel - Hertz Group
12/16/2024	Lemoine's Truck Rental
12/16/2024	rideTHISbike
12/16/2024	Home Malone
12/17/2024	LeMoine Robinson State Farm
12/17/2024	Volunteers of America
12/18/2024	Saint Josephine Bhakita
12/18/2024	Kim Starr Wise LLC
12/18/2024	Kreative Tresses
12/19/2024	Vineyard Missionary Baptist Church
12/20/2024	Bruno's Tavern
12/20/2024	Stillwaters Management

Trade Allies

Overview

The overall mission of the Trade Ally Network is to develop and increase the local residential, commercial, and industrial contractor base by facilitating training and marketing engagement opportunities, aiding with program participation and providing support with obtaining supplier diversity certifications.

Engaging the registered Trade Ally Network is a key factor in the success of the Energy Smart program as trade allies bring in a substantial portion of program savings.

Table 23.1: C&I Trade Ally Tiers

TIER	# OF TRADE ALLIES
Platinum	2
Gold	5
Silver	25
General	60

Commercial & Industrial Trade Ally Network

In Q1, the Energy Smart team updated the Commercial & Industrial trade ally tier system based on trade ally participation in the prior program year. The designations of Platinum, Gold, Silver or General correspond to benefits such as the option to co-brand marketing materials. Trade allies learned their status at the Trade Ally Kickoff Meeting.

In Q1, the Energy Smart team hosted its largest event of Program Year 14, an Energy and Water Conservation Summit. Architects, engineers, and technicians participated as attendees and speakers who covered commercial and industrial conservation measures.

In Q3, Energy Smart staff were instrumental in the formation of a new, local chapter of the Association of Energy Engineers. Three staff members were elected to the board and held the required planning and organizational meetings in preparation for an official 2025 kickoff.

In Q4, the Energy Smart team partnered with the New Orleans Chapter of the American Institute of Architects to host a lunch and learn where architects earned education credits while learning about program incentives.

In Q4, Energy Smart welcomed trade allies and facility directors to attend a Building Automation Deep Dive at Delgado Community College, a comprehensive training on the latest technologies associated with automation.

Residential Trade Ally Network

The Residential Trade Ally Network held the Trade Ally Kick-Off and Awards on January 18th. The Energy Smart team discussed the following topics:

- Award Presentation
- Co-branding Opportunities
- Program Savings goal
- No-shows and missed-appointments discussion
- Self-Scheduling Trade Ally Referrals
- Navigator Rebate Submission Review
- Incentive Increases

Energy Smart Trade Ally of the Year awards

- Home Performance with ENERGY STAR®
- Income-Qualified
- Multifamily Solutions
- A/C Solutions
- Customer Service
- Overall Trade Ally of the Year

Energy Smart Residential Trade Ally One on One

- Nonscheduled meetings with trade allies for inspections
- In-field and office trainings
- Software tutorials for Navigator and rebate reviews
- Strategies for getting leads

On December 10th, Energy Smart Newsletter was emailed to the Trade Ally

- Save the dates
    - TAAG meeting
    - Kickoff
- Trade ally suggestions
- Quick review of YTD savings
- Trade Ally Links

On Dec 16th Energy Smart hosted the Trade Ally Advisory Group (TAAG) at Delgado Community College. The program staff covered:

- Navigator training and updates
- In-field Best Practices
- Marketing strategies
- Selling points
- Meet and greet shared resources between trade allies

Commercial & Industrial Trade Ally Advisory Group

Energy Smart hosted the Commercial & Industrial Trade Ally Kick-Off and Awards Ceremony. Program staff reviewed the following topics:

- Review of Program Year 14
- Overview of budget and goals Program Year 15
- Announcement of the new Energy Smart website

- Explanation of the new-construction code and code-compliance requirements
- Summary of program outreach efforts to small and large commercial customers
- Updated trade ally tier rankings and the benefits associated with the tiers
- Summary of technical training opportunities throughout the year
- Workforce guest speakers from the University of Louisiana at Lafayette and from New Orleans Career Center
- Marketing co-branding opportunities
- Application process updates regarding chiller tune-ups
- New air-conditioning tune-up offering through CoolSaver

Energy Smart provided the following awards to trade allies:

- Lighting Trade Ally of the Year
- Building Automation Trade Ally of the Year
- Retro-commissioning Trade Ally of the Year
- Small Business Trade Ally of the Year
- HVAC Trade Ally of the Year
- Customer Service Trade Ally of the Year

On June 27 the team hosted the Q2 C&I Trade Ally Advisory Group meeting. Program staff covered:

- The project pipeline and program status of goals and budget
- The leaderboard of trade ally participation to that point in the year
- HVAC tune-up incentive breakdown and application process
- Small Business Energy Assessments
- Barriers to trade ally and customer participation

On October 1 the team hosted the Q4 C&I Trade Ally Advisory Group meeting. Program staff covered:

- The project pipeline and program status of goals and budget
- The leaderboard of trade ally participation to that point in the year
- Statewide energy efficiency program
- Update to the guestroom management controls incentive
- The formation of the Bayou Chapter of the Association of Energy Engineers

Contractor Engagement

Engagement is defined as contractors who have applied and been approved to become Registered Residential Trade Ally and/or Registered Commercial & Industrial trade ally. Contractors who register with both are counted in both totals.

Table 23.2: Contractor Engagement

CATEGORY	# OF TRADE ALLIES
C&I Network	73
Residential Network	18
Total Engagement	**91**

Contractor Participation

Participation is defined as registered trade allies who have completed and closed out projects in the current program year.

Table 23.3: Contractor Participation

CATEGORY	# OF COMPANIES
C&I Network	37
Residential Network	17
Total Engagement	**54**

Planned or Proposed Changes

Energy Smart has several changes planned regarding trade ally participation, training and workforce development:

- In Program Year 14, several program staff members held the requisite organizational meetings to create the Bayou Chapter of the Association of Energy Engineers (AEE), a networking organization that connects commercial customers with service providers in energy efficiency and renewable energy and promotes professional certifications in energy efficiency. In Program Year 15, these board members will hold four-chapter meetings and ten board meetings, recruiting facility directors and to attend and network with high-performing trade allies.
- In Program Year 15, Energy Smart will partner with CSSI Services to offer a training called Unlock the Tax Advantages of Energy Efficiency. The program will recruit trade allies, facility directors, building owners, developers and architects to learn how buildings can benefit from the Section 179D Tax Deduction Program, cost segregation analysis and the research and development tax credits.
- In Program Year 15, Energy Smart will partner with Dr. Solomon Yin, Associate Professor in Mechanical Engineering at the University of Louisiana at Lafayette. The program will survey trade allies working in building automation about various aspects of their workforce needs and will facilitate webinar conversations between trade allies and Dr. Yin with the goal of helping the University of Louisiana at Lafayette develop curriculum that will help students to excel in building automation careers.
- In Program Year 14, Energy Smart attended the U.S. Green Building Conference Forward Conference. In Program Year 15, Energy Smart will propose to speak on the topic of incentives and workforce development initiatives.
- In Program Years 13 and 14, Energy Smart held sales trainings with Mark Jewell and the LSU Sales Institute. In Program Year 15, Energy Smart plans to contract with a third sales trainer to expand on the type of sales training trade allies receive.

The program will continue other recent efforts that have proved valuable in training and workforce development:

- Continue to participate as a member of the LA Green Corps Employee Advisory Council
- Present to LSU Industrial Assessment students about careers in energy efficiency
- Partner with the local chapter of American Institute of Architects to offer presentations that provide continuing-education credits
- Present to the local chapter of the International Brotherhood of Electrical Workers

Program Training

Audiences Trained

Energy Smart provided technical training to:

- Commercial & industrial trade allies
- Residential trade allies
- Facility directors
- Architecture firms
- Commercial business owners
- Workforce agency staff and students
- Program staff

Training Topics

Energy Smart program staff received training in refresher courses with BPI learning a comprehensive evaluation of Building Analyst Professionals. Topics covered a full scale of the building envelope, calculations for heating and cooling seasons, testing and data collection, and industry standards.

Energy Smart provided onboarding training to 21 new Commercial & Industrial trade allies in Program Year 14. The onboarding of individual Commercial & Industrial trade allies consisted of the following overview of the application process:

- Instructions on using the incentive application
- An overview of the items required for project submission, such as a utility bill and a verification the equipment meets industry specifications
- A review of the custom and prescriptive measure incentive rates
- Training on communicating effectively about all Energy Smart offerings, including services which the individual trade allies do not offer themselves

On March 13, Energy Smart facilitated an Energy and Water Conservation Summit at the BioInnovation Center. The event consisted of a series of panel discussions, presentations by experts and professional networking on water and energy conservation at facilities in New Orleans. Over 80 attendees learned from eight panelists as well as the lead architect who designed the LEED-Gold BioInnovation Center. Panelists included energy and water engineers, facility directors, and an architect.

On May 28, Energy Smart welcomed two instructors from the LSU Sales Institute to host a training directed toward improving trade ally ability to sell energy services. Greg Acardo, Director of the Professional Sales Institute, and Nawar Chaker, Assistant Professor, advised trade allies on strategies at each step of the sales process. Forty trade allies attend this training.

On June 27, Energy Smart welcomed energy engineer Deng Lin to host a High Performance HVAC training. Lin provided details of high-performance HVAC system designs and operational aspects, with a particular focus on energy efficiency:

- Heat pumps, Variable Refrigerant Flow (VRF) systems, magnetic bearing chillers and condensing boilers
- Hands-on evaluation of HVAC system design
- Advanced techniques for optimizing system part load efficiency through control sequences
- Interpretation of performance curves and understanding the pivotal role of maintenance activities in sustaining system efficiency levels

- Consideration of external factors
- Case studies illustrating application of HVAC systems in various scenarios

On October 25, Energy Smart welcomed Lin back for a training to provide an in-depth exploration of building automation components, protocols and standards. The course covered key topics such as mechanical equipment including chillers, boilers, air handling units (AHUs), and HVAC systems. Participants gained insights into direct digital controls, as well as communication standards like Ethernet, Modbus, BACnet, and LonWorks. The training also addressed BAS configuration and optimization for improved energy efficiency and occupant comfort, effective troubleshooting techniques, maintenance practices, and the integration of BAS with other building systems for seamless operation.

24.1: Training by Investment by Audience Type

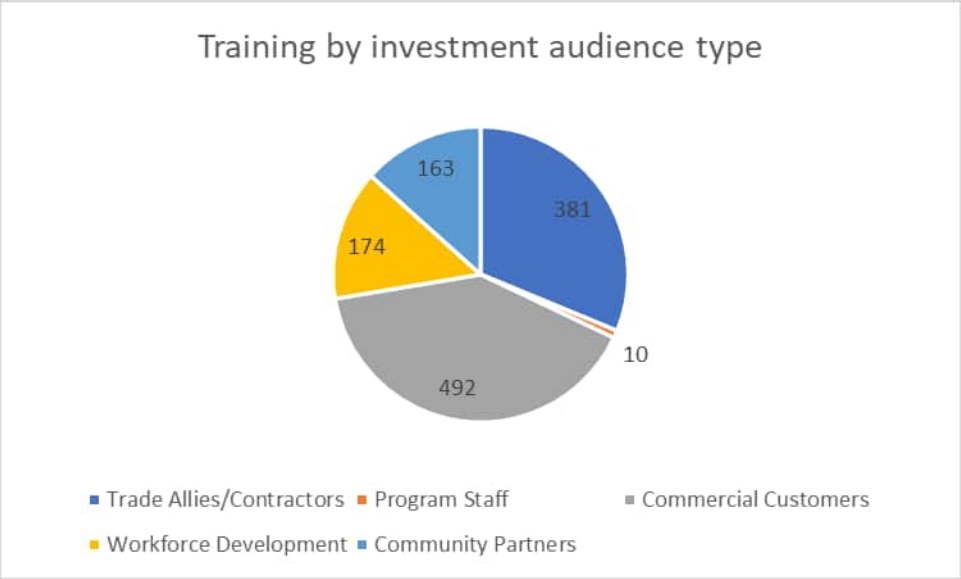
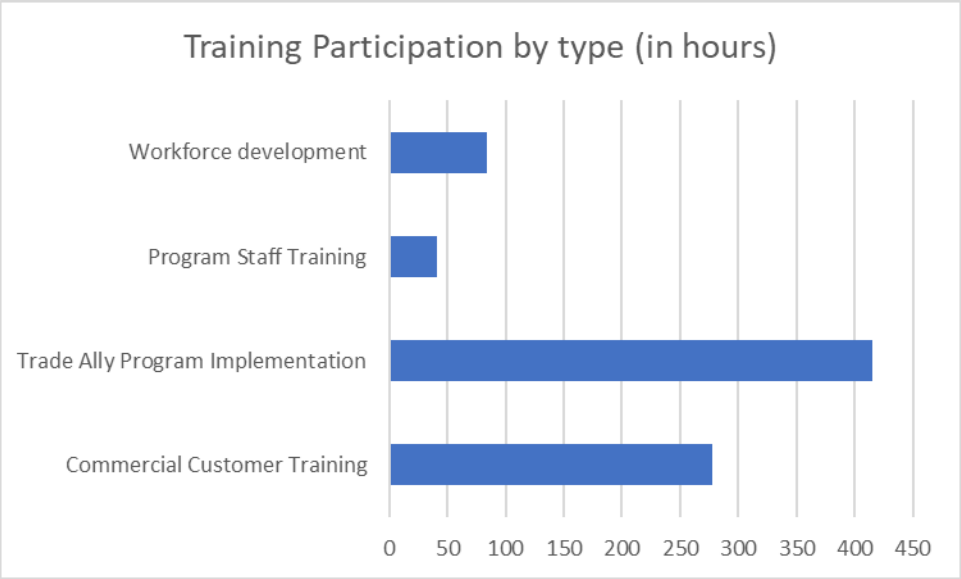


Chart 24.2: Training by Participation Type



Market Segmentation Training Highlights

Program staff focused its training evenly on commercial customers and trade allies. Customer training consisted of program overviews to a wide variety of stakeholders. Whereas larger commercial property facility directors and owners were typically familiar with the program in advance, smaller accounts like churches and restaurants typically discovered the program's benefits through direct outreach that program staff conducted. Customers reviewed the steps to submit a project and receive incentives, as well as how to connect with trade allies. Trade ally training consisted of individual meetings with trade allies to review specific or potential projects, quarterly advisory group meetings, technical training and sales training.

Training Objective

The objective of commercial trade ally training is to review the steps for customers to submit projects to the program, understand the timeline for incentives and to assist commercial customers in securing products and services from trade allies. The objective of trade ally training is to ensure that trade allies are confident in their ability to communicate accurately and effectively about the program and to submit projects efficiently with the appropriate documentation.

Initiatives

Supplier Diversity & Inclusion

Energy Smart partners with multiple small, diverse and local businesses to help deliver the program. These partners create a dynamic and diverse program delivery model. Energy Smart invests in the development of these businesses, providing them with necessary experience to thrive and grow in the energy efficiency sector. These small, minority, and/or disadvantaged businesses that supported Energy Smart are meaningful contributors to the program design and delivery. Their scopes are developed to increase their skills and capabilities in the energy efficiency field. In total, Energy Smart spent over $2.8 million of non-incentive program funds on diverse suppliers in 2024.

Workforce Development

A key component of Energy Smart's delivery model is to continuously improve and elevate trade ally skills and capabilities through training and workforce development initiatives.

In Program Year 14, Energy Smart worked closely with Xavier University of Louisiana and Dillard University to help these universities successfully apply for a Department of Energy Historically Black Colleges and Universities (HBCU) Clean Energy Education Prize. The application was modeled after work Energy Smart completed in prior program years, specifically profiles of professionals working in energy efficiency. The initiative recognizes HBCUs that are making significant strides in developing innovative clean energy partnerships and programs. Energy Smart staff connected the HBCU representatives with professionals working in clean energy, specifically within the Trade Ally Network, as individuals who could be profiled for the end product – a Clean Energy Careers guidebook.

Energy Smart staff also facilitated meetings between trade allies and Delgado Community College regarding the potential of the community college to expand upon their facilities-manager programming by including curriculum in building automation. Technicians and engineers within the Trade Ally Network outlined the skills and training required to be successful in this field. Energy Smart provided Delgado with a summary of the training and certifications that other community colleges around the country provide toward automation curriculum.

The program participated in several other efforts in workforce development:

- Represented Energy Smart at a Community Outreach event via the Opportunity Hub on January 5, a networking group launched with support from GNO Inc. Opportunity Hub strives to assists cities in creating innovation districts that create racial equity in the growing clean-energy career field.
- Met with Build Strong Academy instructors in Kenner regarding careers within the trade ally network.
- Participated three times in Program Year 14 as a member of the LA Green Corps Employee Advisory Council.
- Provided workforce partner Delgado Community College the opportunity to speak at the Energy & Water Conservation Summit on March 13 to trade allies and facility directors about its efforts to create building automation curriculum.
- Presented to undergraduate and graduate students associated with the LSU Industrial Assessment Center on March 18 about careers in energy efficiency, with a particular focus on automation.
- Facilitate conversations between a leading HVAC trade ally and three local workforce development agencies (Urban League, Louisiana Green Corps, and New Orleans Career Center), which led to the hiring of several new employees working in HVAC maintenance.

- Spoke to Tulane University students on April 8 about careers in clean-energy and opportunities within the trade ally network.
- Provided an overview of careers within the HVAC trade ally network to instructors at the New Orleans Career Center on April 8.
- Met with workforce development officers from the Greater New Orleans Foundation in September and October regarding careers in energy efficiency.



FINANCIAL PERFORMANCE

Incentive Budget Highlights

Table 25.1

OFFERING	INCENTIVES	BUDGET*	% TO BUDGET
Small Commercial & Industrial Solutions	$704,568	$953,929	74%
Large Commercial & Industrial Solutions	$4,008,341	$5,609,658	71%
Publicly Funded Institutions	$439,412	$2,320,892	19%
Commercial & Industrial Construction Solutions	$17,916	$163,619	11%
Large C&I Automated Demand Response	$146,139	$532,200	27%
Home Performance with ENERGY STAR	$985,388	$1,201,285	82%
Retail Lighting & Appliances	$938,236	$636,916	147%
Multifamily Solutions	$612,533	$677,909	90%
Income Qualified Weatherization	$1,954,318	$1,679,571	116%
A/C Solutions	$673,431	$1,239,987	54%
Appliance Recycling & Replacement Pilot	$88,450	$226,543	39%
School Kits & Community Outreach	$83,880	$98,600	85%
Behavioral Energy Efficiency	$0	$0	N/A
EasyCool BYOT	$229,825	$340,000	68%
Peak Time Rebate Pilot	$82,100	$67,475	122%
EV Charging Pilot	$13,727	$58,800	23%
Residential Battery Pilot	$34,201	$102,000	34%
TOTAL	$11,012,464	$15,909,384	69%

**Budgets are reflective of the Energy Smart Implementation Plan PY13-PY15.*

Summary table shows energy efficiency incentive spend from January 1, 2024 through December 31, 2024.

Table 25.2

ENERGY SMART EXPENSES/INVOICES					FUNDING SOURCES		
YEAR	Month	Program Year 13	Program Year 14	Program Year 15	Total	EECR	Total Ending Balance
2024	January	$536,958	$1,144,211		$1,681,169	$1,651,416	($5,145,458)
2024	February	$203,174			$203,174	$1,519,089	($6,461,374)
2024	March	$228,619	$1,237,419		$228,619	$1,351,106	($7,583,861)
2024	April	$592,346	$2,347,813		$2,940,158	$1,341,982	($5,985,685)
2024	May	$482,429	$369,357		$851,786	$1,592,513	($6,726,412)
2024	June	$57,342	$1,738,211		$1,795,553	$1,950,716	($5,644,156)
2024	July		$1,543,584		$1,543,584	$2,143,333	($6,243,906)
2024	August		$1,896,908		$1,896,908	$2,192,432	($6,539,430)
2024	September		$1,706,069		$1,706,069	$2,106,529	($6,939,889)
2024	October		$685,698		$685,698	$1,779,619	($8,033,810)
2024	November		$3,674,960		$3,674,960	$1,547,188	($5,906,038)
2024	December		$59,709		$59,709	$1,498,486	($7,344,816)
2025	January		$1,136,528		$1,136,528	$2,029,725	($8,238,012)
2025	February		$2,467,927	$100,000	$2,567,927	$1,932,992	($7,603,077)
2025	March		$730,003	$4,338,598	$5,068,601	$1,588,247	($4,122,724)
2025	April			$2,268,857	$2,268,857	$1,545,343	($3,399,210)
2025	May			$492,676	$492,676	$1,858,979	($4,765,513)
2025	June		$521,060	$3,443,611	$3,964,671	$2,262,368	($3,063,210)

Net Savings Summary

Entergy's Third-Party Evaluator, ADM Associates, conducted the program evaluation to verify the gross energy savings of each offering. Additionally, ADM estimated program net-to-gross ratios (NTGRs) through evaluation of free-ridership and spillover effects.

The Energy Smart program achieved 66,252,206 in Net kWh savings and 25,136.82 in Net kW reductions. These values represent savings net-of-free-ridership, compared to the filed goals.

Table 26.3

	NET kWh SAVINGS**	kWh GOAL*	% TO SAVINGS GOAL	NET kW REDUCTIONS**	kW TARGET*	% TO kW TARGET
Small Commercial & Industrial Solutions	4,056,652	6,349,948	67%	760.02	1,112	71%
Large Commercial & Industrial Solutions	26,050,437	45,589,079	59%	4,087.92	7,291	58%
Publicly Funded Institutions	3,364,504	15,730,841	23%	438.59	397	119%
Commercial & Industrial Construction Solutions	57,050	4,301,994	2%	9.84	987	1%
Large C&I Automated Demand Response	36,961	0	N/A	2,494.77	8,870	28%
Home Performance with ENERGY STAR	3,670,030	3,404,313	110%	1,236.13	966	131%
Retail Lighting & Appliances	1,803,832	1,558,999	140%	186.32	16	1451%
Multifamily Solutions	2,389,569	2,526,471	105%	722.75	145	553%
Income-Qualified Weatherization	3,598,721	3,220,972	112%	2,556.17	66	3873%
A/C Solutions	4,016,197	3,322,555	127%	1,766.36	1,453	128%
Appliance Recycling & Replacement	97658	1,785,774	11%	12.12	26	90%
School Kits & Community Outreach	707,601	797,089	89%	86.84	107	81%
Behavioral Energy Efficiency	16,390,198	19,186,619	85%	2765.00	0	N/A
EasyCool BYOT	0	0	N/A	6,251.12	11,600	54%
Peak Time Rebate Pilot	12,796	0	N/A	1,282.51	998	129%
EV Charging Pilot	0	0	N/A	97.21	1,125	9%
Residential Battery Pilot	0	0	0%	383.17	0	N/A
Total	66,252,206	107,774,654	63%	**25,136.82**	35,159	73%

** Goals are reflective of the Energy Smart Implementation Plan PY13-15.*

***Savings reflect verified net energy savings as documented in TPE's EM&V report.*

The Energy Smart program achieved a Net-to-Gross Ratio (NTGR) of 96.8% in Net kWh savings relative to the verified gross kWh savings and a kW NTGR of 98%.

Table 26.4

	VERIFIED GROSS KWH	NET KWH SAVINGS*	KWH NTGR	VERIFIED GROSS KW	NET KW REDUCTION*	KW NTGR
Small Commercial & Industrial Solutions	4,232,566	4,056,652	96%	792.98	760.02	96%
Large Commercial & Industrial Solutions	26,810,839	26,050,437	97%	4,207.24	4,087.92	97%
Publicly Funded Institutions	3,620,474	3,364,504	93%	471.95	438.59	93%
Commercial & Industrial Construction Solutions	83,603	57,050	68%	14.42	9.84	68%
Large C&I Automated Demand Response	36,961	36,961	100%	2,494.77	2,494.77	100%
Home Performance with ENERGY STAR	3,748,121	3,670,030	98%	1,263.71	1,236.13	98%
Retail Lighting & Appliances	2,177,373	1,803,832	83%	232.10	186.32	80%
Multifamily Solutions	2,650,261	2,389,569	90%	801.60	722.75	90%
Income-Qualified Weatherization	3,598,721	3,598,721	100%	2,556.17	2,556.17	100%
A/C Solutions	4,210,803	4,016,197	95%	1,861.19	1,766.36	95%
Appliance Recycling & Replacement Pilot	188,069	97658	52%	23.29	12.12	52%
School Kits & Community Outreach	707,601	707,601	100%	86.84	86.84	100%
Behavioral Energy Efficiency	16,390,198	16,390,198	100%	2,765.00	2765.00	100%
EasyCool BYOT	0	0	N/A	6,251.00	6,251.12	100%
Peak Time Rebate Pilot	12,796	12,796	N/A	1,283.00	1,282.51	100%
EV Charging Pilot	0	0	N/A	97.21	97.21	100%
Residential Battery Pilot	0	0	N/A	383.17	383.17	100%
Total	68,468,386	66,252,206	97%	25,585.64	25,136.82	98%

**Net savings as documented in TPE's EM&V report.*

Appendices

Appendix A: School Kits & Education Summary
Appendix B: Community Outreach Summary
Appendix C: Training and Education
Appendix D: Marketing Assets

Appendix A: School Kits & Education

SCHOOL NAME	DATE	KITS	ENROLLMENT OFFERING
Dwight D Eisenhower Charter School	2/26/2024	192	Charter
International School of Louisiana – Dixon Campus	2/26/2024	96	Charter
Alice M Harte Charter School	2/27/2024	600	Charter
Rober Russa Moton Charter School	2/27/2024	144	Charter
Lycee Francais De La Nouvelle Orleans – Lower Campus	2/28/2024	192	Charter
Lafayette Academy Lower School	2/29/2024	120	Charter
Elan Academy Charter School	3/1/2024	144	Charter
Homer A Plessy Community School - Treme	3/1/2024	192	Charter
Benjamin Franklin Elementary Math and Science School	3/7/2024	264	Charter
Morris Jeff Community School – Elementary School	3/7/2024	240	Charter
Audubon Charter School – Uptown Upper Campus	3/8/2024	96	Charter
Mary McLeod Bethune Elementary School	3/11/2024	168	Charter
Fannie C Williams Charter School	3/12/2024	120	Charter
Young Audiences Charter School – Lawrence D Crocker Campus	3/13/2024	216	Charter
Noble Minds Institute for Whole Child Learning	3/15/2024	48	Charter
KIPP Leadership	3/19/2024	312	Charter
Homer A Plessy Community School – French Quarter	3/20/2024	96	Charter
ReNEW Dolores T Aaron Academy	3/20/2024	456	Charter
Pierre A Capdau S.T.E.A.M. School	3/21/2024	264	Charter
Foundation Preparatory Academy	3/22/2024	96	Charter
Resurrection of Our Lord School	3/22/2024	48	Private
TOTAL		**4,104**	

Appendix B: Community Outreach

Date	Group/Event	People at Event
7-Feb	NOLA Business Ecosystem Monthly Call	
17-Feb	Entergy Super Tax Day - United Way	
1-Mar	Home & Garden Show	
23-Mar	Green Fest - Okra Alley	
30-Mar	Audubon Nature Fest	22
4-Apr	HANO/ ROSS resource fair	25
9-Apr	Crescent Bloom Consulting	6
9-Apr	Hoffman Triangle Zoom Meeting	18
11-Apr	Lunch and Learn at Tulane River and Coastal Center	20
11-Apr	Entergy Townhall - District E	
15-Apr	Entergy Townhall - District C	
16-Apr	District B Town Hall Meeting	65
16-Apr	Entergy Townhall - District B	
17-Apr	Entergy Townhall - District C	
18-Apr	Entergy Townhall - District A	10
20-Apr	Spring Home Tour	
20-Apr	Mayor's Neighborhood Engagement in Hollygrove	
20-Apr	PRC Spring Home Tour	6
21-Apr	Spring Home Tour	
21-Apr	PRC Spring Home Tour	12
25-Apr	Firstline Family Showcase - Samuel J. Green Charter School	11
25-Apr	First Line's Family Showcase Community Resource Fair	
29-Apr	Pelicans' vs Oklahoma	45
30-Apr	Entergy Townhall - District E	25
4-May	Canvassing - Treme	15
7-May	Beams and Brews @ the Common House	15
7-May	PRC Beams & Brews	30
9-May	New Florida Community Mtg - HANO	
9-May	Claiborne Merchants and Business Association Mtg	
11-May	Canvassing - New Orleans East	
13-May	Canvassing - NORD facilities	10
13-May	Mid-City NO Town Hall	400
15-May	The Collaborative 504	35
20-May	Gentilly CAP residence	30
24-May	Senior Fest	40

29-May	Canvassing - Treme	30
30-May	Canvassing - Lower 9	
30-May	The Giving Hope Community Center	
31-May	Canvassing - New Orleans East	
10-Jun	Entergy Customer Appreciation Day - East bank	
10-Jun	Entergy Customer Appreciation Day - Westbank	
12-Jun	Hospitality Fair	
25-Jun	PRC Mid Mod Tour	
9-Jul	Hoffman Triangle Zoom Meeting	10
10-Jul	Canvassing	
10-Jul	New Orleans East Library	
11-Jul	Claiborne Neighborhood Association	
12-Jul	Depal Health Pantry	
15-Jul	Entergy Customer Care Center - Westbank	
15-Jul	Entergy Customer Care Center - Canal St.	
27-Jul	Urban League National Conference	99
27-Jul	The Estates Back to School Event	
3-Aug	Leslie Harris Housing event	45
3-Aug	Canvassing - TWG	100
4-Aug	New Birth Missionary Baptist Service	45
4-Aug	Please Foundation 1st Annual Field Day	30
4-Aug	Customer Care Center -Canal St.	15
4-Aug	Customer Care Center - Westbank	5
13-Aug	Hoffman Triangle Zoom Meeting	15
13-Aug	East NOLA Advisory Board Mtg	25
20-Aug	Prosperity Center Opening	45
24-Aug	Lower 9th Ward Homeownership Association Meeting	25
27-Aug	QuickBooks Workshop	18
27-Aug	Businesses on Tulane	
28-Aug	Senior Roundup at Joe Brown Park	8
9-Sep	Customer Care Center - Westbank	6
9-Sep	Customer Care Center - Canal St.	3
14-Sep	Urban League Health Expo at Convention Center	30
17-Sep	Delachaise Neighborhood Association Meeting	
19-Sep	Giving Hope Luncheon @ Thrive 9th Ward	
25-Sep	Hoffman Triangle Neighborhood Meeting	
5-Oct	Hoffman Triangle Resource Fair	7
5-Oct	Algiers Community Engagement	17
7-Oct	Entergy Customer Care Center - Canal St.	10

8-Oct	Night Out Against Crime - Hoffman Triangle	10
8-Oct	Night Out Against Crime - Trinity United Missionary Baptist Church	30
17-Oct	New Birth Revival	50
20-Oct	Home Fest	31
24-Oct	Coffee on the Corner at T9	15
25-Oct	Agenda for Children - Fall Festival	21
26-Oct	VA Event	
28-Oct	Housing NOLA Leadership Board Mtg	
29-Oct	Leslie Harris Food Giveaway - Hoffman Triangle	15
30-Oct	Leslie Harris Food Giveaway - Hoffman Triangle	20
4-Nov	Customer Care Center - Canal St.	7
4-Nov	Customer Care Center - Algiers	4
4-Nov	6th District Meeting	7
7-Nov	Desire Community Meeting	11
8-Nov	Goodwill Open House - New Orleans East	8
12-Nov	YMCA	100
12-Nov	Hoffman Triangle	9
18-Nov	Customer Appreciation Day - CCC Canal	78
18-Nov	Customer Appreciation Day - CCC Algiers	
2-Dec	Customer Care Center - Algiers	5
2-Dec	6th District Max Meeting	4
3-Dec	Thrive Works Green Graduation	30
5-Dec	Urban League Event	50
6-Dec	Baptist Ministries Celebration	200
10-Dec	Hoffman Triangle Meeting	7
11-Dec	Desire/New Florida Canvassing	
12-Dec	Desire/New Florida Canvassing	
12-Dec	Loyal End of the Year Meeting	13
12-Dec	New Orleans Business Alliance Networking Event	60
12-Dec	Propeller event	40
13-Dec	Desire/New Florida Canvassing	
13-Dec	The Estates-New Florida Holiday Luncheon with HANO	50
14-Dec	Hoffman Triangle Office of Engagement Clean-up Day	9
15-Dec	New Birth Missionary Baptist Anniversary Celebration	45
16-Dec	Desire/New Florida Canvassing	
17-Dec	ROSS gift wrap event	25
17-Dec	Thrive Business Academy	6

21-Dec	Thrive Toy Drive - HANO Desire Property	35
23-Dec	Entergy CCC-Canal	4

Appendix C: Training and Education

Date	Title	Audience	Attendees	Length	Objective	Description

1/3/2024	Customer -- City of New Orleans Economic Development	City of New Orleans Economic Development	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
1/4/2024	Workforce Development -- LSU Industrial Assessment Center	Workforce Development	2	30	Program Year 14 planning with IAC staff	Prepping for participation at upcoming events in New Orleans and at LSU IAC office.
1/5/2024	Contractor -- NAC Smart Technologies	C&I Trade Allies/Contractors	1	45	LED lighting recycling	Overview of potential training on LED bulb recycling
1/5/2024	Contractor -- Opportunity Hub and GNO Inc partners	Workforce Development	1	30	Represent Energy Smart at a networking event for clean-energy workforce development advocates.	Address questions related to careers in the trade ally network.
1/9/2024	Contractor -- Harris Energy Solutions	C&I Trade Allies/Contractors	1	45	Retro-commissioning overview	Review of potential changes to the Retro-commissioning offering
1/12/2024	Contractor -- Build Strong Academy	Trade school instructors	2	30	Overview of energy-efficiency employment opportunities	Address questions related to careers in the trade ally network.
1/18/2024	Contractor -- All trade allies	C&I Trade Allies/Contractors	35	60	Kickoff	Overview of the program year 13 and the updates to the program year 14 measures and offerings.
1/22/2024	Contractor -- Elan Studio Lighting	C&I Trade Allies/Contractors	2	15	Post kickoff check-in	Review of potential projects in PY14
1/23/2024	Customer -- New Orleans and Company	C&I Customer	1	30	HVAC overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
1/24/2024	Customer -- Blue Economy primer	C&I Customer	10	15	Program overview	Presented customer incentives on prescriptive and custom measures.

1/25/2024	Customer -- St. Augustine High School	C&I Customer	1	60	Program overview	Presented customer incentives on prescriptive and custom measures.
1/29/2024	Contractor -- Powers of Louisiana	C&I Trade Allies/Contractors	1	60	Summit planning	Planning participation in the Energy & Water Conservation Summit
1/30/2024	Customer -- One Canal Place	C&I Customer	1	30	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
1/30/2024	Contractor -- M3 Services	C&I Trade Allies/Contractors	1	60	Non-lighting overview	Review of tune-up incentives and application process
1/31/2024	Customer -- EMR Recycling	C&I Customer	1	60	LSU IAC assessment	Assessment conducted by LSU students, as well as review of customer incentives on prescriptive and custom measures.
1/31/2024	Customer -- Xavier University	C&I Customer	1	60	Dining Hall Renovation	Prescriptive and custom overview for dining hall renovation
1/31/2024	Customer -- People's program	C&I Customer	6	30	Program overview	Presented customer incentives on prescriptive and custom measures.
2/1/2024	Customer -- Marriott Warehouse Arts Distric	C&I Customer	1	60	Program overview	LED lighting incentive overview
2/1/2024	Customer -- LSU IAC Carrolton Water Plant	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
2/2/2024	Contractor -- Crawford Lighting	C&I Trade Allies/Contractors	1	60	Lighting overview	Program overview regarding lighting incentives and application process for One Canal Place

2/2/2024	Contractor -- M3 Services	C&I Trade Allies/Contractors	1	60	Non-lighting overview	Review of tune-up incentives and application process
2/5/2024	Customer -- Hilton Riverside	C&I Customer	1	90	Project overview	Review of several potential energy efficiency projects
2/5/2024	Customer -- Trinity Episcopal Church	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
2/7/2024	Customer -- City of New Orleans Economic Development	C&I Customer	10	20	Program overview	Prescriptive and custom overview for customers within the city of New Orleans network
2/9/2024	Contractor -- LED Pro	C&I Trade Allies/Contractors	2	60	Non-lighting overview	Review of tune-up incentives and application process
2/14/2024	Contractor -- Crawford Lighting	C&I Trade Allies/Contractors	1	60	Lighting overview	Program overview regarding lighting incentives and application process for One Canal Place
2/15/2024	Contractor -- RGHR	C&I Trade Allies/Contractors	2	60	Non-lighting overview	Review of refrigeration incentives

2/16/2024	Customer -- GSA Building	C&I Customer	1	30	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
2/16/2024	Workforce Development -- Delgado Community College	Workforce Development	2	60	Advise on building automation curriculum	Advised Louisiana Workforce Commission representative and Delgado workforce representative on how community colleges in other areas of the country are implementing building automation curriculum.
2/20/2024	Contractor -- Johnstone	C&I Trade Allies/Contractors	2	60	Non-lighting overview	Review of HVAC tune-up and chiller tune-up incentives as well as program application process
2/20/2024	Customer -- Chamber of Commerce power hour	C&I Customer	60	5	Program overview	Presented customer incentives on prescriptive and custom measures.
2/21/2024	Workforce Development -- Louisiana Green Corps	Workforce Development	2	30	Advise on building automation curriculum	Advised Louisiana Workforce Commission representative and Delgado workforce representative on how community colleges in other areas of the country are implementing building automation curriculum.
2/22/2024	Customer -- Trinity Episcopal Church	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
2/22/2024	Customer -- Textron	C&I Customer	1	30	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
2/22/2024	Workforce Development -- M3 Services/LA Green Corps	Trade ally and workforce partner	2	60	Facilitate employee candidacy discussion between trade ally and workforce partner	Discuss potential HVAC tech candidates within the workforce network for a trade ally.
2/23/2024	Customer -- Split Second Foundation	C&I Customer	1	60	New construction overview	Review of lighting power density and other prescriptive incentives

2/23/2024	Contractor -- Bernhard	C&I Trade Allies/Contractors	2	60	Non-lighting overview	Review of HVAC tune-up and chiller tune-up incentives
2/27/2024	Customer -- Reilly Foods	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
2/27/2024	Customer -- Touro Synagogue	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
2/29/2024	Customer -- Desire Square Community Housing	C&I Customer	1	60	New construction overview	Review of lighting power density and other prescriptive incentives
3/1/2024	Contractor -- Dalkia	C&I Trade Allies/Contractors	1	60	Retro-commissioning overview	Review of retro-commissioning process
3/5/2024	Customer -- City of New Orleans Economic Development	C&I Customer	10	20	Program overview	Prescriptive and custom overview for customers within the city of New Orleans network
3/6/2024	Contractor -- Ideal Lighting	C&I Trade Allies/Contractors	1	30	Lighting overview	program overview regarding lighting incentives and application process
3/7/2024	Customer -- Homewood Suites	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
3/8/2024	Customer -- St. Roch Market	C&I Customer	1	30	HVAC and refrigeration overview	Review of cooler and tune-up incentives.
3/11/2024	Customer -- BioInnovation Center	C&I Customer	1	30	LED lighting overview	Review of prescriptive and custom incentives associated with LED retrofit.

3/11/2024	Customer -- Energy & Water Conservation Summit	C&I Customer	30	120	Panel discussion	Expert panel discussion of energy and water conservation measures.
3/13/2024	Contractor -- Summit	C&I Trade Allies/Contractors	40	120	Panel discussion	Expert panel discussion of energy and water conservation measures.
3/14/2024	Contractor -- Multistudio	C&I Trade Allies/Contractors	1	40	Program overview	Onboarding of Multistudio and review of new construction projects
3/15/2024	Customer -- GSA Building	C&I Customer	1	30	Program overview	Project review timelines for HVAC and chiller tune-ups
3/18/2024	Customer -- Homewood Suites	C&I Customer	1	30	Program overview	Project review timelines for HVAC and chiller tune-ups
3/18/2024	Customer -- New Orleans and Company	C&I Customer	1	60	Program overview	Project review and pre-site inspection for HVAC project
3/18/2024	Workforce Development -- LSU Industrial Assessment Center	Workforce Development	12	60	Present about Energy Smart	Advised Louisiana Workforce Commission representative and Delgado workforce representative on how community colleges in other areas of the country are implementing building automation curriculum.
3/19/2024	Workforce Development -- Dillard University	Workforce Development	60	30	Present on video about HBCU Clean Energy Prize	Video recording regarding careers in clean energy.
3/20/2024	Customer -- HNOC Williams Research Center	C&I Customer	1	60	New construction overview	Review new construction project opportunities

3/20/2024	Customer -- St. Roch Market	C&I Customer	1	30	HVAC and refrigeration overview	Review of cooler and tune-up incentives.
3/25/2024	Customer -- Alliance for Multi-Specialty research	C&I Customer	1	30	LED lighting overview	Discussion of SBDI and energy assessment measures.
3/27/2024	Customer -- Audubon Charter	C&I Customer	1	30	Program overview	Review of prescriptive and custom incentives associated with LED retrofit.
3/27/2024	Customer -- Greater New Orleans Hotel and Lodging Association	C&I Customer	60	15	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
3/27/2024	Customer -- St. Roch Market	C&I Customer	1	30	HVAC and refrigeration overview	Review of cooler and tune-up incentives.
3/28/2024	Customer -- Xavier University	C&I Customer	1	60	Lighting overview	Walkthrough of Annex building and light count.
3/28/2024	Customer -- Greater St. Stephen Full Gospel Church	C&I Customer	1	30	Program overview	Review of prescriptive and custom incentives associated with LED retrofit.
3/29/2024	Customer -- GSA Building	C&I Customer	1	30	Program overview	Project close-out for lighting project.
4/1/2024	Workforce Development -- Delgado Community College	Workforce Development	2	60	Advise on building automation curriculum	Advised Louisiana Workforce Commission representative and Delgado workforce representative on how community colleges in other areas of the country are implementing building automation curriculum.

4/1/2024	Contractor -- MacLean's Air Conditioning	C&I Trade Allies/Contractors	1	30	Non-lighting overview	Review of HVAC tune-up and chiller tune-up incentives
4/1/2024	Contractor -- Trane Technologies	C&I Trade Allies/Contractors	1	30	Non-lighting overview	Review of HVAC tune-up and chiller tune-up incentives
4/1/2024	Contractor -- Mighty's AC	C&I Trade Allies/Contractors	1	60	Non-lighting overview	Review of HVAC tune-up and chiller tune-up incentives
4/1/2024	Contractor -- Louisiana Energy Solutions	C&I Trade Allies/Contractors	1	30	Lighting overview	program overview regarding lighting incentives and application process
4/2/2024	Customer -- City of New Orleans Economic Development	C&I Customer	10	20	Program overview	Prescriptive and custom overview for customers within the city of new orleans network
4/2/2024	Customer -- Cotton Mill Condos	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
4/3/2024	Contractor -- BEF Electric	C&I Trade Allies/Contractors	1	60	Lighting overview	program overview regarding lighting incentives and application process
4/5/2024	Contractor -- BEF Electric	C&I Trade Allies/Contractors	1	60	Lighting overview	Light count and application process at Health Clinic
4/5/2024	Contractor -- Theron Holmes	C&I Trade Allies/Contractors	1	45	Non-lighting overview	Review of HVAC tune-up and chiller tune-up incentives
4/5/2024	Contractor -- Star Service	C&I Trade Allies/Contractors	3	45	Non-lighting overview	Review of HVAC tune-up and chiller tune-up incentives

4/5/2024	Customer -- Chick-fil-A	C&I Customer	1	30	HVAC and refrigeration overview	Review of cooler and tune-up incentives.
4/8/2024	Workforce Development -- New Orleans Career Center	Workforce Development	1	45	Discuss commercial trade ally network and careers	Discuss upcoming HVAC curriculum and how the commercial trade ally network could connect with students and staff.
4/8/2024	Workforce Development -- Tulane University	Workforce Development	20	15	Discuss commercial trade ally network and careers	Discuss potential for Tulane students to connect with automation companies.
4/9/2024	Customer -- LSUHSC	C&I Customer	1	30	HVAC tune-up and chiller tune-up overview	Review of prescriptive incentives associated with tune-ups.
4/9/2024	Customer -- Windsor Court	C&I Customer	1	45	Review of coil cleaning incentives	Review of prescriptive incentives associated with tune-ups.
4/9/2024	Customer -- Marriott Hotel	C&I Customer	1	45	Review of coil cleaning incentives	Review of prescriptive incentives associated with tune-ups.
4/9/2024	Contractor -- LED Pro	C&I Trade Allies/Contractors	2	60	Non-lighting overview	Review of air handling unit, HVAC, and chiller tune-up incentives with customer
4/9/2024	Customer -- Homewood Suites	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
4/10/2024	Customer -- Greater St. Stephen Full Gospel Church	C&I Customer	1	30	Program overview	Review of prescriptive and custom incentives associated with LED retrofit.
4/10/2024	Contractor -- Frischhertz Electric	C&I Trade Allies/Contractors	1	60	LED lighting overview	Lighting count conducted

4/11/2024	Customer -- Intercontinental Hotel	C&I Customer	1	30	Program overview	Review of prescriptive and custom incentives associated with LED retrofit.
4/11/2024	Customer -- Hotel Provincial	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
4/11/2024	Customer -- Homewood Suites	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
4/11/2024	Contractor -- Blue Box Air	C&I Trade Allies/Contractors	1	60	Non-lighting overview	Assistance with meeting a hotel operator regarding non-lighting incentive
4/11/2024	Trade Ally -- American Institute of Architects	C&I Trade Allies/Contractors	20	10	Program overview	Review of prescriptive and custom incentives, and a discussion new construction incentives
4/12/2024	Customer -- GSA Building	C&I Customer	1	30	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
4/12/2024	Contractor -- Bernhard	C&I Trade Allies/Contractors	1	60	Non-lighting overview	Review of HVAC tune-up and chiller tune-up incentives
4/15/2024	Workforce Development -- Delgado Community College	Workforce Development	3	60	Advise on building automation curriculum	Incorporate automation specialist into discussion to review upcoming curriculum Delgado is planning to adopt.
4/17/2024	Contractor -- Siemens	C&I Trade Allies/Contractors	3	60	Non-lighting overview	Review of multiple potential projects as well as retro-commissioning and continuous commissioning
4/18/2024	Contractor -- Johnstone Supply	C&I Trade Allies/Contractors	1	60	Non-lighting overview	Review of trade ally kWh reduction reporting in advance of project submission.

4/19/2024	Customer -- Tommy's Seafood	C&I Customer	1	30	Non-lighting overview	Review of HVAC tune-up and chiller tune-up incentives
4/22/2024	Customer -- Earth Day event	Earth Day	20	5	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
4/23/2024	Contractor -- RGHR	C&I Trade Allies/Contractors	1	30	Accounting overview	Review of refrigeration invoicing procedure for incentives paid to trade ally.
4/24/2024	Customer -- Benson Tower	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
4/24/2024	Customer -- Blue Oak	C&I Customer	1	30	Non-lighting overview	Review of HVAC tune-up and chiller tune-up incentives
4/25/2024	Contractor -- Star Service	C&I Trade Allies/Contractors	1	45	Application overview	Non-lighting application overview for potential project.
4/26/2024	Customer -- GSA Building	C&I Customer	1	30	Program overview	Project close-out for lighting project.
4/26/2024	Customer - Cambira Hotel	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
4/26/2024	Customer -- Hilton Riverside	C&I Customer	1	30	Non-lighting overview	Review of HVAC tune-up and chiller tune-up incentives
4/26/2024	Contractor -- Gallo Mechanical	C&I Trade Allies/Contractors	1	60	Application overview	Non-lighting application overview for potential project.

4/29/2024	Customer -- New Orleans and Company	C&I Customer	1	60	Program overview	Review of custom and prescriptive incentives.
4/29/2024	Customer -- Houston's Restaurant	C&I Customer	1	30	Program overview	Review of custom and prescriptive incentives.
4/30/2024	Customer -- Marriott Hotel	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
4/30/2024	Customer - Mt Olivet Episcopal	C&I Customer	2	30	Lighting & HVAC walkthrough	Identify potential efficiency upgrades
4/30/2024	Customer - City Church	C&I Customer	1	30	Lighting & HVAC discussion	Identify potential efficiency upgrades
5/1/2024	Customer -- Ace Hotel	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
5/1/2024	Customer -- Greater St. Stephen Full Gospel Church	C&I Customer	1	30	HVAC tune-up overview	Chiller replacement discussion as well as tune-up incentives.
5/1/2024	Customer -- Hotel Santa Maria	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
5/1/2024	Contractor -- Frischhertz Electric	C&I Trade Allies/Contractors	1	60	LED lighting overview	DLC and Energy Star tutorial for lighting project with Greater St. Stephen Gospel Church.
5/2/2024	Workforce Development -- Dillard University	Workforce Development	30	15	Provided insight on careers in clean energy	Advised how Dillard could create a guidebook for careers in clean energy.

5/6/2024	Customer -- Hilton Riverside	C&I Customer	1	60	General overview	Review several energy efficiency projects
5/7/2024	Customer -- City of New Orleans Economic Development	C&I Customer	10	20	Program overview	Prescriptive and custom overview for customers within the city of new orleans network
5/7/2024	Customer -- Tulane Memorial Baptist Church	C&I Customer	1	30	HVAC tune-up overview	Review of HVAC incentives and potential trade allies who can do the work.
5/7/2024	Contractor -- Daikin	C&I Trade Allies/Contractors	1	60	Application overview	Non-lighting application overview for potential project.
5/8/2024	Contractor -- NAC Smart Technologies	C&I Trade Allies/Contractors	1	60	Application overview	LED lighting application process overview
5/9/2024	Contractor -- M3 Services	C&I Trade Allies/Contractors	1	30	Accounting overview	Review of trade ally portal and invoice submission process.
5/9/2024	Customer -- Audubon Condominiums	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
5/9/2024	Customer - 111 Audubon St - Condo Common Area Walkthrough	C&I Customer	5	60	Walkthrough	Identify potential efficiency upgrades
5/10/2024	Customer -- GSA Building	C&I Customer	1	30	Lighting overview	Project close-out for lighting project.
5/10/2024	Contractor -- Powers of Louisiana	C&I Trade Allies/Contractors	3	45	Program overview	International Brotherhood of Electrical Workers; review of electrician network as well as incentives associated with LED measures.

5/7/2024	Customer -- Beanlandia	C&I Customer	1	30	HVAC tune-up overview	Review of HVAC incentives and potential trade allies who can do the work.
5/10/2024	Contractor -- Powers of Louisiana	C&I Trade Allies/Contractors	1	60	Onboarding trade ally meeting	Program overview regarding controls and building automation.
5/13/2024	Customer -- Xavier University	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network, with particular emphasis on new construction incentives.
5/13/2024	Customer - Place St. Charles	C&I Customer	3	60	Lighting Walk through	Gather info on proposed lighting project
5/14/2024	Customer -- Omni Riverfront	C&I Customer	1	30	HVAC tune-up overview	Review of HVAC incentives and potential trade allies who can do the work.
5/14/2024	Customer -- Homewood Suites	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
5/14/2024	Contractor -- Regency Electric	C&I Trade Allies/Contractors	1	30	Recruitment phone conversation	Program overview
5/15/2024	Customer -- Cabrini High School	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
5/15/2024	Contractor -- Johnstone Supply	C&I Trade Allies/Contractors	1	60	Existing project overview	HVAC incentive overview
5/15/2024	Contractor -- Lux Lighting	C&I Trade Allies/Contractors	1	60	Existing project overview	Lighting application assistance.

5/16/2024	Contractor -- A Basem Electric	C&I Trade Allies/Contractors	1	60	Onboarding trade ally meeting	Review of lighting incentives and discussion of potential projects at gas stations.
5/20/2024	Customer -- The Bottle Factory	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
5/20/2024	Customer -- Homewood Suites	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
5/22/2024	Contractor -- Tyler and Tyler	C&I Trade Allies/Contractors	1	30	Recruitment phone conversation	Program overview
5/23/2024	Customer - Federal Reserve Bank	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
5/23/2024	Customer -- The Building on OC Haley	C&I Customer	1	30	HVAC tune-up overview	Review of HVAC incentives and potential trade allies who can do the work.
5/23/2024	Contractor -- Balthazar Electriks	C&I Trade Allies/Contractors	1	60	Existing project overview	Lighting project overview of application process and light count
5/28/2024	Customer - NOLA Baptist Seminary	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
5/28/2024	Contractor -- trade ally sales training	C&I Trade Allies/Contractors	30	180	Sales training	Two LSU Sales Institute instructors provided sales training to thirty trade ally representatives
5/29/2024	Customer -- St. Paul Lutheran Church	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network

5/29/2024	Customer -- Loyola University	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
5/29/2024	Customer - Nieux CO	C&I Customer	5	60	Customer requested help identifying energy efficiency projects	Initial walk through of kitchen and shared working space. Explained program. Requested SBEA, talked with HVAC contractor re: tune-ups, measured windows.
5/29/2024	Customer -- New Orleans Career Center	C&I Customer	1	30	HVAC tune-up overview	Review of HVAC incentives and potential trade allies who can do the work.
5/29/2024	Customer -- St. Paul Lutheran Church	C&I Customer	1	30	HVAC tune-up overview	Review of HVAC incentives and potential trade allies who can do the work.
5/29/2024	Customer -- Loyola University	C&I Customer	4	60	HVAC tune-up overview	Review of HVAC incentives and potential trade allies who can do the work.
5/29/2024	Contractor -- Johnstone Supply	C&I Trade Allies/Contractors	2	60	Existing project overview	Meeting change-out from window units to central air
5/30/2024	Customer -- St. Mary's Dominican	C&I Customer	1	60	Program overview	Review of prescriptive and custom incentives, and a discussion of the trade ally network
6/5/2024	Customer -- City of New Orleans Economic Development	C&I Customer	10	20	Program overview	Prescriptive and custom overview for customers within the city of new orleans network
6/6/2024	Customer -- Dillard University	C&I Customer	1	60	Program overview	Review of potential project leads.
6/10/2024	Customer -- Hilton Riverside	C&I Customer	1	60	Retro-commissioning overview	RCx walkthrough and BAS overview

6/13/2024	Contractor -- Ideal Lighting	C&I Trade Allies/Contractors	1	60	Recruitment meeting and program overview	LED lighting incentive overview
6/13/2024	Contractor -- Marvin Electric	C&I Trade Allies/Contractors	1	60	Recruitment meeting and program overview	LED lighting incentive overview
6/13/2024	Contractor -- Barnes Electric	C&I Trade Allies/Contractors	1	60	Recruitment meeting and program overview	LED lighting incentive overview
6/14/2024	Customer -- GSA Building	C&I Customer	1	30	Lighting overview	Project close-out for lighting project.
6/14/2024	Contractor -- Jones AC and Heating	C&I Trade Allies/Contractors	1	60	Recruitment meeting and program overview	Discuss HVAC tune-up incentives as well as LED lighting and HVAC replacement incentives
6/14/2024	Customer - Daily Beet	C&I Customer	1	30	Customer - requested Restaurant Walkthrough	Identify Potential Projects
6/17/2024	Contractor -- Funches AC and Heating	C&I Trade Allies/Contractors	1	30	Recruitment meeting and program overview	Discuss HVAC tune-up, HVAC replacement, and smart thermostat incentives
6/18/2024	Contractor -- T&B Electric	C&I Trade Allies/Contractors	1	45	Recruitment meeting and program overview	Discuss LED lighting incentives and program application overview.
6/20/2024	Customer -- Hilton Riverside	C&I Customer	1	60	Program overview	LED lighting walkthrough.
6/21/2024	Contractor -- T&B Electric	C&I Trade Allies/Contractors	1	90	Recruitment meeting and program overview	Walkthrough, counting recessed cans and 4-ft. lamps

6/21/2024	Customer -- St. Thomas Housing Development	C&I Customer	1	30	Program overview	LED lighting incentive overview as well as HVAC incentive overview
6/26/2024	Contractor -- T&B Electric	C&I Trade Allies/Contractors	1	30	New construction overview	Review of new construction incentive possibilities
6/27/2024	Contractor -- Trade Ally Advisory Group meeting	C&I Trade Allies/Contractors	20	30	Program updates and guest speakers	Project leaderboard, guest speakers in workforce development and training, and program updates

Appendix D: Marketing Assets

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Residential Collateral

Energy Smart Overview



EnergySmart
A New Orleans Program

Step-By-Step Guide
During the Assessment

ENERGY STAR AWARD 2025 PARTNER OF THE YEAR Sustained Excellence

Home Performance with ENERGY STAR®

Through the Home Performance with ENERGY STAR offering, you'll receive a **no-cost** Home Energy Assessment with recommendations for ways to improve your home's energy efficiency. Rather than focusing on a single problem (like an old heater or cooling system, insufficient insulation or leaky windows), the Home Performance with ENERGY STAR offering helps you improve your home's whole system. **No-cost** installation of energy-saving upgrades* in your home may include:

LED Light Bulbs**
- Can only replace incandescent or halogen light bulbs.
- Cannot replace lighting if located in rarely used spaces such as an attic or closet.
- Will not be replaced if in a location that may be a safety hazard.

Smart Thermostats
- Usually requires a follow-up measure installed at a later date.

Smart Power Strips

Low-Flow Showerheads
- Electric water-heated areas only.
- Cannot replace handheld showerheads.

Hot Water Pipe Insulation
- Electric water-heated areas only.
- Limit of 10 ft. of pipe insulation at the heater source only.

Low-Flow Bathroom Aerators
- Electric water-heated areas only.
- Cannot replace specialty faucet types.

Low-Flow Kitchen Aerators
- Electric water-heated areas only.
- Cannot replace specialty faucet types.

*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.
**Number of LED bulbs installed is dependent on availability.

For more information about this and other energy efficiency offerings, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6060**.

About the Assessment

Energy Smart offers home energy assessments and instant rebates to residential Entergy New Orleans electric customers,* which helps to reduce energy bills.

1. An Energy Smart energy advisor will visit your home and complete a no-cost home energy assessment. The assessment will take roughly an hour.
2. After the assessment is complete, you will receive no-cost installation of energy-saving products pictured to the left, along with additional recommendations to improve your home's energy efficiency.
3. See backside for rebates available and how a trade ally can help you with your energy-saving project.

*If you are a renter, the owner of the property must sign an approval form.

Energy Smart Step-By-Step Guide

More Opportunities to Save

Energy Smart Online Marketplace

As an Entergy New Orleans customer, you're eligible to receive instant discounts on energy-saving products that we'll ship right to your door. In addition to products, the Energy Smart Online Marketplace has educational blog posts on more ways to save. Shop and start saving today at **shop.energysmartnola.com**.

Service Rebates

(Work must be completed by a participating trade ally.)

Central A/C Replacement
- Up to $500 Mail-In Rebate per unit.

Attic Insulation
- Up to $.40 per square foot.

Central A/C Duct Sealing
- Up to $150 per CFM50 reduction.

Home Air Sealing
- Up to $.30 per CFM50 reduction.

Central A/C Tune-Up
- Up to $150 per unit.
- All Entergy New Orleans residential customers are eligible.
- System must be at least one year old.
- The unit must be in working order at the time of the tune-up.
- Rebates do not cover adding new refrigerant, or repairing or replacing any mechanical parts.
- The same A/C system is eligible for a second rebate only after two years have elapsed.

Purchase Rebates

ENERGY STAR Window A/C Units
- $50 Mail-In Rebate.

ENERGY STAR Refrigerators
- $50 Mail-In Rebate.

ENERGY STAR Pool Pumps
- $300 Mail-In Rebate.

ENERGY STAR Heat Pump Water Heaters
- $400 Mail-In Rebate.

ENERGY STAR Dehumidifiers
- $25 Mail-In Rebate.

ENERGY STAR Water Coolers
- Up to $50 Mail-In Rebate.

ENERGY STAR Smart Thermostats
- Up to $100 Mail-In Rebate.

ENERGY STAR Air Purifiers
- $25 Mail-In Rebate.

ENERGY STAR Freezers
- $25 Mail-In Rebate.

Please allow up to 4 to 6 weeks from the date of acquired information is received to process your rebate. Must allow the program team to perform on-site inspections of the appliances installed or work performed. A rebate check will be mailed to the purchaser listed on the rebate forms. Email address will only be used to notify you of your rebate status. Visit energysmartnola.com for more information and to learn more about program rebates.

To find a participating trade ally to work with you on your weatherization projects or a retailer where you can purchase products eligible for a rebate, call **504-229-6060** or visit **energysmartnola.com**.

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Multifamily Direct Install Service Agreement



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Multifamily Solutions direct install service agreement

Property information

Property owner: _____

Building name: _____

Installation address: _____ Property phone: _____

City: _____ State: _____ ZIP: _____

Agreement

Property owner agrees to participate in Multifamily Solutions and understands that this program provides compliementary products and installation of smart thermostats, LEDs, advanced power strips, pipe insulation, kitchen and bathroom aerators, and low-flow showerheads where applicable. Property owner agrees to work with the Multifamily Solutions implementation contractor, Franklin Energy, LLC, to notify the residents of program participation through various means, including, but not limited to, notices, posters in common areas and letters distributed to each unit or residence. Property owner will support these efforts by either distributing the notices as instructed or by providing Franklin Energy, LLC with access to distribute in common areas and to each unit or residence at least 24 hours before the scheduled installation. Property owner agrees to provide personnel to escort the Franklin Energy, LLC technicians throughout the property and to provide access to all units or residences when the resident is not home or the residence is unoccupied. The program reserves the right to post-inspect 5 percent of installed units after installation to ensure compliance with program guidelines.

Property owner also 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. Franklin Energy, LLC will be responsible for any loss or damage incurred to the extent caused by the gross negligence or willful misconduct of Franklin Energy, LLC. Property owner agrees that under no circumstances will Entergy or Franklin Energy, LLC 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.

Note: Entergy New Orleans, LLC does not guarantee that the energy efficiency products recommended or installed or the services provided through this program, will result in energy or cost savings.

Customer signature

Customer signature: _____

Customer name (print): _____ Date: _____

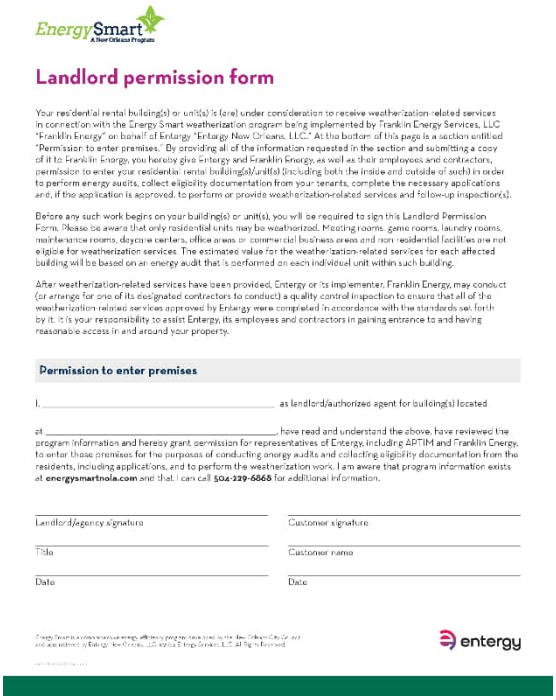
Property owner or authorized manager's signature: _____

Questions? Email **info@energysmartnola.com** or call **504-229-6060**

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Landlord permission form



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Landlord permission form

Your residential rental building(s) or unit(s) is (are) under consideration to receive weatherization-related services in connection with the Energy Smart weatherization program being implemented by Franklin Energy Services, LLC "Franklin Energy" on behalf of Entergy "Entergy New Orleans, LLC." 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 Franklin Energy, you hereby give Entergy and Franklin Energy, 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 Landlord 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, Franklin Energy, 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.

Permission to enter premises

I, _____ as 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 Franklin Energy, to enter those 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 **energysmartnola.com** and that I can call **504-229-6868** for additional information.

Landlord/agency signature | Customer signature

Title | Customer name

Date | Date

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Multifamily solutions sell sheet



EnergySmart

Keep costs low and satisfaction high.

What if you could enhance your property and save you and your residents money—all without spending a cent? It's not too good to be true. It's **Multifamily Solutions.**

What do you get for signing up?

At no cost to you or your tenants, eligible properties will receive a no-cost energy assessment and no-cost energy-saving products* installed in your tenant's unit, which may include:

LED Light Bulbs | Kitchen Aerators | Bathroom Aerators | Water-Saving Showerheads | Smart Thermostats | Pipe Insulation | Smart Power Strip

What happens after the no-cost assessment and product installations?

You will receive recommended low-cost or no-cost upgrades for your property. Based on your recommendations, you'll select an appropriate trade ally who will provide an estimate for the energy-efficient upgrades and help you identify specific rebates you may qualify for. Recommended low-cost or no-cost upgrades may include:

Air sealing | Duct sealing | Insulation | A/C tune-up

How do you sign up?

Call **504-229-6868** or email **info@energysmartnola.com.**
We'd love to answer any questions you may have about the program, too.

Visit **energysmartnola.com** for more energy-saving tips and info.

* Actual products installed may differ from the images shown. Products 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. LEDs will be installed only in fixtures containing incandescent or halogen lamps.

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Home Performance Outreach Kit



Install today.

- **Two LED light bulbs.**
- **Two LED night-lights.**

Schedule your **free in-home energy assessment** today to find out how much you could be saving tomorrow.

energysmartnola.com **504-229-6868** **info@energysmartnola.com**

Scan to schedule a **free home assessment.**

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energysmartnola.com
504-229-6868
info@energysmartnola.com

- Top-to-bottom, whole-house energy assessment.
- Complimentary installation of energy-saving products.
- Comprehensive summary report with low- to no-cost recommendations.

Kit Insert

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HOME PERFORMANCE WITH ENERGY STAR

Schedule a free home energy assessment today

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

What to expect:

1. A top-to-bottom **review of your home's energy efficiency**.
2. The installation of **free energy-saving products.***
3. A **personalized report** summarizing the efficiency of your home and recommendations for energy-saving improvements.
4. **Rebates to lower or cover the cost** on recommended services: **Increasing attic insulation, sealing air leaks and ductwork, A/C tune-ups.**

Below are a few examples of energy-saving products that may be installed:*



Smart thermostats | Faucet aerators | LED light bulbs | Advanced power strips

Get started here

Scan the QR code or call **504-229-6868** to sign up for your free assessment.
Visit **energysmartnola.com** or email us with any questions at **info@energysmartnola.com**.

*Products installed are based on Entergy account type and eligibility. Actual products installed may differ from the images shown.

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Schedule a free home energy assessment today

504-229-6868

www.energysmartnola.com

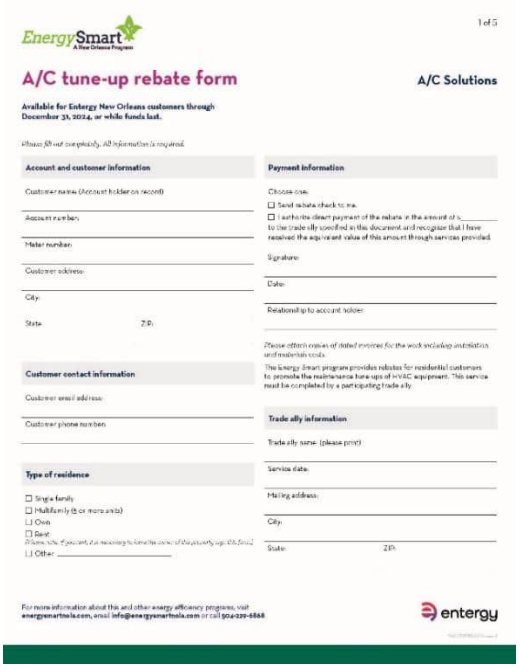
info@energysmartnola.com

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Service rebate forms

A/C Tune-Up Rebate Form



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A New Orleans Program

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A/C tune-up rebate form

A/C Solutions

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

Please fill out completely. All information is required.

Account and customer information

Customer name: (Account holder on record)

Account number:

Meter number:

Customer address:

City:

State: ZIP:

Customer contact information

Customer email address:

Customer phone number:

Type of residence

☐ Single family
☐ Multifamily (5 or more units)
☐ Own
☐ Rent
If Rent, is it a Section 8 or other income-restricted property? ☐ Yes ☐ No
☐ Other: _____

Payment information

Choose one:

☐ Send rebate check to me.
☐ I authorize direct payment of the rebate in the amount of $_____ to the trade ally specified in this document and recognize that I have received the equivalent value of this amount through services provided.

Signature:

Date:

Relationship to account holder:

Please attach copies of dated invoices for the work including installation and materials costs.

The Energy Smart program provides rebates for residential customers to promote the maintenance tune-ups of HVAC equipment. This service must be completed by a participating trade ally.

Trade ally information

Trade ally name: (please print)

Service date:

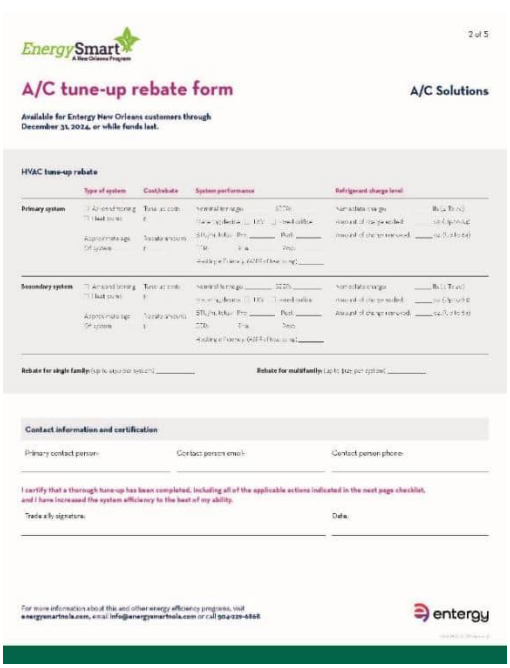
Mailing address:

City:

State: ZIP:

For more information about this and other energy efficiency programs, visit energysmartnola.com, email info@energysmartnola.com or call 504-229-6868.

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A/C tune-up rebate form

A/C Solutions

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

HVAC tune-up rebate

	Type of system	Cost/rebate	System performance	Refrigerant charge level
Primary system	☐ Air-cond/heating ☐ Heat pump	Total ac cost: $	Nominal tonnage: _____ (CFM) Manufacturer: ☐ EEV ☐ Fixed orifice Approximate age of system: _____ Tonnage amount: _____ SEER/HSPF/AFUE: Pre: _____ Post: _____ Pre: _____ Post: _____ Heating efficiency (AFUE if furnace or HSPF if heat pump): _____	Normal/max charge: _____ lb (_____ lb max) Amount of charge added: _____ oz (_____ kg) Amount of charge removed: _____ oz (_____ kg)
Secondary system	☐ Air-cond/heating ☐ Heat pump	Total ac cost: $	Nominal tonnage: _____ (CFM) Manufacturer: ☐ EEV ☐ Fixed orifice Approximate age of system: _____ Tonnage amount: _____ SEER/HSPF/AFUE: Pre: _____ Post: _____ Pre: _____ Post: _____ Heating efficiency (AFUE if furnace or HSPF if heat pump): _____	Normal/max charge: _____ lb (_____ lb max) Amount of charge added: _____ oz (_____ kg) Amount of charge removed: _____ oz (_____ kg)

Rebate for single family (up to one per system): _____ Rebate for multifamily (up to two per system): _____

Contact information and certification

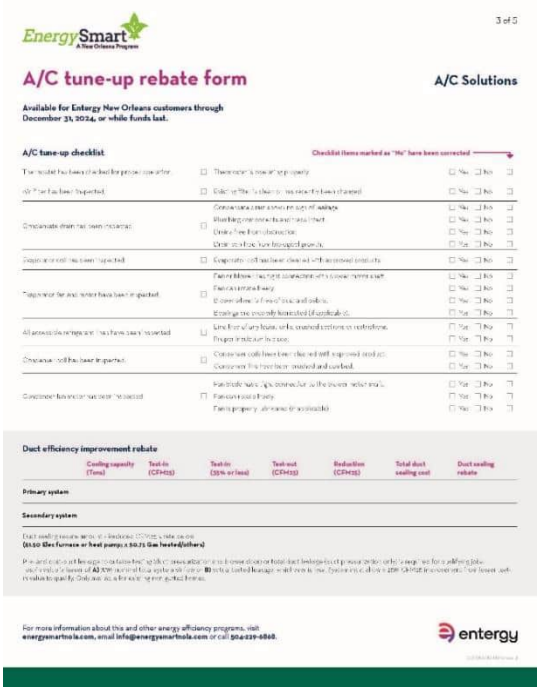
Primary contact person: Contact person email: Contact person phone:

I certify that a thorough tune-up has been completed, including all of the applicable actions indicated in the next page checklist, and I have increased the system efficiency to the best of my ability.

Trade ally signature: Date:

For more information about this and other energy efficiency programs, visit energysmartnola.com, email info@energysmartnola.com or call 504-229-6868.

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A/C tune-up rebate form

A/C Solutions

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A/C tune-up checklist

Checklist items marked as "No" have been corrected →

The outlet has been checked for proper operation.	☐	There are no loose wiring components.	☐ Yes ☐ No ☐
Air flow has been inspected.	☐	Dirty or flat blades have been cleaned or replaced if beyond cleaning.	☐ Yes ☐ No ☐
Condensate drain has been inspected.	☐	Condensate drain is clear, no signs of leaking.	☐ Yes ☐ No ☐
		Drain is free from obstruction.	☐ Yes ☐ No ☐
		Drain is not clogged or blocked properly.	☐ Yes ☐ No ☐
Evaporator coil has been inspected.	☐	Evaporator coil has been cleaned with approved products.	☐ Yes ☐ No ☐
Refrigerant line and water lines have been inspected.	☐	Refrigerant lines are not damaged, corroded, or have signs of leaks.	☐ Yes ☐ No ☐
		Refrigerant lines are properly insulated.	☐ Yes ☐ No ☐
		Refrigerant lines are properly supported and protected.	☐ Yes ☐ No ☐
		Refrigerant lines are properly labeled (if applicable).	☐ Yes ☐ No ☐
All accessible refrigerant lines have been inspected.	☐	Lines free of any holes, kinks, crushed sections or rodent bites.	☐ Yes ☐ No ☐
		Proper insulation in place.	☐ Yes ☐ No ☐
Condenser coil has been inspected.	☐	Condenser coil has been cleaned with approved products.	☐ Yes ☐ No ☐
		Condenser fins have been straightened and combed.	☐ Yes ☐ No ☐
Condenser fan motor has been inspected.	☐	Fan blade tight, no signs of rust or other deterioration.	☐ Yes ☐ No ☐
		Fan motor operates properly.	☐ Yes ☐ No ☐
		Fan is properly aligned (if applicable).	☐ Yes ☐ No ☐

Duct efficiency improvement rebate

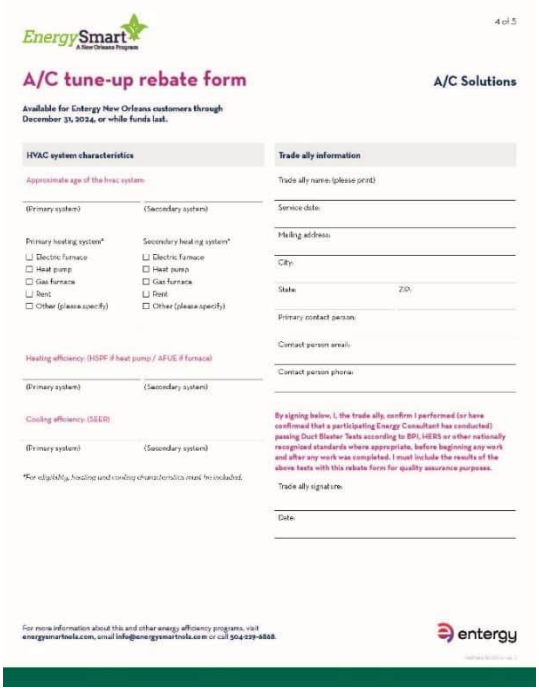
	Cooling capacity (Tons)	Test-in (CFM25)	Test-in (35% or less)	Test-out (CFM25)	Reduction (CFM25)	Total duct sealing cost	Duct sealing rebate
Primary system							
Secondary system							

Duct sealing measure limit = (Reduced CFM25 x rate as per ($1.50 Elec furnace or heat pump; x $0.75 Gas heated/others)

Pre- and post-duct blaster tests (CFM25) are required for duct sealing rebate. Duct sealing rebate is limited to 20% of the total cost of the system or $1 per total installed tonnage, whichever is less. Systems must show a 20% CFM25 improvement. For fewer savings, results to qualify. Only one duct sealing rebate per system is allowed.

For more information about this and other energy efficiency programs, visit energysmartnola.com, email info@energysmartnola.com or call 504-229-6868.

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A/C tune-up rebate form

A/C Solutions

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

HVAC system characteristics

Approximate age of the hvac system:

(Primary system) (Secondary system)

Primary heating system*
☐ Electric furnace
☐ Heat pump
☐ Gas furnace
☐ Rent
☐ Other (please specify)

Secondary heating system*
☐ Electric furnace
☐ Heat pump
☐ Gas furnace
☐ Rent
☐ Other (please specify)

Heating efficiency: (HSPF if heat pump / AFUE if furnace)

(Primary system) (Secondary system)

Cooling efficiency: (SEER)

(Primary system) (Secondary system)

*For eligibility, heating and cooling characteristics must be included.

Trade ally information

Trade ally name: (please print)

Service date:

Mailing address:

City:

State: ZIP:

Primary contact person:

Contact person email:

Contact person phone:

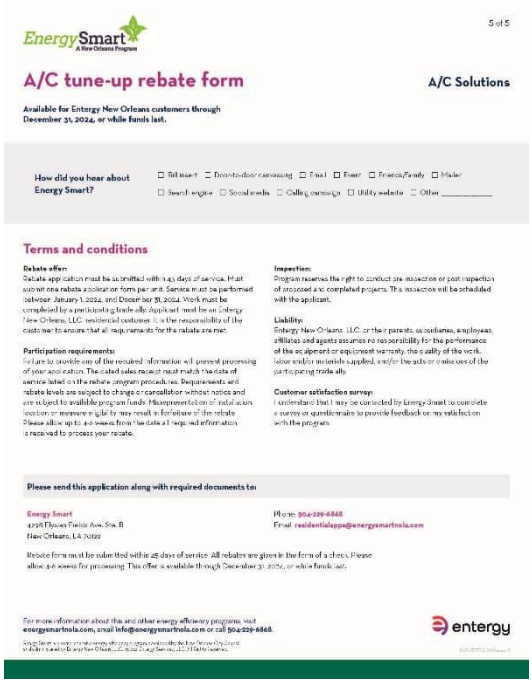
By signing below, I, the trade ally, confirm I performed (or have confirmed that a participating Energy Consultant has conducted) passing Duct Blaster Tests according to BPI, HERS or other nationally recognized standards where appropriate, before beginning any work and after any work was completed. I must include the results of the above tests with this rebate form for quality assurance purposes.

Trade ally signature:

Date:

For more information about this and other energy efficiency programs, visit energysmartnola.com, email info@energysmartnola.com or call 504-229-6868.

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A/C tune-up rebate form

A/C Solutions

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

How did you hear about Energy Smart?

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

Terms and conditions

Rebate offer:
Rebate application must be submitted within 45 days of service. Must submit one rebate application form per unit. Service must be performed between January 1, 2024, and December 31, 2024. Work must be completed by a participating trade ally. Applicant must be an Entergy New Orleans, LLC residential customer. It is the responsibility of the customer to ensure that all requirements for the rebate are met.

Participation requirements:
Failure to provide any of the required information will prevent processing of your application. The dated sales receipt must match the date of service listed on the rebate program procedures. Requirements and rebate levels are subject to change or cancellation without notice and are subject to available program funds. Misrepresentation of installation location or measure eligibility may result in forfeiture of the rebate. Please allow up to 6-8 weeks from the date all required information is received to process your rebate.

Inspection:
Program reserves the right to conduct pre-inspection or post-inspection of proposed and completed projects. The inspection will be scheduled with the applicant.

Liability:
Entergy New Orleans, LLC, or their parents, subsidiaries, employees, affiliates and agents assumes no responsibility for the performance of the equipment or equipment warranty, the quality of the work, labor and/or materials supplied, and/or the acts or omissions of the participating trade ally.

Customer satisfaction survey:
I understand that I may be contacted by Energy Smart to complete a survey or questionnaire to provide feedback on my satisfaction with the program.

Please send this application along with required documents to:

Energy Smart
4298 Elysian Fields Ave. Ste. B
New Orleans, LA 70122

Phone: 504-229-4868
Email: residentialapps@energysmartnola.com

Rebate form must be submitted within 45 days of service. All rebates are given in the form of a check. Please allow 4-6 weeks for processing. This offer is available through December 31, 2024, or while funds last.

For more information about this and other energy efficiency programs, visit energysmartnola.com, email info@energysmartnola.com or call 504-229-4868.

Energy Smart is a program of the Energy Smart Consortium, which is led by the City of New Orleans and includes Entergy New Orleans, LLC, Local Energy Services, LLC, and Habitat for Humanity.

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HVAC replacement rebate form



EnergySmart
A/C Solutions

HVAC system replacement rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

Please fill out completely. All information is required.

Purchaser information

Purchaser's name

Daytime phone

Email

Installation address

City

State ZIP

Purchaser's address (if different from install address)

City

State ZIP

Type of residence

☐ Single-family
☐ Multifamily (5 or more units)
☐ Other

Equipment information

New purchased system information

New system:
☐ Central air conditioner ☐ Mini-split (ductless) heat pump
☐ Air source heat pump

Does the new system have a factory-installed, electronically commutated motor?
☐ Yes ☐ No

Choose one:
☐ Replaced failed unit ☐ Replaced working, but inefficient unit

New system capacity (tons)

Cooling efficiency:
SEER2 EER2

Heating efficiency:
HSPF2 (if heat pump)

Condenser brand Condenser model

Coil model Air handler model

Replaced HVAC system information

Approximate age of replaced system

Replaced system capacity (tons)

Cooling efficiency:
SEER2 EER2

Heating system before the replacement (choose one):
☐ Heat pump ☐ Electric resistance
☐ Gas ☐ Other

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EnergySmart
A/C Solutions

HVAC system replacement rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

Required document checklist:

☐ AHRI certificate (provided by equipment installer)
☐ Copy of customer's invoice (provided by equipment installer)
☐ Signed and completed Energy Smart rebate form

Installation date

HVAC rebate amount

Customer completion:

I acknowledge the above is true and correct. By signing below, I agree to allow Energy Smart to perform an on-site verification of installed equipment. I also understand that failure to allow an inspection within 60 days may result in forfeiture of the rebate amount.

Customer signature

Date

Qualified equipment and rebate amounts*

Central air conditioner

Efficiency level	SEER2 ≥ 15.2 with ECM	SEER2 ≥ 16 with ECM	SEER2 ≥ 17 with ECM
Rebate amount	$[illegible] per System	$[illegible] per System	$[illegible] per System

Air source heat pump

Efficiency level	SEER2 ≥ 15.2 & HSPF2 ≥ 7.7	SEER2 ≥ 16 & HSPF2 ≥ 7.7	SEER2 ≥ 17 & HSPF2 ≥ 7.8
Rebate amount	$[illegible] per System	$[illegible] per System	$[illegible] per System

Mini-split (ductless) heat pump

Efficiency level	SEER2 ≥ 17 & HSPF2 ≥ 7.7 (Replaced Unit: Heat Pump)	SEER2 ≥ 17 & HSPF2 ≥ 7.7 (Replaced Unit: Electric Strip)
Rebate amount	$[illegible] per System	$[illegible] per System

*[illegible] and 8.5 HSPF2 or higher is required to receive rebate.

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EnergySmart
A/C Solutions

HVAC system replacement rebate form

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☐ Search engine ☐ Social media ☐ Calling campaign ☐ Utility website ☐ Other _____

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Inspection:
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Liability:
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Phone: 504-229-4868
Email: residentialapps@energysmartnola.com

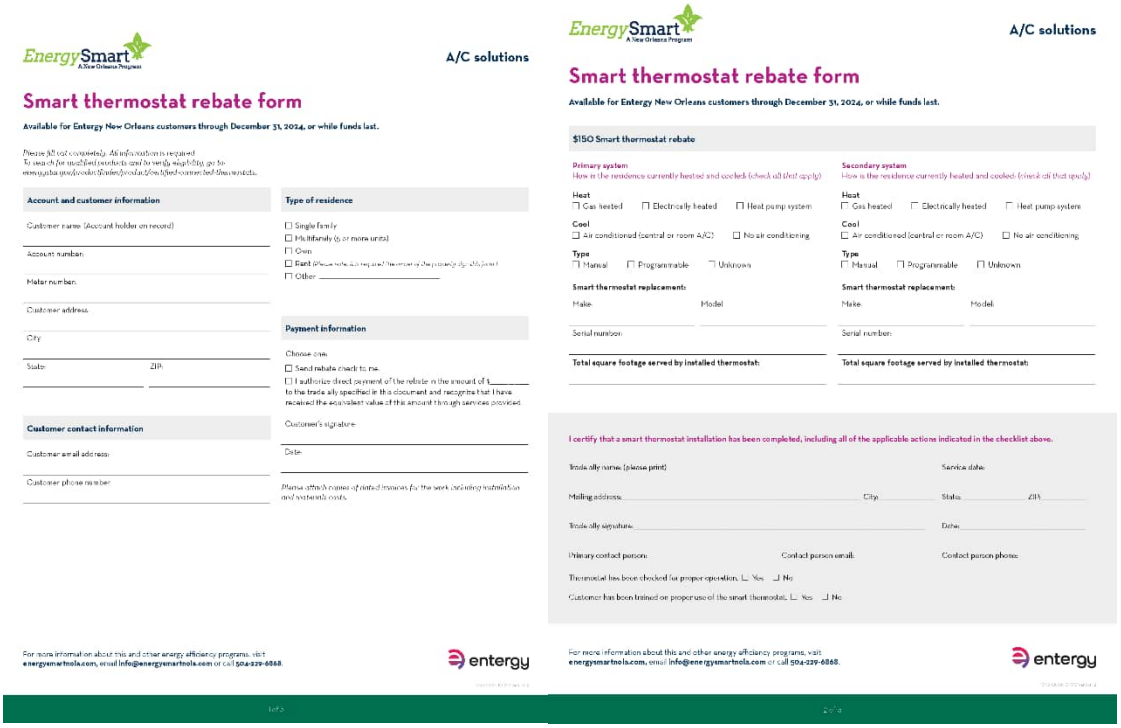
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[illegible] is a program administered by New Orleans Sustainability Council, LLC. [illegible] All Rights Reserved.

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Smart thermostat rebate form



EnergySmart
A New Orleans Program

A/C solutions

Smart thermostat rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

Please fill out completely. All information is required.
To search for qualified products and to verify eligibility, go to energysmartnola.com/residential/products/qualified-connected-thermostats.

Account and customer information

Customer name (Account holder on record)

Account number:

Meter number:

Customer address:

City:

State: ZIP:

Customer contact information

Customer email address:

Customer phone number:

Type of residence

☐ Single family
☐ Multifamily (5 or more units)
☐ Own
☐ Rent (Please note, ID required. Permission by property owner required.)
☐ Other _____

Payment information

Choose one:

☐ Send rebate check to me.
☐ I authorize direct payment of the rebate in the amount of $_____ to the trade ally specified in this document and recognize that I have received the equivalent value of this amount through services provided.

Customer's signature:

Date:

Please attach copies of itemized invoices for the work including installation and materials costs.

For more information about this and other energy efficiency programs, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6868**.

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EnergySmart
A New Orleans Program

A/C solutions

Smart thermostat rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

$150 Smart thermostat rebate

Primary system
How is the residence currently heated and cooled (check all that apply)

Heat
☐ Gas heated ☐ Electrically heated ☐ Heat pump system

Cool
☐ Air conditioned (central or room A/C) ☐ No air conditioning

Type
☐ Manual ☐ Programmable ☐ Unknown

Smart thermostat replacement:

Make: Model:

Serial number:

Total square footage served by installed thermostat:

Secondary system
How is the residence currently heated and cooled (check all that apply)

Heat
☐ Gas heated ☐ Electrically heated ☐ Heat pump system

Cool
☐ Air conditioned (central or room A/C) ☐ No air conditioning

Type
☐ Manual ☐ Programmable ☐ Unknown

Smart thermostat replacement:

Make: Model:

Serial number:

Total square footage served by installed thermostat:

I certify that a smart thermostat installation has been completed, including all of the applicable actions indicated in the checklist above.

Trade ally name (please print): Service date:

Mailing address: City: State: ZIP:

Trade ally signature: Date:

Primary contact person: Contact person email: Contact person phone:

Thermostat has been checked for proper operation. ☐ Yes ☐ No

Customer has been trained on proper use of the smart thermostat. ☐ Yes ☐ No

For more information about this and other energy efficiency programs, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6868**.

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EnergySmart
A New Orleans Program

A/C solutions

Smart thermostat rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

How did you hear about Energy Smart?

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

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Customer satisfaction survey:
I understand that I may be contacted by Energy Smart to complete a survey or questionnaire to provide feedback on my satisfaction with the program.

Please send this application along with required documents to:

Energy Smart
4201 Elysian Fields Ave. Ste. B
New Orleans, LA 70122

Phone: 504-229-6868
Email: residentialapps@energysmartnola.com

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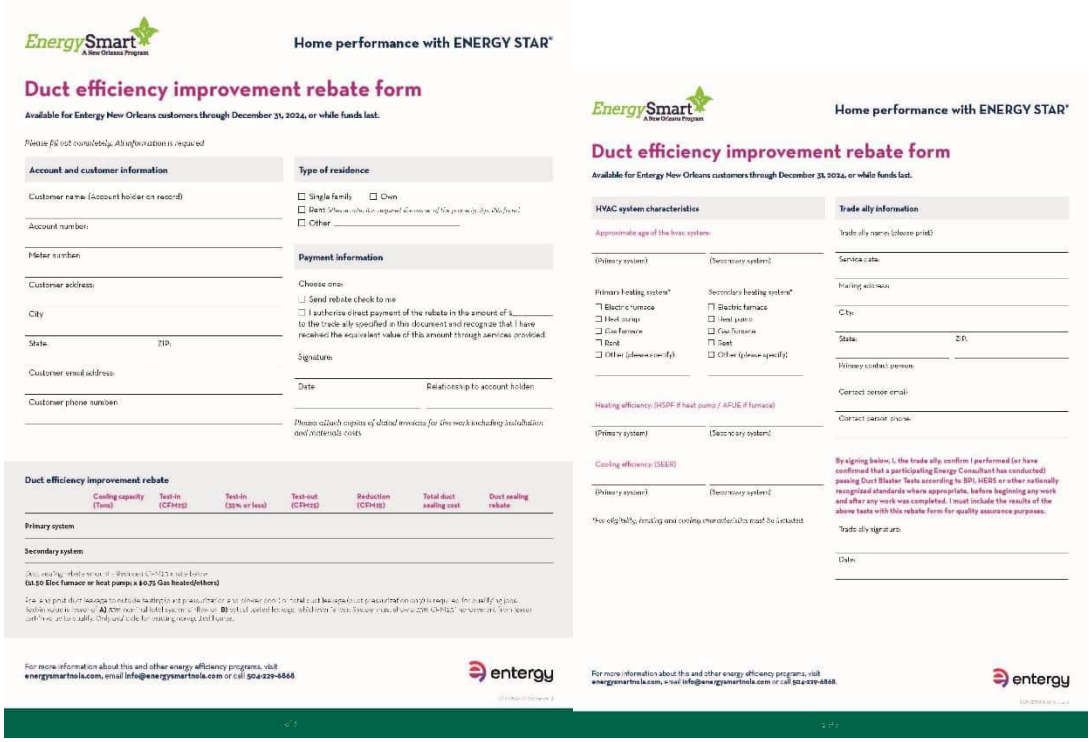
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Duct efficiency improvement rebate form

Home performance with ENERGY STAR



Home performance with ENERGY STAR®

Duct efficiency improvement rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

Please fill out completely. All information is required

Account and customer information

Customer name (Account holder on record):

Account number:

Meter number:

Customer address:

City:

State: ZIP:

Customer email address:

Customer phone number:

Type of residence

☐ Single family ☐ Own

☐ Rent

☐ Other

Payment information

Choose one:

☐ Send rebate check to me

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

Signature:

Date: Relationship to account holder:

Please attach copies of detailed invoices for the work including installation and materials costs.

Duct efficiency improvement rebate

	Cooling capacity (Tons)	Test-in (CFM25)	Test-in (30% or less)	Test-out (CFM25)	Reduction (CFM25)	Total duct sealing cost	Duct sealing rebate
Primary system							
Secondary system							

Duct sealing rebate amount = Reduction (CFM25) x rate below

($1.50 Elec furnace or heat pump; x $0.75 Gas heated/others)

For duct sealing rebate, A) 30% or more total system airflow or B) total sealed leakage should be less than 5 cfm25 per ton of cooling capacity, whichever is greater. Only applicable for existing ducted systems.

For more information about this and other energy efficiency programs, visit energysmartnola.com, email info@energysmartnola.com or call 504-229-6868.

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Home performance with ENERGY STAR®

Duct efficiency improvement rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

HVAC system characteristics

Approximate age of the hvac system:

(Primary system) (Secondary system)

Primary heating system*

☐ Electric furnace
☐ Heat pump
☐ Gas furnace
☐ Both
☐ Other (please specify):

Secondary heating system*

☐ Electric furnace
☐ Heat pump
☐ Gas furnace
☐ Both
☐ Other (please specify):

Heating efficiency: (HSPF if heat pump / AFUE if furnace)

(Primary system) (Secondary system)

Cooling efficiency: (SEER)

(Primary system) (Secondary system)

*For eligibility, heating and cooling characteristics must be detailed.

Trade ally information

Trade ally name (please print):

Service rate:

Mailing address:

City:

State: ZIP:

Primary contact person:

Contact person email:

Contact person phone:

By signing below, I, the trade ally, confirm I performed (or have confirmed that a participating Energy Consultant has conducted) passing Duct Blaster Tests according to BPI, HERS or other nationally recognized standards where appropriate, before beginning any work and after any work was completed. I must include the results of the above tests with this rebate form for quality assurance purposes.

Trade ally signature:

Date:

For more information about this and other energy efficiency programs, visit energysmartnola.com, e-mail info@energysmartnola.com or call 504-229-6868.

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Home performance with ENERGY STAR®

Duct efficiency improvement rebate form

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How did you hear about Energy Smart?

☐ Bill insert ☐ Door to door canvassing ☐ Email ☐ Event ☐ Friends/family ☐ Mailer
☐ Search engine ☐ Social media ☐ Calling campaign ☐ Utility website ☐ Other:

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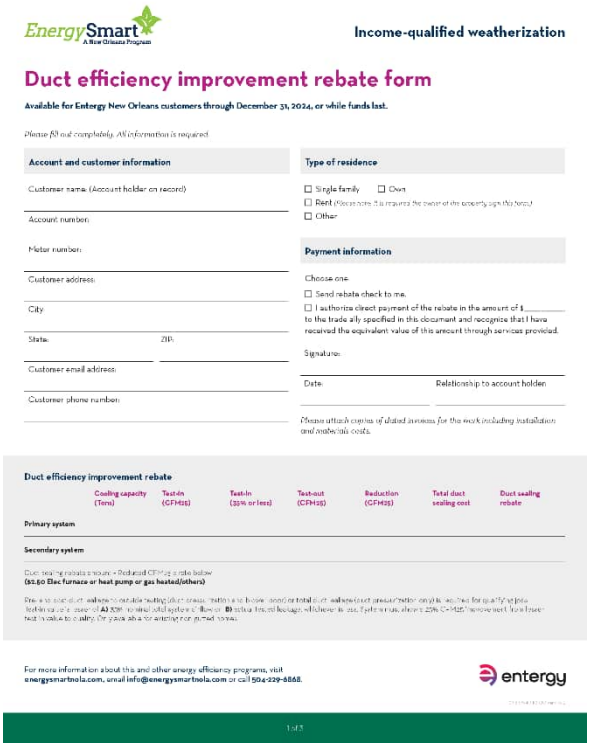
Phone: 504-229-6868
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Income-qualified weatherization



EnergySmart A New Orleans Program

Income-qualified weatherization

Duct efficiency improvement rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

Please fill out completely. All information is required.

Account and customer information

Customer name (Account holder on record)

Account number:

Meter number:

Customer address:

City

State: ZIP:

Customer email address:

Customer phone number:

Type of residence

☐ Single family ☐ Own

☐ Rent (Please note: It is required the owner of the property sign this form.)

☐ Other

Payment information

Choose one

☐ Send rebate check to me.

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

Signature:

Date: Relationship to account holder:

Please attach copies of dated invoices for the work including installation and materials costs.

Duct efficiency improvement rebate

	Cooling capacity (Tons)	Test-in (CFM25)	Test-in (25% or less)	Test-out (CFM25)	Reduction (CFM25)	Total duct sealing cost	Duct sealing rebate
Primary system							
Secondary system							

Duct sealing rebate amount = Reduced CFM25 x rate below
($2.50 Elec furnace or heat pump or gas heated/others)

Pre- and post-duct sealing testing (duct blaster testing) is to be done on total duct sealing (duct pressurization only) is required for qualifying jobs. Testing is in case of A) 20% or more total system airflow or B) visible, total leakage, whichever is less. Typical result, where 25% CFM25 is removed from these testing is to a utility-determined value.

For more information about this and other energy efficiency programs, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6868**.

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EnergySmart A New Orleans Program

Income-qualified weatherization

Duct efficiency improvement rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

HVAC system characteristics

Approximate age of the hvac system:

(Primary system) (Secondary system)

Primary heating system* Secondary heating system*

☐ Electric furnace ☐ Electric furnace
☐ Heat pump ☐ Heat pump
☐ Gas furnace ☐ Gas furnace
☐ Rent ☐ Rent
☐ Other (please specify) ☐ Other (please specify)

Heating efficiency (HSPF if heat pump / AFUE if furnace)

(Primary system) (Secondary system)

Cooling efficiency (SEER)

(Primary system) (Secondary system)

*For eligibility, heating and cooling characteristics must be included.

Trade ally information

Trade ally name (please print):

Service date:

Mailing address:

City:

State: ZIP:

Primary contact person:

Contact person email:

Contact person phone:

By signing below, I, the trade ally, confirm I performed (or have confirmed that a participating Energy Consultant has conducted) passing Duct Blaster Tests according to BPI, HERS or other nationally recognized standards where appropriate, before beginning any work and after any work was completed. I must include the results of the above tests with this rebate form for quality assurance purposes.

Trade ally signature:

Date:

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EnergySmart A New Orleans Program

Income-qualified weatherization

Duct efficiency improvement rebate form

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How did you hear about Energy Smart?

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

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Energy Smart is a comprehensive energy efficiency program developed by the New Orleans City Council and administered by Entergy New Orleans, LLC, doing Energy Services, LLC. All Rights Reserved.

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Attic Insulation and Air Infiltration reeducation rebate form

Home performance with ENERGY STAR



EnergySmart
A New Orleans Program

Home performance with ENERGY STAR®

Attic insulation and air infiltration reduction rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

Please fill out completely. All information is required.

Account and customer information

Customer name (Account holder on record)

Account number

Meter number

Customer address:

City:

State: ZIP:

Customer contact information

Customer email address:

Customer phone number:

Type of residence

☐ Single family
☐ Own
☐ Rent *(Please provide landlord's name and contact information and proof of ownership with this form.)*
☐ Other _____

How is the residence primarily heated and cooled?

Heating:
☐ Electric resistance heated (Furnace, baseboard, etc.)
☐ Heat pump system (Air source, mini-split, etc.)
☐ Gas heated

Cooling:
☐ Air conditioned (central or room A/C)
☐ No air conditioning

Approximate age of the hvac system:

Payment information

Choose one:

☐ Send rebate check to me.
☐ I authorize direct payment of the rebate in the amount of $_____ to the trade ally specified in this document and recognize that I have received the equivalent value of this amount through services provided.

Signature

Date:

Relationship to account holder:

Please attach copies of dated invoices for the work including installation and materials costs.

For more information about this and other energy efficiency programs, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6868**.

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1 of 3

EnergySmart
A New Orleans Program

Home performance with ENERGY STAR®

Attic insulation and air infiltration reduction rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

Attic insulation (For trade ally use only)

Total insulation cost: Total insulation sq. ft:

Starting R value: (R8 or less)

Final R value: (R38 or more)

Service date:

Starting R value	$ Rebate per sq. ft. (per heating fuel type)		
	Gas-heated	Heat pump	Electric strip or furnace
R-0 to R-4	$0.30 per sq. ft.	$0.30 per sq. ft.	$0.45 per sq. ft.
R-5 to R-8	$0.15 per sq. ft.	$0.20 per sq. ft.	$0.22 per sq. ft.

Total rebate amount: _____ X _____ = _____
Insulation sq. ft. X Rebate per sq. ft.

Air infiltration and reduction*

Total air sealing cost

Number of stories: ☐ 1 ☐ 2 ☐ 3

Home shielding (pick one): ☐ Normal ☐ Wall ☐ Exposed

**20% CFM50 reduction required for eligibility*

Starting CFM50 Final improved CFM50 CFM50 reduction*

	$ Rebate per sq. ft. (per heating fuel type)			
	Gas-heated	Heat pump	Electric strip or furnace	Electric strip or furnace (No A/C)
3000 per CFM50	$0.25 per CFM50	$0.25 per CFM50	$0.25 per CFM50	Not eligible

Total rebate amount: _____ X _____ = _____
CFM50 reduction X Rebate per CFM50 reduction

Trade ally company name: (please print)

Trade ally mailing address: City: State: ZIP:

Primary contact person: Contact person email: Contact person phone:

By signing below, I, the trade ally, confirm I performed (or have confirmed that a participating Energy Consultant has conducted) passing Duct Blaster Tests according to BPI, HERS or other nationally recognized standards where appropriate, before beginning any work and after any work was completed. I must include the results of the above tests with this rebate form for quality assurance purposes.

Trade ally signature: Date:

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EnergySmart
A New Orleans Program

Home performance with ENERGY STAR®

Attic insulation and air infiltration reduction rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

How did you hear about Energy Smart?

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

Terms and conditions

Rebate offer:
Rebate application must be submitted within 45 days of service. Must submit one rebate application form per unit. Service must be performed between January 1, 2024, and December 31, 2024. Work must be completed by a participating trade ally. Applicant must be an Entergy New Orleans, LLC. residential customer. It is the responsibility of the customer to ensure that all requirements for the rebate are met.

Participation requirements:
Failure to provide any of the required information will prevent processing of your application. The dated sales receipt must match the date of service listed on the rebate program procedures. Requirements and rebate levels are subject to change or cancellation without notice and are subject to available program funds. Misrepresentation of installation location or measure eligibility may result in forfeiture of the rebate. Please allow up to 4-6 weeks from the date all required information is received to process your rebate.

Inspection:
Program reserves the right to conduct pre-inspection or post-inspection of proposed and completed projects. This inspection will be scheduled with the applicant.

Liability:
Entergy New Orleans, LLC. or their parents, subsidiaries, employees, affiliates and agents assumes no responsibility for the performance of the equipment or equipment warranty, the quality of the work, labor and/or materials supplied, and/or the acts or omissions of the participating trade ally.

Customer satisfaction survey:
I understand that I may be contacted by Energy Smart to complete a survey or questionnaire to provide feedback on my satisfaction with the program.

Please send this application along with required documents to:

Energy Smart
4206 Elysian Fields Ave. Ste. B
New Orleans, LA 70122

Phone: **504-229-6868**
Email: **residentialapps@energysmartnola.com**

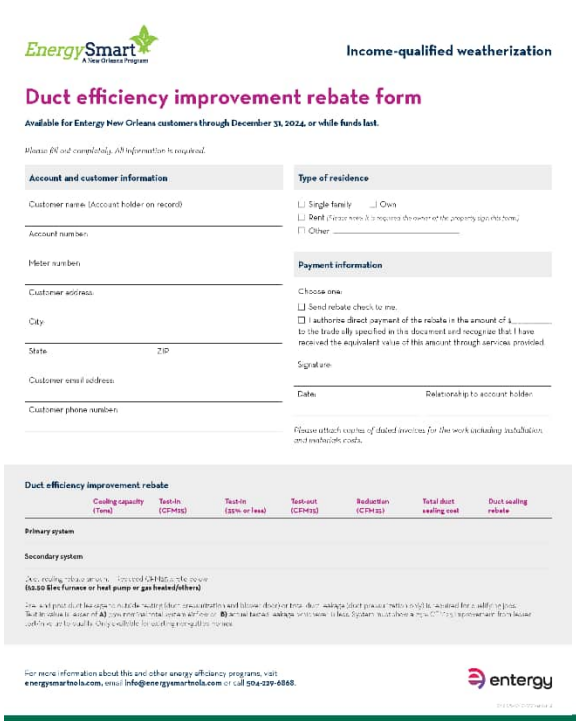
Rebate form must be submitted within 45 days of service. All rebates are given in the form of a check. Please allow 4-6 weeks for processing. This offer is available through December 31, 2024, or while funds last.

For more information about this and other energy efficiency programs, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6868**.

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3 of 3

Income-qualified weatherization



EnergySmart A New Orleans Program

Income-qualified weatherization

Duct efficiency improvement rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

Please fill out completely. All information is required.

Account and customer information

Customer name (Account holder on record)

Account number

Meter number

Customer address

City

State ZIP

Customer email address

Customer phone number

Type of residence

☐ Single family ☐ Own

☐ Rent *(Please note: It is required the owner of the property sign this form.)*

☐ Other: _____

Payment information

Choose one:

☐ Send rebate check to me.

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

Signature

Date Relationship to account holder

Please attach copies of dated invoices for the work including installation and materials costs.

Duct efficiency improvement rebate

	Cooling capacity (Tons)	Test-in (CFM25)	Test-in (25% or less)	Test-out (CFM25)	Reduction (CFM25)	Total duct sealing cost	Duct sealing rebate
Primary system							
Secondary system							

Any cooling rebate amount ... required CFM25 reduction
(53.33 Elec furnace or heat pump or gas heated/others)

The total post duct leakage to outside reading (duct pressurization and blower door test duct leakage (post pressurization) to be retested for validation.
Test-in value is lesser of **A)** 25% of the total system airflow or **B)** actual tested leakage with new 1" filter. System must show a min 25% improvement from lesser value to be qualify. Only qualified for existing non-gas homes.

For more information about this and other energy efficiency programs, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6868**.

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EnergySmart A New Orleans Program

Income-qualified weatherization

Duct efficiency improvement rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

HVAC system characteristics

Approximate age of the hvac system:

(Primary system) (Secondary system)

Primary heating system* Secondary heating system*

☐ Electric furnace ☐ Electric furnace
☐ Heat pump ☐ Heat pump
☐ Gas furnace ☐ Gas furnace
☐ Rent ☐ Rent
☐ Other (please specify) ☐ Other (please specify)

Heating efficiency (HSPF if heat pump / AFUE if furnace)

(Primary system) (Secondary system)

Cooling efficiency (SEER)

(Primary system) (Secondary system)

** For eligibility, heating and cooling characteristics must be included.*

Trade ally information

Trade ally name: (please print)

Service date:

Mailing address:

City:

State: ZIP:

Primary contact person:

Contact person email:

Contact person phone:

By signing below, I, the trade ally, confirm I performed (or have confirmed that a participating Energy Consultant has conducted) passing Duct Blaster Tests according to BPI, HERS or other nationally recognized standards where appropriate, before beginning any work and after any work was completed. I must include the results of the above tests with this rebate form for quality assurance purposes.

Trade ally signature:

Date:

For more information about this and other energy efficiency programs, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6868**.

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EnergySmart A New Orleans Program

Income-qualified weatherization

Duct efficiency improvement rebate form

Available for Entergy New Orleans customers through December 31, 2024, or while funds last.

How did you hear about Energy Smart?

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

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Customer satisfaction survey:
I understand that I may be contacted by Energy Smart to complete a survey or questionnaire to provide feedback on my satisfaction with the program.

Please send this application along with required documents to:

Energy Smart
4298 Elysian Fields Ave. Ste. B
New Orleans, LA 70122

Phone: 504-229-6868
Email: residentialapps@energysmartnola.com

Rebate form must be submitted within 45 days of service. All rebates are given in the form of a check. Please allow 4-6 weeks for processing. This offer is available through December 31, 2024, or while funds last.

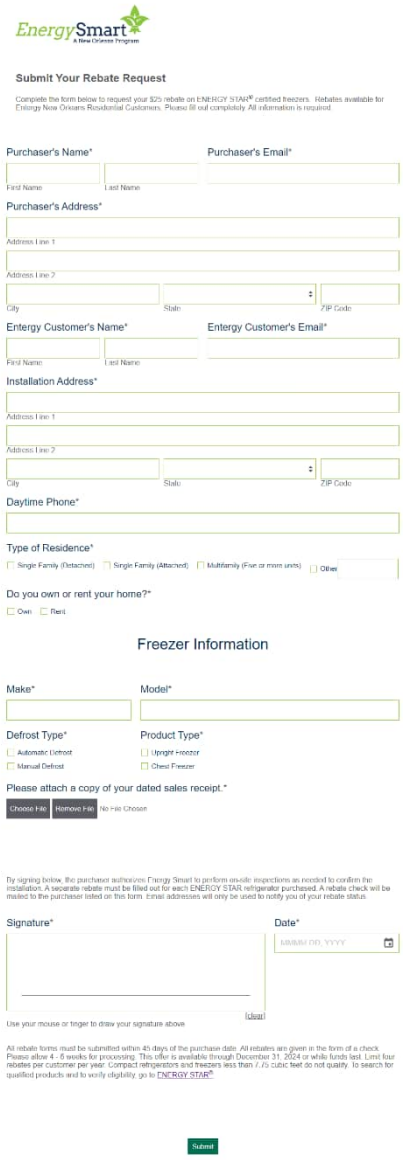
For more information about this and other energy efficiency programs, visit: **energysmartnola.com**, e-mail **info@energysmartnola.com** or call **504-229-6868**.

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Product purchase rebate forms

Freezers



EnergySmart
A New Orleans Program

Submit Your Rebate Request

Complete the form below to request your $25 rebate on ENERGY STAR® certified freezers. Rebates available for Entergy New Orleans Residential Customers. Please fill out completely. All information is required.

Purchaser's Name* — First Name, Last Name
Purchaser's Email*
Purchaser's Address* — Address Line 1, Address Line 2, City, State, ZIP Code
Entergy Customer's Name* — First Name, Last Name
Entergy Customer's Email*
Installation Address* — Address Line 1, Address Line 2, City, State, ZIP Code
Daytime Phone*
Type of Residence* — Single Family (Detached), Single Family (Attached), Multifamily (Five or more units), Other
Do you own or rent your home?* — Own, Rent

Freezer Information

Make*
Model*
Defrost Type* — Automatic Defrost, Manual Defrost
Product Type* — Upright Freezer, Chest Freezer
Please attach a copy of your dated sales receipt.* — Choose File, Remove File, No File Chosen

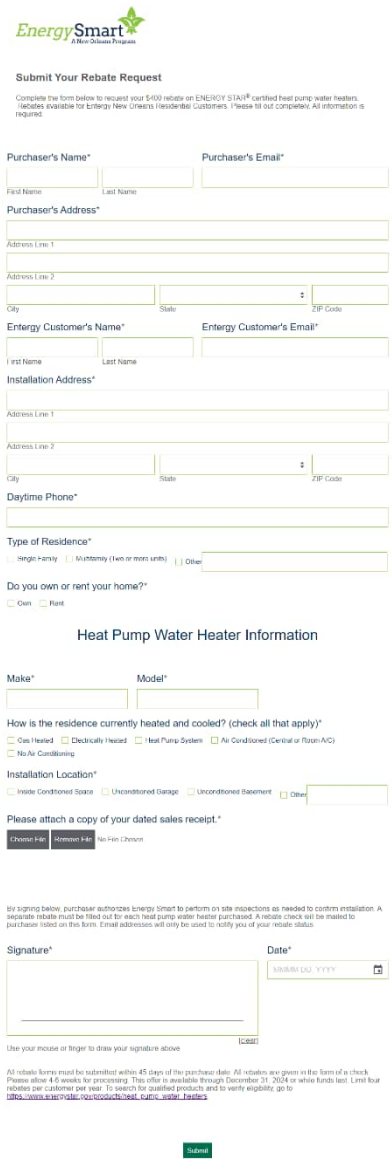
By signing below, the purchaser authorizes Energy Smart to perform on-site inspections as needed to confirm the installation. A separate rebate must be filled out for each ENERGY STAR refrigerator purchased. A rebate check will be mailed to the purchaser listed on this form. Email addresses will only be used to notify you of your rebate status.

Signature* — Clear — Use your mouse or finger to draw your signature above
Date* — MM/DD/YYYY

All rebate forms must be submitted within 45 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 December 31, 2024 or while funds last. Limit four rebates per customer per year. Compact refrigerators and freezers less than 7.75 cubic feet do not qualify. To search for qualified products and to verify eligibility, go to ENERGY STAR®

Submit

Heat pump water heater



EnergySmart
A New Orleans Program

Submit Your Rebate Request

Complete the form below to request your $400 rebate on ENERGY STAR® certified heat pump water heaters. Rebates available for Entergy New Orleans Residential Customers. Please fill out completely. All information is required.

Purchaser's Name* | Purchaser's Email*

First Name | Last Name

Purchaser's Address*

Address Line 1

Address Line 2

City | State | ZIP Code

Entergy Customer's Name* | Entergy Customer's Email*

First Name | Last Name

Installation Address*

Address Line 1

Address Line 2

City | State | ZIP Code

Daytime Phone*

Type of Residence*

Single Family | Multifamily (Two or more units) | Other

Do you own or rent your home?*

Own | Rent

Heat Pump Water Heater Information

Make* | Model*

How is the residence currently heated and cooled? (check all that apply)*

Gas Heated | Electrically Heated | Heat Pump System | Air Conditioned (Central or Room A/C) | No Air Conditioning

Installation Location*

Inside Conditioned Space | Unconditioned Garage | Unconditioned Basement | Other

Please attach a copy of your dated sales receipt.*

Choose File | Remove File | No File Chosen

By signing below, purchaser authorizes Energy Smart to perform on site inspections as needed to confirm installation. A separate rebate must be filled out for each heat pump water heater purchased. A rebate check will be mailed to purchaser listed on this form. Email addresses will only be used to notify you of your rebate status.

Signature^ | Date*

MM/DD/YYYY

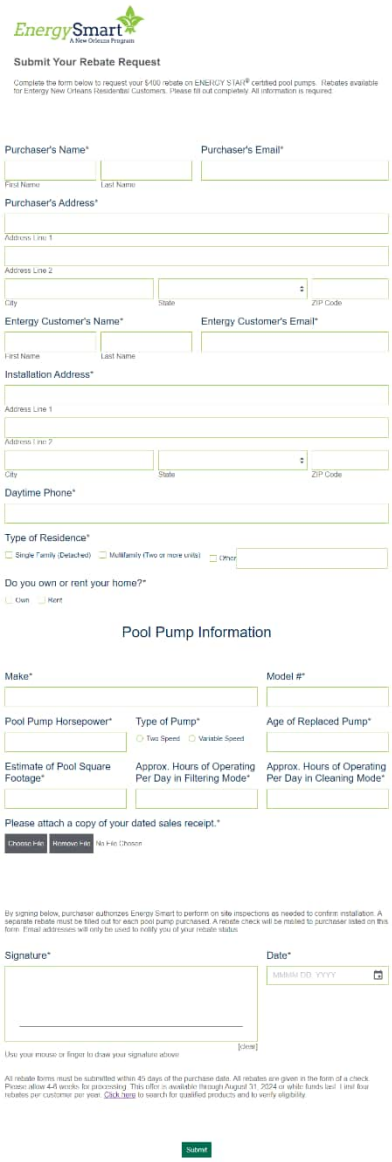
Clear

Use your mouse or finger to draw your signature above

All rebate forms must be submitted within 45 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 December 31, 2024 or while funds last. Limit four rebates per customer per year. To search for qualified products and to verify eligibility, go to https://www.energystar.gov/products/heat_pumps_water_heaters.

Submit

Pool pump



EnergySmart
A New Orleans Program

Submit Your Rebate Request

Complete the form below to request your $400 rebate on ENERGY STAR® certified pool pumps. Rebates available for Entergy New Orleans Residential Customers. Please fill out completely. All information is required.

Purchaser's Name* — First Name, Last Name
Purchaser's Email*
Purchaser's Address* — Address Line 1, Address Line 2, City, State, ZIP Code
Entergy Customer's Name* — First Name, Last Name
Entergy Customer's Email*
Installation Address* — Address Line 1, Address Line 2, City, State, ZIP Code
Daytime Phone*
Type of Residence* — Single Family (Detached), Multifamily (Two or more units), Other
Do you own or rent your home?* — Own, Rent

Pool Pump Information

Make*
Model #*
Pool Pump Horsepower*
Type of Pump* — Two Speed, Variable Speed
Age of Replaced Pump*
Estimate of Pool Square Footage*
Approx. Hours of Operating Per Day in Filtering Mode*
Approx. Hours of Operating Per Day in Cleaning Mode*
Please attach a copy of your dated sales receipt.* — Choose File, Remove File, No File Chosen

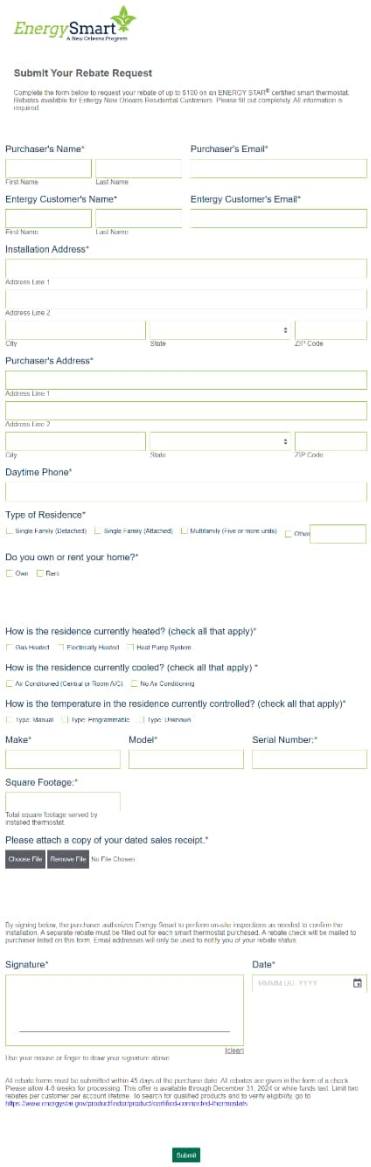
By signing below, purchaser authorizes Energy Smart to perform on site inspections as needed to confirm installation. A separate rebate must be filled out for each pool pump purchased. A rebate check will be mailed to purchaser listed on this form. Email addresses will only be used to notify you of your rebate status.

Signature*
Date* — MM/DD/YYYY
Clear
Use your mouse or finger to draw your signature above.

All rebate forms must be submitted within 45 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 August 31, 2024 or while funds last. Limit four rebates per customer per year. Click here to search for qualified products and to verify eligibility.

Submit

Refrigerator



EnergySmart
A New Orleans Program

Submit Your Rebate Request

Complete the form below to request your rebate of up to $100 on an ENERGY STAR® certified smart thermostat. Rebates available for Entergy New Orleans Residential Customers. Please fill out completely. All information is required.

Purchaser's Name*
First Name
Last Name
Purchaser's Email*

Entergy Customer's Name*
First Name
Last Name
Entergy Customer's Email*

Installation Address*
Address Line 1
Address Line 2
City
State
ZIP Code

Purchaser's Address*
Address Line 1
Address Line 2
City
State
ZIP Code

Daytime Phone*

Type of Residence*
Single Family (Detached) Single Family (Attached) Multifamily (Five or more units) Other

Do you own or rent your home?*
Own Rent

How is the residence currently heated? (check all that apply)*
Gas Heated Electrically Heated Heat Pump System

How is the residence currently cooled? (check all that apply) *
Air Conditioned (Central or Room A/C) No Air Conditioning

How is the temperature in the residence currently controlled? (check all that apply)*
Type: Manual Type: Programmable Type: Unknown

Make*
Model*
Serial Number:*

Square Footage:*
Total square footage served by installed thermostat.

Please attach a copy of your dated sales receipt.*
Choose File Remove File No File Chosen

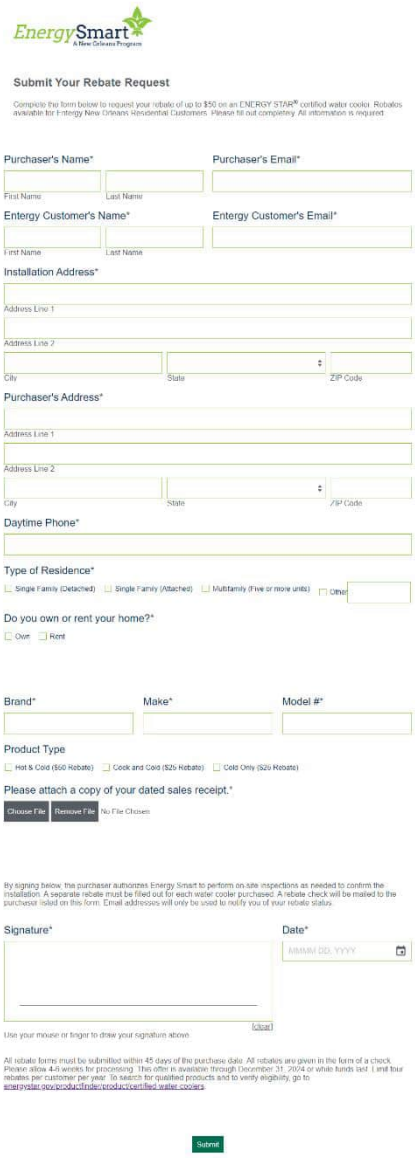
By signing below, the purchaser authorizes Energy Smart to perform on-site inspections as needed to confirm the installation. A separate rebate must be filled out for each smart thermostat purchased. A rebate check will be mailed to purchaser listed on this form. Email addresses will only be used to notify you of your rebate status.

Signature*
Date*
MM/DD/YYYY
Clear
Use your mouse or finger to draw your signature above.

All rebate forms must be submitted within 45 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 December 31, 2024 or while funds last. Limit two rebates per customer per account lifetime. To search for qualified products and to verify eligibility, go to https://www.energystar.gov/productfinder/product/certified-connected-thermostats.

Submit

Water cooler



EnergySmart
A More Efficient Program

Submit Your Rebate Request

Complete the form below to request your rebate of up to $50 on an ENERGY STAR® certified water cooler. Rebates available for Entergy New Orleans Residential Customers. Please fill out completely. All information is required.

Purchaser's Name* — First Name, Last Name
Purchaser's Email*
Entergy Customer's Name* — First Name, Last Name
Entergy Customer's Email*
Installation Address* — Address Line 1, Address Line 2, City, State, ZIP Code
Purchaser's Address* — Address Line 1, Address Line 2, City, State, ZIP Code
Daytime Phone*
Type of Residence* — Single Family (Detached), Single Family (Attached), Multifamily (Five or more units), Other
Do you own or rent your home?* — Own, Rent
Brand*
Make*
Model #*
Product Type — Hot & Cold ($50 Rebate), Cook and Cold ($25 Rebate), Cold Only ($25 Rebate)
Please attach a copy of your dated sales receipt.* — Choose File, Remove File, No File Chosen

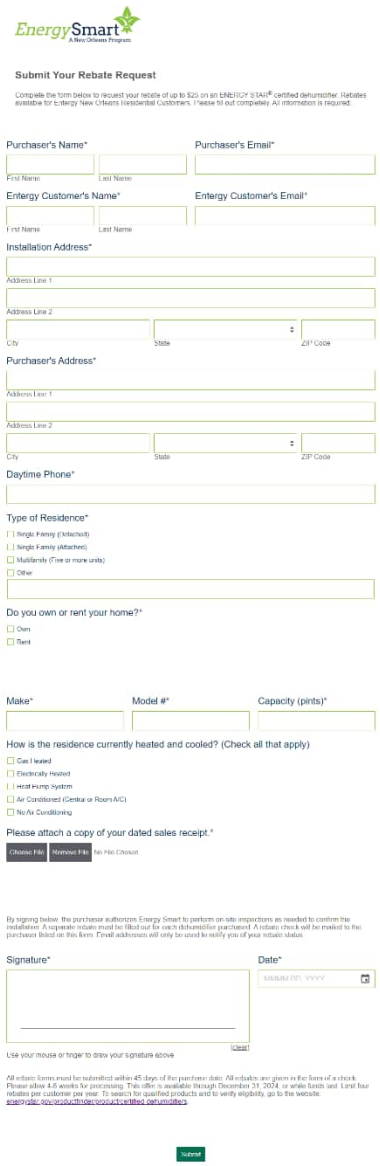
By signing below, the purchaser authorizes Energy Smart to perform on-site inspections as needed to confirm the installation. A separate rebate must be filled out for each water cooler purchased. A rebate check will be mailed to the purchaser listed on this form. Email addresses will only be used to notify you of your rebate status.

Signature*
Date* — MMMM DD, YYYY
Clear
Use your mouse or finger to draw your signature above.

All rebate forms must be submitted within 45 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 December 31, 2014 or while funds last. Limit four rebates per customer per year. To search for qualified products and to verify eligibility, go to energystar.gov/productfinder/product/certified-water-coolers.

Submit

Window Air Conditioner



EnergySmart
A New Orleans Program

Submit Your Rebate Request

Complete the form below to request your rebate of up to $25 on an ENERGY STAR® certified dehumidifier. Rebates available for Entergy New Orleans residential customers. Please fill out completely. All information is required.

Purchaser's Name*
First Name
Last Name
Purchaser's Email*

Entergy Customer's Name*
First Name
Last Name
Entergy Customer's Email*

Installation Address*
Address Line 1
Address Line 2
City
State
ZIP Code

Purchaser's Address*
Address Line 1
Address Line 2
City
State
ZIP Code

Daytime Phone*

Type of Residence*
- [ ] Single Family (Detached)
- [ ] Single Family (Attached)
- [ ] Multifamily (Five or more units)
- [ ] Other

Do you own or rent your home?*
- [ ] Own
- [ ] Rent

Make*
Model #*
Capacity (pints)*

How is the residence currently heated and cooled? (Check all that apply)
- [ ] Gas Heated
- [ ] Electrically Heated
- [ ] Heat Pump System
- [ ] Air Conditioned (Central or Room A/C)
- [ ] No Air Conditioning

Please attach a copy of your dated sales receipt.*
Choose File | Remove File | No File Chosen

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

Signature*
Clear
Use your mouse or finger to draw your signature above

Date*
MM/DD/YYYY

All rebate forms must be submitted within 45 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 December 31, 2024, or while funds last. Limit four rebates per customer per year. To search for qualified products and to verify eligibility, go to the website: energystar.gov/productfinder/product/certified-dehumidifiers.

Submit

Customer Satisfaction Surveys

Home Performance with ENERGY STAR® Satisfaction Survey



EnergySmart
A New Orleans Program

Hi Energy Smart Customer,

Thank you for participating in the Home Performance with ENERGY STAR® offering. Energy Smart would like your feedback regarding your installation and customer service experience. Simply click here or on the button below to complete a brief survey.

Complete the survey

Please call **504-229-6868** if you have any questions. Be sure to tell your family and friends about participating in Energy Smart.

Sincerely,
Nate Wolf
Program Manager

entergy

Income-Qualified Weatherization Satisfaction Survey



EnergySmart
A New Orleans Program

Hi Energy Smart Customer,

Thank you for participating in the Income-Qualified Weatherization offering. Energy Smart would like your feedback regarding your installation and customer service experience. Simply click here or on the button below to complete a brief survey.

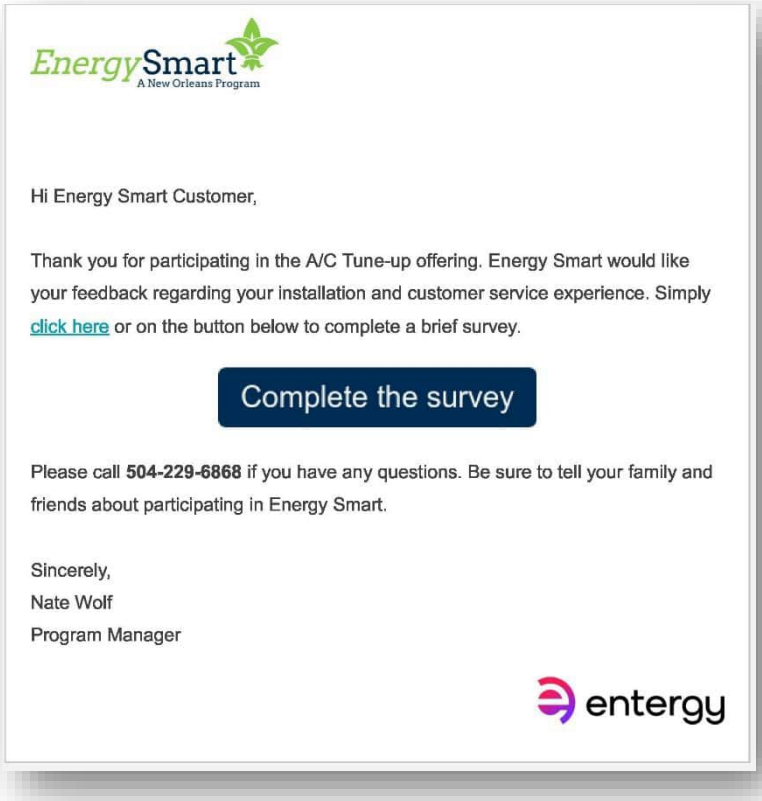
Complete the survey

Please call **504-229-6868** if you have any questions. Be sure to tell your family and friends about participating in Energy Smart.

Sincerely,
Nate Wolf
Program Manager

entergy

A/C Tune-Up Satisfaction Survey



EnergySmart
A New Orleans Program

Hi Energy Smart Customer,

Thank you for participating in the A/C Tune-up offering. Energy Smart would like your feedback regarding your installation and customer service experience. Simply click here or on the button below to complete a brief survey.

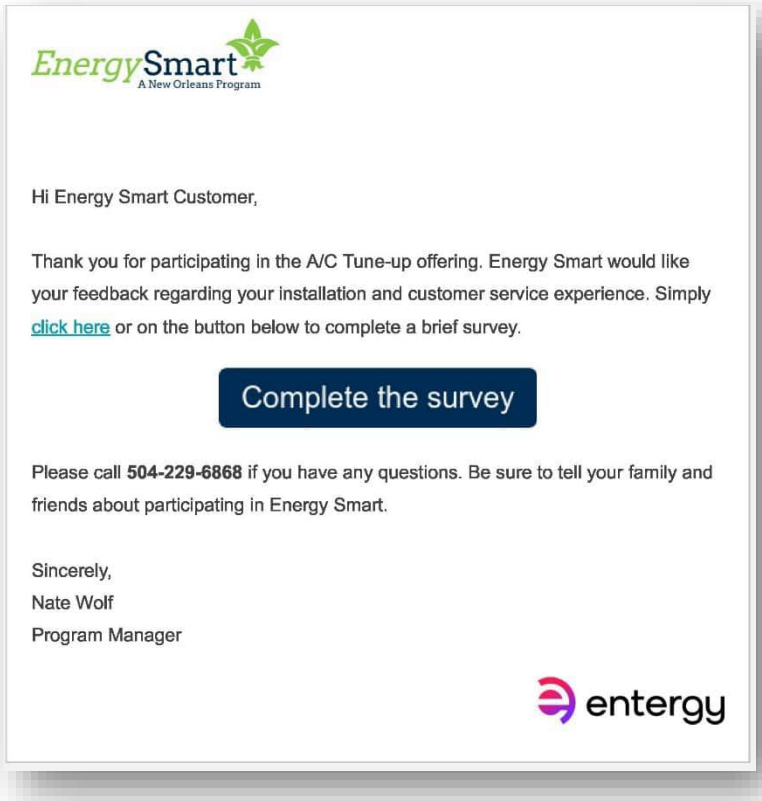
Complete the survey

Please call **504-229-6868** if you have any questions. Be sure to tell your family and friends about participating in Energy Smart.

Sincerely,
Nate Wolf
Program Manager

entergy

Energy Smart Online Marketplace Satisfaction Survey



EnergySmart
A New Orleans Program

Hi Energy Smart Customer,

Thank you for participating in the A/C Tune-up offering. Energy Smart would like your feedback regarding your installation and customer service experience. Simply click here or on the button below to complete a brief survey.

Complete the survey

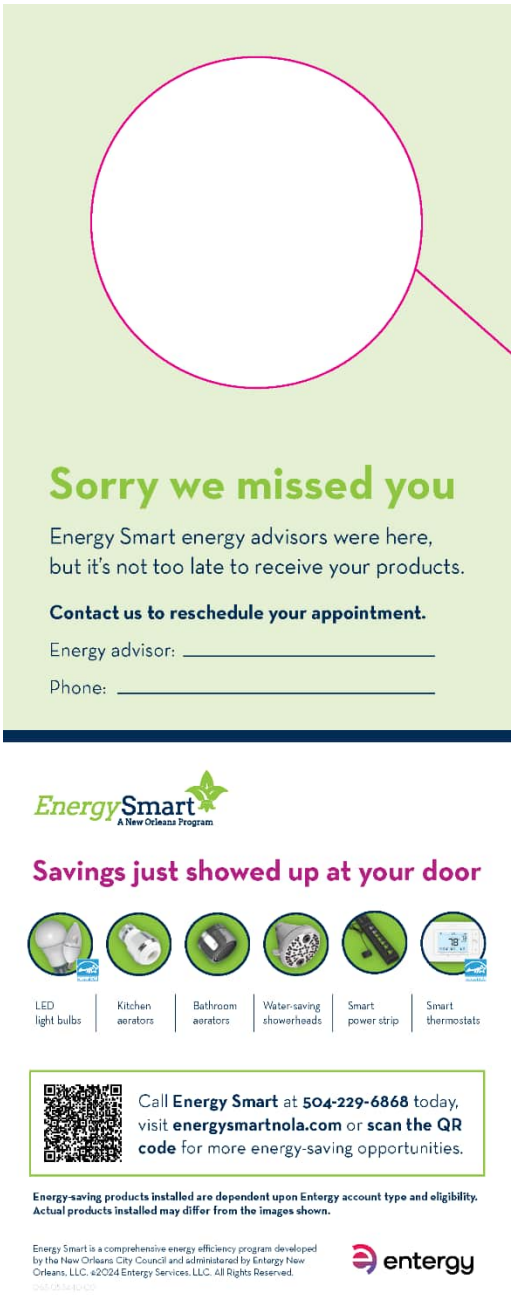
Please call **504-229-6868** if you have any questions. Be sure to tell your family and friends about participating in Energy Smart.

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Nate Wolf
Program Manager

entergy

Leave behinds

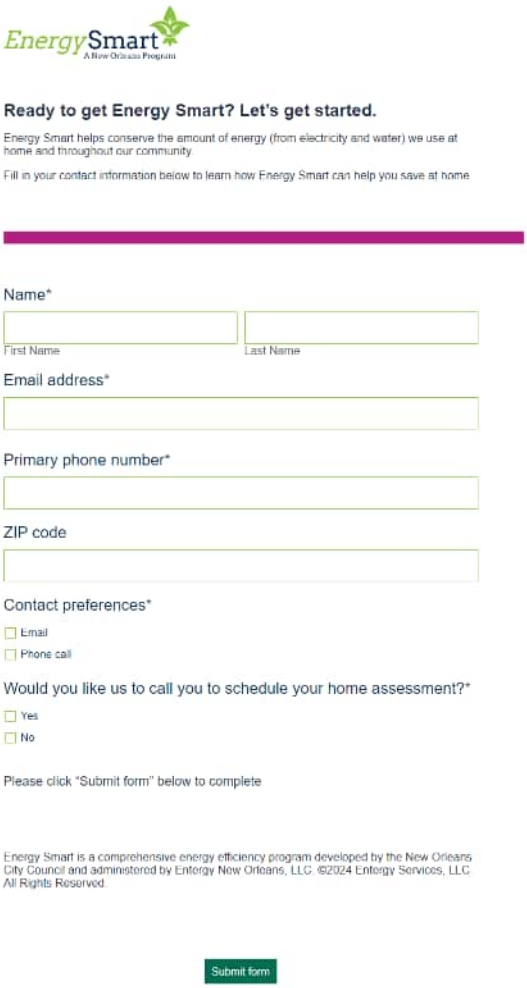
HPwES and IQW Sorry we missed you door hanger



Post assessment leave behind



Event outreach customer inquiry
Request form



EnergySmart
A New Orleans Program

Ready to get Energy Smart? Let's get started.

Energy Smart helps conserve the amount of energy (from electricity and water) we use at home and throughout our community.

Fill in your contact information below to learn how Energy Smart can help you save at home

Name*

First Name

Last Name

Email address*

Primary phone number*

ZIP code

Contact preferences*

- Email
- Phone call

Would you like us to call you to schedule your home assessment?*

- Yes
- No

Please click "Submit form" below to complete

Energy Smart is a comprehensive energy efficiency program developed by the New Orleans City Council and administered by Entergy New Orleans, LLC. ©2024 Entergy Services, LLC. All Rights Reserved.

Submit form

Follow-up email

EnergySmart
A New Orleans Program

Thank you for joining us today. Let's get started so you can stay cool and save on your energy bill this summer.

Sign up today for Energy Smart's Home Performance with ENERGY STAR® assessment—a no-cost and easy way to make your home more comfortable and energy efficient. This offer is just for select Entergy New Orleans customers, like you.

Click here to schedule online or call **504-229-6868**.

More ways to save at home

- Home appliances: Rebates of up to $500 are available for a variety of ENERGY STAR certified appliances, including air conditioning systems, pool pumps, water coolers, dehumidifiers, freezers and more.
- A/C Tune-Up: Get an instant rebate of up to $150 and improve the cooling output and efficiency of your unit by up to 30%.
- Online marketplace: Shop for discounted energy-efficient products such as smart thermostats, air purifiers, advanced power strips, water-savers and pipe insulation.
- Appliance Recycling: Get $50 and we'll pick up your outdated, working fridge or freezer.
- EasyCool: Earn $50 when you enroll and participate in events with your smart thermostat.

To learn more about Energy Smart and the other energy-saving opportunities, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6868**.

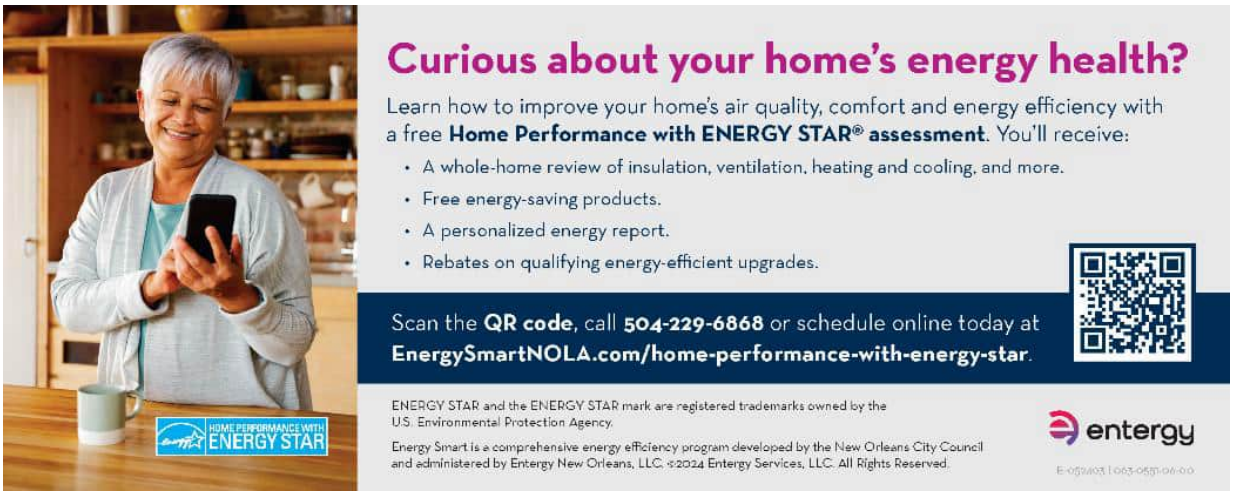
Residential Multi-Offering Campaigns

Email



Bill insert


EnergySmart
A New Orleans Program
Filter particles out. Bring savings in.
Improve indoor air quality and save energy with the Simply Conserve® Tabletop Air Purifier, now 30% off.
• Removes 99.97% of airborne contaminants, including viruses, bacteria, pollen, dust and smoke.
• Features a 3-stage True HEPA H13 filtration system.
• Purifies rooms up to 178 square feet.
Offer valid May 23–June 21, 2024, or while supplies last. Discount automatically applied at checkout. Limit of four (4) air purifiers per residential customer account per year.
ENERGY STAR
Save on this and other efficient home products at shop.EnergySmartNOLA.com or scan this QR code.


Curious about your home's energy health?
Learn how to improve your home's air quality, comfort and energy efficiency with a free Home Performance with ENERGY STAR® assessment. You'll receive:
• A whole-home review of insulation, ventilation, heating and cooling, and more.
• Free energy-saving products.
• A personalized energy report.
• Rebates on qualifying energy-efficient upgrades.
Scan the QR code, call 504-229-6868 or schedule online today at EnergySmartNOLA.com/home-performance-with-energy-star.
HOME PERFORMANCE WITH ENERGY STAR
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Preservation in Print Magazine (print and digital publication)

June- November 2024

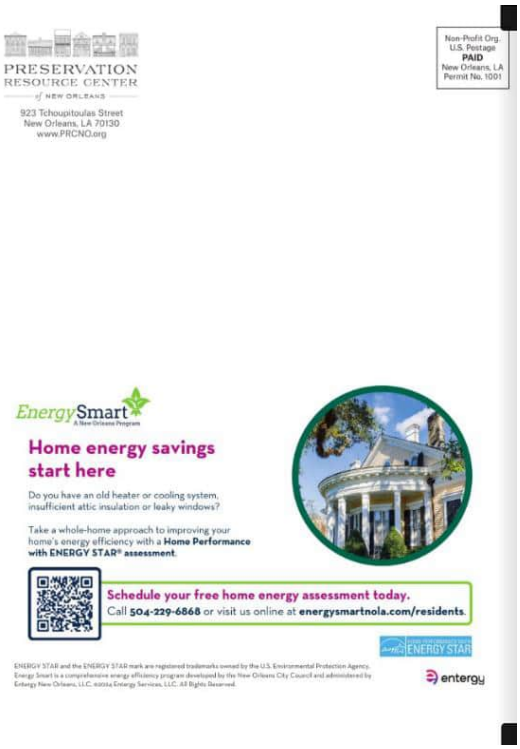
Issue: June/ July 2024 *(Full Page Ad)*



Issue: August/September 2024 *(Half-page ad)*

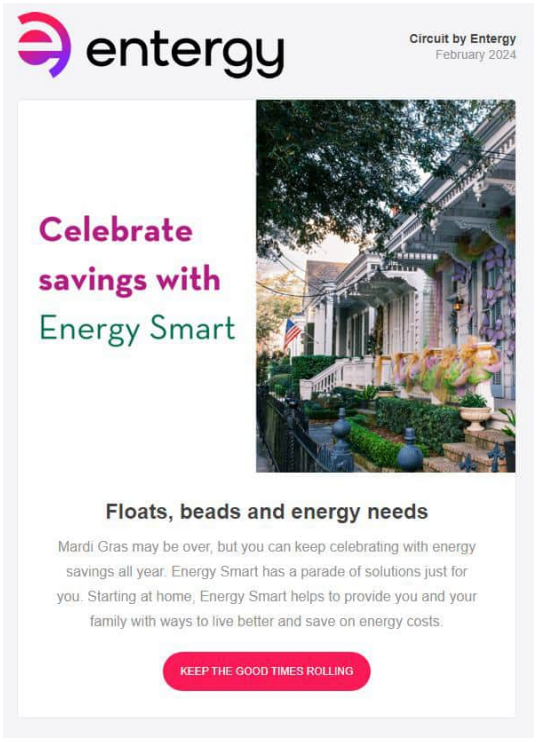


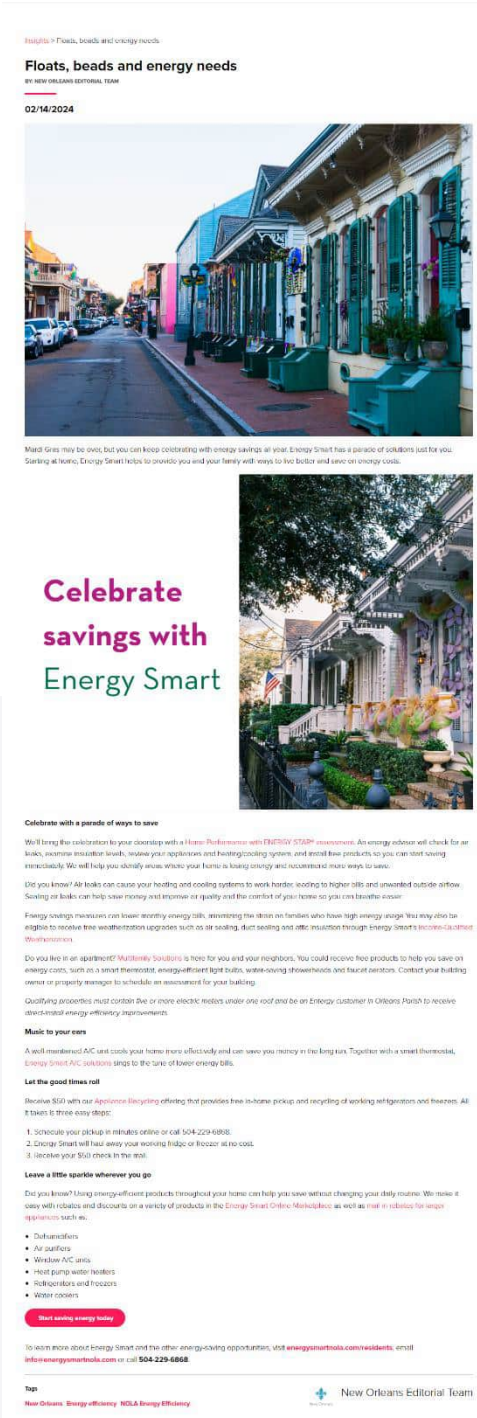
Issue: October/November 2024 *(Half-page ad)*



Monthly Circuit Newsletter and Entergy Newsroom content

February







Insights > Tips and tools

Floats, beads and energy needs

02/14/2024

Mardi Gras may be over, but you can keep celebrating with energy savings all year. Energy Smart has a parade of solutions just for you. Starting at home, Energy Smart helps to provide you and your family with ways to live better and save on energy costs.

Read more

March



Spring checkup for your home

Spring is just around the corner. Energy Smart can help you get your home ready with a home energy assessment.

START YOUR ASSESSMENT TODAY



Insights > Tips and tools

Spring checkup for your home

03/06/2024

Now is the perfect time to refresh your home ahead of peak allergy and humidity season. Energy Smart can help you get your home ready.

Read more

Insights > Spring checkup for your home

Spring checkup for your home

BY: NEW ORLEANS EDITORIAL TEAM

03/06/2024



Spring is just around the corner. Flowers are blooming, and temperatures are rising. Now is the perfect time to refresh your home ahead of peak allergy and humidity season. **Energy Smart can help you get your home ready.** Here are a few reminders that a **Home Performance with ENERGY STAR® assessment** can help your home function better so you can feel your best.

- Windows: Check for excessive moisture or condensation, which could indicate air leaks, poor ventilation, mold or mildew. Fixing air leaks keeps conditioned air inside, can improve air quality and reduce your energy bills.
- Air vents: Check for excessive dust and strange smells. Fresh air circulation is essential for a healthy home. Proper ventilation helps prevent moisture buildup and mold growth.
- Air filters:Check for clogged air filters, which can reduce airflow, making your heating/cooling system work harder.
- Room temperature: Check to see if any rooms in your home feel significantly warmer or cooler than others, which could indicate poor insulation or air leaks in your home. Insulation helps keep your home cool in summer and warm in winter to keep you comfortable all year round.

Schedule your Home Performance with ENERGY STAR® assessment today.

- The assessment is like a health checkup for your home and won't cost you anything.
- Easy to sign up: Call **504-229-6868, or click here to schedule online.**
- An energy advisor will:
  1. Complete a walkthrough of your home and check for air leaks, examine insulation levels, review appliances and heating/cooling system.
  2. Install no-cost energy-efficient products if needed, such as LED bulbs, power strips, water-saving devices and smart thermostats.
  3. Talk through your personalized report at the end of your assessment to help you understand how your home uses energy and make recommendations on ways to be more energy efficient.

Energy Smart also offers rebates to offset the cost of recommendations for weatherization options such as air sealing, duct sealing and attic insulation. Plus, you may qualify to receive these services for free through Energy Smart's **Income-Qualified Weatherization.**

See if you qualify

To learn more about Energy Smart and other energy-saving opportunities, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6868**.

April



Insights > Tips and tools

Five ways Energy Smart can help make every day Earth Day

04/08/2024

There are so many ways to improve your health and the environment at the same time — and to celebrate Earth Day (April 22). Now is a great time to get started.

Read more

Insights > Five ways Energy Smart can help make every day Earth Day

Five ways Energy Smart can help make every day Earth Day

BY: NEW ORLEANS EDITORIAL TEAM

04/08/2024



There are so many ways to improve your health and the environment at the same time — and to celebrate Earth Day (April 22). Now is a great time to get started.

Energy-efficient homes consume less electricity, gas and water. By saving energy, we reduce our carbon footprint, preserve natural resources, save money on utility bills and contribute to a healthier planet.

Here are five ways you can make a positive impact on the planet and our beautiful New Orleans community, right from your home:

Visit the Online Marketplace for energy-efficient products

Reduce your carbon footprint, and save money. You'll find everyday savings on products like air purifiers, dehumidifiers, smart thermostats, LED bulbs and advanced power strips.To make a bigger impact, save even more with these Earth Day deals:

- **Lighting:** 30% off Simply Conserve® standard LEDs; offer ends April 24.
- **Power-savers:** 30% off Simply Conserve® advanced power strip; offer ends April 24.
- **Smart thermostats:**
  - Sensi™ and Sensi™ Touch 2 smart thermostat for as low as $.01; offer ends April 24.
  - Google® Nest and Nest Learning Thermostat for as low as $.01; offer ends April 28.
  - Get an additional $30 off all ecobee smart thermostats (ecobee3 lite, Premium, Enhanced); offer ends April 29.
  - "New item" Save up to $155 on Honeywell Home Color 7 Day and T9 smart thermostats; offer ends May 1.

Upgrade to ENERGY STAR® certified appliances

Get rebates ($25-$500) on qualifying appliances, from air conditioners to water coolers, pool pumps and heat pump water heaters.

Get an A/C tune up

Stay cool this summer, and save with a $150 instant rebate. Lower your energy usage, and help your A/C unit last longer.

Schedule a home energy assessment

It's free and a great place to start, especially if you're not sure how your home uses energy. You'll receive a complete overview of your home, installation of energy-efficient products such as LED bulbs, water-savers and power strips, along with personalized recommendations to learn how to start saving immediately.

Charge your EV during off-hours

You can earn $7 or 2,100* miles of free driving per month by charging your vehicle off-peak at least three times per month. (*2,100 free miles based on 3 miles/kWh, at $0.0196/kWh. Actual results will vary.)

Small changes can make a world of difference. Participating in an Energy Smart offering is often an easy and affordable way to make a real impact.

Start saving today. To learn more about Energy Smart and the other energy-saving opportunities, visit energysmartnola.com, email info@energysmartnola.com or call 504-229-6868.

Tags

Corporate Electric vehicles Energy efficiency ENERGY STAR Environment

New Orleans Editorial Team

entergy

Circuit by Entergy
April 2024

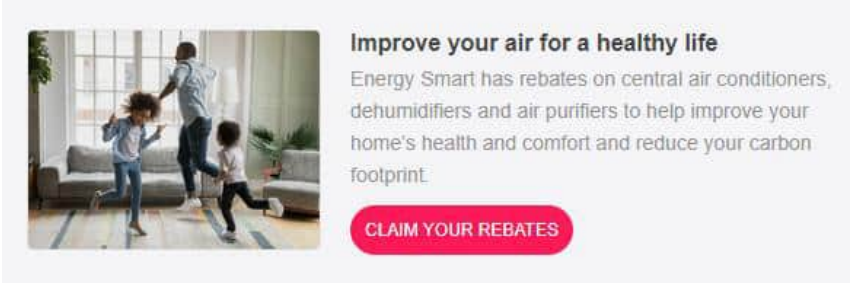


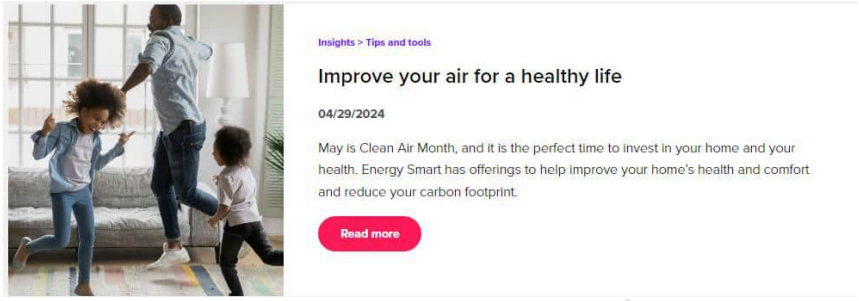
Five ways Energy Smart can help make every day Earth Day

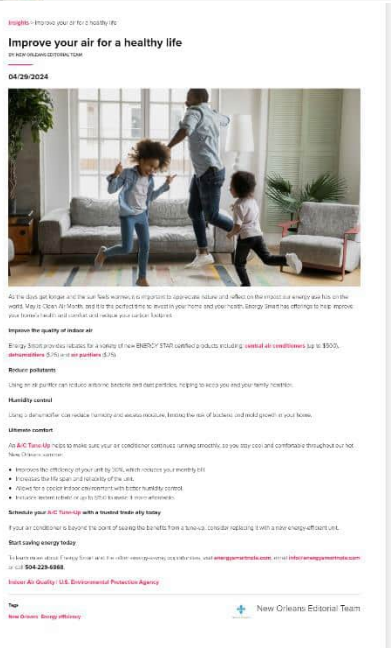
There are so many ways to improve your health and the environment at the same time. Now is a great time to get started. To make a bigger impact, save even more with these Earth Day deals.

FIND AVAILABLE DEALS

May



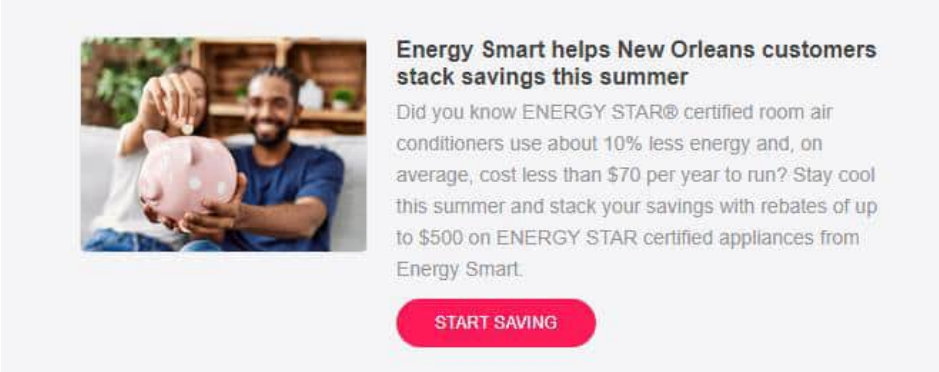




June: Outdoor/Stay cool summer

Offerings: Rebates (pool pumps, watercoolers) appliance recycling.

Circuit newsletter



Entergy Newsroom



Article content

Insights > Energy Smart helps New Orleans customers stack savings this summer

Energy Smart helps New Orleans customers stack savings this summer

BY: NEW ORLEANS EDITORIAL TEAM

06/03/2024



We know that, as temperatures rise, so can our energy bills. With Energy Smart, you can sign up for free home assessments, earn cash for taking simple actions to reduce energy use and enjoy discounts and rebates on home upgrades and energy-efficient products designed to help you save.

Have you thought about upgrading your home appliances or HVAC equipment?

Consider switching to ENERGY STAR® certified products. They are meant to help you save energy, save money and protect the planet. Many retailers offer promotional discounts on home appliances throughout the summer. If you purchase a qualifying product from any retailer, you can submit an **Energy Smart rebate form** to get even more money back.

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

- Pool pumps: $400 (limited time only, regularly $300).
- Central air-conditioner units: Up to $500.
- Heat pump water heaters: $400.
- Refrigerators: $50.
- Freezers: $50.
- Window air-conditioner units: $50.
- Water coolers: Up to $50.
- Smart thermostats: Up to $100.
- Air purifiers: $50.
- Dehumidifiers: $25.

Interested in **smart thermostats, air purifiers or dehumidifiers**? Visit the online marketplace, where you'll find additional promotional offers and receive your rebate as an instant discount.

Don't forget you can also **earn $50 with Energy Smart Appliance Recycling**. Schedule an appointment online or call **504-229-6868** to have Energy Smart pick up your old fridge or freezer.

Energy Smart is here to make it easy for you to improve your energy efficiency and reduce your energy costs at home.

Stack your savings

To learn more about Energy Smart and the other energy-saving opportunities, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6868**.

Tags

New Orleans Energy efficiency Energy Smart

New Orleans Editorial Team



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New Orleans Energy efficiency Energy Smart

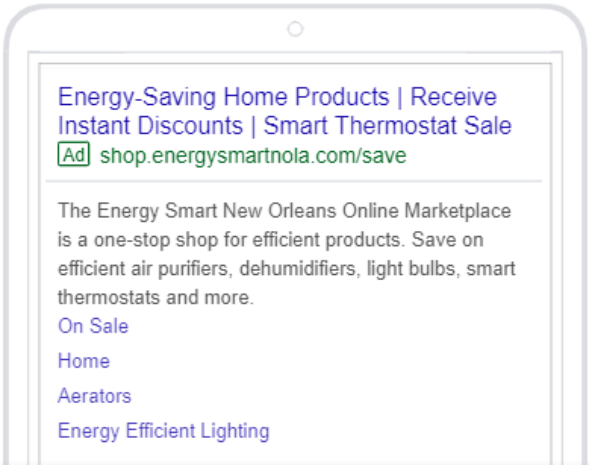
New Orleans Editorial Team

Organic social

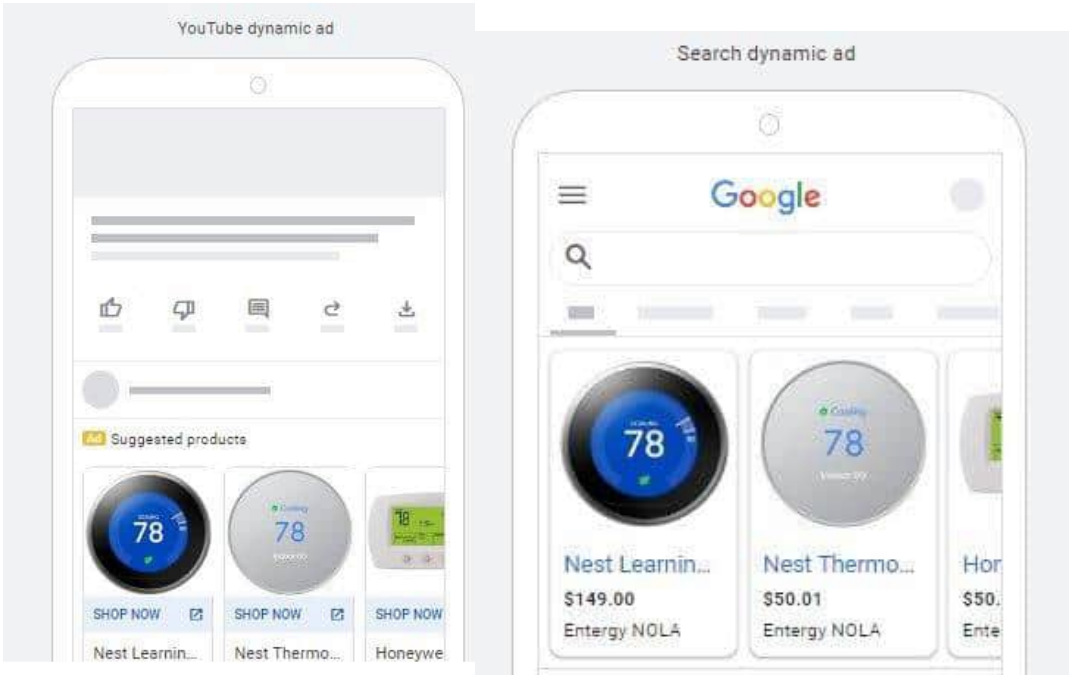


Online marketplace

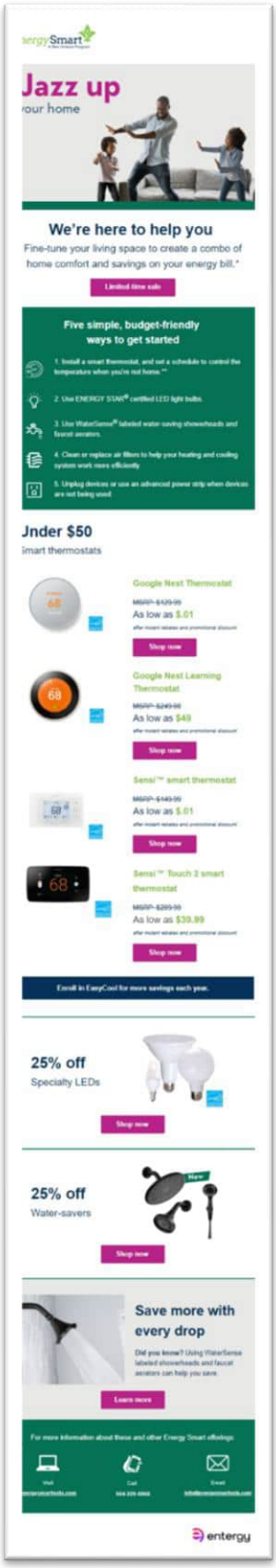
Search ads



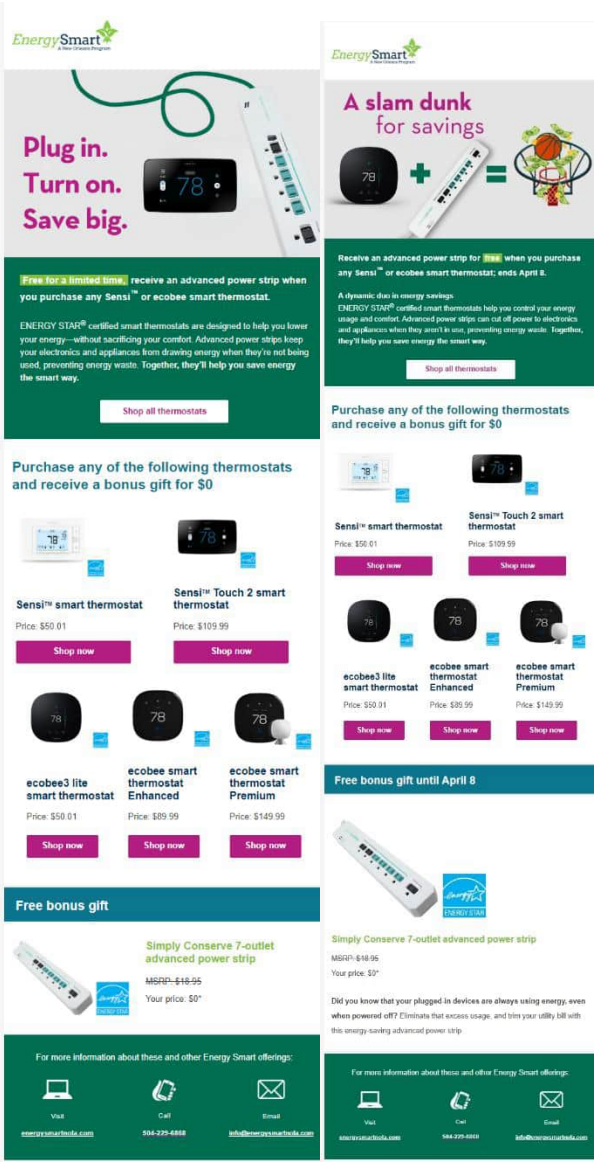
Shopping ads



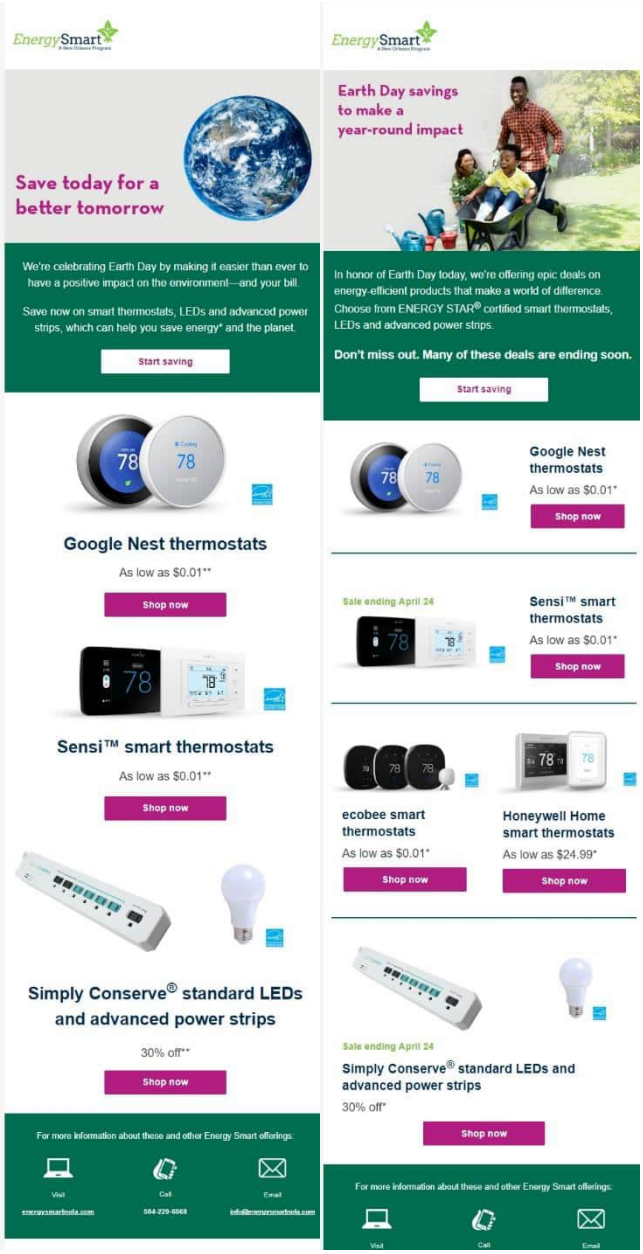
Leap year savings

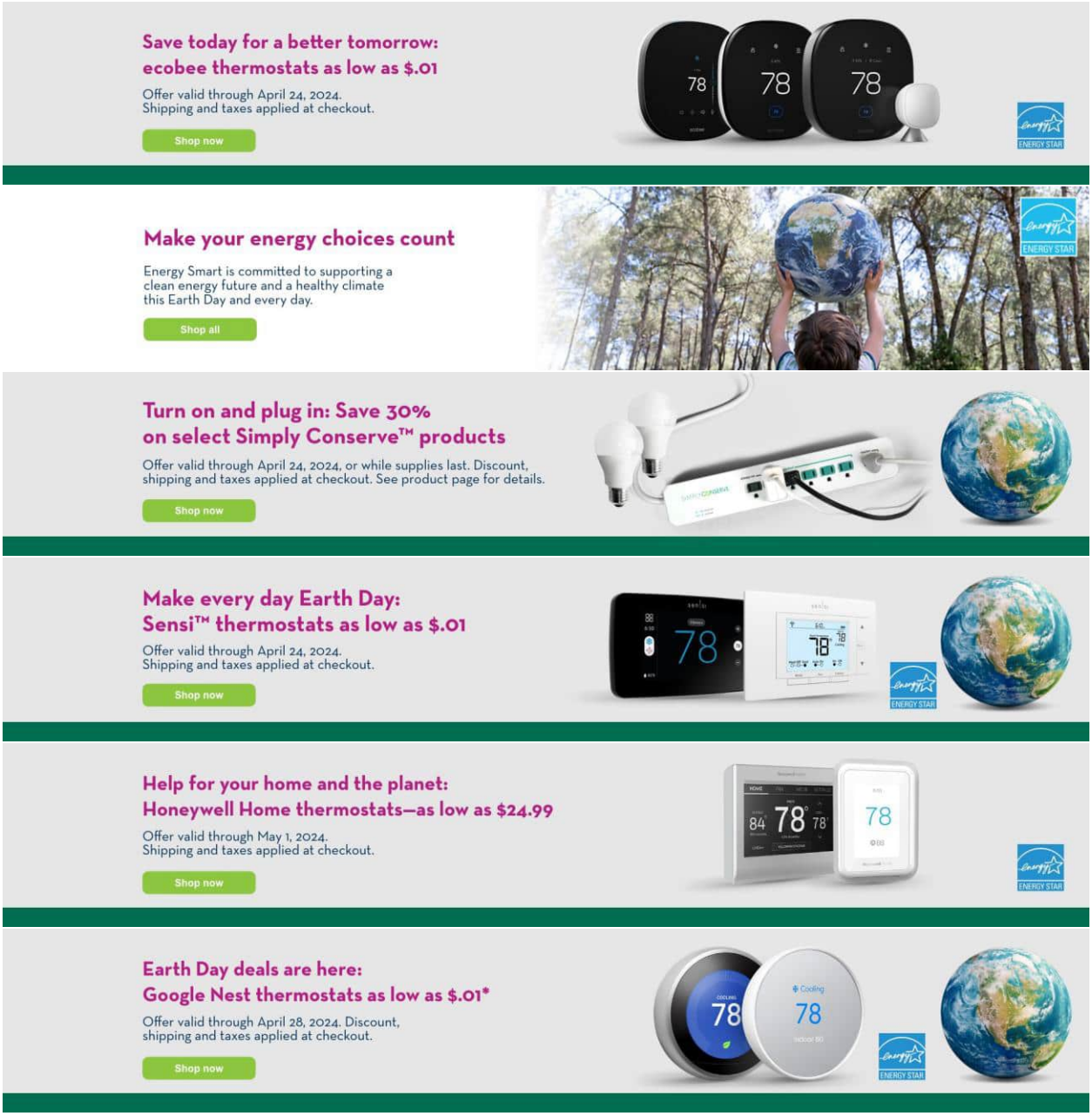


BOGO promotion



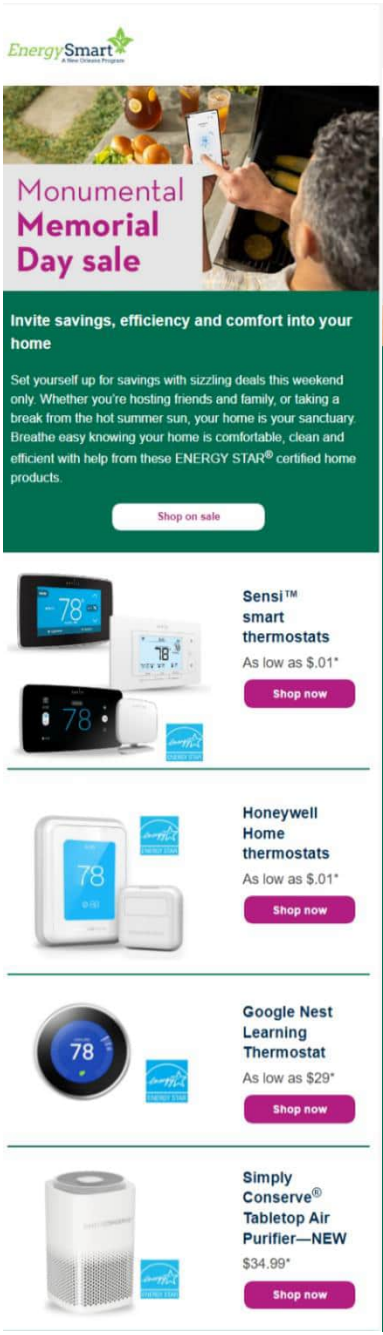
Earth Day promotion

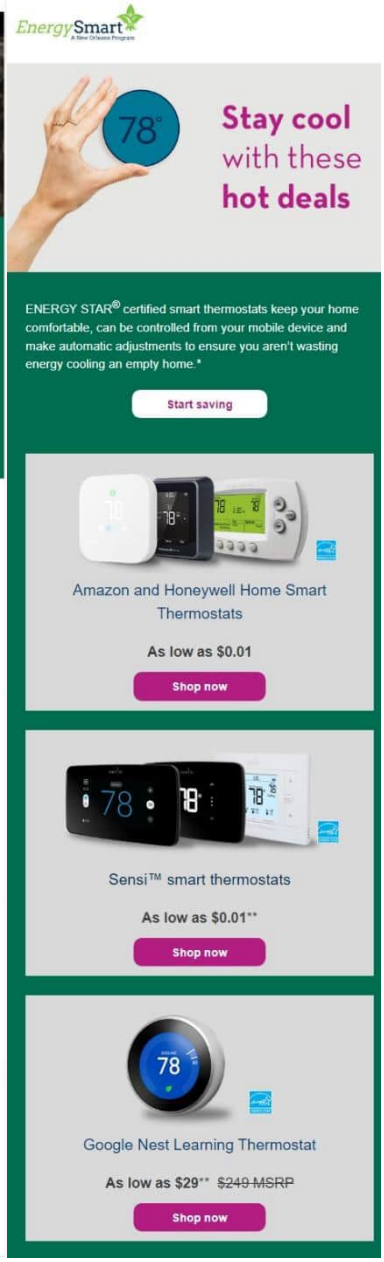


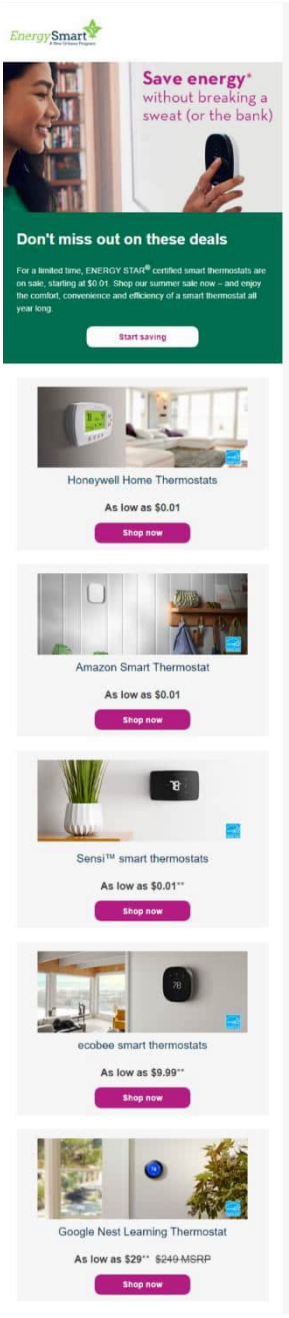

Save today for a better tomorrow:
ecobee thermostats as low as $.01
Offer valid through April 24, 2024.
Shipping and taxes applied at checkout.
Shop now
78
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ENERGY STAR
Make your energy choices count
Energy Smart is committed to supporting a clean energy future and a healthy climate this Earth Day and every day.
Shop all
ENERGY STAR
Turn on and plug in: Save 30% on select Simply Conserve™ products
Offer valid through April 24, 2024, or while supplies last. Discount, shipping and taxes applied at checkout. See product page for details.
Shop now
Make every day Earth Day:
Sensi™ thermostats as low as $.01
Offer valid through April 24, 2024.
Shipping and taxes applied at checkout.
Shop now
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ENERGY STAR
Help for your home and the planet:
Honeywell Home thermostats—as low as $24.99
Offer valid through May 1, 2024.
Shipping and taxes applied at checkout.
Shop now
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ENERGY STAR
Earth Day deals are here:
Google Nest thermostats as low as $.01*
Offer valid through April 28, 2024. Discount, shipping and taxes applied at checkout.
Shop now
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Cooling
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ENERGY STAR

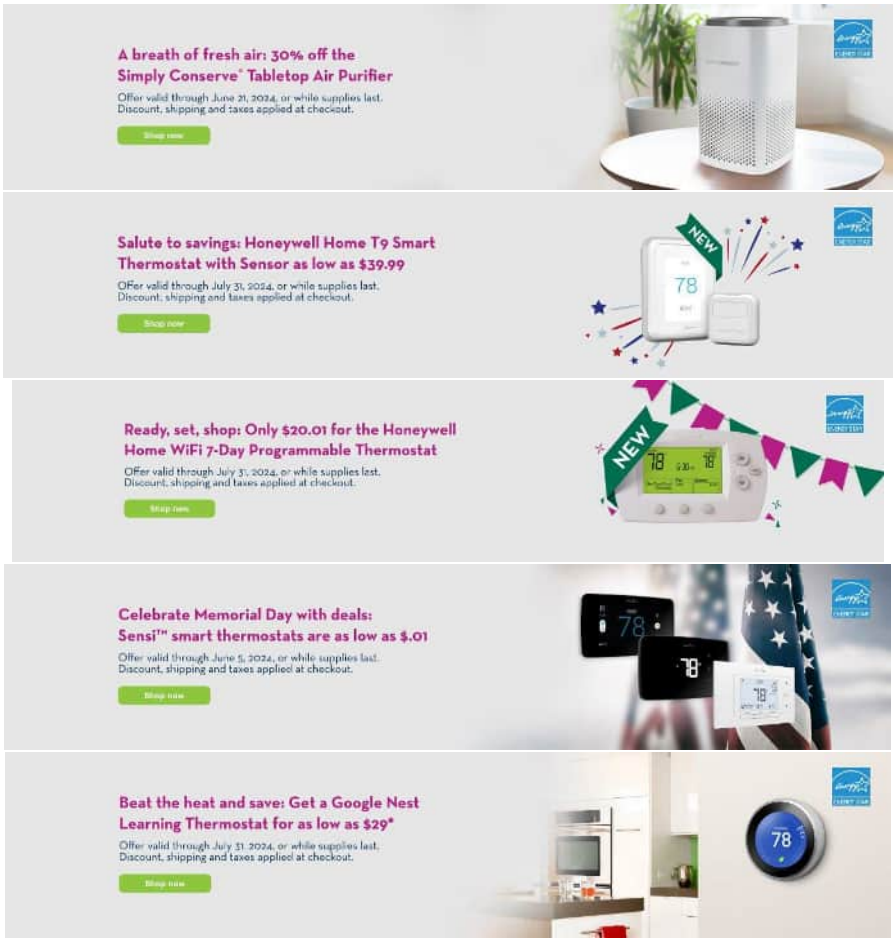
Memorial Day/Summer savings promotions

Emails








A breath of fresh air: 30% off the Simply Conserve® Tabletop Air Purifier
Offer valid through June 21, 2024, or while supplies last. Discount, shipping and taxes applied at checkout.
Shop now
Salute to savings: Honeywell Home T9 Smart Thermostat with Sensor as low as $39.99
Offer valid through July 31, 2024, or while supplies last. Discount, shipping and taxes applied at checkout.
Shop now
NEW
78
Ready, set, shop: Only $20.01 for the Honeywell Home WiFi 7-Day Programmable Thermostat
Offer valid through July 31, 2024, or while supplies last. Discount, shipping and taxes applied at checkout.
Shop now
NEW
78
Celebrate Memorial Day with deals: Sensi™ smart thermostats are as low as $.01
Offer valid through June 5, 2024, or while supplies last. Discount, shipping and taxes applied at checkout.
Shop now
78
Beat the heat and save: Get a Google Nest Learning Thermostat for as low as $29*
Offer valid through July 31, 2024, or while supplies last. Discount, shipping and taxes applied at checkout.
Shop now
78

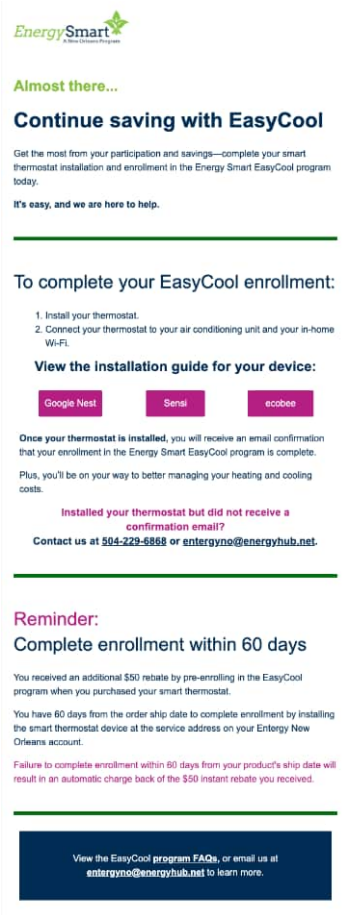
Free Simply Conserve® Tabletop Air Purifier promotion

Hospitality Health Fair flyer



EasyCool Pre-enrollment

Installation reminder email series



EnergySmart

Almost there...

Continue saving with EasyCool

Get the most from your participation and savings—complete your smart thermostat installation and enrollment in the Energy Smart EasyCool program today.

It's easy, and we are here to help.

To complete your EasyCool enrollment:

1. Install your thermostat.
2. Connect your thermostat to your air conditioning unit and your in-home Wi-Fi.

View the installation guide for your device:

Google Nest | Sensi | ecobee

Once your thermostat is installed, you will receive an email confirmation that your enrollment in the Energy Smart EasyCool program is complete.

Plus, you'll be on your way to better managing your heating and cooling costs.

Installed your thermostat but did not receive a confirmation email?
Contact us at 504-229-6868 or entergyno@energyhub.net.

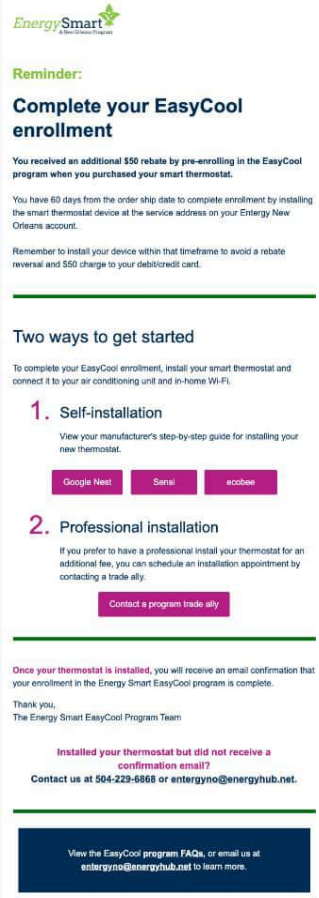
Reminder:
Complete enrollment within 60 days

You received an additional $50 rebate by pre-enrolling in the EasyCool program when you purchased your smart thermostat.

You have 60 days from the order ship date to complete enrollment by installing the smart thermostat device at the service address on your Entergy New Orleans account.

Failure to complete enrollment within 60 days from your product's ship date will result in an automatic charge back of the $50 instant rebate you received.

View the EasyCool **program FAQs**, or email us at **entergyno@energyhub.net** to learn more.



EnergySmart

Reminder:

Complete your EasyCool enrollment

You received an additional $50 rebate by pre-enrolling in the EasyCool program when you purchased your smart thermostat.

You have 60 days from the order ship date to complete enrollment by installing the smart thermostat device at the service address on your Entergy New Orleans account.

Remember to install your device within that timeframe to avoid a rebate reversal and $50 charge to your debit/credit card.

Two ways to get started

To complete your EasyCool enrollment, install your smart thermostat and connect it to your air conditioning unit and in-home Wi-Fi.

1. Self-installation

View your manufacturer's step-by-step guide for installing your new thermostat.

Google Nest | Sensi | ecobee

2. Professional installation

If you prefer to have a professional install your thermostat for an additional fee, you can schedule an installation appointment by contacting a trade ally.

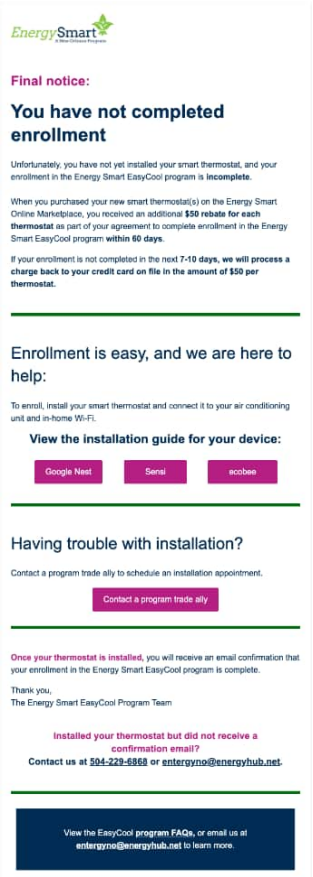
Contact a program trade ally

Once your thermostat is installed, you will receive an email confirmation that your enrollment in the Energy Smart EasyCool program is complete.

Thank you,
The Energy Smart EasyCool Program Team

Installed your thermostat but did not receive a confirmation email?
Contact us at 504-229-6868 or entergyno@energyhub.net.

View the EasyCool **program FAQs**, or email us at **entergyno@energyhub.net** to learn more.



EnergySmart

Final notice:

You have not completed enrollment

Unfortunately, you have not yet installed your smart thermostat, and your enrollment in the Energy Smart EasyCool program is **incomplete**.

When you purchased your new smart thermostat(s) on the Energy Smart Online Marketplace, you received an additional **$50 rebate for each thermostat** as part of your agreement to complete enrollment in the Energy Smart EasyCool program **within 60 days**.

If your enrollment is not completed in the next **7-10 days, we will process a charge back to your credit card on file in the amount of $50 per thermostat.**

Enrollment is easy, and we are here to help:

To enroll, install your smart thermostat and connect it to your air conditioning unit and in-home Wi-Fi.

View the installation guide for your device:

Google Nest | Sensi | ecobee

Having trouble with installation?

Contact a program trade ally to schedule an installation appointment.

Contact a program trade ally

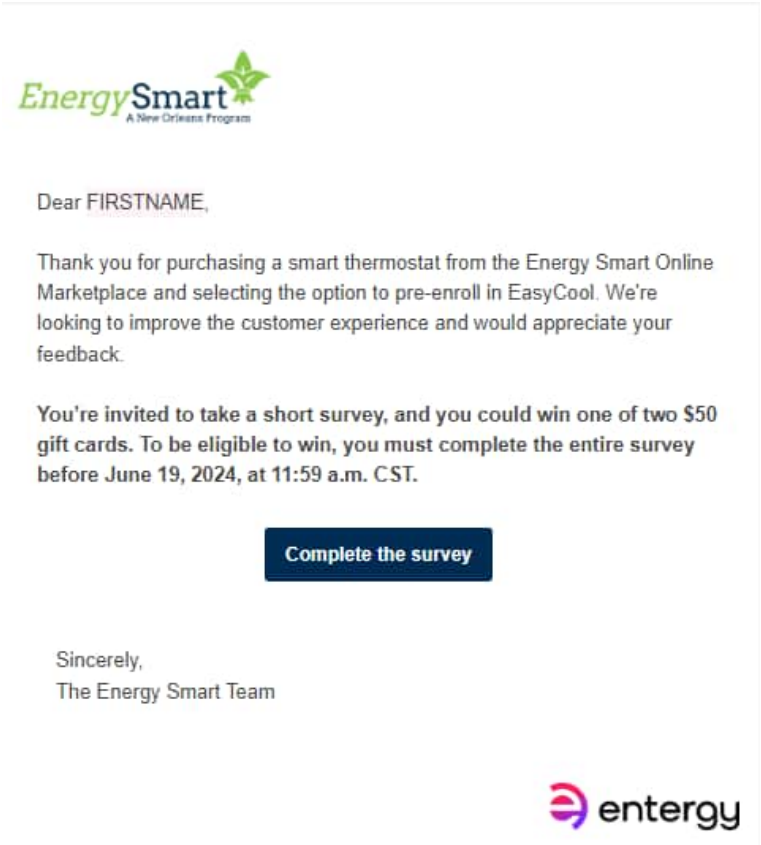
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Thank you,
The Energy Smart EasyCool Program Team

Installed your thermostat but did not receive a confirmation email?
Contact us at 504-229-6868 or entergyno@energyhub.net.

View the EasyCool **program FAQs**, or email us at **entergyno@energyhub.net** to learn more.

Research survey email



EnergySmart
A New Orleans Program

Dear FIRSTNAME,

Thank you for purchasing a smart thermostat from the Energy Smart Online Marketplace and selecting the option to pre-enroll in EasyCool. We're looking to improve the customer experience and would appreciate your feedback.

You're invited to take a short survey, and you could win one of two $50 gift cards. To be eligible to win, you must complete the entire survey before June 19, 2024, at 11:59 a.m. CST.

Complete the survey

Sincerely,
The Energy Smart Team

entergy

Customer research survey raffle winner letter

EnergySmart
A New Orleans Program

Congratulations

You are the winner of a $50 prepaid gift card.

Thank you for taking the time to complete the recent Energy Smart EasyCool Pre-enrollment Survey. Your feedback is valuable, and we appreciate your participation.

Enclosed is a $50 prepaid gift card.

If you would like to learn more about our other Energy Smart offerings, please visit **energysmartnola.com**, call us at **504-229-6868** or email **info@energysmartnola.com**.

Thank you again for participating in Energy Smart. You're helping create a better energy future for our community.

Sincerely,
The Energy Smart Program

entergy

Energy Smart is a comprehensive energy efficiency program developed by the New Orleans City Council and administered by Entergy New Orleans, LLC.
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Peak Time Rebate

Enrollment Request Form



EnergySmart
A New Orleans Program

Peak Time Rebate Enrollment

Name on Entergy Account*

First Name

Last Name

Entergy New Orleans Account Number*

Address on Entergy Account*

Address Line 1

Address Line 2

City

State

ZIP Code

Email Address*

A valid email address is required to participate in this offering.

Would you like to receive event text message notifications?*

Yes

No



How did you hear about this offering?*

Email

Social media

In-person event

Energy Smart website

Friends/family

Entergy E-Newsletter

News outlet

None of the above

Signature*

Clear

Use your mouse or finger to draw your signature above.

Date*

MMM DD, YYYY

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Request Event Text Message Form



EnergySmart
A New Orleans Program

Please complete and submit this form to request event text message notifications for the Energy Smart Peak Time Rebate Pilot.

Name*

First Name | Last Name

Enrolled email address *

Would you like to receive event text message notifications?*

Yes
No

Signature*

Clear

Use your mouse or finger to draw your signature above.

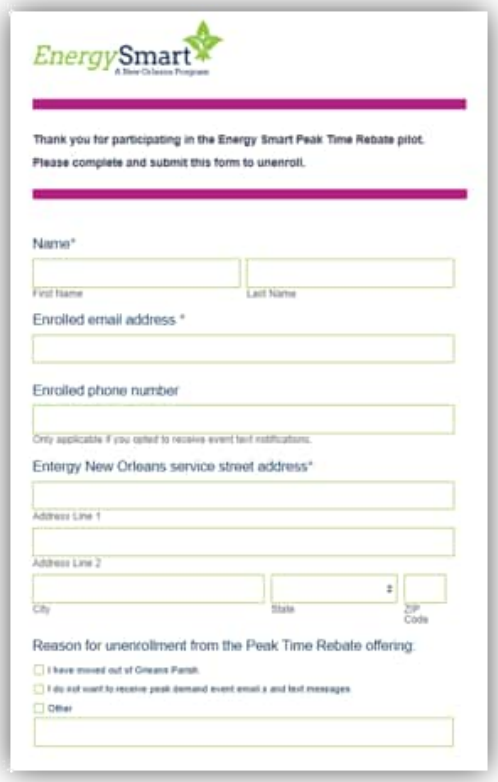
Date/Time*

Jun 03, 2024 | 01:41 pm

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Unenrollment Form



EnergySmart
A New Orleans Program

Thank you for participating in the Energy Smart Peak Time Rebate pilot.
Please complete and submit this form to unenroll.

Name*

First Name | Last Name

Enrolled email address *

Enrolled phone number

Only applicable if you opted to receive event text notifications.

Entergy New Orleans service street address*

Address Line 1

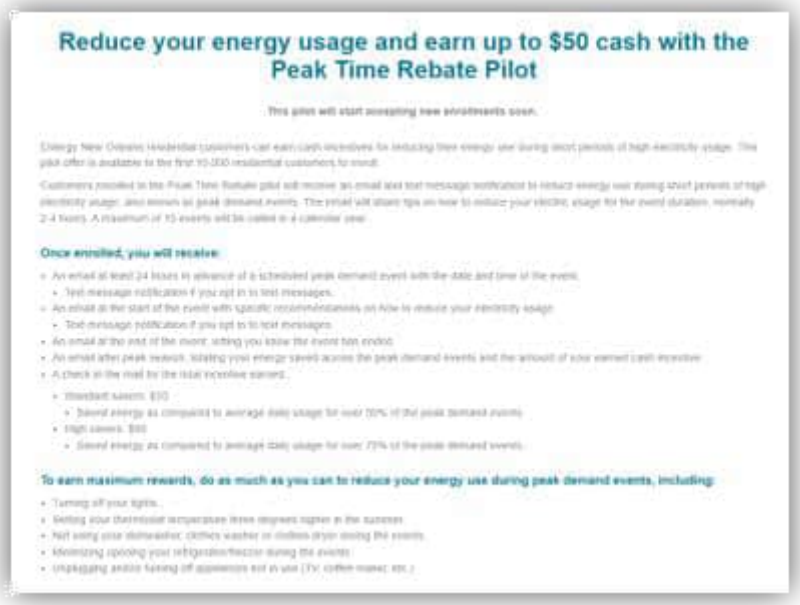
Address Line 2

City | State | ZIP Code

Reason for unenrollment from the Peak Time Rebate offering:

I have moved out of Orleans Parish.
I do not want to receive peak demand event email s and text messages
Other

Website update



Reduce your energy usage and earn up to $50 cash with the Peak Time Rebate Pilot

This pilot will start accepting new enrollments soon.

Entergy New Orleans residential customers can earn cash incentives for reducing their energy use during short periods of high electricity usage. This pilot offer is available to the first 10,000 residential customers to enroll.

Customers enrolled in the Peak Time Rebate pilot will receive an email and text message notification to reduce energy use during short periods of high electricity usage, also known as peak demand events. The email will share tips on how to reduce your electric usage for the event duration, normally 2-4 hours. A maximum of 10 events will be called in a calendar year.

Once enrolled, you will receive:

- An email at least 24 hours in advance of a scheduled peak demand event with the date and time of the event.
  - Text message notification if you opt in to text messages.
- An email at the start of the event with specific recommendations on how to reduce your electricity usage.
  - Text message notification if you opt in to text messages.
- An email at the end of the event, letting you know the event has ended.
- An email after peak season, totaling your energy saved across the peak demand events and the amount of your earned cash incentive.
- A check in the mail for the total incentive earned.
  - Standard savers: $30
    - Saved energy as compared to average daily usage for over 50% of the peak demand events.
  - High savers: $50
    - Saved energy as compared to average daily usage for over 75% of the peak demand events.

To earn maximum rewards, do as much as you can to reduce your energy use during peak demand events, including:

- Turning off your lights.
- Setting your thermostat temperature three degrees higher in the summer.
- Not using your dishwasher, clothes washer or clothes dryer during the events.
- Minimizing opening your refrigerator/freezer during the events.
- Unplugging and/or turning off appliances not in use (TV, coffee maker, etc.)



Common questions answered

- What is the Peak Time Rebate program?
- When is the peak demand summer season?
- Is the Peak Time Rebate program a good fit for individuals who are already energy efficient?
- Will I get a $20 rebate just for enrolling in the Peak Time Rebate Pilot?
- What determines a peak demand event?
- How many events will there be?
- Is there a penalty for not engaging in every event?
- How does the Peak Time Rebate program promote energy efficiency?
- How is the energy savings for events determined?
- I participated in peak demand events in 2023 but did not receive an incentive or received a lower than expected incentive. How come?
- Will I need to buy anything to participate in the program?
- How will I know if I earned a rebate after a Peak Time event?
- Can I be enrolled in the Peak Time Rebate program if my smart thermostat is enrolled in the Energy Smart EasyCool program?
- How are energy savings determined in the Peak Time Rebate Pilot?
- How do I earn the rebate?
- Who is a good fit for the Peak Time Rebate Pilot?
- Who should not participate in the Peak Time Rebate?

Outreach Event Table Flyer



Event Text Message Mock-ups







Recruitment Email



Recruitment Remarket Email

EnergySmart
A New Orleans Program



Energy Smart pays you when you use less

No risk, just rewards

Enrollment is available on a first-come, first-served basis. Customers can earn up to $50 cash with the Peak Time Rebate pilot; there is no cost to participate.

Get started

Step 1	Step 2	Step 3	Step 4
			
Enroll online in Energy Smart's Peak Time Rebate.	Look out for Peak Time Rebate event notifications.	During peak time events, reduce your energy usage.	Earn cash incentives based on the amount of energy you saved.

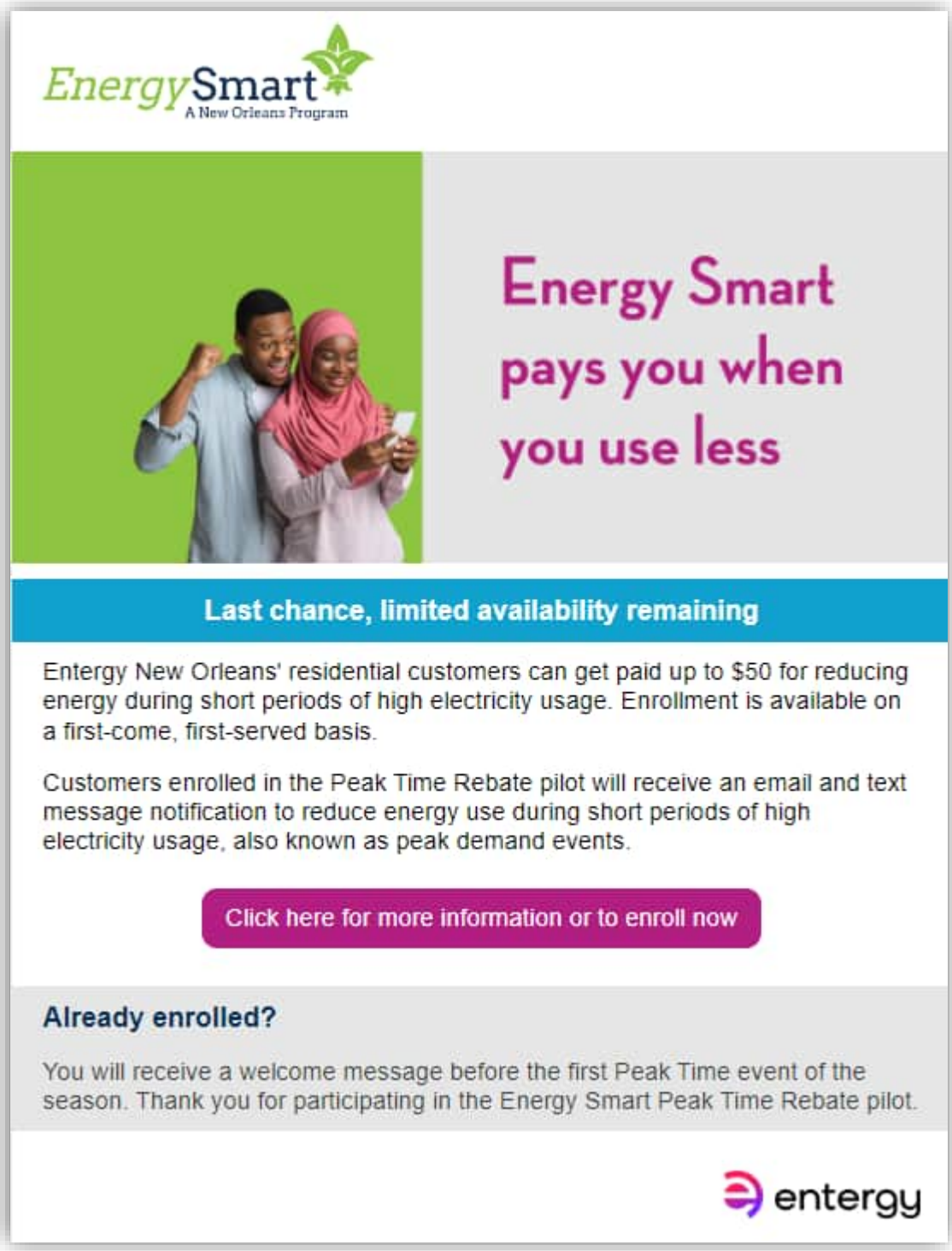
Enroll now

Already enrolled?

You will receive a welcome message before the first Peak Time event of the season. Thank you for participating in the Energy Smart Peak Time Rebate pilot.

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Last Recruitment Email to non-openers



Welcome back to the Energy Smart Peak Time Rebate Pilot Email Template

EnergySmart
A New Orleans Program

Energy Smart Peak Time Rebate Pilot season notice

Welcome back

Between June 1 and September 30, you will receive emails informing you of a scheduled peak demand event. Along with the date and time of the event, the email will include recommendations on ways you can lower your energy usage during the event time.

What's new?

Because of your valued feedback to help us improve our offerings and services, we've added the features below.



Updated incentive tiers	Event text message notifications	Common questions answered section
Learn more	Request to opt-in	Visit our website

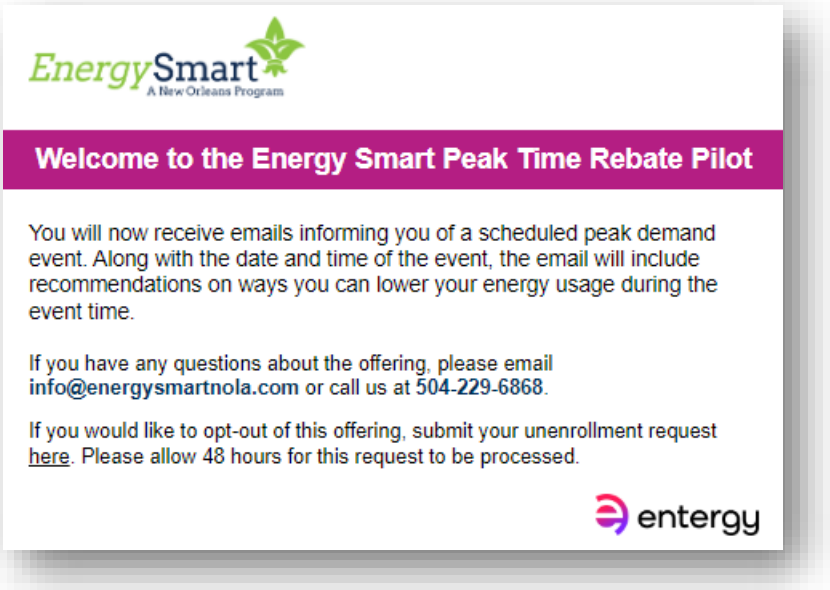
Thank you for participating in the Energy Smart Peak Time Rebate Pilot.

If you have any questions about the offering, please email **info@energysmartnola.com** or call us at **504-229-6868**.

If you would like to opt-out of this offering, submit your unenrollment request here. Please allow 48 hours for this request to be processed.

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Welcome to the Energy Smart Peak Time Rebate Pilot Email Template



EnergySmart
A New Orleans Program

Welcome to the Energy Smart Peak Time Rebate Pilot

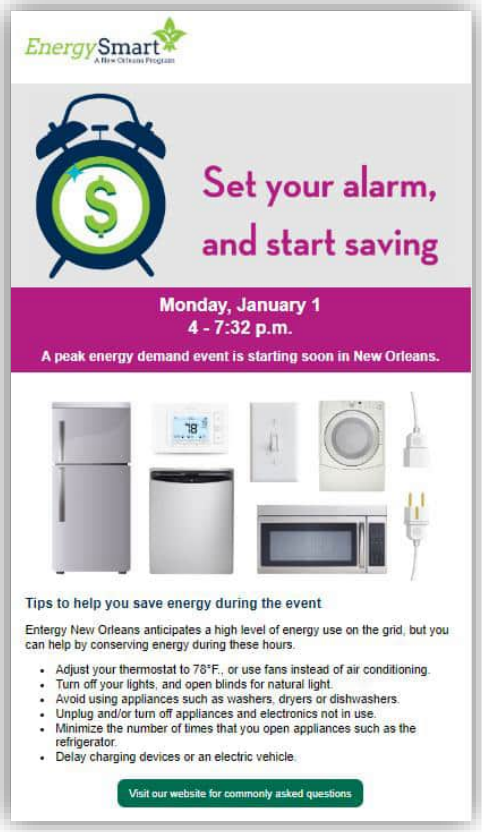
You will now receive emails informing you of a scheduled peak demand event. Along with the date and time of the event, the email will include recommendations on ways you can lower your energy usage during the event time.

If you have any questions about the offering, please email **info@energysmartnola.com** or call us at **504-229-6868**.

If you would like to opt-out of this offering, submit your unenrollment request here. Please allow 48 hours for this request to be processed.

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1-hour notice template



EnergySmart
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Set your alarm, and start saving

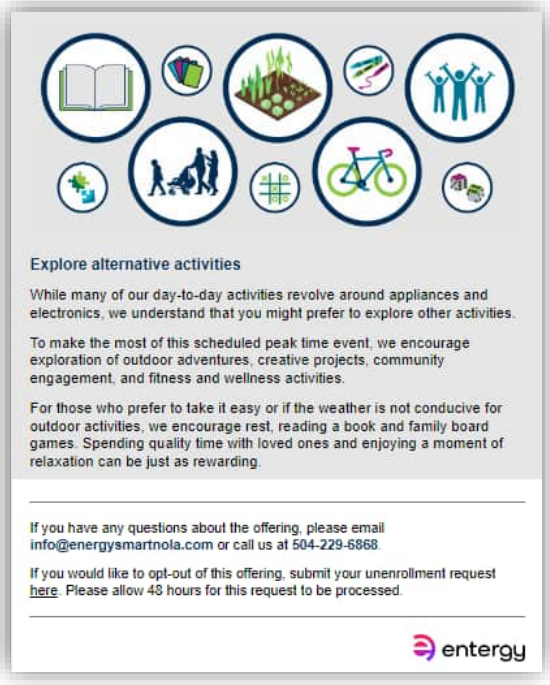
Monday, January 1
4 - 7:32 p.m.
A peak energy demand event is starting soon in New Orleans.

Tips to help you save energy during the event

Entergy New Orleans anticipates a high level of energy use on the grid, but you can help by conserving energy during these hours.

- Adjust your thermostat to 78°F., or use fans instead of air conditioning.
- Turn off your lights, and open blinds for natural light.
- Avoid using appliances such as washers, dryers or dishwashers.
- Unplug and/or turn off appliances and electronics not in use.
- Minimize the number of times that you open appliances such as the refrigerator.
- Delay charging devices or an electric vehicle.

Visit our website for commonly asked questions



Explore alternative activities

While many of our day-to-day activities revolve around appliances and electronics, we understand that you might prefer to explore other activities.

To make the most of this scheduled peak time event, we encourage exploration of outdoor adventures, creative projects, community engagement, and fitness and wellness activities.

For those who prefer to take it easy or if the weather is not conducive for outdoor activities, we encourage rest, reading a book and family board games. Spending quality time with loved ones and enjoying a moment of relaxation can be just as rewarding.

If you have any questions about the offering, please email info@energysmartnola.com or call us at 504-229-6868.

If you would like to opt-out of this offering, submit your unenrollment request here. Please allow 48 hours for this request to be processed.

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24-Hour Notice Email Template

EnergySmart
A New Orleans Program



New event scheduled

Monday, January 1
4 - 7:32 p.m.

A peak energy demand event is scheduled tomorrow.

Entergy New Orleans anticipates a high level of energy use on the grid, but you can help by conserving energy during these hours.

If possible, try the following to shift your energy use away from event hours:

- Pre-cool your home before event hours.
- Delay charging devices or electric vehicles during event.
- Minimize the number of times that you open appliances, such as the refrigerator, during event hours.
- Avoid using appliances, such as washers, dryers or dishwashers, during event hours.
- Unplug electronics when not in use during event hours.

Visit our website for more information

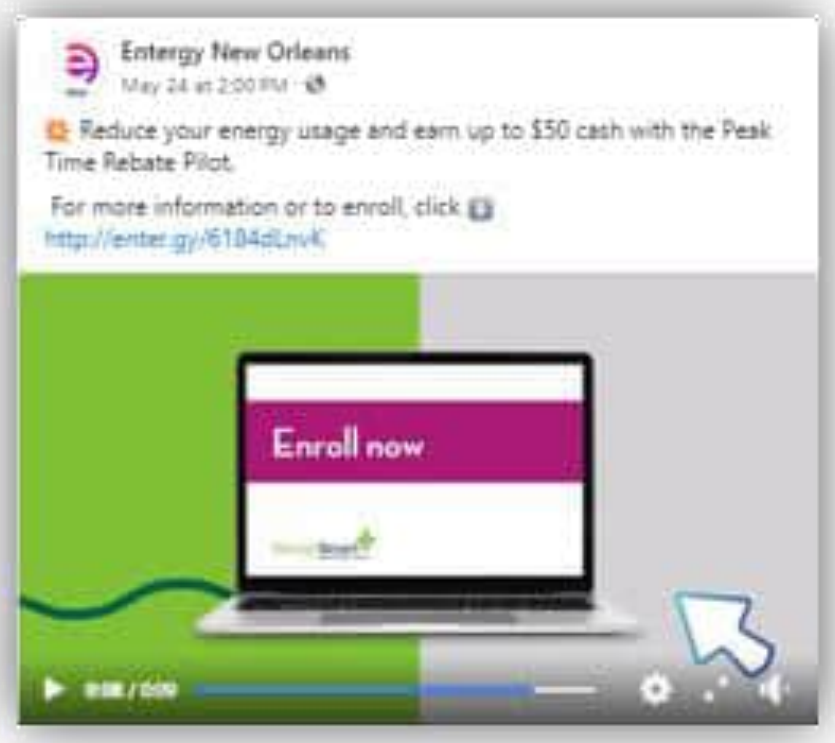
If you have any questions about the offering, please email **info@energysmartnola.com** or call us at **504-229-6868**.

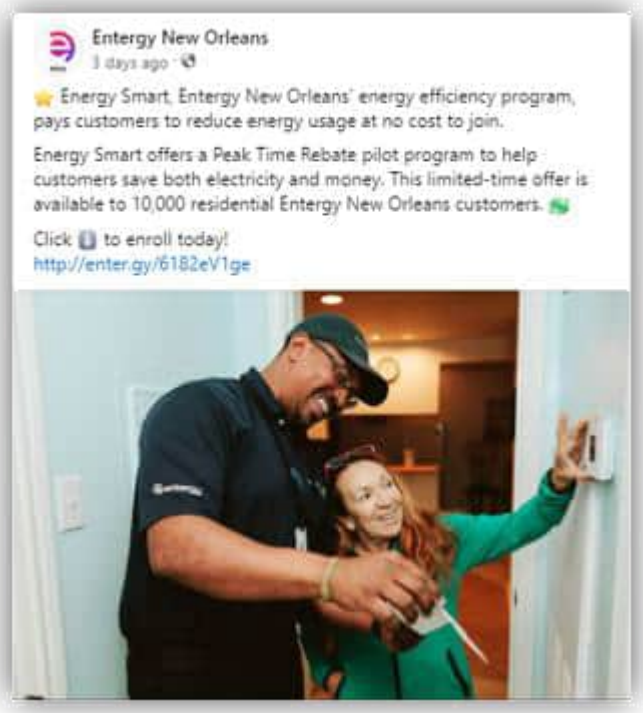
If you would like to opt-out of this offering, submit your unenrollment request here. Please allow 48 hours for this request to be processed.

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Organic Social






Entergy New Orleans
2 days ago
Time is ticking on this limited time offer! Enroll NOW in Energy Smart's Peak Time Rebate program and earn cash rewards by using less electricity!
Click for more information
ENERGYSMARTNOLA.INFO
Peak Time Rebate Pilot
Entergy New Orleans residential customers can earn cash incentive...


Entergy New Orleans
2 hours ago
Time is ticking on this limited time offer! Enroll NOW in Energy Smart's Peak Time Rebate program and earn cash rewards by using less electricity!
Click for more information
http://enter.gy/6183571Wf
Energy Smart pays you when you use less

Press Release

FOR IMMEDIATE RELEASE:
May X, 2024

Media Contacts:
Reagan Gill
reagan.gill@aptim.com
469-260-6306

Energy Smart, a New Orleans program, reopens enrollment for a limited time for residential customers to earn cash incentives

Energy Smart pays customers to reduce energy usage at no cost to join.

NEW ORLEANS, May x, 2024 – Energy Smart, Entergy New Orleans' energy efficiency program, offers a pilot program to help customers save both electricity and money. Entergy New Orleans residential customers can get cash incentives for reducing their energy use during short periods of high electricity usage.

The new program offering received an overwhelming amount of interest and success during the pilot phase last year. As a result, Energy Smart is reopening enrollment for a very limited time. Customers enrolled in the Peak Time Rebate program will receive an email notification to reduce energy use during short periods of high electricity usage, also known as peak demand events, and in return receive cash incentives for their participation. This limited-time offer is available to 10,000 residential Entergy New Orleans customers. Enrollment is available on a first-come, first-served basis. Customers are encouraged to enroll today to save electricity and earn cash rewards. To learn more and enroll, please visit: Peak Time Rebate Pilot.

"We are thrilled with the success of the Peak Time Rebate pilot. Not only have customers received rebates for their efforts, they have also played a crucial role in reducing the strain on the grid during peak times," said Ross Thevenot, Entergy New Orleans energy efficiency project manager. "We encourage all our customers to take advantage of the financial incentives and the opportunity to contribute to a more sustainable city by enrolling today."

To learn more about Energy Smart and the other energy-saving opportunities, visit energysmartnola.com, email info@energysmartnola.com or call **504-229-6868**.

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NOLANEWSWIRE

This is New YOURleans

June 18, 2024

EVENTS SUBMIT NEWS BY INDUSTRY

Entergy Residential Customers Can Get Paid to Cut Usage

May 9, 2024

NEW ORLEANS – Energy Smart, Entergy New Orleans' energy efficiency program, is offering a pilot program to help customers save electricity and money. Entergy New Orleans residential customers can get cash incentives for reducing their energy use during short periods of high electricity usage.

The new program offering received an overwhelming amount of interest during the pilot phase last year. As a result, Energy Smart is reopening enrollment for a very limited time. Customers enrolled in the Peak Time Rebate program will receive an email notification to reduce energy use during short periods of high electricity usage, also known as peak demand events, and in return receive cash incentives for their participation. This limited-time offer is available to 10,000 residential Entergy New Orleans customers. Enrollment is available on a first-come, first-served basis. Customers are encouraged to enroll today to save electricity and earn cash rewards. To learn more and enroll, visit: Peak Time Rebate Pilot.

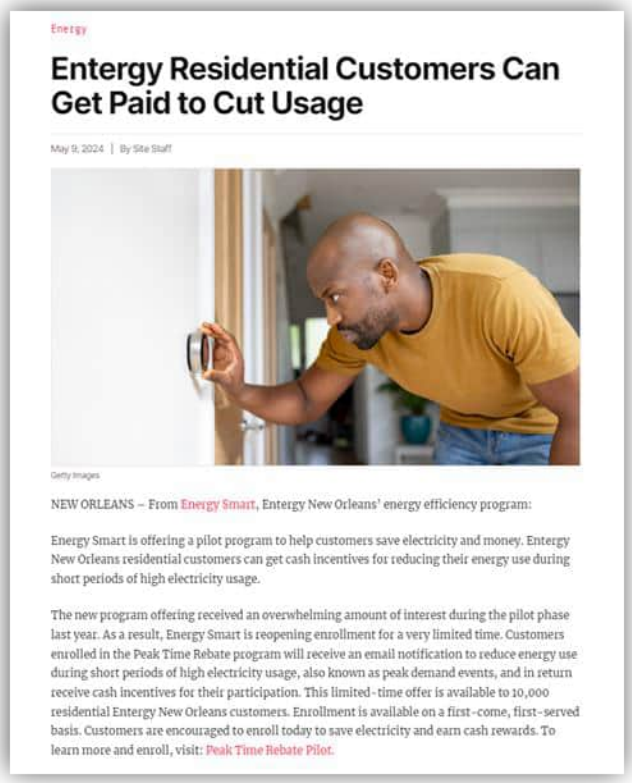
"We are thrilled with the success of the Peak Time Rebate pilot. Not only have customers received rebates for their efforts, they have also played a crucial role in reducing the strain on the grid during peak times," said Ross Thevenot, Entergy New Orleans energy efficiency project manager. "We encourage all our customers to take advantage of the financial incentives and the opportunity to contribute to a more sustainable city by enrolling today."

CLICK HERE FOR PR TIPS YOU NEED TO KNOW

POPULAR RELEASES (LAST 7 DAYS)

New Orleans Native Kenneth St. Charles to Lead Red Cross of Louisiana

Battery Tech Startup Advano Advances Pilot Facility in New Orleans East with Key Leadership Appointments



Energy

Entergy Residential Customers Can Get Paid to Cut Usage

May 9, 2024 | By Site Staff

Getty Images

NEW ORLEANS – From Energy Smart, Entergy New Orleans' energy efficiency program:

Energy Smart is offering a pilot program to help customers save electricity and money. Entergy New Orleans residential customers can get cash incentives for reducing their energy use during short periods of high electricity usage.

The new program offering received an overwhelming amount of interest during the pilot phase last year. As a result, Energy Smart is reopening enrollment for a very limited time. Customers enrolled in the Peak Time Rebate program will receive an email notification to reduce energy use during short periods of high electricity usage, also known as peak demand events, and in return receive cash incentives for their participation. This limited-time offer is available to 10,000 residential Entergy New Orleans customers. Enrollment is available on a first-come, first-served basis. Customers are encouraged to enroll today to save electricity and earn cash rewards. To learn more and enroll, visit: Peak Time Rebate Pilot.



Energy Smart pays customers to reduce energy usage at no cost to join

Eligibility Notice

EnergySmart
A New Orleans Program

Thank you for your interest

The Energy Smart team has reviewed your enrollment request for the Peak Time Rebate pilot. Unfortunately, your enrollment is not eligible for the program at this time.

We understand that this news may be disappointing. Although you are not eligible for the Peak Time Rebate pilot, we encourage you to explore other energy-saving initiatives, resources and programs that may be available to you such as:



Residential and business customers outside Orleans Parish

Entergy Louisiana Residential and Business Customers: 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.

Energy-saving tips for everyone

- Take steps to weatherize your home by sealing air leaks, adding insulation and installing energy-efficient windows and doors. These measures can help reduce energy loss and save on heating and cooling costs.
- Energy-efficient lighting: Replace incandescent bulbs with energy-efficient LED bulbs. LED bulbs use significantly less energy and last much longer, reducing both energy consumption and replacement frequency.
- Implement habits such as turning off lights when not in use, unplugging electronics when not in use and adjusting thermostat settings to conserve energy throughout the day.
- Look for ENERGY STAR® certified appliances when it's time to replace old or inefficient models. These appliances are designed to consume less energy without sacrificing performance.

Please contact Energy Smart with questions or concerns at info@energysmartnola.com or 504-229-6868.

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June Blog Post

Energy Smart pays to save

BY NEW ORLEANS EDITORIAL TEAM

06/25/2024



This summer, Entergy New Orleans' residential customers can earn extra cash for participating in innovative energy-saving programs offered by Energy Smart. Discover how to take advantage of these exciting opportunities.

Peak Time Rebate

Customers enrolled in the Entergy New Orleans' Energy Smart Peak Time Rebate program will receive an email notification to reduce energy use during short periods of high electricity usage, also known as peak demand events and, in return, can earn up to $50 cash incentives based on participation. Enrollment in the Peak Time Rebate program is available on a first-come, first-served basis. **Enroll today** to help save electricity and earn cash rewards.

EasyCool

Customers who own or purchase a smart thermostat can earn incentives of up to $50 their first year by enrolling qualifying smart thermostats in the Energy Smart EasyCool program and can earn a $25 incentive each additional year of participation. Visit EasyCool Smart Thermostats | Energy Smart NOLA for more information.

Appliance Recycling

Energy Smart's Appliance Recycling program pays customers who are looking to get rid of an old refrigerator or freezer. This offer pays customers $50 and provides free in-home pickup and recycling of working refrigerators and freezers. **Schedule** your no-cost pickup today.

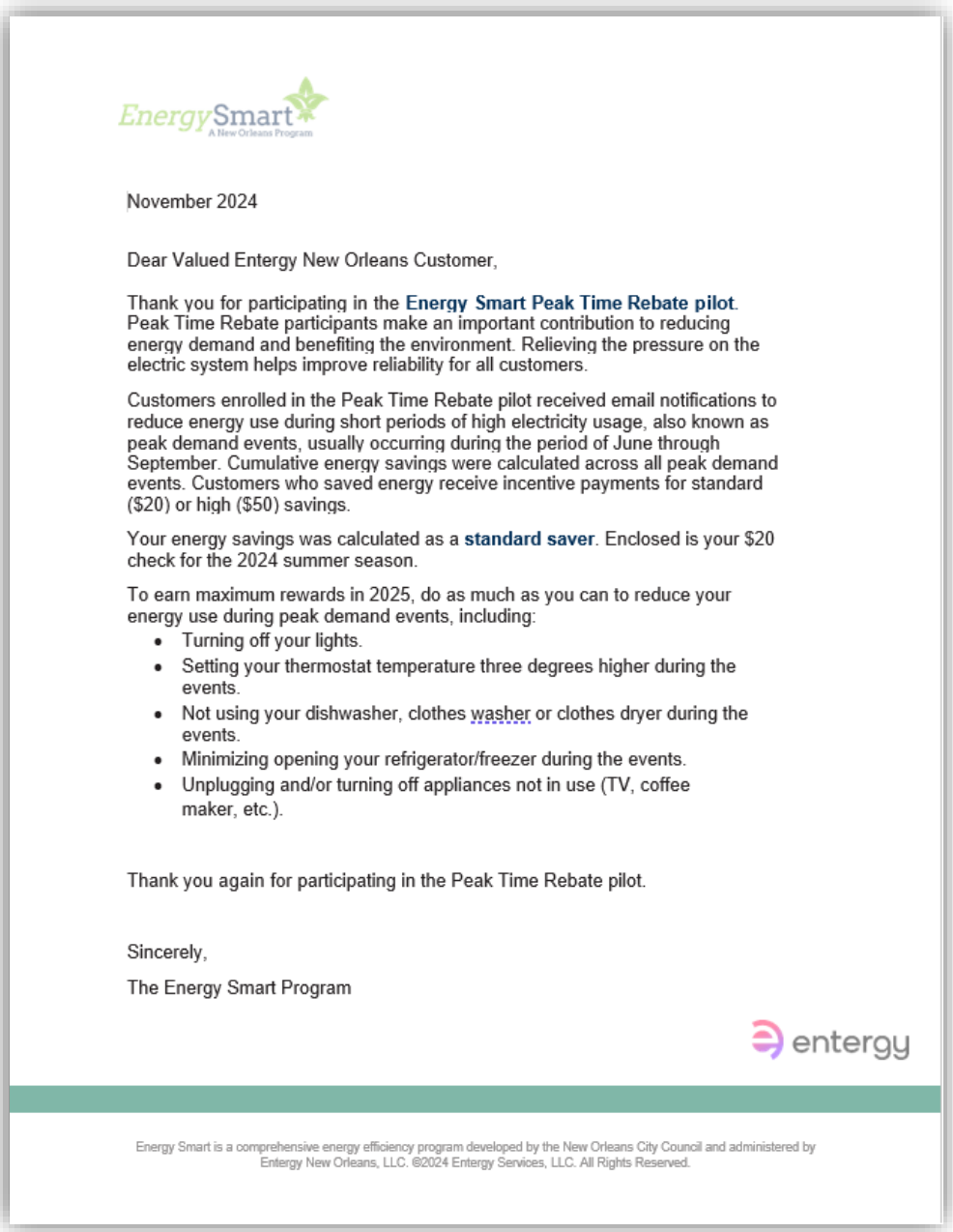
To learn more about Energy Smart and the other energy-saving opportunities, visit **energysmartnola.com**, email **info@energysmartnola.com** or call **504-229-6868**.

Tags

New Orleans Community Customers Electricity Energy efficiency
Energy Smart NOLA Community NOLA Energy Efficiency

New Orleans Editorial Team

Standard Saver Payment Letter



EnergySmart
A New Orleans Program

November 2024

Dear Valued Entergy New Orleans Customer,

Thank you for participating in the **Energy Smart Peak Time Rebate pilot**. Peak Time Rebate participants make an important contribution to reducing energy demand and benefiting the environment. Relieving the pressure on the electric system helps improve reliability for all customers.

Customers enrolled in the Peak Time Rebate pilot received email notifications to reduce energy use during short periods of high electricity usage, also known as peak demand events, usually occurring during the period of June through September. Cumulative energy savings were calculated across all peak demand events. Customers who saved energy receive incentive payments for standard ($20) or high ($50) savings.

Your energy savings was calculated as a **standard saver**. Enclosed is your $20 check for the 2024 summer season.

To earn maximum rewards in 2025, do as much as you can to reduce your energy use during peak demand events, including:

- Turning off your lights.
- Setting your thermostat temperature three degrees higher during the events.
- Not using your dishwasher, clothes washer or clothes dryer during the events.
- Minimizing opening your refrigerator/freezer during the events.
- Unplugging and/or turning off appliances not in use (TV, coffee maker, etc.).

Thank you again for participating in the Peak Time Rebate pilot.

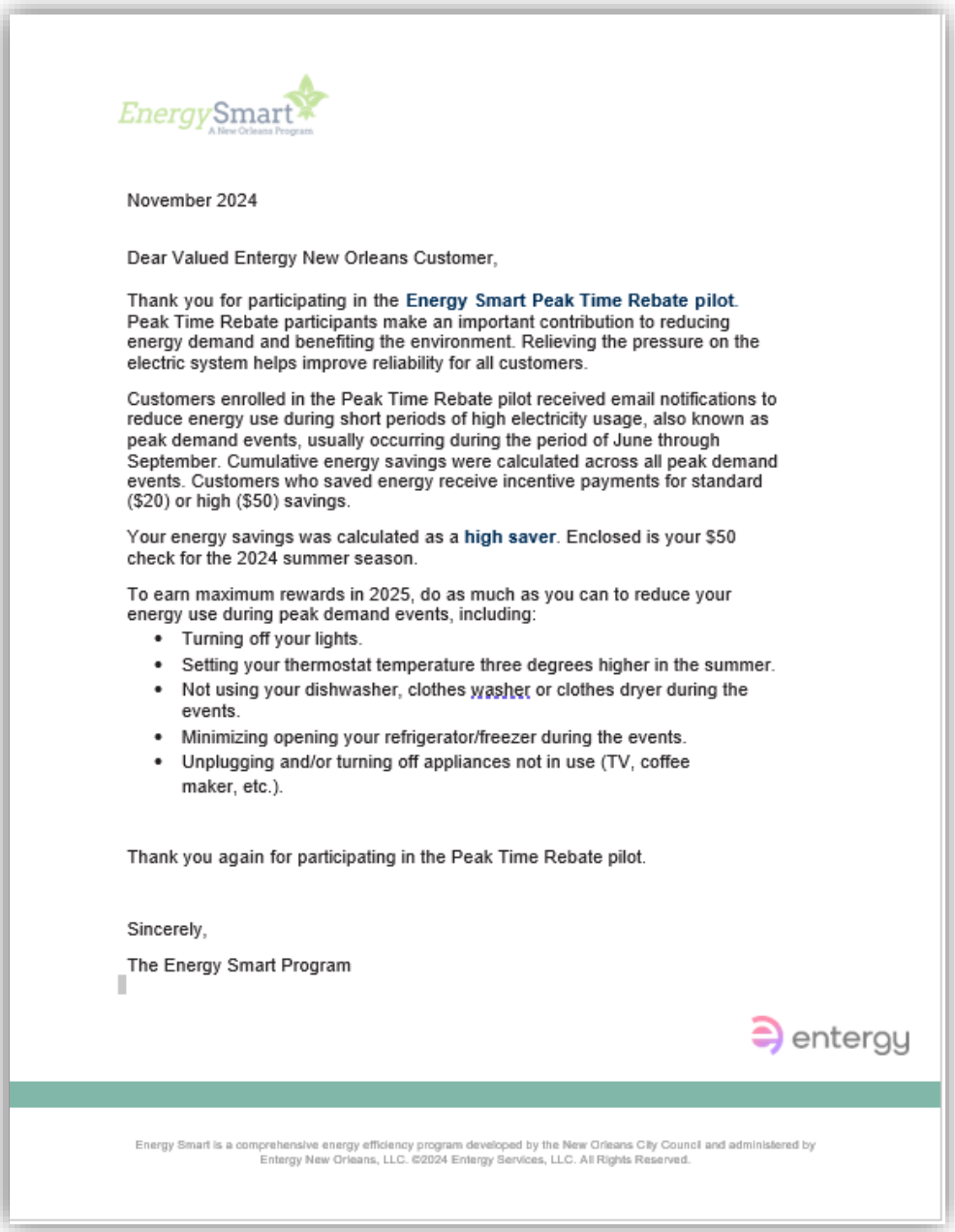
Sincerely,

The Energy Smart Program

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High Saver Payment Letter



EnergySmart
A New Orleans Program

November 2024

Dear Valued Entergy New Orleans Customer,

Thank you for participating in the **Energy Smart Peak Time Rebate pilot**. Peak Time Rebate participants make an important contribution to reducing energy demand and benefiting the environment. Relieving the pressure on the electric system helps improve reliability for all customers.

Customers enrolled in the Peak Time Rebate pilot received email notifications to reduce energy use during short periods of high electricity usage, also known as peak demand events, usually occurring during the period of June through September. Cumulative energy savings were calculated across all peak demand events. Customers who saved energy receive incentive payments for standard ($20) or high ($50) savings.

Your energy savings was calculated as a **high saver**. Enclosed is your $50 check for the 2024 summer season.

To earn maximum rewards in 2025, do as much as you can to reduce your energy use during peak demand events, including:

- Turning off your lights.
- Setting your thermostat temperature three degrees higher in the summer.
- Not using your dishwasher, clothes washer or clothes dryer during the events.
- Minimizing opening your refrigerator/freezer during the events.
- Unplugging and/or turning off appliances not in use (TV, coffee maker, etc.).

Thank you again for participating in the Peak Time Rebate pilot.

Sincerely,

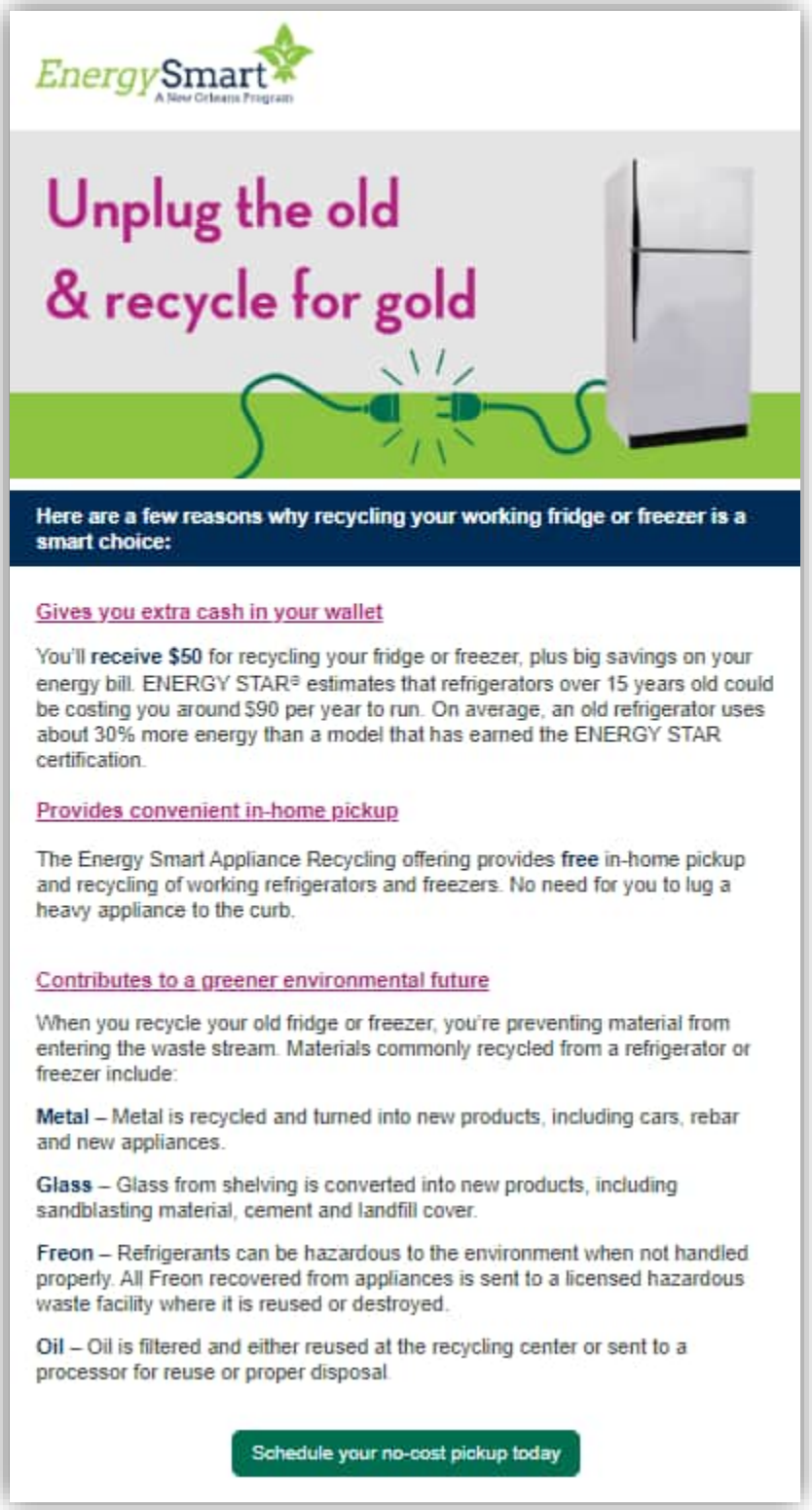
The Energy Smart Program

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Appliance Recycling

Email Targeting High Energy Users



March Madness Email



March Madness Remarket Email



EnergySmart

Here are a few reasons why recycling your working fridge or freezer is a smart choice:

Gives you extra cash in your wallet

You'll **receive $50** for recycling your fridge or freezer, plus big savings on your energy bill. ENERGY STAR® estimates that refrigerators over 15 years old could be costing you around $90 per year to run. On average, an old refrigerator uses about 30% more energy than a model that has earned the ENERGY STAR certification.

Provides convenient in-home pickup

The Energy Smart Appliance Recycling offering provides **free** in-home pickup and recycling of working refrigerators and freezers. No need for you to lug a heavy appliance to the curb.

Contributes to a greener environmental future

When you recycle your old fridge or freezer, you're preventing material from entering the waste stream. Materials commonly recycled from a refrigerator or freezer include:

Metal – Metal is recycled and turned into new products, including cars, rebar and new appliances.

Glass – Glass from shelving is converted into new products, including sandblasting material, cement and landfill cover.

Freon – Refrigerants can be hazardous to the environment when not handled properly. All Freon recovered from appliances is sent to a licensed hazardous waste facility where it is reused or destroyed.

Oil – Oil is filtered and either reused at the recycling center or sent to a processor for reuse or proper disposal.

Schedule your no-cost pickup today

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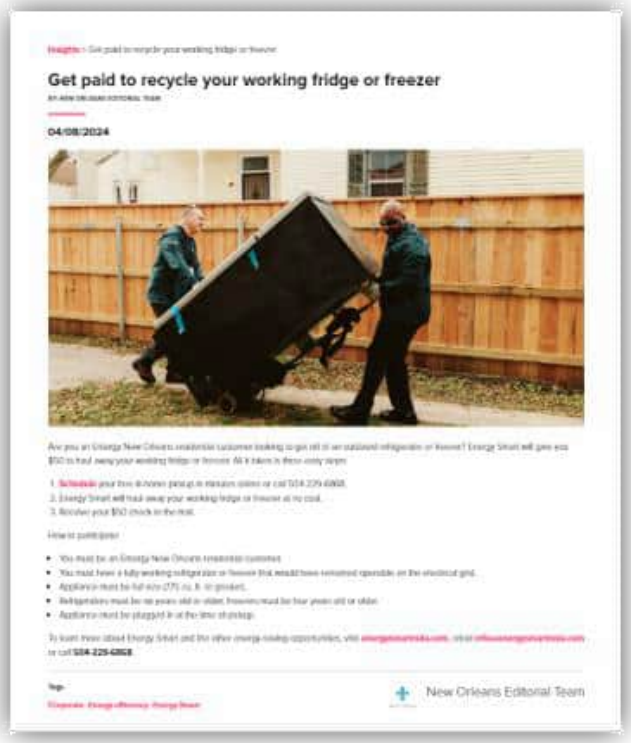
March Circuit Article



Two ways New Orleans' residential customers can score $50

03/06/2024

April Circuit Article



Get paid to recycle your working fridge or freezer

04/08/2024

New Orleans Editorial Team

Senior Fest Print Ad

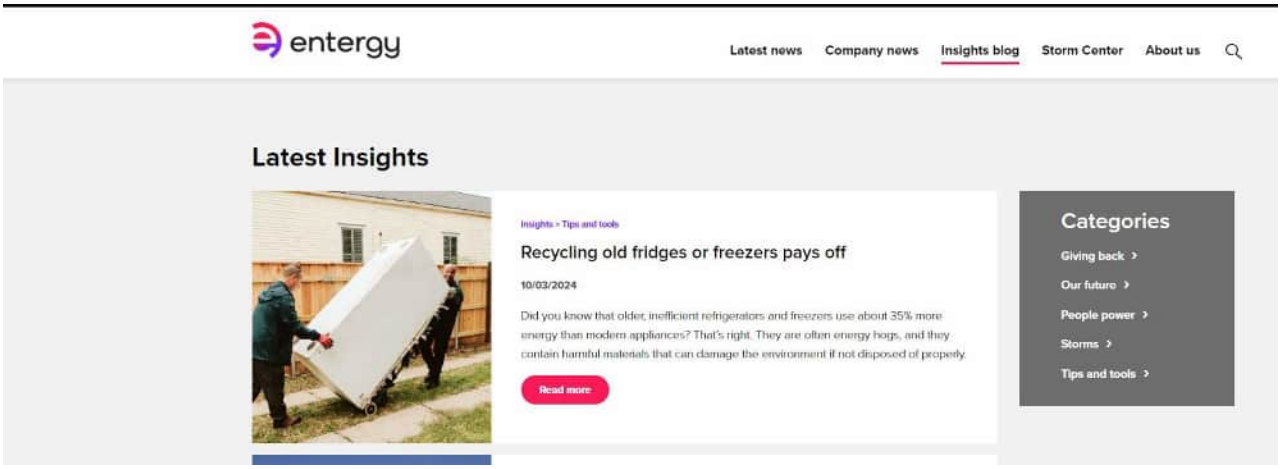


June email


EnergySmart
A New Orleans Program
Have you recently purchased a new fridge or freezer?
Receive $50 for recycling your old fridge or freezer. The Energy Smart Appliance Recycling offering provides free in-home pickup and recycling of working refrigerators and freezers. No need for you to lug a heavy appliance to the curb.
Schedule your no-cost pickup today
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Energy Awareness Month Blog Post

October 3, 2024



Google Keyword Search Ad

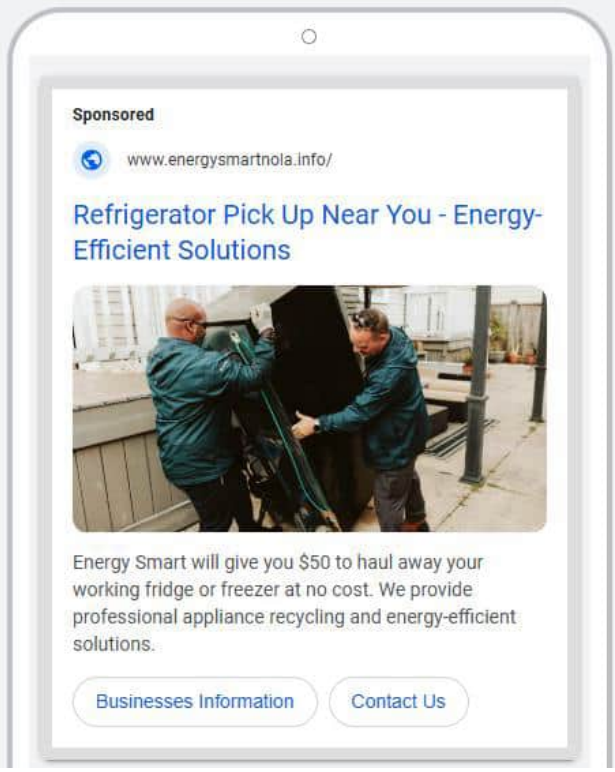
Organic Social

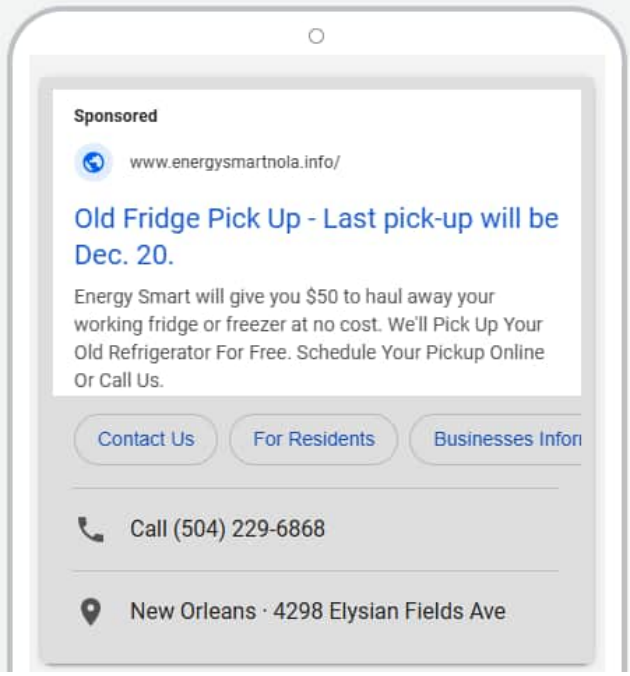

Entergy New Orleans
May 27 at 10:00 AM
Are you an Entergy New Orleans residential customer looking to get rid of an outdated refrigerator or freezer?
✓ Energy Smart will haul your working fridge or freezer for free and give you $50.
Schedule your free in-home pickup or call 504-229-6868.
http://enter.gy/6189dLpTT

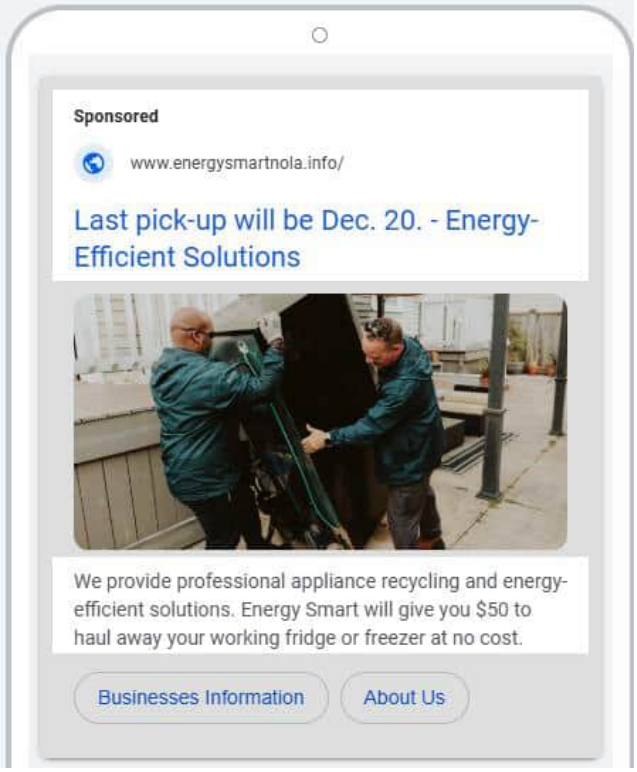

Entergy New Orleans
22 hours ago
Have you recently purchased a new fridge or freezer?
Energy Smart will give you $50 to haul away your old working fridge or freezer!
Click to schedule your free in-home pickup.
ENERGYSMARTNOLA.INFO
Appliance Recycling
Looking to get rid of an outdated refrigerator or freezer? Energy S...


Entergy New Orleans
June 22 at 3:30 PM
⁉ Have you recently purchased a new fridge or freezer? Energy Smart will give you $50 to haul away your old working fridge or freezer!
Click to schedule your free in-home pickup.
ENERGYSMARTNOLA.INFO
Appliance Recycling
Looking to get rid of an outdated refrigerator or freezer? Energy S...

Paid Search Ads



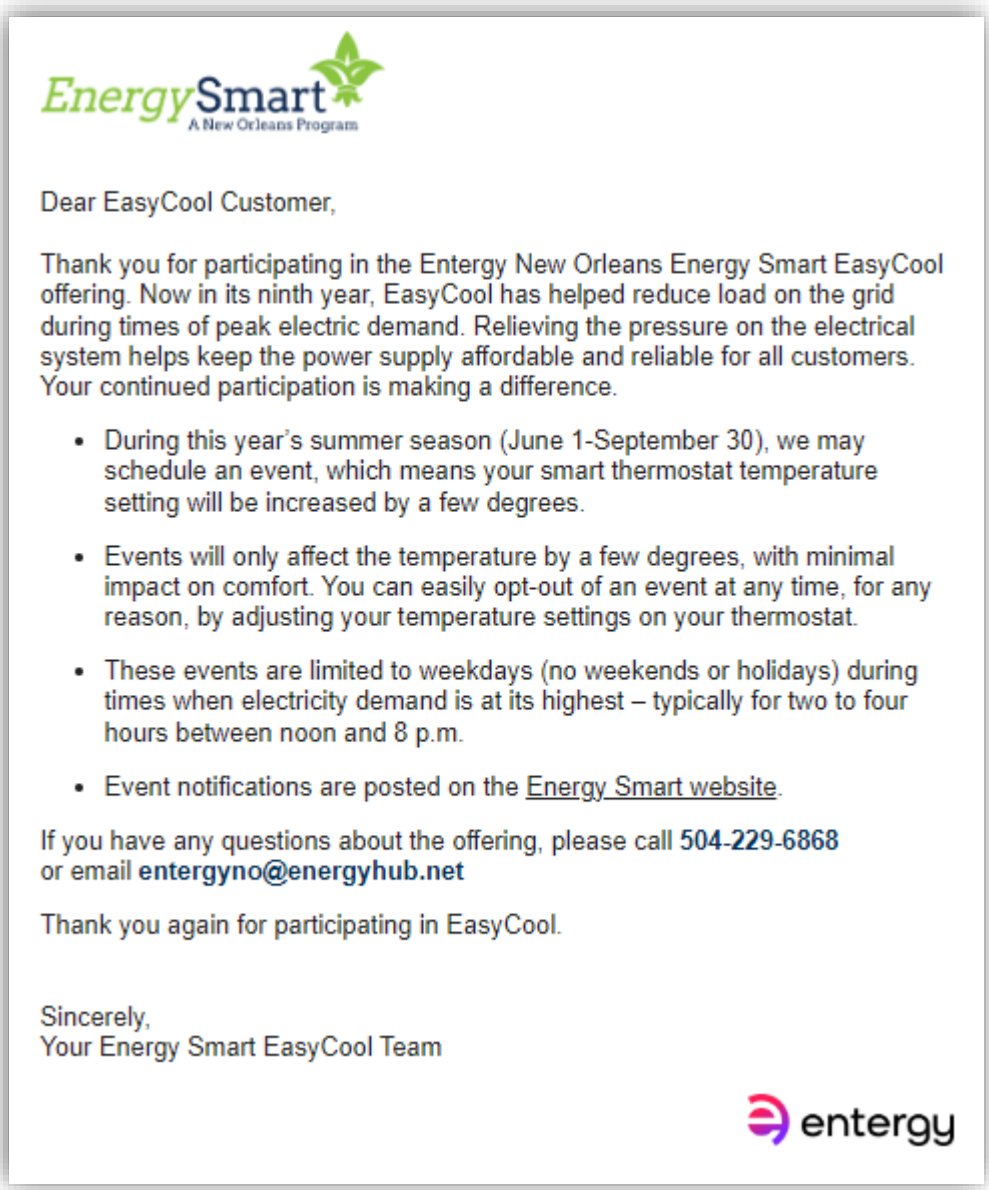




Appliance Recycling Landing Page



EasyCool
Pre-season letter



EnergySmart
A New Orleans Program

Dear EasyCool Customer,

Thank you for participating in the Entergy New Orleans Energy Smart EasyCool offering. Now in its ninth year, EasyCool has helped reduce load on the grid during times of peak electric demand. Relieving the pressure on the electrical system helps keep the power supply affordable and reliable for all customers. Your continued participation is making a difference.

- During this year's summer season (June 1-September 30), we may schedule an event, which means your smart thermostat temperature setting will be increased by a few degrees.
- Events will only affect the temperature by a few degrees, with minimal impact on comfort. You can easily opt-out of an event at any time, for any reason, by adjusting your temperature settings on your thermostat.
- These events are limited to weekdays (no weekends or holidays) during times when electricity demand is at its highest – typically for two to four hours between noon and 8 p.m.
- Event notifications are posted on the Energy Smart website.

If you have any questions about the offering, please call **504-229-6868** or email **entergyno@energyhub.net**

Thank you again for participating in EasyCool.

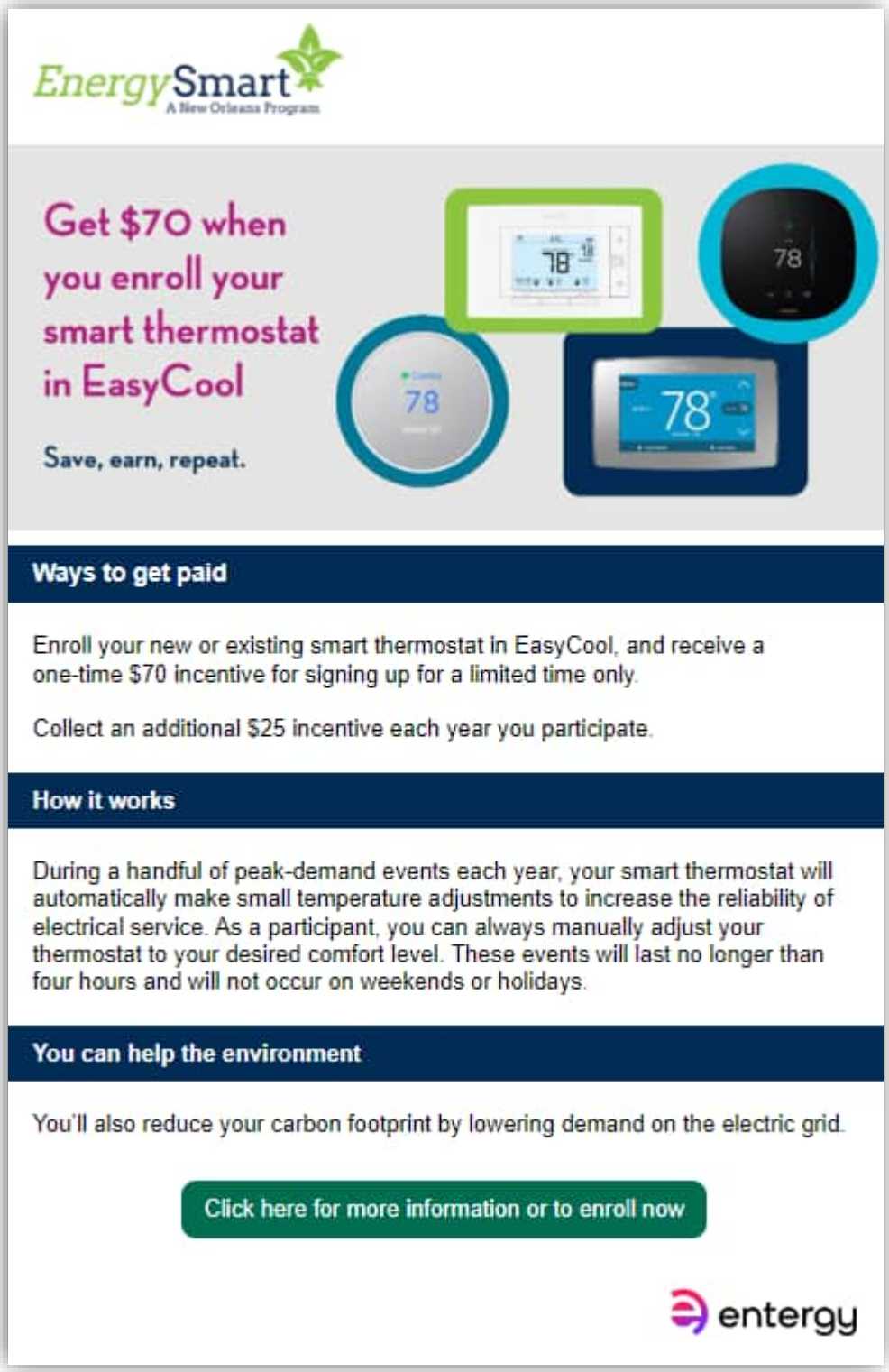
Sincerely,
Your Energy Smart EasyCool Team

entergy

Earth Day Bonus Email Lead Generation



Earth Day Bonus: Week 2 Did Not Click Remarket



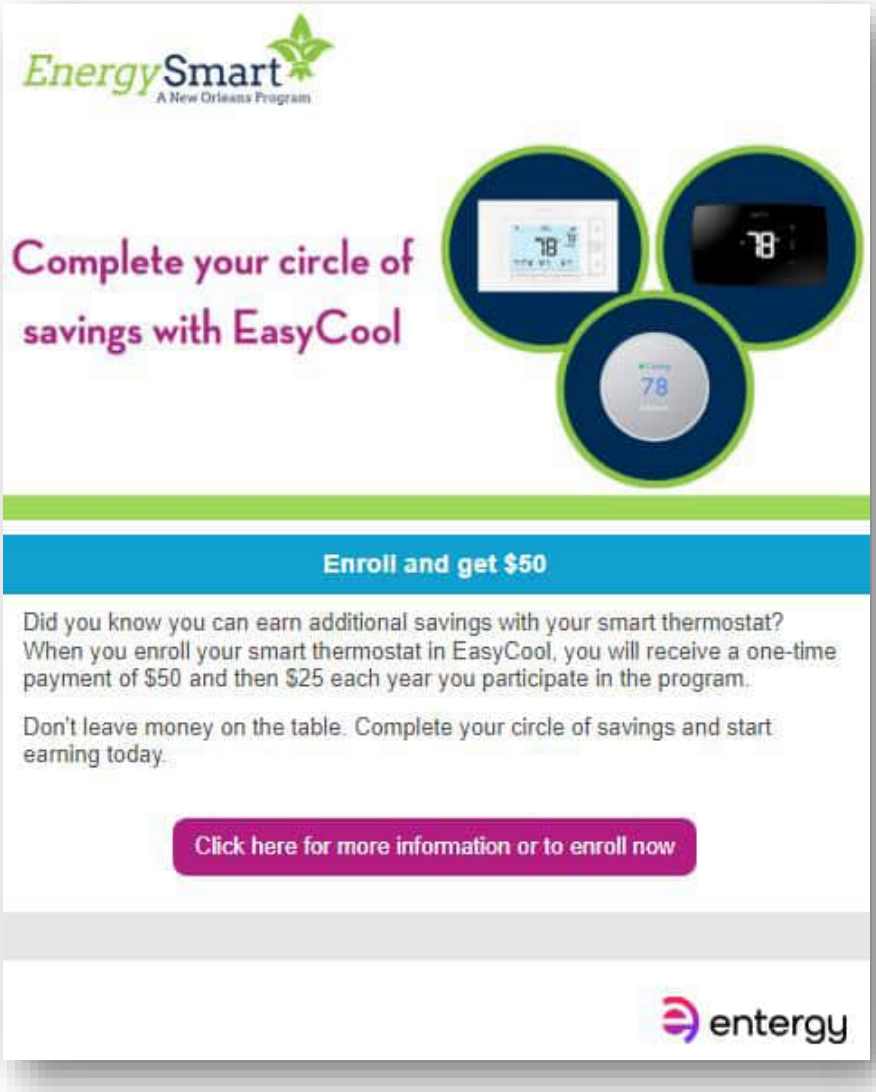
Earth Day Bonus New Creative/Messaging



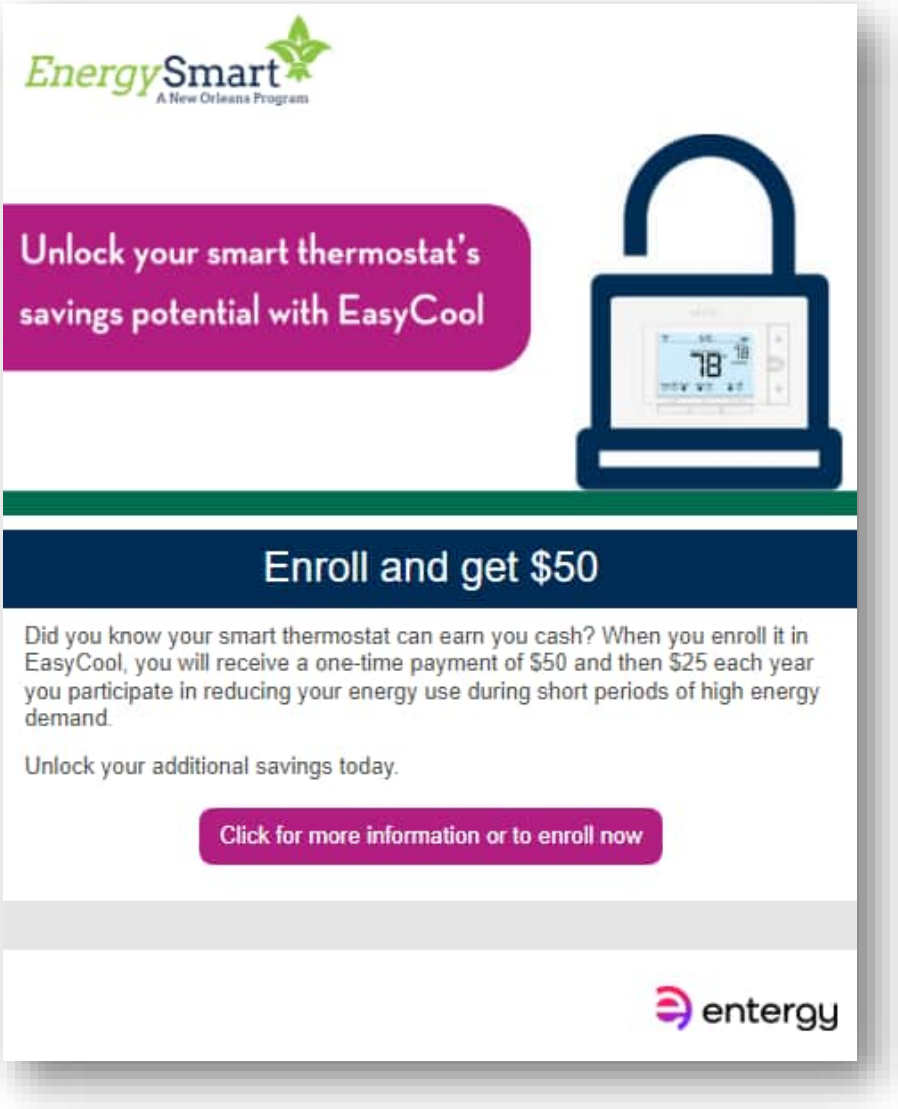
Earth Day Bonus Email: Final Chance



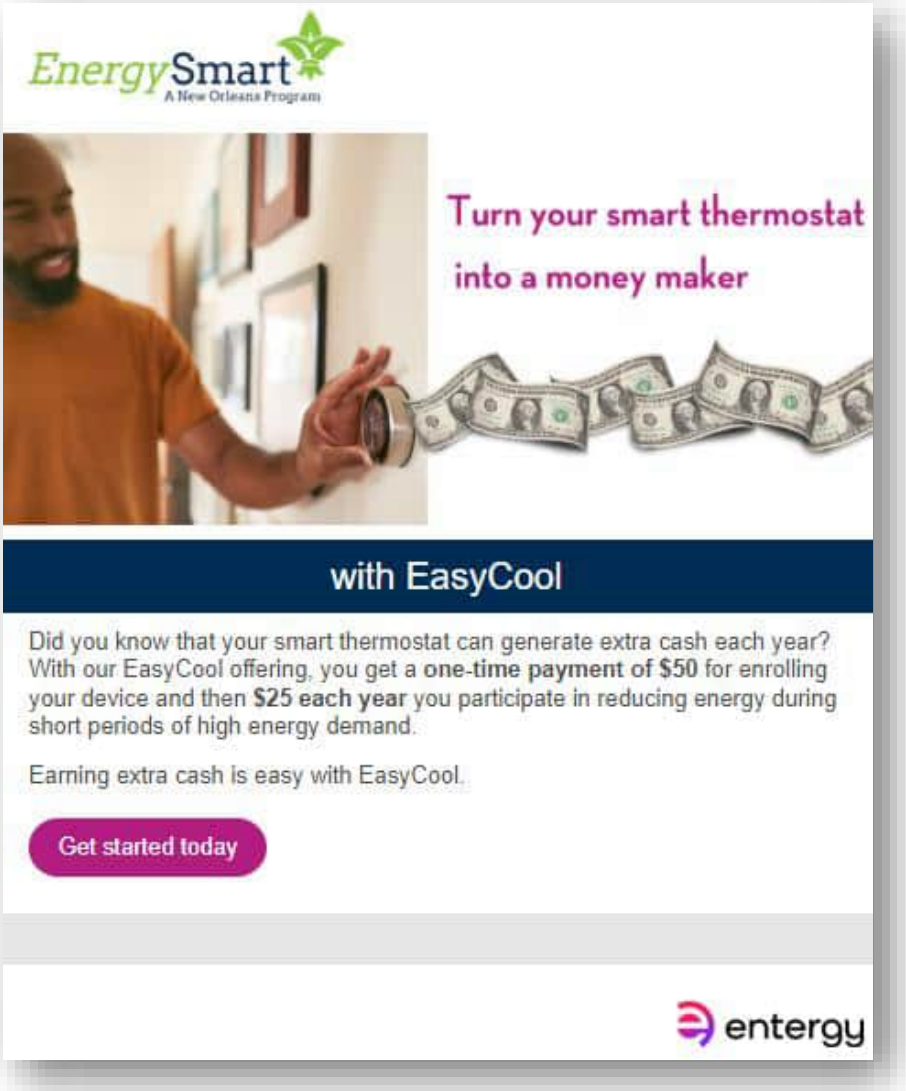
August 17, 2024 Email



September 9 and 19, 2024 Email

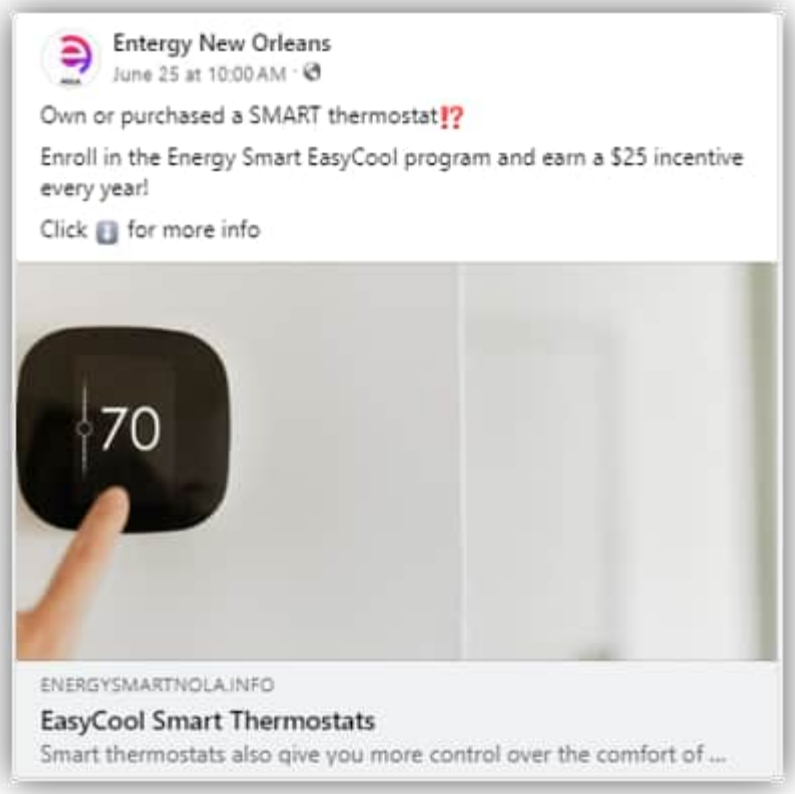


October 21 and 28, 2024



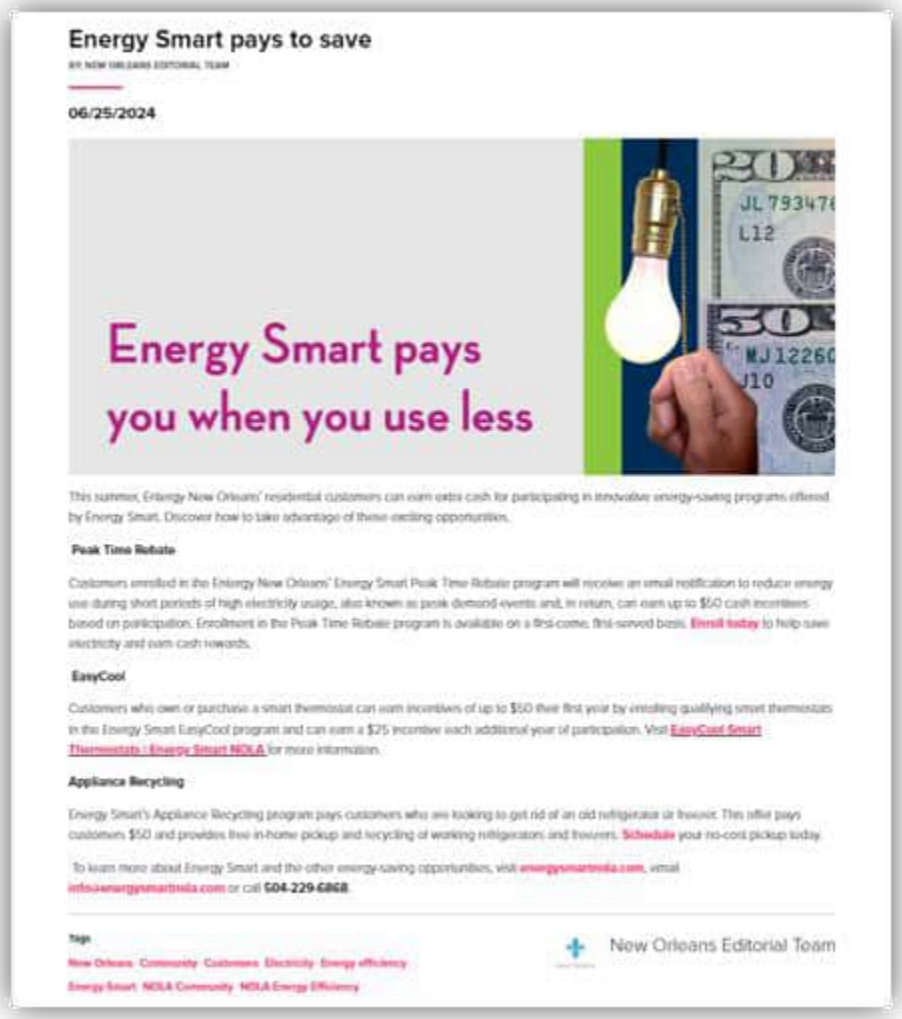
Organic social






Entergy New Orleans
June 26 at 9:00 AM
Own or purchased a SMART thermostat!?
Enroll in the Energy Smart EasyCool program and earn a $25 incentive every year!
Click for more info... See more
Easy cash with EasyCool
Save, earn, repeat.

Blog Post Appliance Recycling, EasyCool and Peak Time Rebate



Energy Smart pays to save

06/25/2024

Energy Smart pays you when you use less

This summer, Entergy New Orleans' residential customers can earn extra cash for participating in innovative energy-saving programs offered by Energy Smart. Discover how to take advantage of these exciting opportunities.

Peak Time Rebate

Customers enrolled in the Entergy New Orleans' Energy Smart Peak Time Rebate program will receive an email notification to reduce energy use during short periods of high electricity usage, also known as peak demand events and, in return, can earn up to $60 cash incentives based on participation. Enrollment in the Peak Time Rebate program is available on a first-come, first-served basis. Enroll today to help save electricity and earn cash rewards.

EasyCool

Customers who own or purchase a smart thermostat can earn incentives of up to $50 their first year by enrolling qualifying smart thermostats in the Energy Smart EasyCool program and can earn a $25 incentive each additional year of participation. Visit EasyCool Smart Thermostats | Energy Smart NOLA for more information.

Appliance Recycling

Energy Smart's Appliance Recycling program pays customers who are looking to get rid of an old refrigerator or freezer. This offer pays customers $50 and provides free in-home pickup and recycling of working refrigerators and freezers. Schedule your no-cost pickup today.

To learn more about Energy Smart and the other energy-saving opportunities, visit energysmartnola.com, email info@energysmartnola.com or call 504-229-6868.

Tags

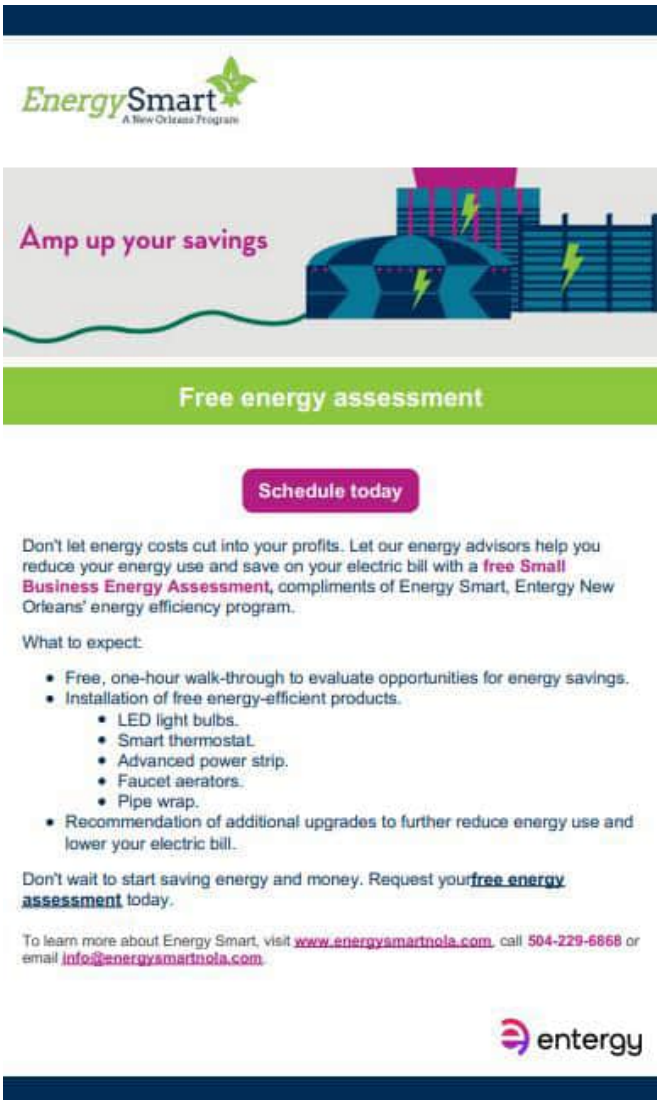
New Orleans Community Customers Electricity Energy efficiency Energy Smart NOLA Community NOLA Energy Efficiency

New Orleans Editorial Team

Commercial & Industrial Marketing Assets

Emails

Small Business Energy Assessment January 15


EnergySmart
A New Orleans Program
Amp up your savings
Free energy assessment
Schedule today
Don't let energy costs cut into your profits. Let our energy advisors help you reduce your energy use and save on your electric bill with a free Small Business Energy Assessment, compliments of Energy Smart, Entergy New Orleans' energy efficiency program.
What to expect:
Free, one-hour walk-through to evaluate opportunities for energy savings.
Installation of free energy-efficient products.
LED light bulbs.
Smart thermostat.
Advanced power strip.
Faucet aerators.
Pipe wrap.
Recommendation of additional upgrades to further reduce energy use and lower your electric bill.
Don't wait to start saving energy and money. Request yourfree energy assessment today.
To learn more about Energy Smart, visit www.energysmartnola.com, call 504-229-6868 or email info@energysmartnola.com.
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Increased Incentive January 17

EnergySmart
A New Orleans Program



Exciting incentive changes

Trade ally partner,

We are excited to share with you that Energy Smart has increased all custom incentive rates and select prescriptive incentives for 2024. Incentive increases average over 25% higher than 2023 rates.

The new incentive rates are included in the lighting and non-lighting workbooks on the Energy Smart website.

2024 workbooks

Questions? Visit www.energysmartnola.com, call 504-229-6868 or email info@energysmartnola.com.

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January 29 Get Your Share Email

EnergySmart
A New Orleans Program



Get your share of the Energy Smart Fund

Not sure how to fund your next energy-saving upgrade? Let Energy Smart, Entergy New Orleans' energy efficiency program, help pay for it through the Energy Smart Fund.

The **Energy Smart Fund** for 2024 **is $9 million**. Don't miss out on getting your share. To date, close to $2 million has been claimed by local businesses for their projects.

Click the button below and tell us what type of energy-saving projects you are considering, and our energy advisors will help you maximize the available cash incentives.

Project request

Visit **www.energysmartnola.com/businesses** for other business offerings.

To learn more about Energy Smart, visit **www.energysmartnola.com**, call **504-229-6868** or email **info@energysmartnola.com**.

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March 20 Let the Good Times Roll Email



EnergySmart
A New Orleans Program

Laissez les bons temps rouler

with energy savings for your business

Free energy assessments
exclusively for small business customers

Schedule today

Let the good times roll with Energy Smart, Entergy New Orleans' energy - efficiency program. We're here to help you uncover ways to reduce your energy use, save on your electric bill and improve workplace comfort. Schedule your free energy assessment so you can start enjoying your savings.

What to expect:

- Free, one-hour walk-through to evaluate opportunities for energy savings.
- Installation of free energy-efficient products.
  - LED light bulbs.
  - Smart thermostat.
  - Advanced power strip.
  - Faucet aerators.
  - Pipe wrap.
- Recommendation on additional upgrades to further reduce energy use and lower your electric bill.

Click **free energy assessment** to learn how to start saving today.

To learn more about Energy Smart, visit www.energysmartnola.com, call 504-229-6868 or email info@energysmartnola.com.

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April 2 Dialed Up Incentives Email



EnergySmart
A New Orleans Program

We've dialed up incentive rates

Permanently on all custom and select prescriptive rates

You read that correctly. We have permanently increased all custom and select prescriptive incentive rates for 2024.

Nearly every lighting measure received a permanent incentive rate increase.

- Average of 36% increase for large commercial prescriptive lighting rates.
- Average of 41% for small commercial prescriptive lighting incentives.

These new incentive rates replace the old promotional bonus incentives offered in years past.

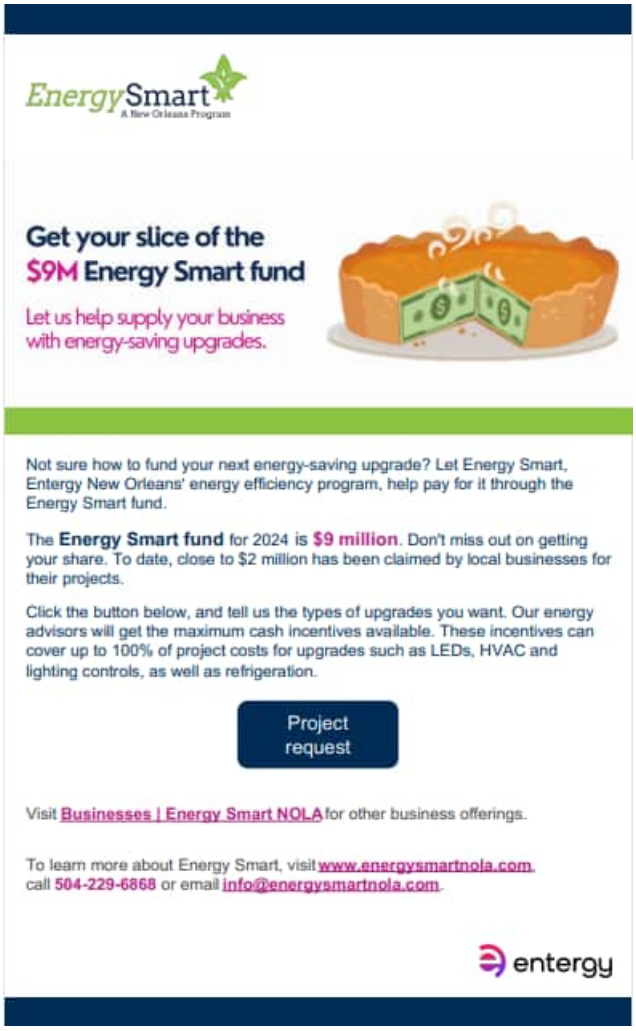
Don't wait. Submit your applications now to secure your share of the $9M Energy Smart Fund. To date, over $2M has been allocated for energy-saving upgrades.

2024 workbooks

Questions? Visit www.energysmartnola.com, call 504-229-6868 or email info@energysmartnola.com

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April 9 Get Your Slice Email



EnergySmart
A New Orleans Program

Get your slice of the $9M Energy Smart fund

Let us help supply your business with energy-saving upgrades.

Not sure how to fund your next energy-saving upgrade? Let Energy Smart, Entergy New Orleans' energy efficiency program, help pay for it through the Energy Smart fund.

The **Energy Smart fund** for 2024 is **$9 million**. Don't miss out on getting your share. To date, close to $2 million has been claimed by local businesses for their projects.

Click the button below, and tell us the types of upgrades you want. Our energy advisors will get the maximum cash incentives available. These incentives can cover up to 100% of project costs for upgrades such as LEDs, HVAC and lighting controls, as well as refrigeration.

Project request

Visit Businesses | Energy Smart NOLA for other business offerings.

To learn more about Energy Smart, visit www.energysmartnola.com, call 504-229-6868 or email info@energysmartnola.com.

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May 14 A/C Tune-Up Cash Incentives Email

EnergySmart
A New Orleans Program



Cash incentives for A/C tune-ups

Get your business summer ready with an A/C tune-up. Energy Smart has significantly increased incentives to jump-start your summer savings.

Minimum capacity (tons)	Maximum capacity (tons)	Tune-up incentives
1.5	3.5	$225
4	5	$275
6	10	$450
11	15	$650
16	25	$800
26	30	$850
31	50	$1,400
51	80	$2,000
80+	-	$2,500

Click here for a list of Energy Smart trade ally contractors.

Already have a reliable A/C contractor? Request tune-up requirements and application before your A/C contractor performs the tune-up.

Request form

To learn more about Energy Smart, visit www.energysmartnola.com, call 504-229-6868 or email info@energysmartnola.com.

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May 28 HVAC Tune-Up Email



EnergySmart
A New Orleans Program

Cash incentives
for an A/C tune-up

Jump-start your summer energy savings

As outside temps start to rise, make sure your indoor temps do not. Ensure the comfort of your employees and customers, while lowering your utility cost, with an A/C tune-up.

Don't wait until your system is running inefficiently - or worse yet - not at all. Utilize our increased A/C tune-up cash incentives to jump-start your summer energy savings. Incentives range between $225 and $2,500.*

*Incentives based on unit's tonnage capacity.

Inquire today

Need a contractor? Click here for a list of Energy Smart trade ally contractors.

Already have a reliable A/C contractor? Request tune-up requirements and application before your contractor performs the tune-up.

To learn more about Energy Smart, visit www.energysmartnola.com, call 504-229-6868 or email info@energysmartnola.com.

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May 28 TA Sales Training Event Email

EnergySmart
A New Orleans Program

You're invited

Trade ally sales training

hosted by the LSU Professional Sales Institute

Monday, May 28, 2024
8:30-11:30 a.m.
Breakfast will be served, starting at 8 a.m.

Delgado Community College
Student Life Center (campus building 23)
Lac Maurepas Room on 2nd floor
615 City Park Avenue
New Orleans, LA 70119



P. Greg Accardo
Director, Instructor and Professional Sales Advisor
Professional Sales Institute



Nawar Chaker, Ph.D.
Assistant Professor and Director of Research
Professional Sales Institute

Please register by May 22, 2024, at energysmartsales.eventbrite.com.

Kevin.Fitzwilliam@aptim.com energysmartnola.com

Energy Smart invites you to an interactive sales training on Monday, May 28, 2024, at Delgado Community College. Learn about:

- 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, many of whom are pursuing careers in technical sales.

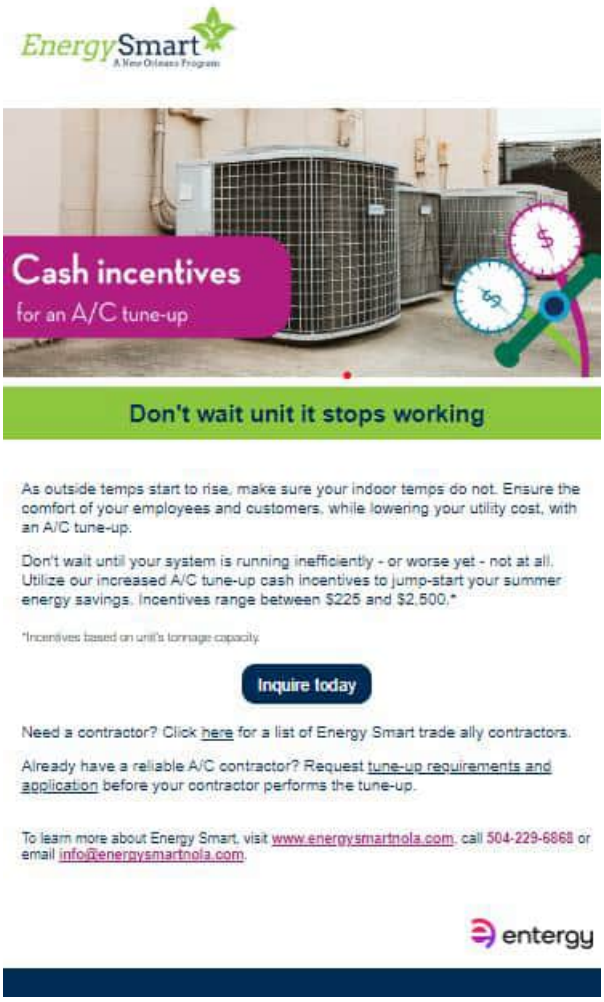
A full breakfast will be served, starting at 8 a.m.

RSVP by May 22

Questions? Contact Kevin Fitzwilliam at kevin.fitzwilliam@aptim.com.

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June 4 HVAC Tune-Up Email



June 11 HVAC Tune-Up Email

EnergySmart



Don't let cost be a barrier to ensuring your business stays comfortable and energy efficient this summer. We can help keep your A/C system in tip-top shape without breaking the bank.

Get your share of the cash incentives available to Entergy New Orleans businesses for A/C tune-ups.

Minimum capacity (tons)	Maximum capacity (tons)	Tune-up incentives
1.5	3.5	$225
4	5	$275
6	10	$450
11	15	$600
16	25	$800
26	30	$850
31	50	$1,400
51	80	$2,000
80+	-	$2,500

Submit your request today, and one of our energy advisors will reach out to help you with the process and connect you with A/C contractors.

Already have a reliable A/C contractor? Request tune-up requirements and application before your A/C contractor performs the tune-up.

Request form

To learn more about Energy Smart, visit www.energysmartnola.com, call [redacted] or email info@energysmartnola.com.

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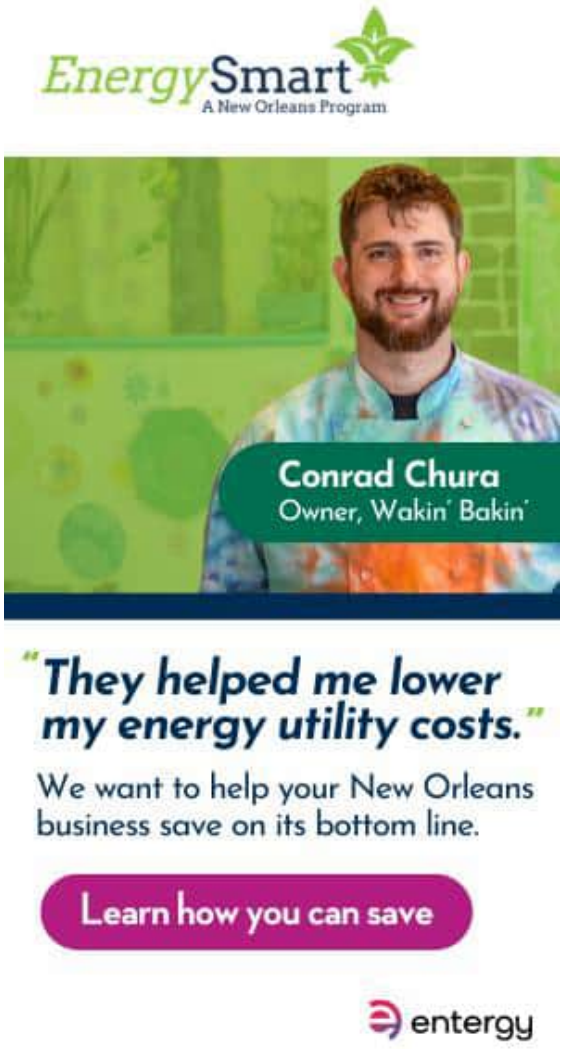


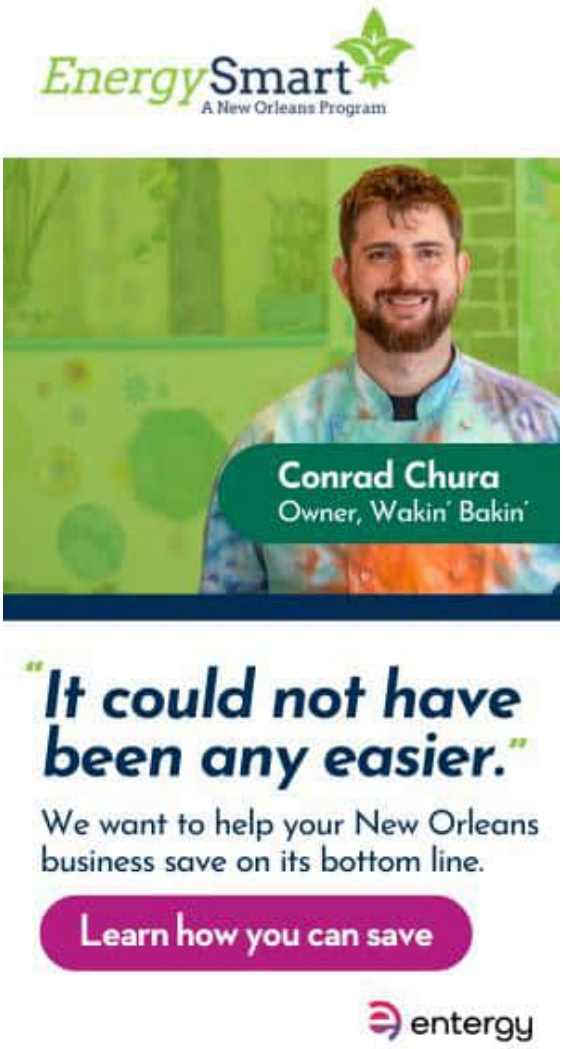









EnergySmart
A New Orleans Program
Conrad Chura
Owner, Wakin' Bakin'
"They helped me lower my energy utility costs."
We want to help your New Orleans business save on its bottom line.
Learn how you can save
entergy


EnergySmart
A New Orleans Program
Conrad Chura
Owner, Wakin' Bakin'
"It could not have been any easier."
We want to help your New Orleans business save on its bottom line.
Learn how you can save
entergy


EnergySmart
Make energy-saving upgrades to your business, and beat the summer heat
Courtesy of the $9M Energy Smart fund.
Claim your share today
entergy


EnergySmart
A New Orleans Program
Beat the summer heat with energy-saving upgrades to your business
Courtesy of the $9M Energy Smart fund.
Request a consultation
entergy

Animated Video for Small Business Energy Assessment



SBEA-Animation-30
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Wakin' Bakin' Customer Testimonial Video



Energy Smart + Wakin' Bakin' on Vimeo

Digital Sponsored Article on NOLA.com

Energy Smart program helps New Orleans cafe improve efficiency, preserve historic charm and boost the bottom line

BY AMANDA MCELFRESH | BRANDED CONTENT SPECIALIST · May 15, 2024 · 2 min to read





Sponsored Content

This article is brought to you by Energy Smart.

Crystal and Conrad Chura love the fact that both the French Quarter and Mid-City locations of their Wakin' Bakin' restaurants are in older buildings. The historic nature of the structures brings a sense of character and charm that could never be replicated. But, it also means that the buildings were not originally designed with modern energy usage in mind.

"We know our energy system can be fragile, especially in the tough summer months," Crystal Chura said. "There is a strain on everything. That is even more of the case in buildings like ours that have been here for so long."





Provided photo



However, the Churas have been able to protect the integrity of the buildings while making changes to improve their energy efficiency and save money. Last year, a New Orleans nonprofit connected them to Energy Smart, a comprehensive energy-efficiency program designed to help Entergy New Orleans electric customers discover opportunities to reduce energy use, improve comfort in their homes and businesses, and save on their bills.

After an initial Energy Smart assessment, the Churas made small but meaningful changes at Wakin' Bakin', including the installation of smart thermostats and LED lights. Crystal Chura said the changes had no effect on the Wakin' Bakin' food or service, but did lead to immediate financial benefits, most notably lower electricity bills. Nearly 6,300 kilowatt-hours have been saved at both locations combined since the Energy Smart changes were made.

"It's been really valuable for us because any time we can find a way to reduce costs, that helps our business," she said. "The Energy Smart program introduced us to features we had no idea were even available. As small business owners, it can be hard for us to keep up on the latest technology and mitigating features that are on the market. We were really happy with the changes we could make immediately."

Chura added she and her husband expect the lower energy costs at Wakin' Bakin' to help them have more money to invest in their business in the future.

"That's money that is going back into our bottom line to reinforce our workforce, serve our customers and contribute to our community," she said.

Energy Smart assessments are free to business owners. During the walk-through, an energy advisor evaluates opportunities for energy savings. Following that, the advisor will install select energy-efficient measures and recommend additional projects that can be completed by an Energy Smart trade ally.



In many cases, smaller items like thermostats, faucet aerators and light bulbs are provided free of charge. If larger projects are needed, such as new air conditioners or pipe-wrapping, significant rebates are often available to help business owners save.

"Through the Energy Smart program, Wakin' Bakin' was able to utilize incentives to support their energy-saving upgrades," said Derek Mills, manager of Entergy New Orleans' demand-side management programs. "By making these upgrades, Wakin' Bakin' is taking important steps toward reducing energy consumption and saving money. We encourage other New Orleans restaurants and businesses to take advantage of the program to improve their efficiency and bottom line."



Provided photo

Chura added that the positive experience with Energy Smart has made the couple consider energy-efficient decisions while looking for a home and managing their business moving forward.



"The education and awareness help inform your choices. We're more mindful about making investments that will improve sustainability in the long run," she said.

For more information or to schedule an assessment, visit energysmartnola.com, email info@energysmartnola.com or call 504-229-6868.



Email Amanda McElfresh at amcelfresh@theadvocate.com

Sponsored Article in Times-Picayune



Ukraine's divisive mobilization law comes into force

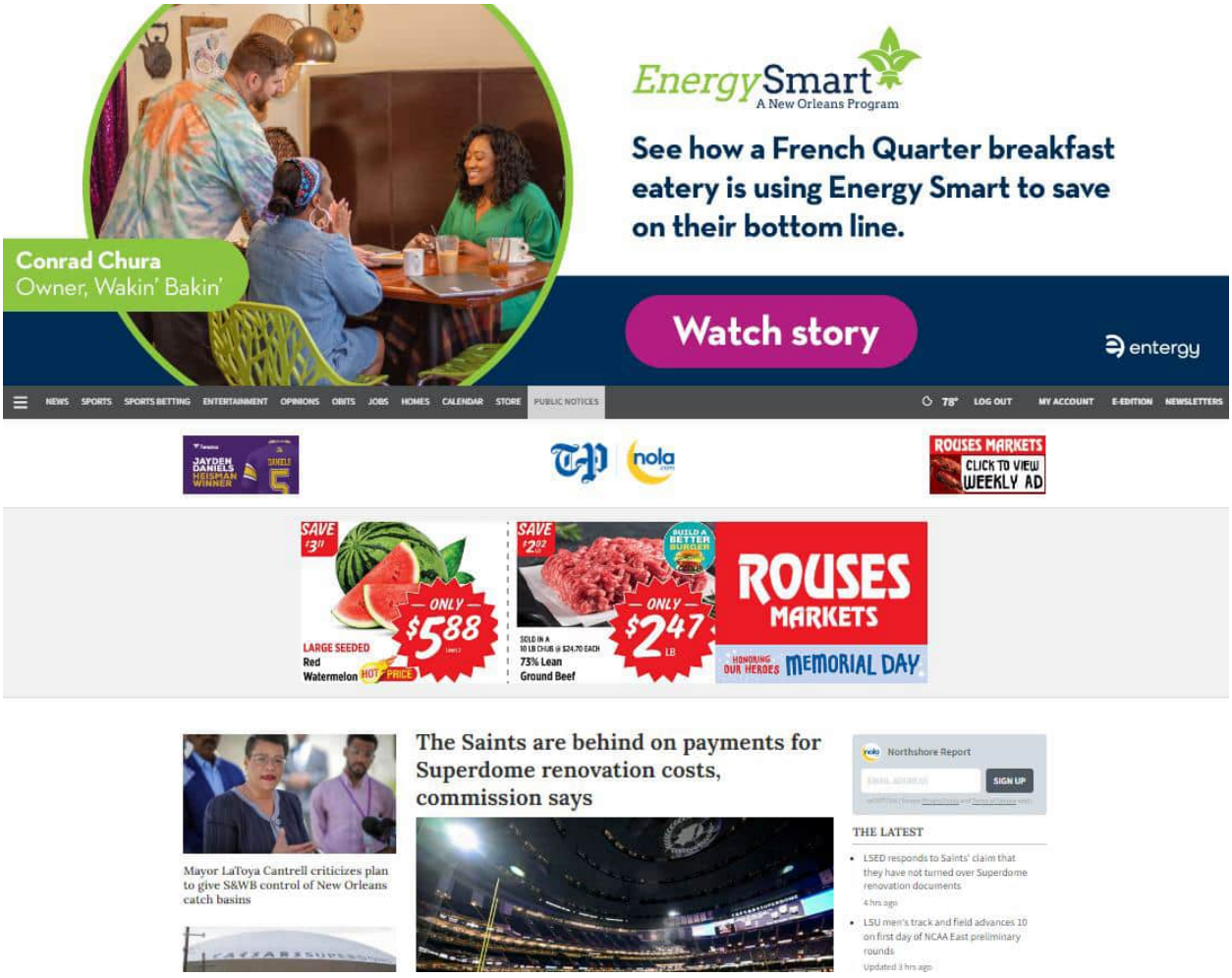
New Russian push strains front-line troops

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Energy Smart program helps New Orleans cafe improve efficiency, preserve historic charm and boost the bottom line

Energy Smart
Conrad Chura
Owner
Wakin' Bakin'
See how a French Quarter breakfast eatery is using Energy Smart to save on their bottom line.
Read story
entergy
energysmartnola.info | 504-339-6868

Wakin' Bakin' High Impact Unit on NOLA.com



NOLA Business Insider e-newsletter ad

The Times-Picayune | nola

NOLA BUSINESS INSIDER



Medicare Won't Cover Walk-In Tub (Do This Instead)
Trending In: Safe Walk-In Bath

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Lawmakers move to give Citizens' customers a break



See how a French Quarter breakfast eatery is using Energy Smart to save on their bottom line.

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EnergySmart

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The Times-Picayune | nola.com

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Entergy's Energy Smart Program Brings Cost Conscious Innovation to New Orleans

May 7, 2024 | By Jeremy Marshall



The Arbor Room - City Park New Orleans

Offering comprehensive energy efficiency at no cost to the consumer, Entergy's Energy Smart program incentivizes Entergy New Orleans customers to perform energy-saving upgrades in their homes and businesses. Devised in 2010 by the New Orleans City Council and administered by Entergy New Orleans, this innovative initiative works with residents, business owners, facility managers, and trade ally contractors to identify opportunities and provide cash incentives for completing eligible upgrades with measurable/verifiable energy savings. As of 2024, the program has awarded $43.7 million in initiatives, served over 113,000 homes and businesses, and saved the city 350.3 kWh in power.

These incentives from the Energy Smart program can seem to almost be too good to be true, with as much as 100% of costs covered for qualified projects. Partnerships throughout the Greater New Orleans area have learned firsthand the value of this program and are spreading the good word about the long-term energy and monetary savings just waiting to be claimed.

One of Energy Smart's key trade allies is Synergy Building Solutions, a local New Orleans-area dealer that provides innovative, cost-effective control solutions and web-based facility automation across a spectrum of facility types. For the past six years, Synergy has partnered with the Energy Smart program to install building automation systems or upgrade existing systems into modern facilities.

"By partnering with trade allies like Synergy, we can help business owners uncover opportunities to reduce energy use and save on electric bills," said Derek Mills, manager of Entergy New Orleans' demand-side management programs. "We value the ongoing partnership with Synergy and all of the Energy Smart trade allies and appreciate their commitment to our customers. Together, we will continue to provide businesses with energy-saving solutions that help their bottom line and the environment."

One of Synergy's project focus areas is the revitalization of the City Park Conservancy and Arbor Room. A stunning event venue for weddings and corporate events, this fountain view space was in desperate need of an upgrade of its HVAC systems. While often these problems might have been left abandoned to siphon wasted energy, through the Energy Smart program, Synergy was contacted to tackle the issue with a long-term, energy-efficient solution.

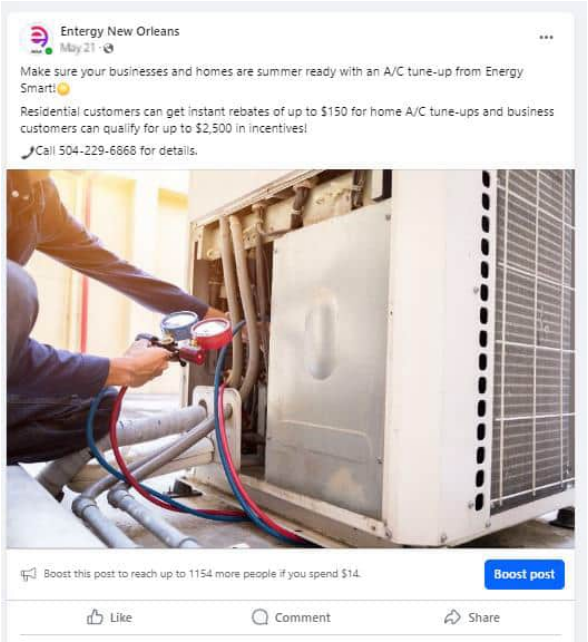
"In the past, some decisions were made that seemed cost effective at the time without fully understanding the impact to the future says William Murphy, facilities manager for City Park. "But through our partnership with the Synergy and the Energy Smart program, now everything is getting more efficient, with fewer lasting issues. City Park is becoming more energy efficient, with HVAC replacements and upgrades now happening throughout the park."

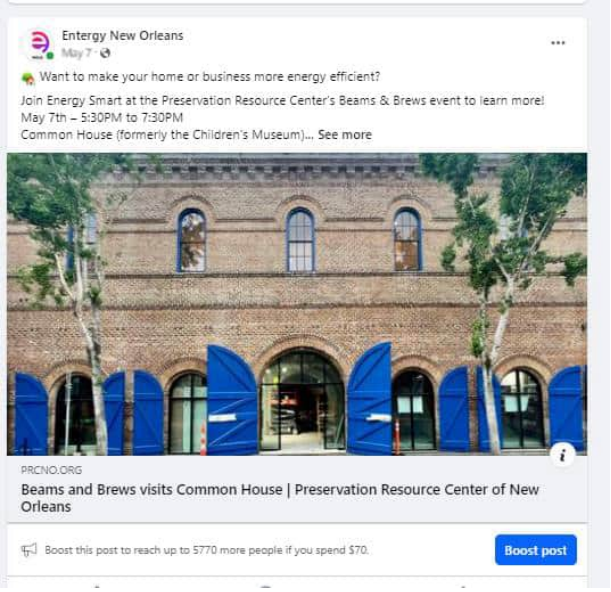
With additional City Park projects currently underway, including upgrading the water features at City Putt, the Synergy/Energy Smart program has led to massive improvements and a desire for long-term partnership.

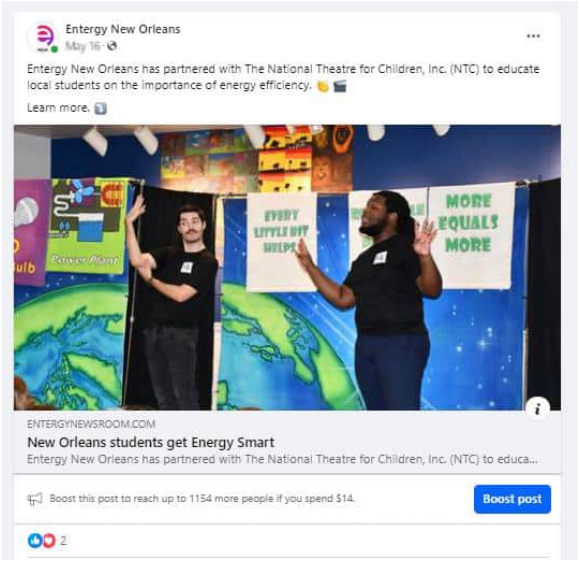
"Overall, it has been an excellent working relationship," says Murphy. "We would be ready to partner up again anytime."

To learn more about the Energy Smart program and how your home or business can benefit from these incredible savings, visit energysmartnola.info, and find out how you can apply.

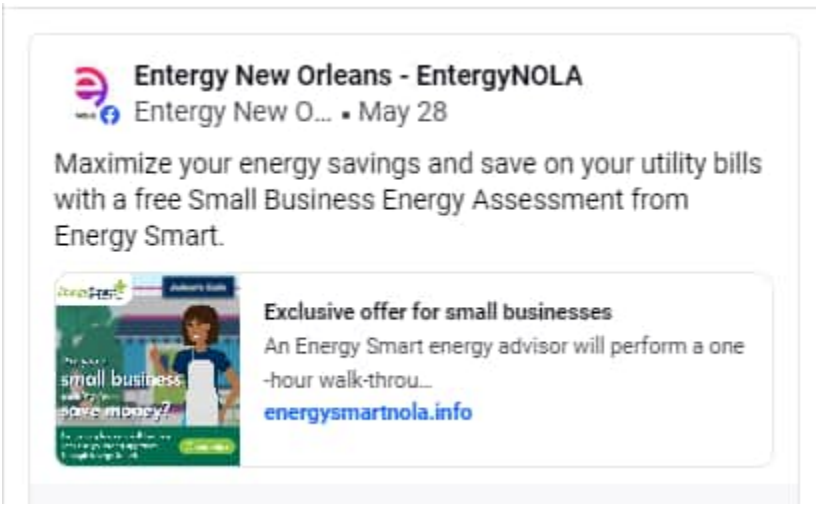
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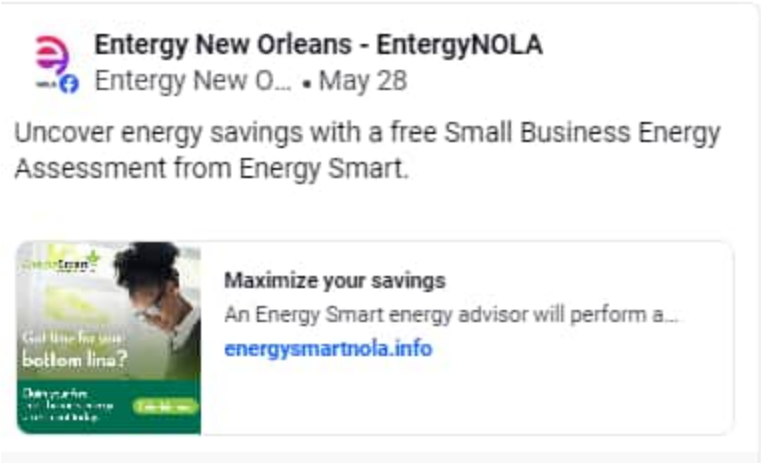




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Entergy New Orleans - EntergyNOLA
Entergy New O... • May 28
Maximize your energy savings and save on your utility bills with a free Small Business Energy Assessment from Energy Smart.
small business
save money?
Exclusive offer for small businesses
An Energy Smart energy advisor will perform a one -hour walk-throu...
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Let Energy Smart help fund your companies energy-savings project.
$9M Energy Smart fund
Energy Smart helps businesses save money wh...
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Earned Media

Downtown Development District e-newsletter

GET YOUR BUSINESS READY FOR SUMMER
WITH ENERGY SMART



Memorial Day Weekend is here, marking the unofficial summer start in New Orleans. Ensure your business is ready for the heat and that your A/C units are running efficiently with an HVAC tune-up from Energy Smart.

Energy Smart has significantly increased its incentives on A/C and heat pump tune-ups for Entergy New Orleans business customers. Incentives start at $225 and cap at $2,500 per unit,

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Memorial Day Weekend is here, marking the unofficial summer start in New Orleans. Ensure your business is ready for the heat and that your A/C units are running efficiently with an HVAC tune-up from Energy Smart.

Energy Smart has significantly increased its incentives on A/C and heat pump tune-ups for Entergy New Orleans business customers. Incentives start at $225 and cap at $2,500 per unit, depending on the unit's tonnage.

HVAC tune-ups increase energy efficiency, decrease energy bills, and create comfort for your employees, customers, or tenants.

Interested in working with Energy Smart this summer? Click HERE for a list of trade ally contractors.

For additional inquiries, visit www.energysmartnola.com, call 504-229-6868, or email info@energysmartnola.com.

New Orleans & Company member e-newsletter

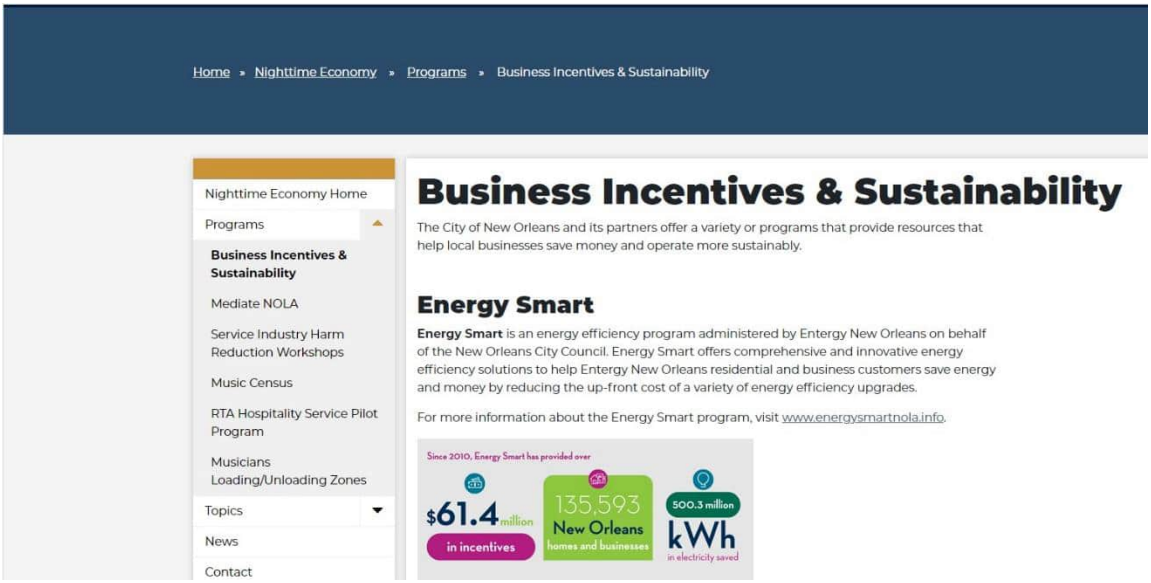


Energy Smart

Get your share of the $9M Energy Smart fund for your next energy-saving upgrade. Cash incentives are available for lighting and non-lighting equipment upgrades. Whether you want to upgrade to LED lights or install efficient HVAC and HVAC control systems, contact Energy Smart to see how much your project can be covered with cash incentives.

Read More >>

Mayor's Office of Nighttime Economy Website



Verite News Media



From our partners

Entergy's Energy Smart Program Brings Cost Conscious Innovation to New Orleans

Paid for by Entergy, Written by Jeremy Marshall

Read more.





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From Our Partners



Free Hospitality Health Fair

Wednesday, June 12 | 10 am - 5 pm

@ Fillmore New Orleans | 6 Canal Street



Advertisement.

Program Collateral

C&I Overview



Commercial and Industrial offerings

Energy Smart is Entergy New Orleans' energy efficiency program that incentivizes customers to perform energy-saving upgrades in their facilities. The program works with business owners, facility managers and trade ally contractors to identify opportunities and provide cash incentives for completing eligible upgrades with proven energy savings.



Incentives are available for equipment upgrades that result in a verifiable electric usage reduction, such as:

- Lighting and lighting controls.
- HVAC replacement and controls.
- A/C, heat pump and chiller tune-ups.
- Commercial kitchen equipment.
- Building automation systems.
- Compressed air systems.

Energy-efficient upgrades can help your business:

- Increase comfort for customers and employees.
- Lower maintenance costs with longer-lasting, high-quality technology.
- Increase occupancy rates.
- Increase asset value.

Per-project incentive cap

$200,000

Annual customer incentive cap

$600,000

Across all projects and accounts.

Follow these few steps to start saving today.

1. Contact Energy Smart to learn if pre-approval is required.
2. Prepare application submittals and complete work.
3. Receive incentive check.

Visit **energysmartnola.com**, email **info@energysmartnola.com**, **scan the QR code** or call **504-229-6868**.

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Offering information

Energy Smart is available to all Entergy New Orleans electric customers including:
Small businesses | Non-profit organizations | Large commercial and industrial facilities | Publicly funded institutions

Prescriptive incentives

Prescriptive incentives are paid a pre-defined amount per unit for certain measures in the following categories:

- Lighting and lighting controls.
- HVAC and HVAC controls.
- Refrigeration equipment.
- Commercial kitchen equipment.

Custom incentives

Custom incentives are paid based on the estimated energy savings, customer size and project type as follows:

- 12.5 cents per kWh saved for **custom lighting** projects in facilities with peak demand >100 kW (large commercial).
- 15 cents per kWh saved for **custom lighting** projects in facilities with peak demand <100 kW (small commercial).
- 15 cents per kWh saved for all **custom non-lighting** projects.

☐	Check if the equipment you plan to install is on the prescriptive incentive list at **energysmartnola.com**. If not, the project will be custom.	Pre-approval is required for all custom projects. Submit your Application Package including custom energy savings calculations to **commercialapps@energysmartnola.com**.
☐	Scope out the project and complete the Lighting or Non-lighting Workbook to determine the estimated incentive value. You may download the Workbooks at **energysmartnola.com**.	Pre-installation site visit will be performed by the Energy Smart team.
☐	If estimated incentive value is greater than $5,000, pre-approval will be required. Submit your Application Package to **commercialapps@energysmartnola.com**. You must receive pre-approval prior to purchasing equipment.	Once approved, project installation may begin.
☐	If estimated incentive is less than $5,000, pre-approval is not required. You may submit your application package including final invoice to **commercialapps@energysmartnola.com**.	Once complete, submit customer-signed Project Completion Notice and final invoice(s) to **commercialapps@energysmartnola.com**.

Program performs post-review and site inspection. Once complete, the incentive payment is approved.

Customer application package includes:

- ☐ Completed Energy Smart Workbook (lighting and/or non-lighting).
- ☐ Entergy New Orleans electric bill for primary account at job site location.
- ☐ Cut sheets or manufacturer's specification sheets for all proposed equipment.
- ☐ Detailed project proposal/estimate.
  - ☐ Photos of existing equipment.
  - ☐ W9 for incentive payee.

energysmartnola.com | info@energysmartnola.com | 504-229-6868

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Commercial HVAC tune-up application

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Application overview

Before you apply:

Verify customer eligibility

- All commercial customers that receive electric service from Entergy New Orleans, 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 or once every five years for chiller tune-ups.
- Review the Terms and Conditions within this document or view online at **energysmartnola.com/businesses/terms**.

Submit your application:

Email your application and all supporting documentation to **commercialapps@energysmartnola.com**. Please retain a copy of the application for your records.

A/C and heat pump tune-up rates:

Minimum capacity (tons)	Maximum capacity (tons)	Tune-up incentive
1.5	3.5	$225
4	5	$275
6	10	$450
11	15	$650
16	25	$800
26	30	$850
31	50	$1,400
51	80	$2,000
80+	-	$2,500

Chiller tune-up rates:

Chiller tune-up measure	Incentive	Unit
Tune-up of air-cooled chiller	$15	per ton
Tune-up of water-cooled chiller (reciprocating, rotary screw, scroll)	$9	per ton
Tune-up of water-cooled chiller (centrifugal)	$9	per ton

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Project application

Account and customer information

Has this Entergy account been opened within the last eight weeks?

☒ Yes ☐ No

Company name:

Legal address (as shown on company W-9):

City:

State: ZIP:

Customer contact information

Customer contact name:

Primary phone number:

Email address:

How did you hear about us? Check all that apply.

- ☐ Utility
- ☐ Trade ally
- ☐ Website
- ☐ Email
- ☐ Advertisement
- ☐ Other:

Job site information

Please refer to your utility bills for account numbers below.

Job site business name:

Electric account number:

- ☐ Job site address is same as legal address.
- ☐ Job site address is different (complete below).

Job site address:

City:

State: ZIP:

Trade ally contractor information

Trade ally contact name:

Primary phone number:

Email address:

Company name: Registered trade ally ☐ Yes ☐ No

Address:

City:

State: ZIP:

Payment information

A form W-9 is required for the payee.

Make incentive check payable to:

- ☐ Trade ally
- ☐ Customer

Tax entity:

Tax ID:

Mail check to:

- ☐ Legal address
- ☐ Alternate address (complete below)

Address:

City:

State: ZIP:

Attention to (if applicable):

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Project application

Property information

Select one property type that best describes your business:

- ☐ Assembly or entertainment/recreation
- ☐ College or university
- ☐ Fast food restaurant
- ☐ Full menu restaurant
- ☐ Grocery and convenience
- ☐ Health clinic or hospital
- ☐ Small office
- ☐ Large office
- ☐ Lodging
- ☐ Religious or faith-based
- ☐ Retail
- ☐ K-12 school
- ☐ Gas station
- ☐ Government
- ☐ Automotive services
- ☐ IT/data center
- ☐ Parking garage
- ☐ Industrial or manufacturing
- ☐ Warehouse
- ☐ Exterior
- ☐ Other: _____

Building heating and cooling system:

- ☐ A/C with electric resistance heat
- ☐ A/C with natural gas heat
- ☐ A/C with no heat
- ☐ Heat pump
- ☐ Unconditioned
- ☐ Not applicable

Water heating system type:

- ☐ Electric
- ☐ Natural gas
- ☐ Oil
- ☐ Propane
- ☐ Steam
- ☐ Other
- ☐ Not applicable

Year built: _____

Square footage: _____

Ownership: ☐ Rent ☐ Own ☐ Lease

Project background information

Total labor cost: _____

Installation completed date (mm/dd/yyyy): _____

Site photographs and a site inspection may be required by the program. A program representative may contact you to request this information and schedule an on-site visit.

Under penalty of perjury, I certify that:

I have read and agree to the provisions set forth herein and to the Terms and Conditions. I understand that Energy Smart may revise these Terms and Conditions at any time and I will not be notified in the event changes are made. To the best of my knowledge, the statements made on this application are complete, true and correct.

Customer signature: _____ Name (print): _____

Date: _____

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A/C and heat pump tune-up

Please complete one form for each unit receiving the HVAC tune-up in the Energy Smart application package.

Unit information

Unit make:

Unit model number:

Unit serial number:

Unit capacity (Btu/hr; tonnage):

Approximate age of system:

Pre-/post- electric readings

Pre-voltage:

Post-voltage:

Pre-amperage:

Post-amperage:

Record readings before the tune-up (pre) and after tune-up (post).

System refrigerant charge

Nameplate charge (lb/oz):

Charge added (oz):

Charge removed (oz):

Duct leakage (if duct sealing)

Pre-CFM (@25 Pa):

Post-CFM (@25 Pa):

Total CFM25 reduction:

Required A/C and heat pump checklist

- ☐ Inspect and clean condenser, evaporator coils and blower.
- ☐ Inspect refrigerant level and adjust to manufacturer specifications.
- ☐ Measure the statis pressure across the cooling coil to verify adequate airflow, and adjust to manufacturer specifications.
- ☐ Inspect, clean or change air filters.
- ☐ Calibrate thermostat on/off set points on building occupancy.
- ☐ Tighten all electrical connections, and measure voltage and current on motors.
- ☐ Lubricate all moving parts, including motor and fan bearings.
- ☐ Inspect and clean the condensate drain.
- ☐ Inspect controls of the system to ensure proper and safe operation.

Incentives:

Incentives are tiered based on the specific capacity range of the individual equipment in scope. For HVAC DX (A/C and heat pump) tune-ups to be eligible for Energy Smart incentives, trade allies must:

- Perform test-in and test-out measurements of equipment voltage and amperage (current).
- Inspect and clean condenser, evaporator coils and blower.
- Inspect refrigerant level, and adjust to manufacturer specifications.
- Measure the static pressure across the cooling coil to verify adequate system airflow, and adjust to manufacturer specifications.
- Inspect, clean or change air filters.
- Calibrate thermostat on/off setpoints based on building occupancy.
- Tighten all electrical connections, and measure voltage and current on motors.
- Lubricate all moving parts, including motor and fan bearings.
- Inspect and clean the condensate drain.
- Inspect controls of the system to ensure proper and safe operation. Check the starting cycle of the equipment to ensure the system starts, operates and shuts off properly.
- Provide documentation showing completion of the above checklist to the utility or the utility's representative.

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Chiller tune-up

Please complete one form for each unit receiving the chiller tune-up in the Energy Smart application package.

- ☐ Tune-up of air-cooled chiller.
- ☐ Tune-up of water-cooled chiller (reciprocating, rotary screw, scroll).
- ☐ Tune-up of water-cooled chiller (centrifugal).

Unit make:	Full load kW/ton:
Unit model number:	Part load (IPLV) k/W ton:
Unit serial number (if applicable):	Total equipment cost:
Unit capacity (tons):	Total labor cost:

Chiller tune-up checklist

- ☐ Clean condenser coil/tubes.
- ☐ Check cooling tower for scale or buildup (only for water-cooled chillers).
- ☐ Check contractors condition.
- ☐ Check evaporator condition.
- ☐ Check low-pressure controls.
- ☐ Check high-pressure controls.
- ☐ Check filter; replace as needed.
- ☐ Check crankcase heater operation.
- ☐ Check economizer operation.

Measurement requirements

	Pre-tune-up	Post-tune-up
Record system pressure psig:		
Record compressor amp draw:		
Record liquid line temperature in °F:		
Record subcooling and superheat temperatures in °F:		
Record suction pressure psig and temperature in °F:		
Record condenser fan amp draw:		
Record supply motor amp draw:		

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Program agreement Terms and Conditions

Entergy New Orleans, LLC ("ENO") and APTIM Environmental & Infrastructure, LLC. ("APTIM" or "Program Administrator") have entered into an agreement whereby APTIM will design, implement, and administer the Energy Smart Program in accordance with the ENO comprehensive demand-side management plan. Program Administrator and any eligible applicants to a Program shall be the parties to and bound by these terms and conditions ("this Agreement"). ENO, Entergy Corporation, and ENO's affiliates shall be third-party beneficiaries of this Agreement and Applications.

1. **Definitions**
   a. Applicant means any person who submits an application to a Program.
   b. Approval Date means the date on which Program Administrator approves an Application.
   c. APTIM means APTIM Environmental & Infrastructure, Inc.
   d. ENO means Entergy New Orleans, LLC.
   e. Program Administrator means APTIM.
   f. Program means any of the Energy Smart Programs that are administered by the Program Administrator.
   g. Program Payment means any monetary incentive or reward available to ENO customers that meet the requirements for each Program and which are paid pursuant to the terms and conditions of this Agreement.
   h. Project or Project Measure means specific energy efficiency measures listed on applications and approved by Program Administrator.
   i. Project Pre-Approval Date means the date the Program Administrator confirms all required documentation has been provided to pre-approve the Project for participation in the Program.
   j. Project Approval Date means the date the Program Administration approves the Project for payment.
   k. Project Completion Date means the date the Program Administrator accepts the Project Completion Notice.
   l. Project Completion Deadline means the completion date established by the Program for the specific Project or Project measure associated with the Application.
   m. Project Completion Notice means the notice to be provided by Applicant to Program Administrator after completion of a Project.

2. **Incentive offer**

   Program Payments shall be available to eligible Applicants who properly submit a Program application ("Application") and meet Program requirements described further herein. Program Payments shall be available according to the terms of the applicable Program and Application, as well as this Agreement. Products required by the applicable Program must be purchased and installed within the date range outlined on the Application. Applicant understands that all custom incentive Applications must be pre-approved in writing by the Program Administrator. Applicants should maintain a copy of the Application for your records. Incomplete Applications will be returned and will not be processed. Final applications must have complete information and be submitted with proof of purchase, such as receipts or invoices that clearly itemize the product(s) and/or services(s) received. Purchase orders, proposals, and quotes are not considered proof of purchase.

3. **Project term and description**

   The Term of this Agreement shall begin on the Approval Date as determined by the Program as part of the Application to this Agreement and shall run continuously through the Project Completion Deadline, unless extended or terminated pursuant to this Agreement or by notification of either of the parties. The Project shall be implemented in accordance with this Agreement.

4. **Program payments**

   Upon completion of a Project, Applicant shall submit a Project Completion Notice to Program Administrator. Upon receipt and acceptance of a Completion Notice and any other requested project documentation, Program Administrator will facilitate Program Payment to the Applicant. There shall be no obligation to make any payments to the Applicant if ENO does not provide the funds to the Program for this purpose. The Program Administrator, on behalf of the Program, reserves the right to increase or decrease incentive amounts, and associated energy savings to be claimed, if conditions change from the time of Project Pre-Approval to the time of Project implementation. This includes, but is not limited to, Project cost and Project scope. Applicants may only receive one payment per Project Measure. Should Applicant or its representative make duplicate application for payment for the same Project, ENO or its representative has the right to recover any payments made in excess of the entitled payment. The Program excludes internal, non-contracted labor for private companies or individuals when calculating the total project cost. Incentives are available on a first-come, first-served basis. Incentives are subject to change or termination without notice at the discretion of the Program Administrator and ENO. Agreements that are in place and applications that are in-progress during a change in incentive or program availability shall be honored.

5. **Program discretion**

   The Program Administrator and ENO reserve the right to change or discontinue aspects of the Program upon a 45-day notice. The Program Administrator also reserves the right, in its sole discretion, to withhold or terminate Program Payments immediately if:
   (1) An identified problem with a Project is not resolved, due to an Applicant's failure to follow any and all applicable terms and conditions, rules, or procedures; or
   (2)Determination that Applicant's receipt of Incentive Payments will not result in the implementation of any measures by Applicant, or if the measures will not result in the reduction of energy usage, or
   (3)The Applicant becomes "Insolvent" (which shall mean Applicant (i) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization, or similar law, including but not limited to the United States Bankruptcy Code or the laws of any state, or has any such petition filed or commenced against it, (ii) makes an assignment or any general arrangement for the benefit of creditors, (iii) otherwise becomes the subject of a bankruptcy proceeding or insolvent (however evidenced), (iv) has a liquidator, administrator, receiver, trustee, conservator, or similar official appointed with respect to it or any substantial portion of its property or assets; or (v) is generally unable to pay its debts as they fall due).

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6. **Misrepresentation**
Any and all funds determined by the Program, Program Administrator, or ENO to have been acquired on the basis of false information supplied by or on behalf of Applicant must be returned to the Program. This article shall not limit other remedies that may be available for the filing of false or fraudulent Applications. Applicant shall be responsible for all costs incurred for collection of monies owed due to any misrepresentation or false statements.

7. **Project implementation**
(1) The Applicant's procurement, installation, and implementation ("Completion") of energy efficiency measures shall be accomplished in accordance with the requirements outlined in this Agreement. The Applicant shall deliver to Program Administrator a Project Completion Notice by the Project Completion Deadline noted in the Application. The Applicant must provide invoices for equipment purchased or service performed as well as documentation that verifies that the energy efficiency measures (i) have been properly installed, (ii) are functioning properly, and (iii) have the potential to generate energy savings if properly maintained and operated. All Projects are expected to comply with standard federal, state, and local building and construction codes. All equipment must be new; used or rebuilt equipment is eligible only when pre-approved by Program Administrator in writing. Displaced equipment must not be reused as part of the Project unless determined as part of the Project and reviewed in accordance with Project Pre-Approval. Equipment purchased under a capital lease structure may qualify for an incentive, but must be pre-approved by Program Administrator in writing before project initiation or entering into the equipment lease.
(2) Should Program Administrator discover that the Project was not implemented as attested to in the Project Completion Notice, the Applicant may be considered in breach of this Agreement and required to repay any incentive payment made, including costs incurred by the Program Administrator or ENO to recover such fees, and may be subject to any additional relief to which ENO may be entitled.

8. **Right to inspect**
The Program Administrator and ENO shall have the right to inspect any and all Project records and installations during the term of this Agreement and the corresponding Application, and for a two-year period thereafter. The Program Administrator and its designated representatives shall have the right to observe and inspect all Project work in any of the Applicant's facilities upon advance notice for a period of 2 years from the Project Payment date. The Applicant shall maintain accurate records of the Project work (e.g., installation records, invoices, and maintenance information) that is performed hereunder for a period of 2 years from the date of the applicable Project Payment.

9. **Monitoring and verification**
The Program Administrator, and its designated representatives, shall have the right to monitor energy use/production prior to and after installation of the Project and to perform an inspection of any Project to evaluate Program efficacy for a period of 2 years from the date of Project Payment under this Agreement or pursuant to an Application.

10. **Manner and performance**
The Applicant shall perform its responsibilities under this Agreement in an efficient and expeditious manner and in accordance with all of the terms and provisions of this Agreement. The Applicant shall make all reasonable attempts to ensure that all Project work, as described in this Agreement, is performed in accordance with current professional standards and with the diligence and skill expected for the performance of such work.

11. **Representations/warranty**
The Program Administrator and ENO do not endorse any particular trade ally, manufacturer, product, system, or design by offering an incentive. The Program Administrator and ENO are not responsible for any tax liability imposed on the recipient as a result of the payment of incentives. The Program Administrator and ENO make no representation or warranty and assume no liability with respect to the quality, safety, performance, or other aspect of any design, consulting, product, system, equipment, Project, or appliance installed or received and expressly disclaims any such representations, warranties, and liability, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The Program Administrator and ENO do not guarantee that installation and operation of energy-efficient equipment will result in reduced usage or in cost savings. The Program Administrator and ENO are not responsible for the proper disposal or recycling of any waste generated as a result of any Project. The Program Administrator and ENO are not liable for any damages, including any incidental or consequential damages, arising out of the operation or malfunction of any Project, products, equipment, or appliances, or the installation thereof.

12. **Default and termination**
(1) This Agreement shall remain in effect until the Project Completion Deadline as specified in the Application hereof unless a Party is in breach of any provision of this Agreement.
(2) In the event that ENO terminates, for any cause, Program Administrator's Contract, which terminates Program Administrator's right to act as Program Administrator of the Energy Smart Program, responsibility for this Agreement transfers to the new Program Administrator or ENO until a new Program Administrator is named.
(3) This Agreement may be terminated at Program Administrator's sole discretion if Applicant does not complete implementation of the Project on or before the Project Completion Deadline, unless the Project Completion Date is extended by mutual written agreement of the Parties.
(4) Program Administrator as approved by ENO reserves the right to change or discontinue any Program at any time with 45-day notification, and reserves the right to terminate or amend this Agreement upon the change or discontinuance of any such Program, or as directed by the Council of the City of New Orleans or pursuant to a change in laws or regulations applicable to a Program.

13. **Indemnification and damages**
The Applicant shall protect, indemnify, defend, and hold harmless Program Administrator, ENO, and the City of New Orleans (the "City") respective affiliates, subsidiaries, parent companies, officers, directors, agents, and employees, (collectively the "Indemnitees") against all losses, damages, expenses, fees, costs, and liability arising from the Program, any Project, design, consulting, product, system, equipment, or appliance, and claims thereof by Applicant or any third party. The Applicant agrees that such obligations under this Article shall survive any expiration or termination of this Agreement or an Application, and shall not be limited by any enumeration herein of required insurance coverage. To the maximum extent permitted by law, the Applicant agrees to limit Program Administrator's, ENO's, and the City's liability to the total amount of the Project Payments identified in the Application for the Project giving rise to such liability. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. Under no circumstances shall Indemnitees be liable for any special, indirect, or consequential damages, including, but not limited to, lost profits, loss of earning, or loss of use, however the same may be caused.

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14. Publicity

The Applicant shall not use the Program, Program Administrator's or ENO's corporate name, logo, identity, any affiliation, or any related logo including the "Energy Smart" name, logo, or identity, for any marketing, advertising, or solicitation without prior written consent of Program Administrator and ENO, which may be withheld for any or no reason. Program Administrator and ENO reserve the right to publicize the Applicant's participation in the Energy Smart program unless requested otherwise in writing and submitted to info@energysmartnola.com at the time the Application is submitted. For purposes of the foregoing, to the extent applicable, Applicant grants Program Administrator and its contractors a nonexclusive, fully paid up, irrevocable license to Applicant's name and logo solely for the purpose of publicizing Applicant's participation in the Program.

15. Review and disclaimer

Execution of this Agreement and any review of the design, construction, operation, or maintenance of the Project by any Program representative or any of their subcontractors shall not constitute any representation or warranty by the Program, Program Administrator, or ENO as to the economic or technical feasibility, operational capability, or reliability of any renewable or energy efficiency measures or the capability or reliability of any market provider performing any work on the Project. The Applicant shall in no way represent to any third party that the execution of this Agreement or an Application, or any reviews by Program representatives or their subcontractors, including, but not limited to, review of the design, construction, operation, or maintenance of the Project is a representation or warranty by the Program, Program Administrator, or ENO as to the economic or technical feasibility, operational capability, or reliability of the renewable or energy efficiency measures or an endorsement of the contractor performing work on the Project. The Applicant is solely responsible for the technical feasibility, operational capability, and reliability of the renewable or energy efficiency measures.

16. Miscellaneous

(1) Governing Law. All Applications, Incentive Agreements, and these Terms and Conditions shall be governed, construed, and enforced in accordance with the laws and regulations of the State of Louisiana, without regard to any conflicts of laws or principles that may direct the application of the laws of another jurisdiction. The Applicant irrevocably submits to the jurisdiction of the state and federal courts sitting in New Orleans, Louisiana, with regard to any controversy in any way relating to the execution, delivery, or performance of an Application or this Agreement. Suits, claims, or actions founded upon such controversies shall be brought or filed exclusively in such courts and nowhere else. The exclusive venue for any dispute or controversy arising under an Application or Incentive Agreement shall be the Orleans Parish Civil District Court or the Federal District Court for the Eastern District of Louisiana.
(2) Compliance with Applicable Laws. The Applicant shall at all times comply with and observe all federal and Louisiana state laws and published circulars, local laws, ordinances, rules, and regulations which are in effect from the time at which Applicant submits an Application or enters into this Agreement through Applicant's receipt of a Program Payment as they pertain to this Program. All references to statutes or regulations contained in any Application or this Agreement shall be construed to include successors thereto.
(3) Assignment. Upon consent of ENO, Program Administrator may assign, transfer, or convey any Application or any of its rights, obligations, interests, or responsibilities thereunder, in whole or in part, without the consent of the Applicant. Neither an Application nor any rights or obligations hereunder or thereunder may be sold, assigned, transferred, or otherwise disposed by Applicant, whether pursuant to a change of control, by operation or law, or otherwise, without Program Administrator's prior written consent.
(4) Severability. If any provision of any Application or this Agreement is construed by a court of competent jurisdiction to be illegal, invalid, or unenforceable under present or future laws, such provision shall be fully severable and the Application or this Agreement shall be construed and enforced as if the illegal, invalid, or unenforceable provision had never comprised a part thereof. Furthermore, in lieu of such illegal, invalid, or unenforceable provision, the Application or this Agreement shall be reformed with a similar provision that is legal, valid, and enforceable.
(5) Risk of Loss. The Program Administrator and ENO at no time assume risk of loss for any personal property of the Applicant or any third party.
(6) Waiver. Failure or delay on the part of either party to exercise any right, power, privilege, or remedy hereunder shall not constitute a waiver thereof. A waiver of any default shall not operate as a waiver of any other default or of the same type of default on a future occasion.

17. Acceptance

The Applicant is required to acknowledge its understanding and acceptance of the terms and conditions of this Agreement by signing and returning executed copy of the Energy Smart Program Application to the Program Administrator at the address or email identified in this form on or before the required Deadline. If a completed Application is not received by the Project Pre-Approval or Application deadline, Program Administrator will consider that Applicant's decision is to decline the terms and conditions contained herein, and this Agreement will be of no force and effect.

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EnergySmart

Energy Smart prescriptive incentive rates

Rates effective January 1, 2024 (may change at program's discretion).

Measure	Small Commercial Solutions	Large Commercial & Industrial	Unit	Requirements
Interior lighting				
LED downlight lamp/kit	$13	$8	per fixture	ENERGY STAR® certified.
LED exit sign	$20	$18	per lamp	<5 watts, must meet state fire marshal codes and be UL rated.
T8/T12 upgrade to LED linear-4 ft.	$9.50	$8	per lamp	DLC listed. For retrofitting and replacing existing fixtures. Quantity (# of units) is based on number of existing lamps being replaced.
T8/T12 High Output (HO) upgrade to LED linear-4 ft.	$10	$10	per lamp	
T5 upgrade to LED linear-4 ft.	$3.50	$6	per lamp	
T5 High Output (HO) upgrade to LED linear-4 ft.	$13	$11	per lamp	
T8/T12 upgrade to LED linear-8 ft.	$17	$14	per lamp	
T8/T12 High Output (HO) upgrade to LED linear-8 ft.	$20	$20	per lamp	
T8/T12 upgrade to LED linear-2 ft.	$4	$3.50	per lamp	
T5 upgrade to LED linear-2 ft.	$3.50	$2.50	per lamp	
T5 High Output (HO) upgrade to LED linear-2 ft.	$6.50	$5.50	per lamp	
T8/T12 upgrade to LED linear-U-tube	$10	$6.50	per lamp	
LED replacing <175W HID (lamp wattage)	$57	$44	per fixture	DLC listed.
LED replacing 175W to 250W HID (lamp wattage)	$52	$44	per fixture	
LED replacing 251W to 400W HID (lamp wattage)	$130	$110	per fixture	
LED replacing 401W to 1000W HID (lamp wattage)	$325	$275	per fixture	
LED replacing >1000W HID (lamp wattage)	$385	$325	per fixture	
LED refrigerated case lighting (without controls)	$44	$44	per door	DLC listed. Retrofits must completely remove the existing fluorescent fixture and connectors and ballasts to qualify, wiring may be reused.
LED refrigerated case lighting (with controls)	$57	$57	per door	
Exterior lighting				
LED downlight lamp/kit	$13	$8	per fixture	ENERGY STAR® certified.
T8/T12 upgrade to LED linear-4 ft.	$8	$6.50	per lamp	DLC listed. For retrofitting and replacing existing fixtures. Quantity (# of units) is based on number of existing lamps being replaced.
T8/T12 High Output (HO) upgrade to LED linear-4 ft.	$18	$14	per lamp	
T5 upgrade to LED linear-4 ft.	$3.50	$6	per lamp	
T5 High Output (HO) upgrade to LED linear-4 ft.	$13	$11	per lamp	
T8/T12 upgrade to LED linear-8 ft.	$17	$14	per lamp	
T8/T12 High Output (HO) upgrade to LED linear-8 ft.	$31	$27	per lamp	
T8/T12 upgrade to LED linear-2 ft.	$4	$3.50	per lamp	
T5 upgrade to LED linear-2 ft.	$3.50	$3	per lamp	
T5 High Output (HO) upgrade to LED linear-2 ft.	$6.50	$5.50	per lamp	
T8/T12 upgrade to LED linear-U-tube	$11	$9	per lamp	

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Measure	Small Commercial	Large Commercial	Unit	Requirements
LED replacing <175W HID (lamp wattage)	$62	$44	per fixture	DLC listed.
LED replacing 175W to 250W HID (lamp wattage)	$78	$66	per fixture	
LED replacing 251W to 400W HID (lamp wattage)	$145	$120	per fixture	
LED replacing 401W to 1000W HID (lamp wattage)	$395	$350	per fixture	
LED replacing >1000W HID (lamp wattage)	$415	$350	per fixture	
LED replacing <175W Park/Athletic Field HID (lamp wattage)	$6.50	$6.50	per fixture	
LED replacing 175W to 250W Park/Athletic Field HID (lamp wattage)	$9	$9	per fixture	
LED replacing 251W to 400W Park/Athletic Field HID (lamp wattage)	$15	$15	per fixture	
LED replacing 401W to 1000W Park/Athletic Field HID (lamp wattage)	$58	$58	per fixture	
LED replacing >1000W Park/Athletic Field HID (lamp wattage)	$58	$58	per fixture	
Lighting controls				
Daylighting controller (controlling <500W)	$32	$26	per unit	Quantity (# of units) is based on number of installed units. Integrated sensors built in to proposed fixtures do not qualify.
Daylighting controller (controlling >500W)	$95	$79	per unit	
Occupancy sensor (controlling <500W)	$48	$40	per unit	
Occupancy sensor (controlling >500W)	$145	$120	per unit	
Occupancy sensor - daylighting control (controlling <500W)	$58	$48	per unit	
Occupancy sensor - daylighting control (controlling >500W)	$165	$140	per unit	
IS-level parking garage lighting controls (controlling <50W)	$21	$18	per unit	At low power, lights must consume less than 70% of full load power. Quantity (# of units) is based on number of installed units. Fixture integrated sensors do qualify for this incentive.
IS-level parking garage lighting controls (controlling 51W to 100W)	$63	$53	per unit	
IS-level parking garage lighting controls (controlling 101W to 150W)	$105	$88	per unit	
IS-level parking garage lighting controls (controlling 151W to 200W)	$150	$125	per unit	
HVAC				
High efficiency A/C unit	$80	$80	per ton	• A/C unit (<5.4 tons), min 12.3 EER, 14.5 SEER2. • A/C unit (5.4 to 11.2 tons), min. 12.2 EER, 14.8 SEER. • A/C unit (11.3 to 20 tons), min. 12.2 EER, 14.8 SEER. • A/C unit (20.1 to 63.3 tons), min. 10.8 EER, 13.5 SEER. • A/C unit (>63.3 tons), min. 10.4 EER, 13.0 SEER. • Must be AHRI certified.
High efficiency heat pump unit	$80	$80	per ton	• HP unit (<5.4 tons), min. 12.3 EER, 14.5 SEER2, 8.0 HSPF 2. • HP unit (5.4 to 11.2 tons), min. 11.3 EER, 14.5 SEER, 12.0 HSPF. • HP unit (11.3 to 20 tons), min. 10.9 EER, 14.0 SEER, 12.0 HSPF. • HP unit (>20.1 tons), min. 10.3 EER, 13.0 SEER, 12.0 HSPF. • Must be AHRI certified.
High efficiency packaged terminal A/C (PTAC) unit	$35	$35	per ton	• Standard PTAC (<0.6 tons), min. 13 EER. • Standard PTAC (0.6 to 1.25 tons), min. 12 EER. • Standard PTAC (<1.25 tons), min. 11 EER. • Non-standard PTAC (<0.6 tons), min. 11 EER. • Non-standard PTAC (0.6 to 1.25 tons), min. 9 EER. • Non-standard PTAC (>1.25 tons), min. 9 EER. • Must be AHRI certified. *Standard refers to PTAC dimensions of 42" wide, 16" high and 13 3/4" deep), all other dimensions are non-standard.

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Measure	Small Commercial	Large Commercial	Unit	Requirements
High efficiency packaged terminal HP (PTHP) unit	$35	$35	per ton	• Standard PTHP (<0.6 tons), 13 EER, 3.5 COP. • Standard PTHP (0.6 to 1.25 tons), 12 EER, 3.4 COP. • Standard PTHP (>1.25 tons), 11 EER, 3.3 COP. • Non-standard PTHP (<0.6 tons), 10 EER, 3.2 COP. • Non-standard PTHP (0.6 to 1.25 tons), 9 EER, 3.1 COP. • Non-standard PTHP (>1.25 tons), 8 EER, 3 COP. • Must be AHRI certified. Standard refers to PTAC dimensions of (42" wide, 16" high and 13 3/4" deep), all other dimensions are non-standard.
Guestroom energy management controls	$45	$45	per unit/room	• Must utilize occupancy sensor to control guestroom HVAC. • Must set back thermostat setting by a minimum of 5°F.
Smart thermostats for small business	$150	N/A	per unit	• Smart thermostat must be ENERGY STAR® qualified. • Controlled equipment must be electrically heated or cooled.
Commercial A/C and heat pump tune-up	$225-$2,500	$225-$2,500	per unit	• **Incentives tiered based on the specific capacity range of the individual equipment in scope.** • Trade allies submitting this measure are REQUIRED to perform test-in and test-out measurements of equipment efficiencies, EER/SEER (A/C and heat pump units) and HSPF (for heat pump units only). • Inspect and clean condenser, evaporator coils, and blower. • Inspect refrigerant level and adjust to manufacturer specifications. • Measure the static pressure across the cooling coil to verify adequate system airflow and adjust to manufacturer specifications. • Inspect, clean or change air filters. • Calibrate thermostat on/off setpoints based on building occupancy. • Tighten all electrical connections, and measure voltage and current on motors. • Lubricate all moving parts, including motor and fan bearings. • Inspect and clean the condensate drain. • Inspect controls of the system to ensure proper and safe operation. Check the starting cycle of the equipment to ensure the system starts, operates and shuts off properly. • Provide documentation showing completion of the above checklist to the utility or the utility's representative.
Commercial chiller tune-up	$9-$15	$9-$15	per ton	• **Incentives tiered based on the type of chiller equipment (air-cooled vs. water-cooled)** • Tune-up requirements. - Clean condenser coil/tubes. - Check cooling tower for scale or buildup (only for water-cooled chillers). - Check contactors condition. - Check evaporator condition. - Check low-pressure controls. - Check high-pressure controls. - Check filter, replace as needed. - Check belt, replace as needed. - Check crankcase heater operation. - Check economizer operation. • Measurement requirements. - Record system pressure psig. - Record compressor amp draw. - Record liquid line temperature in °F. - Record subcooling and superheat temperatures in °F. - Record suction pressure psig and temperature in °F. - Record condenser fan amp draw. - Record supply motor amp draw.

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Measure	Small Commercial	Large Commercial	Unit	Requirements
Commercial duct sealing	$.70	$.70	per CFM leakage reduction	• Eligible only for system with central air conditioning with less than 50% of ducts in the conditioned space. • Total leakage is the only accepted method of duct testing. • Minimum 25% leakage rate reduction required. Incentives capped at 35% leakage rate reduction. • Ducts sealed with long-lasting materials such as UL 181A or UL 181 B approved foil tape. Fabric-based duct tape is not allowed.
High efficiency air-cooled chiller	$50	$50	per ton	• Air-cooled chiller (<150 tons), min 9.7 full load EER, 15.8 IPLV EER. • Air-cooled chiller (>150 tons), min 9.7 full load EER, 16.1 IPLV EER.
High efficiency positive displacement water-cooled chiller	$17	$17	per ton	• Water-cooled PD chiller (<75 tons), min full load kW/ton 0.78, IPLV kW/ton 0.5. • Water-cooled PD chiller (75 to 150 tons), min full load kW/ton 0.75, IPLV kW/ton 0.49. • Water-cooled PD chiller (150 to 300 tons), min full load kW/ton 0.68, IPLV kW/ton 0.44. • Water-cooled PD chiller (>300 tons), min full load kW/ton 0.63, IPLV kW/ton 0.41.
High efficiency centrifugal water-cooled chiller	$30	$30	per ton	• Water-cooled cent. chiller (<300 tons), min full load kW/ton 0.656, IPLV kW/ton 0.44. • Water-cooled cent. chiller (300 to 600 tons), min full load kW/ton 0.595, IPLV kW/ton 0.39. • Water-cooled cent. chiller (>600 tons), min full load kW/ton 0.585, IPLV kW/ton 0.38.
Refrigeration				
ECM motor for freezer or cooler	$100	$100	per unit	Applicable only to refrigerated cooler and freezer fans.
Evaporator fan controller for freezer or cooler	$65	$65	per motor controlled	Controller must turn on fan only when the system's thermostat is calling for the compressor to operate.
Anti-sweat heater controls for freezer or cooler	$35	$35	per linear ft. of case	• Controller must sense dew point temperature of case exterior environment and vary power supplied to heaters accordingly. • Applicable for retrofit only, not applicable for new equipment with integrated controls.
Refrigerated case night covers	$20	$20	per linear ft. of case	Applicable for retrofit only, not applicable for new cases with integrated night covers.
ENERGY STAR® solid door refrigerator	$95	$95	per unit	Must be ENERGY STAR® certified.
ENERGY STAR® solid door freezer	$185	$185	per unit	Must be ENERGY STAR® certified.
Strip curtains for walk-in coolers	$4	$4	per sq. ft. covered	Applicable to coolers with damaged strip curtains or without pre-existing strip curtains.
Strip curtains for walk-in freezers	$8	$8	per sq. ft. covered	Applicable to freezers with damaged strip curtains or without pre-existing strip curtains.
Strip curtains for refrigerated warehouse doors	$8	$8	per sq. ft. covered	Applicable to doors with damaged strip curtains or without pre-existing strip curtains.
Door gaskets – coolers (refrigeration)	$2	$2	per linear ft.	Baseline standard is walk in or reach-in cooler or freezer with worn-out, defective gaskets. Efficiency standard for this measure is a new, better-fitting gasket.
Door gaskets – freezers (refrigeration)	$14	$14	per linear ft.	
Auto door closers – coolers (refrigeration)	$113	$113	per unit	Auto, hydraulic-type door closer on main walk-in cooler or freezer insulated opaque door(s). Must firmly close the door when it is within 1 inch of full closure.
Auto door closers – freezers (refrigeration)	$157	$157	per unit	

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Measure	Small Commercial	Large Commercial	Unit	Requirements
Commercial kitchen				
ENERGY STAR® commercial electric fryer	$250	$250	per unit	Electrically heated and ENERGY STAR® certified.
ENERGY STAR® commercial electric steam cooker	$1,865	$1,865	per unit	
ENERGY STAR® electric convection oven	$230	$230	per unit	
ENERGY STAR® electric griddle	$45	$45	per linear ft. of width	
ENERGY STAR® commercial dishwasher	$600	$600	per unit	
Food service kitchen exhaust controls	$600	$600	per exhaust fan HP	Controls must automatically adjust flow of exhaust ventilation system using variable speed fan motor.
Pre-rinse spray valves	$35	$35	per unit	Maximum flow rate for new equipment of 1.07 GPM. Applicable only to equipment supplied with electrically heated water.
Miscellaneous				
Computer power management	$22	$22	per unit	Software must put the computer equipment into a reduced power state (sleep mode) when the computer is inactive.
Window film	$.30-$1.50	$.30-$1.50	per sq. ft. of window area	• Applicable to clear single or double-pane glazing with a solar heat gain factor (SHGC) =0.66. • Applicable to east-, west-, and south-facing windows only. The SHGC of the proposed film must be less than 0.50. • Not applicable to low E windows, windows with existing solar films or solar screens. • Film must meet the following standards: ASTM E408, ASTM E308, ASTM E903, ASTM G90, ASTM G26, ASTM E84. • **Incentives tiered based on orientation and HVAC system type.**
Efficient windows	$0.50	$0.50	per sq. ft. of window area	• Installation of efficient and/or premium windows which provide a lower U-value and SHGC vs. existing windows or prevailing codes and standards. • Applicable to clear single- or double-pane glazing with a solar heat gain factor (SHGC) greater than 0.70. • Must be independently tested and certified according to the standards of the National Fenestration Rating Council (NFRC). • Must meet or exceed the following performance ratings: Efficient Windows – SHGC = 0.25 and U factor = 0.40; Premium Windows - SHGC = 0.23 and U factor = 0.36.
Advanced power strips	$8	$8	per unit	Multi-plug power strip that automatically disconnects loads depending on the power draw of a specified "master" load.
Low-flow faucet aerators	$6	$6	per aerator	• Maximum flow rate for new equipment of 1.5 GPM. • Applicable only to faucets supplied with electrically heated water.
Low-flow showerheads	$7	$7	per unit	• Maximum flow rate for new equipment of 2.0 GPM. • Applicable only to showers supplied with electrically heated water.

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Sector Sheets



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Restaurant incentives

Implementing the measures listed below can help restaurants save money on operations and maintenance costs. Identifying opportunities and installing energy efficiency upgrades can not only save money – they can improve comfort and reduce the building's environmental footprint, too.

Measure	Incentive	Description
HVAC tune-up	$225-$2,500 per unit	Incentives available for A/C and heat pump tune-ups.
Exterior LED lighting	$6-$415 per lamp	Replace your outdoor lighting with LED lighting.
Door gaskets	$3 per cooler per linear ft. $14 per freezer per linear ft.	Incentives available for refrigerator and freezer gaskets.
ENERGY STAR® kitchen equipment	$45-$1,865	Incentives available for ENERGY STAR® refrigerators, freezers, commercial dishwasher, electric fryer, steam cooker, electric griddle.

Scan the QR code to find a full listing of program measures and incentives.

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Grocery sector savings

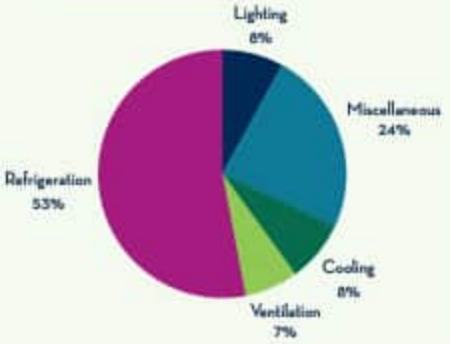
Energy-saving opportunities don't stop once you've completed your free Small Business Energy Assessment. Grocery stores consume four times as much energy per square foot as a typical commercial building – averaging over $5.50 per square foot annually. Electricity for refrigeration averages $3 per square foot annually. Making additional energy-saving upgrades can help you save even more. Let Energy Smart help fund those upgrades with valuable cash incentives.

Did you know?

20-30%

of grocery store electricity costs can be reduced by implementing measures incentivized by the Energy Smart program.

Typical grocery store electricity use in the Southern United States



Follow these few steps to start saving today.

1. Contact Energy Smart and tell us about your project.*
2. Work with a contractor to implement your project.
3. Receive cash incentive.

*Pre-approval may be required.

Scan the QR code to get started on your grocery savings.

For more information about how you can save, visit **energysmartnola.com**, email **info@energysmart.com**, call 504-229-6868 or scan the **QR code** to receive a call from an Energy Smart energy advisor.

Qualifying incentives are listed on the back of this page.

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Grocery incentives

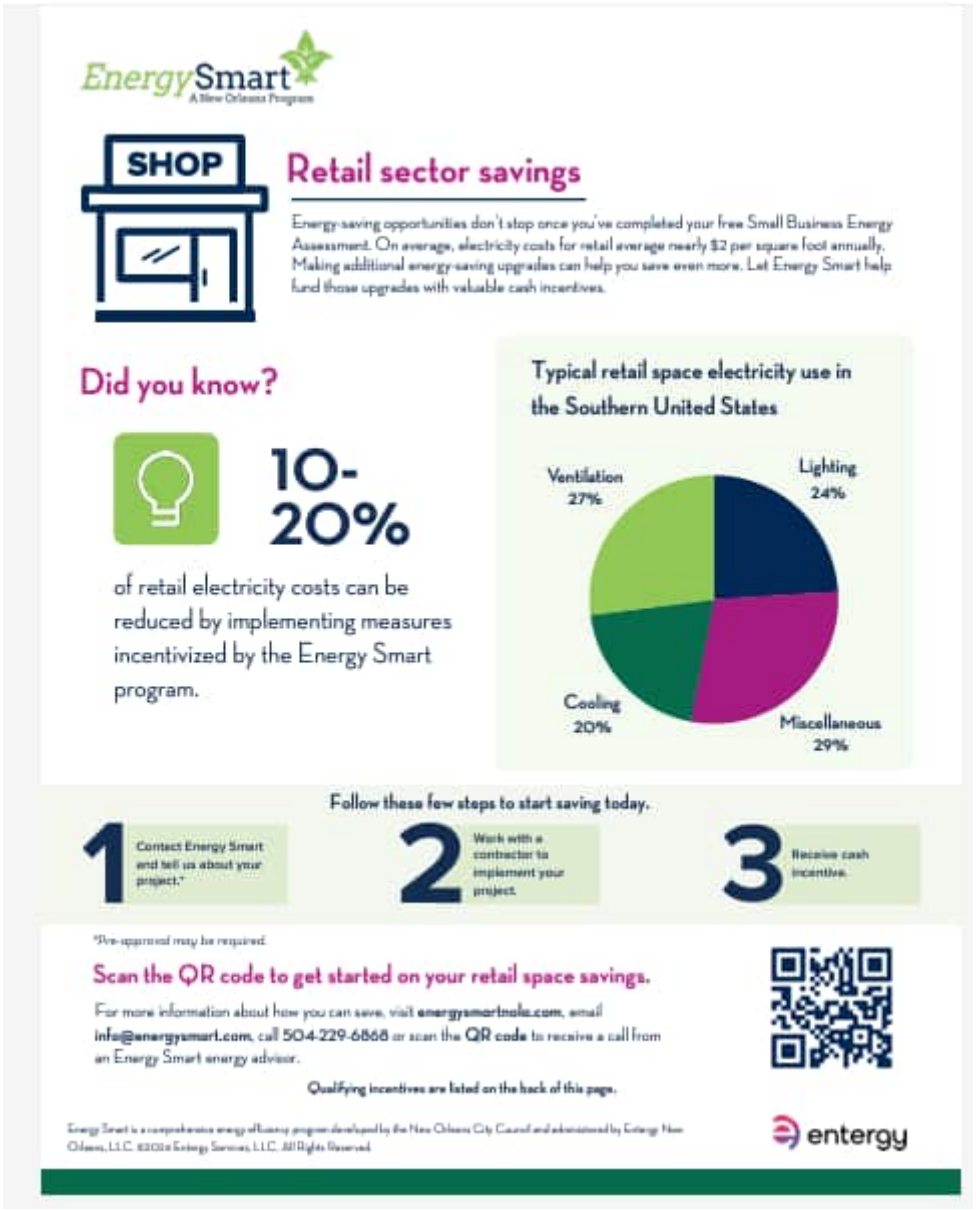
Implementing the measures listed below can help grocery stores save money on operations and maintenance costs. Identifying opportunities and installing energy efficiency upgrades can not only save money – they can improve comfort and reduce the building's environmental footprint, too.

Measure	Incentive	Description
HVAC tune-up	$225-$2,500 per unit	Incentives available for A/C and heat pump tune-ups.
Anti-sweat heater controls	$35 per linear ft. of case	Install controls to reduce anti-sweat door heater run time.
LED refrigerated case lighting	$44-$57 per door	Replace fluorescent case lighting with LED lighting.
Door gaskets	$2 per cooler per linear ft. $14 per freezer per linear ft.	Replace worn-out reach-in cooler and freezer door gaskets.
Strip curtains	$4 for coolers per sq. ft. covered $8 for freezers per sq. ft. covered	Install strip curtains to help seal refrigerated or freezer cases.
Exterior LED lighting	$6-$415 per lamp	Replace your outdoor lighting with LED lighting.

Scan the QR code to find a full listing of program measures and incentives.

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EnergySmart
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SHOP
Retail sector savings
Energy-saving opportunities don't stop once you've completed your free Small Business Energy Assessment. On average, electricity costs for retail average nearly $2 per square foot annually. Making additional energy-saving upgrades can help you save even more. Let Energy Smart help fund those upgrades with valuable cash incentives.
Did you know?
10-20%
of retail electricity costs can be reduced by implementing measures incentivized by the Energy Smart program.
Typical retail space electricity use in the Southern United States
Ventilation 27%
Lighting 24%
Cooling 20%
Miscellaneous 29%
Follow these few steps to start saving today.
1 Contact Energy Smart and tell us about your project.*
2 Work with a contractor to implement your project.
3 Receive cash incentive.
*Pre-approval may be required.
Scan the QR code to get started on your retail space savings.
For more information about how you can save, visit energysmartnola.com, email info@energysmart.com, call 504-229-6868 or scan the QR code to receive a call from an Energy Smart energy advisor.
Qualifying incentives are listed on the back of this page.
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Retail incentives

Implementing the measures listed below can help retail stores save money on operations and maintenance costs. Identifying opportunities and installing energy efficiency upgrades can not only save money – they can improve comfort and reduce the building's environmental footprint, too.

Measure	Incentive	Description
Lighting controls	$32-$165 per unit	Incentives available for lighting controls including occupancy sensors and daylighting controls.
Exterior LED lighting	$6-$415 per lamp	Replace your outdoor lighting with LED lighting.
HVAC tune-up	$225-$2,500 per unit	Incentives available for A/C and heat pump tune-ups.

Scan the QR code to find a full listing of program measures and incentives.

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Office sector savings

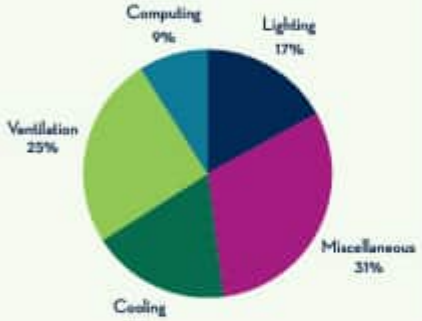
Energy-saving opportunities don't stop once you've completed your free Small Business Energy Assessment. On average, electricity costs for offices average $1.50 per square foot annually. Making additional energy-saving upgrades can help you save even more. Let Energy Smart help fund those upgrades with valuable cash incentives.

Did you know?

10-20%

of office electricity costs can be reduced by implementing measures incentivized by the Energy Smart program.

Typical office space electricity use in the Southern United States



Follow these few steps to start saving today.

1. Contact Energy Smart and tell us about your project.*
2. Work with a contractor to implement your project.
3. Receive cash incentive.

*Pre-approval may be required.

Scan the QR code to get started on your office space savings.

For more information about how you can save, visit **energysmartnola.com**, email **info@energysmart.com**, call 504-229-6868 or scan the **QR code** to receive a call from an Energy Smart energy advisor.

Qualifying incentives are listed on the back of this page.

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Office incentives

Implementing the measures listed below can help office spaces save money on operations and maintenance costs. Identifying opportunities and installing energy efficiency upgrades can not only save money – they can improve comfort and reduce the building's environmental footprint, too.

Measure	Incentive	Description
Lighting controls	$32-$165 per unit	Incentives available for lighting controls including occupancy sensors and daylighting controls.
Exterior LED lighting	$6-$415 per lamp	Replace your outdoor lighting with LED lighting.
HVAC tune-up	$225-$2,500 per unit	Incentives available for A/C and heat pump tune-ups.

Scan the QR code to find a full listing of program measures and incentives.

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Warehouse sector savings

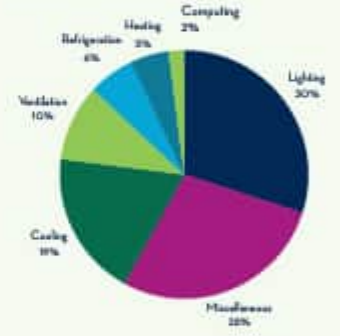
The Energy Smart program helps Entergy New Orleans customers by reducing the up-front cost of energy-saving upgrades through valuable cash incentives. Electricity costs for warehouses average $0.70 per square foot annually. If your warehouse is higher than $0.70 per square foot, you likely have good potential for energy savings through the Energy Smart program.

Did you know?

20-30%

of warehouse electricity costs can be reduced by implementing measures incentivized by the Energy Smart program.

Typical warehouse electricity use in the Southern United States



Follow these few steps to start saving today.

1. Contact Energy Smart and tell us about your project.*
2. Work with a contractor to implement your project.
3. Receive cash incentive.

*Pre-approval may be required.

Scan the QR code to get started on your warehouse savings.

For more information about how you can save in your warehouse, visit **energysmartnola.com**, email **info@energysmart.com**, call 504-229-6868 or scan the **QR code** to receive a call from an Energy Smart energy advisor.

Qualifying incentives are listed on the back of this page.

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Warehouse incentives

Implementing the measures listed below can help warehouses save money on operations and maintenance costs. Identifying opportunities and installing energy efficiency upgrades can not only save money – they can improve comfort and reduce the building's environmental footprint, too.

Measure	Incentive	Description
High-bay lighting retrofit	$45-$240 per light replaced	Replace existing high-bay lighting with efficient LED equivalents.
High-bay lighting controls	$0.10 per kWh saved	Install occupancy or daylight sensors on new LED fixtures.
Fluorescent lighting controls	$5-$8 per lamp replaced	Replace your existing fluorescent, incandescent and halogen lighting with LED lighting.
HVAC tune-up	$35 per ton capacity	Tune up rooftop units, split units or central units to improve their performance.
Exterior lighting	$6-$415 per lamp	Replace your outdoor lighting with LED lighting.
Cool roof	$0.12 per kWh saved	Reduce heat gain and reduce HVAC load by using light-colored and reflective roofing materials.
Custom projects	$0.10-$0.12 per kWh saved	Any project that saves energy within a store can be incentivized through Energy Smart's custom projects measure. Contact Energy Smart for more details.

Scan the QR code to find a full listing of program measures and incentives.

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Small Business Energy Assessment Customer Referral Program



How would you like to earn money for helping your fellow small business community save energy? It's possible with the Small Business Energy Assessment Referral program.

How it works:

- **Refer a friend or several friends:** Do you know a small business that could benefit from reducing their energy expenses? Refer them to Energy Smart for a free Small Business Energy Assessment.
- **Earn $50 per referral:** When your referral completes a Small Business Energy Assessment with Energy Smart, you'll receive a $50 cash reward as our way of saying thank you.
- **Get maximum referrals:** While there's no limit to the number of referrals, we're capping the payout amount to $500 for 10 completed referrals.
- **Receive payment:** Once your referral completes an assessment, we will notify you and send your $50 payment in the mail.

Thank you for being a vital part of the Entergy New Orleans small business community and for helping us make a positive impact. Refer a small business today, and let's make a difference together.

Ready to get started? Scan this QR code, and start referring friends today.

Eligibility: Must be an Entergy New Orleans electric customer to receive the referral bonus.

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Refer a friend today.

504-229-6868

www.energysmartnola.com

info@energysmartnola.com

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Small Business Energy Assessment

Uncover opportunities to reduce your energy use, save on your electric bill and improve workplace comfort with a free small business energy assessment.



During your assessment, an Energy Smart energy advisor will install free energy-efficient equipment including LED light bulbs, smart thermostat, advanced power strip, faucet aerators and pipe-wrap.*



LED light bulbs
- Must replace incandescent, halogen or fluorescent bulb.
- Will not be replaced if in a location that may be a safety hazard.



Smart thermostat
- Requires compatible HVAC equipment and Wi-Fi.



Hot water pipe insulation
- Electric water-heated facilities only.



Faucet aerators
- Electric water-heated facilities only.
- Cannot replace specialty faucet types.



Pre-rinse spray valve
- Electric water-heated facilities only.
- Cannot replace specialty faucet types.

*Actual products installed may differ from the images shown. Eligible measures are determined based on heating fuel type, efficiency of existing equipment and product availability.
**Commercial customers who receive electrical service from Entergy New Orleans, LLC with peak demand <100 kW.

About the assessment

Energy Smart energy advisors will perform a walk-through energy assessment at your small business** to evaluate opportunities for energy savings.

After the one-hour assessment is complete, the Energy Smart advisor will install select energy-efficient measures and recommend additional projects that can be completed by an Energy Smart trade ally.

Assessment benefits

- Lower your energy use.
- Enhance the comfort and appearance of your business.
- Demonstrate your commitment to being environmentally conscious.

For more information, visit **energysmartnola.com**, email **info@energysmartnola.com**, call **504-229-6868** or **scan the QR code** to schedule your energy assessment.

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Application guide

2024

Small Business Direct Install offering



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Program application overview
Small Business Direct Install offering

The Energy Smart Small Business Direct Install offering is available to all commercial customers that receive service from Entergy New Orleans, LLC and have a peak demand of <100 kW. Energy Smart works with business owners, facility managers and trade ally contractors to identify energy efficiency opportunities, offer technical assistance to develop cost-effective projects and provide cash incentives for completing eligible upgrades with proven energy savings.

Customers can receive prescriptive incentives on one-for-one retrofits or replacements of eligible SBDI measures installed by an approved SBDI trade ally. If a project is not installed by an approved SBDI trade ally, the project is not eligible for the SBDI incentive rates.

For any questions regarding the SBDI offering and for assistance with finding a qualified trade ally, contact us at **info@energysmartnola.com** or **504-229-6868**.

Before you apply:

Verify customer eligibility

- All commercial customers that receive electric service from Entergy New Orleans, LLC with peak demand <100 kW are eligible to participate in the Energy Smart Small Business Direct Install offering.
- Review the Terms and Conditions starting on page eight or available online at **energysmartnola.com/businesses/terms**.

Project application process

1. Customer will find and contact an approved SBDI trade ally at **energysmartnola.com/search-companies/**.
2. For any project over $5,000, customer will submit application and receive pre-approval prior to purchasing equipment and/or beginning installation.
3. Trade ally will install measures. Any project less than $5,000 in estimated incentives does not require pre-approval, and the trade ally can proceed with the measure installation.
4. Trade ally will submit application and documents within 30 days following installation.

Required documentation

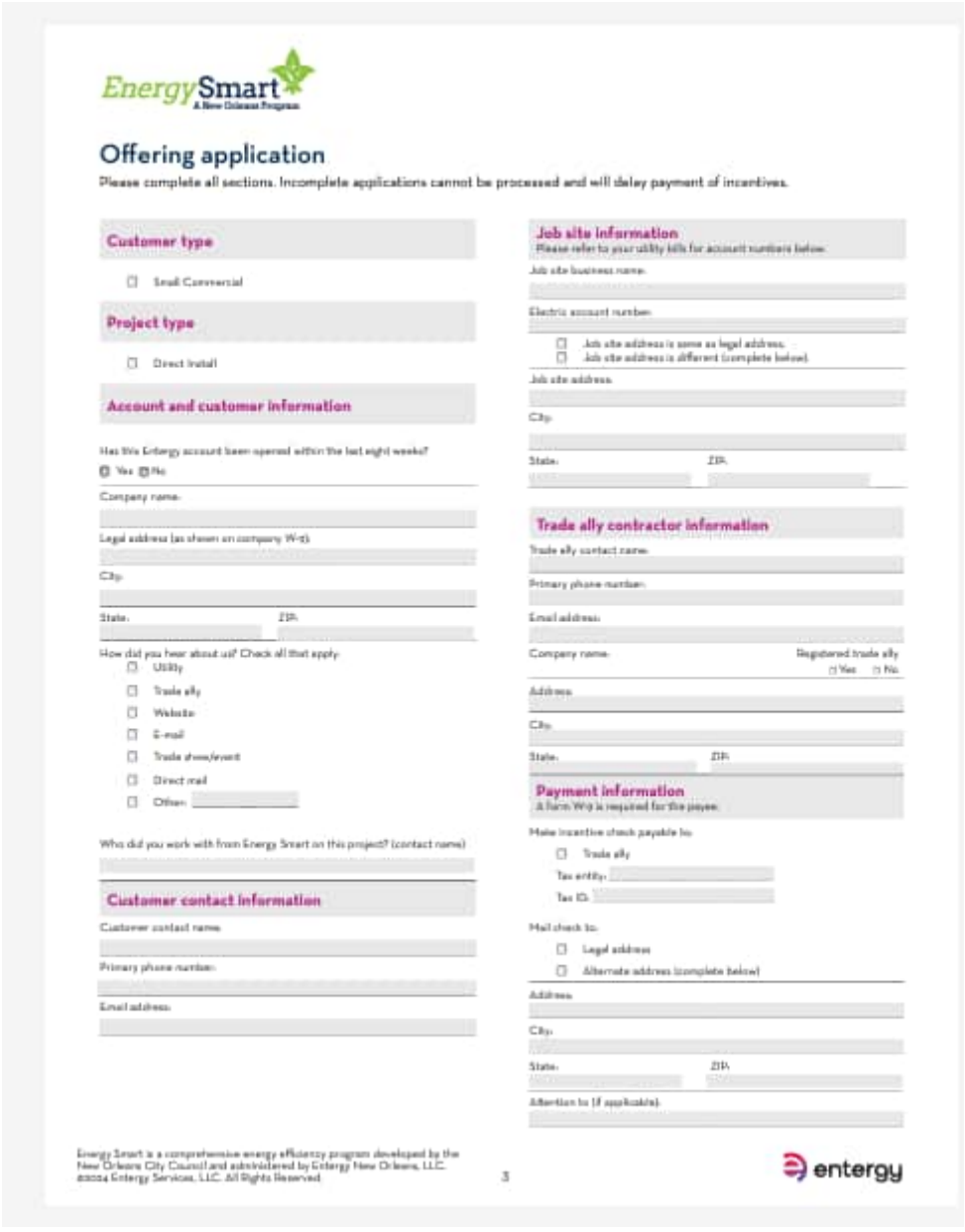
- Completed Energy Smart SBDI offering application. (Verify that all fields are completed. Incomplete applications cannot be processed.)
  - Completed Small Business Direct Install measure list with quantities installed.
- Copy of recent Entergy New Orleans bill.
- Cut sheet or manufacturer specification sheet. (Include a cut sheet or manufacturer specification sheet for all equipment installed as part of the project.)
- Project invoice with incentive discounted off the final amount owed.

Submit your application:

Email your application and all supporting documentation to **commercialapps@energysmartnola.com**. Please retain a copy of the application for your records.

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Offering application

Please complete all sections. Incomplete applications cannot be processed and will delay payment of incentives.

Customer type

☐ Small Commercial

Project type

☐ Direct Install

Account and customer information

Has this Entergy account been opened within the last eight weeks?
◉ Yes ◉ No

Company name:

Legal address (as shown on company W-9):

City:

State: ZIP:

How did you hear about us? Check all that apply:
☐ Utility
☐ Trade ally
☐ Website
☐ E-mail
☐ Trade show/event
☐ Direct mail
☐ Other:

Who did you work with from Energy Smart on this project? (contact name)

Customer contact information

Customer contact name:

Primary phone number:

Email address:

Job site information

Please refer to your utility bills for account numbers below.

Job site business name:

Electric account number:

☐ Job site address is same as legal address.
☐ Job site address is different (complete below).

Job site address:

City:

State: ZIP:

Trade ally contractor information

Trade ally contact name:

Primary phone number:

Email address:

Company name: Registered trade ally ☐ Yes ☐ No

Address:

City:

State: ZIP:

Payment information

A Form W-9 is required for the payee.

Make incentive check payable to:
☐ Trade ally
Tax entity:
Tax ID:

Mail check to:
☐ Legal address
☐ Alternate address (complete below)

Address:

City:

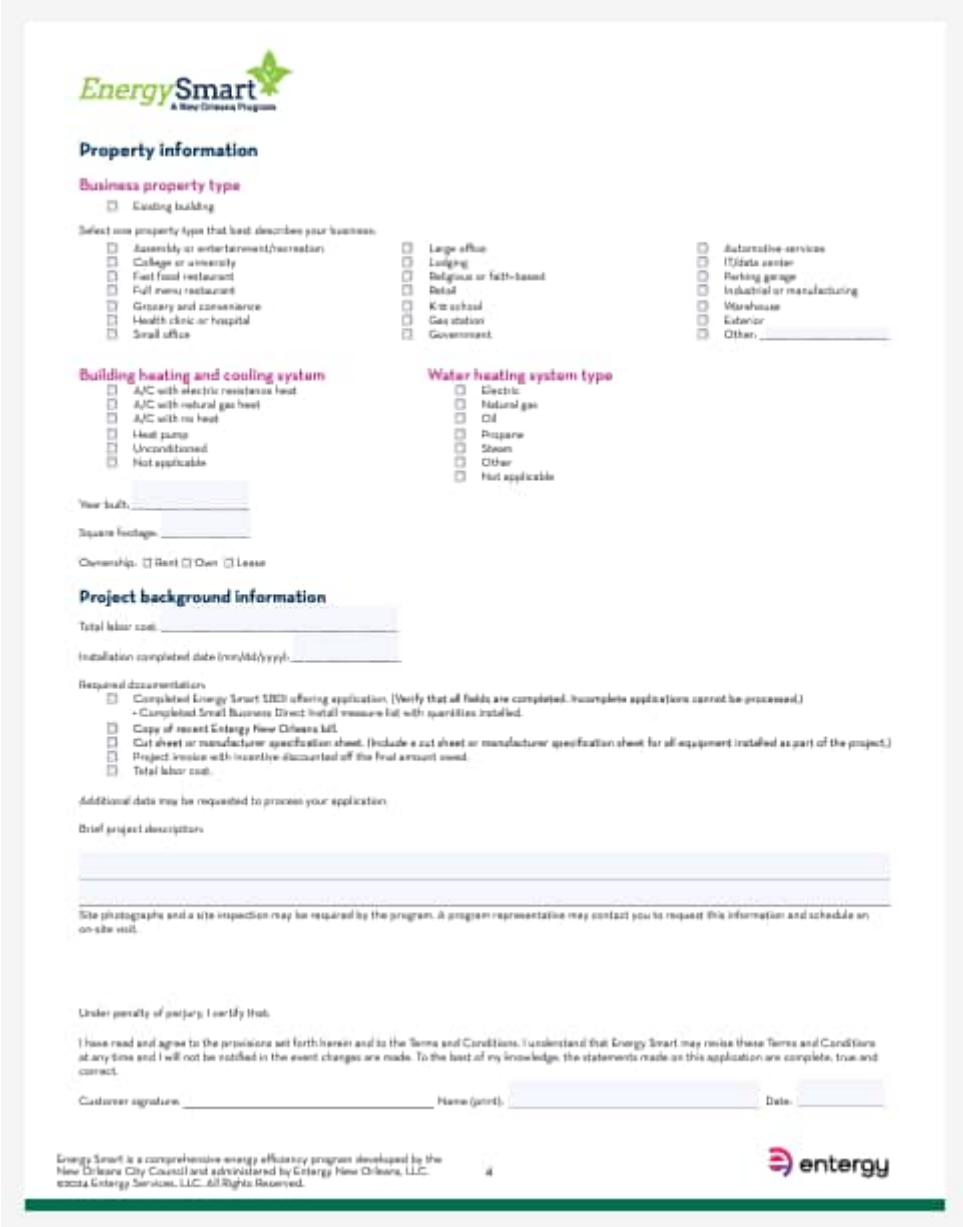
State: ZIP:

Attention to (if applicable):

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Property information

Business property type

☐ Existing building

Select one property type that best describes your business.

☐ Assembly or entertainment/recreation
☐ College or university
☐ Fast food restaurant
☐ Full menu restaurant
☐ Grocery and convenience
☐ Health clinic or hospital
☐ Small office
☐ Large office
☐ Lodging
☐ Religious or faith-based
☐ Retail
☐ K-12 school
☐ Gas station
☐ Government
☐ Automotive services
☐ IT/data center
☐ Parking garage
☐ Industrial or manufacturing
☐ Warehouse
☐ Exterior
☐ Other: _____

Building heating and cooling system

☐ A/C with electric resistance heat
☐ A/C with natural gas heat
☐ A/C with no heat
☐ Heat pump
☐ Unconditioned
☐ Not applicable

Water heating system type

☐ Electric
☐ Natural gas
☐ Oil
☐ Propane
☐ Steam
☐ Other
☐ Not applicable

Year built: _____

Square footage: _____

Ownership: ☐ Rent ☐ Own ☐ Lease

Project background information

Total labor cost: _____

Installation completed date (mm/dd/yyyy): _____

Required documentation:

☐ Completed Energy Smart SBDI offering application. (Verify that all fields are completed. Incomplete applications cannot be processed.)
- Completed Small Business Direct Install measure list with quantities installed.

☐ Copy of recent Entergy New Orleans bill.
☐ Cut sheet or manufacturer specification sheet. (Include a cut sheet or manufacturer specification sheet for all equipment installed as part of the project.)
☐ Project invoice with incentive discounted off the final amount owed.
☐ Total labor cost.

Additional data may be requested to process your application.

Brief project description:

Site photographs and a site inspection may be required by the program. A program representative may contact you to request this information and schedule an on-site visit.

Under penalty of perjury, I certify that:

I have read and agree to the provisions set forth herein and to the Terms and Conditions. I understand that Energy Smart may revise these Terms and Conditions at any time and I will not be notified in the event changes are made. To the best of my knowledge, the statements made on this application are complete, true and correct.

Customer signature: _____ Name (print): _____ Date: _____

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Small Business Direct Install offering incentives

Measure	Requirements	SBDI incentive	Unit	Quantity*	Total material cost*	Estimated incentive
Interior lighting						
LED downlight lamp/kit	ENERGY STAR® certified.	$10.25	per fixture			
LED exit sign	<5 watts, must meet state fire marshal codes and be UL rated.	$27.50	per sign			
T8/T12 upgrade to LED linear - 4ft	DLC listed. For retrofitting and replacing existing fixtures. Quantity (# of units) is based on number of existing lamps being replaced.	$11.88	per lamp			
T8/T12 high output (HO) upgrade to LED linear - 4ft		$12.50	per lamp			
T5 upgrade to LED linear - 4ft		$9.38	per lamp			
T5 high output (HO) upgrade to LED linear - 4ft		$10.25	per lamp			
T8/T12 upgrade to LED linear - 8ft		$21.25	per lamp			
T8/T12 high output (HO) upgrade to LED linear - 8ft		$25	per lamp			
T8/T12 upgrade to LED linear - 2ft		$5	per lamp			
T5 upgrade to LED linear - 2ft		$4.38	per lamp			
T5 high output (HO) upgrade to LED linear - 2ft		$6.13	per lamp			
T8/T12 upgrade to LED linear - U-tube		$12.50	per lamp			
LED replacing <175W HID (lamp wattage)	DLC listed.	$25	per fixture			
LED replacing 175W to 250W HID (lamp wattage)		$65	per fixture			
LED replacing 251W to 400W HID (lamp wattage)		$162.50	per fixture			
LED replacing 401W to 1000W HID (lamp wattage)		$406.25	per fixture			
LED replacing >1000W HID (lamp wattage)		$487.25	per fixture			
LED refrigerated case lighting (without controls)	DLC listed. Retrofits must completely remove the existing fluorescent fixture and connectors and ballasts to qualify; wiring may be reused.	$55	per door			
LED refrigerated case lighting (with controls)		$77.25	per door			
Exterior lighting						
LED downlight lamp/kit	ENERGY STAR® certified.	$10.25	per lamp			
T8/T12 upgrade to LED linear - 4ft	DLC listed. For retrofitting and replacing existing fixtures. Quantity (# of units) is based on number of existing lamps being replaced.	$22	per lamp			
T8/T12 high output (HO) upgrade to LED linear - 4ft		$20.1	per lamp			
T5 upgrade to LED linear - 4ft		$9.38	per lamp			
T5 high output (HO) upgrade to LED linear - 4ft		$10.25	per lamp			
T8/T12 upgrade to LED linear - 8ft		$21.25	per lamp			
T8/T12 high output (HO) upgrade to LED linear - 8ft		$30.75	per lamp			
T8/T12 upgrade to LED linear - 2ft		$5	per lamp			
T5 upgrade to LED linear - 2ft		$4.38	per lamp			
T5 high output (HO) upgrade to LED linear - 2ft		$6.13	per lamp			
T8/T12 upgrade to LED linear - U-Tube		$13.75	per lamp			

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Measure	Requirements	SBDI incentive	Unit	Quantity	Total material cost	Estimated incentives
Exterior lighting (continued)						
LED replacing <175 W HID (lamp wattage)	DLC listed.	$69	per fixture			
LED replacing 175 W to 250 W HID (lamp wattage)		$137.50	per fixture			
LED replacing 251 W to 400 W HID (lamp wattage)		$181.25	per fixture			
LED replacing 401 W to 1000 W HID (lamp wattage)		$456.25	per fixture			
LED replacing >1000 W HID (lamp wattage)		$568.75	per fixture			
Park/athletic field LED replacing <175 W HID (lamp wattage)		$82.13	per fixture			
Park/athletic field LED replacing 175 W to 250 W HID (lamp wattage)		$11.25	per fixture			
Park/athletic field LED replacing 251 W to 400 W HID (lamp wattage)		$68.75	per fixture			
Park/athletic field LED replacing 401 W to 1000 W HID (lamp wattage)		$427.50	per fixture			
Park/athletic field LED replacing >1000 W HID (lamp wattage)		$570	per fixture			
Lighting controls						
Daylighting controller (controlling <300 watts)	Quantity (# of units) is based on number of installed units. Integrated sensors built-in to proposed fixtures do not qualify.	$401	per unit			
Daylighting controller (controlling >300 watts)		$168.75	per unit			
Occupancy sensor (controlling <300 watts)		$601	per unit			
Occupancy sensor (controlling >300 watts)		$182.25	per unit			
Occupancy sensor – daylighting control (controlling <300 watts)		$301	per unit			
Occupancy sensor – daylighting control (controlling >300 watts)		$226.75	per unit			
Bi-level parking garage lighting control (controlling <30 watts)	At low power, lights must consume less than 70% of full load power. Quantity (# of units) is based on number of installed units. Fixture-integrated sensors do qualify for this incentive.	$22.25	per unit			
Bi-level parking garage lighting control (controlling 31-100 watts)		$28.75	per unit			
Bi-level parking garage lighting control (controlling 101-150 watts)		$37.25	per unit			
Bi-level parking garage lighting control (controlling 151-200 watts)		$48.50	per unit			
Refrigeration						
ECM motor for freezer and cooler	Applicable only to refrigerated cooler and freezer fans.	$125	per motor			
Evaporator fan controller for freezer and cooler	Controller must turn on fan only when the system's thermostat is calling for the compressor to operate.	$81.25	per fan controlled			
Anti-sweat heater controls for freezer and cooler	Controller must sense dew point temperature of case exterior environment and vary power supplied to heaters accordingly. Applicable for retrofit only, not applicable for new equipment with integrated controls.	$43.75	per linear foot of case			
Refrigerated case night covers	Applicable for retrofit only, not applicable for new cases with integrated night covers.	$23	per linear foot of case			
ENERGY STAR® solid door refrigerator	Must be ENERGY STAR® certified.	$168.75	per unit			
ENERGY STAR® solid door freezer	Must be ENERGY STAR® certified.	$226.25	per unit			
Strip curtains for walk-in coolers	Applicable to coolers with damaged strip curtains or without pre-existing strip curtains.	$3	per square foot covered			
Strip curtains for walk-in freezers	Applicable to freezers with damaged strip curtains or without pre-existing strip curtains.	$10	per square foot covered			
Strip curtains for refrigerated warehouse doors	Applicable to doors with damaged strip curtains or without pre-existing strip curtains.	$10	per square foot covered			

Measure	Requirements	SBDI incentive	Unit	Quantity	Total material cost	Estimated incentives
Refrigeration (continued)						
Door gaskets - coolers	*Baseline standard is walk-in or reach-in cooler or freezer with worn-out, defective gaskets. *Efficiency standard for this measure is a new, better-fitting gasket.	$2.50	per linear foot			
Door gaskets - freezers		$17.50	per linear foot			
Auto door closers - coolers	*Auto. hydraulic-type door closer on main walk-in cooler or freezer insulated opaque door(s). *Must firmly close the door when it is within 1 inch of full closure.	$141.75	per unit			
Auto door closers - freezers		$196.25	per unit			
Totals:						

Footnotes

*For all light bulbs/lamps, light fixtures and exit signs, quantities are based on number of EXISTING lamps/fixtures being replaced, which this accounts for scenarios of de-lamping.

**The total material cost is the total cost of all the bulbs or fixtures for a particular measure/line item.

^Any replacement of equipment that operates 24/7 (and will continue to do so after the project is completed) will qualify for incentive rebates under the custom lighting program as a separate application.

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Program agreement Terms and Conditions

Entergy New Orleans, LLC ("ENO") and APTIM Environmental & Infrastructure, LLC. ("APTIM" or "Program Administrator") have entered into an agreement whereby APTIM will design, implement, and administer the Energy Smart Program in accordance with the ENO comprehensive demand side management plan. Program Administrator and any eligible applicants to a Program shall be the parties to and bound by these terms and conditions ("this Agreement"). ENO, Entergy Corporation, and ENO's affiliates shall be third-party beneficiaries of this Agreement and Applications.

1. **Definitions**
   a. Applicant means any person who submits an application to a Program.
   b. Approval Date means the date on which Program Administrator approves an Application.
   c. APTIM means APTIM Environmental & Infrastructure, Inc.
   d. ENO means Entergy New Orleans, LLC.
   e. Program Administrator means APTIM.
   f. Program means any of the Energy Smart Programs that are administered by the Program Administrator.
   g. Program Payment means any monetary incentive or reward available to ENO customers that meet the requirements for each Program and which are paid pursuant to the terms and conditions of this Agreement.
   h. Project or Project Measure means specific energy efficiency measures listed on applications and approved by Program Administrator.
   i. Project Pre-Approval Date means the date the Program Administrator confirms all required documentation has been provided to pre-approve the Project for participation in the Program.
   j. Project Approval Date means the date the Program Administrator approves the Project for payment.
   k. Project Completion Date means the date the Program Administrator accepts the Project Completion Notice.
   l. Project Completion Deadline means the completion date established by the Program for the specific Project or Project measure associated with the Application.
   m. Project Completion Notice means the notice to be provided by Applicant to Program Administrator after completion of a Project.

2. **Incentive offer**

   Program Payments shall be available to eligible Applicants who properly submit a Program application ("Application") and meet Program requirements described further herein. Program Payments shall be available according to the terms of the applicable Program and Application, as well as this Agreement. Products required by the applicable Program must be purchased and installed within the date range outlined on the Application. Applicant understands that all custom incentive Applications must be pre-approved in writing by the Program Administrator. Applicants should maintain a copy of the Application for your records. Incomplete Applications will be returned and will not be processed. Final applications must have complete information and be submitted with proof of purchase, such as receipts or invoices that clearly itemize the product(s) and/or service(s) received. Purchase orders, proposals, and quotes are not considered proof of purchase.

3. **Project term and description**

   The Term of this Agreement shall begin on the Approval Date as determined by the Program as part of the Application to this Agreement and shall run continuously through the Project Completion Deadline, unless extended or terminated pursuant to this Agreement or by notification of either of the parties. The Project shall be implemented in accordance with this Agreement.

4. **Program payments**

   Upon completion of a Project, Applicant shall submit a Project Completion Notice to Program Administrator. Upon receipt and acceptance of a Completion Notice and any other requested project documentation, Program Administrator will facilitate Program Payment to the Applicant. There shall be no obligation to make any payments to the Applicant if ENO does not provide the funds to the Program for this purpose. The Program Administrator, on behalf of the Program, reserves the right to increase or decrease incentive amounts, and associated energy savings to be claimed, if conditions change from the time of Project Pre-Approval to the time of Project implementation. This includes, but is not limited to, Project cost and Project scope. Applicants may only receive one payment per Project Measure. Should Applicant or its representative make duplicate application for payment for the same Project, ENO or its representative has the right to recover any payments made in excess of the entitled payment. The Program excludes internal, non-contracted labor for private companies or individuals when calculating the total project cost. Incentives are available on a first-come, first-served basis. Incentives are subject to change or termination without notice at the discretion of the Program Administrator and ENO. Agreements that are in place and applications that are in progress during a change in incentive or program availability shall be honored.

5. **Program discretion**

   The Program Administrator and ENO reserve the right to change or discontinue aspects of the Program upon a 45-day notice. The Program Administrator also reserves the right, in its sole discretion, to withhold or terminate Program Payments immediately if:
   (i) An identified problem with a Project is not resolved, due to an Applicant's failure to follow any and all applicable terms and conditions, rules, or procedures; or
   (ii) Determination that Applicant's receipt of Incentive Payments will not result in the implementation of any measures by Applicant, or if the measures will not result in the reduction of energy usage; or
   (iii) The Applicant becomes "Insolvent" (which shall mean Applicant (i) files a petition or otherwise commences, authorizes, or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization, or similar law, including but not limited to the United States Bankruptcy Code or the laws of any state, or has any such petition filed or commenced against it, (ii) makes an assignment or any general arrangement for the benefit of creditors, (iii) otherwise becomes the subject of a bankruptcy proceeding or insolvent (however evidenced), (iv) has a liquidator, administrator, receiver, trustee, conservator, or similar official appointed with respect to it or any substantial portion of its property or assets, or (v) is generally unable to pay its debts as they fall due).

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8. Misrepresentation
Any and all funds determined by the Program, Program Administrator, or ENO to have been acquired on the basis of false information supplied by or on behalf of Applicant must be returned to the Program. This article shall not limit other remedies that may be available for the filing of false or fraudulent Applications. Applicant shall be responsible for all costs incurred for collection of monies owed due to any misrepresentation or false statements.

9. Project implementation
(i) The Applicant's procurement, installation, and implementation ("Completion") of energy efficiency measures shall be accomplished in accordance with the requirements outlined in this Agreement. The Applicant shall deliver to Program Administrator a Project Completion Notice by the Project Completion Deadline noted in the Application. The Applicant must provide invoices for equipment purchased or service performed as well as documentation that verifies that the energy efficiency measures (i) have been properly installed, (ii) are functioning properly, and (iii) have the potential to generate energy savings if properly maintained and operated. All Projects are expected to comply with standard federal, state, and local building and construction codes. All equipment must be new, used or rebuilt equipment is eligible only when pre-approved by Program Administrator in writing. Displaced equipment must not be reused as part of the Project unless determined as part of the Project and reviewed in accordance with Project Pre-Approval. Equipment purchased under a capital lease structure may qualify for an incentive, but must be pre-approved by Program Administrator in writing before project initiation or entering into the equipment lease.
(ii) Should Program Administrator discover that the Project was not implemented as attested to in the Project Completion Notice, the Applicant may be considered in breach of this Agreement and required to repay any incentive payment made, including costs incurred by the Program Administrator or ENO to recover such fees, and may be subject to any additional relief to which ENO may be entitled.

10. Right to inspect
The Program Administrator and ENO shall have the right to inspect any and all Project records and installations during the term of this Agreement and the corresponding Application, and for a two-year period thereafter. The Program Administrator and its designated representatives shall have the right to observe and inspect all Project work in any of the Applicant's facilities upon advance notice for a period of 2 years from the Project Payment date. The Applicant shall maintain accurate records of the Project work (e.g., installation records, invoices, and maintenance information) that is performed hereunder for a period of 2 years from the date of the applicable Project Payment.

11. Monitoring and verification
The Program Administrator, and its designated representatives, shall have the right to monitor energy use/production prior to and after installation of the Project and to perform an inspection of any Project to evaluate Program efficacy for a period of 2 years from the date of Project Payment under this Agreement or pursuant to an Application.

12. Manner and performance
The Applicant shall perform its responsibilities under this Agreement in an efficient and expeditious manner and in accordance with all of the terms and provisions of this Agreement. The Applicant shall make all reasonable attempts to ensure that all Project work, as described in this Agreement, is performed in accordance with current professional standards and with the diligence and skill expected for the performance of such work.

13. Representations/warranty
The Program Administrator and ENO do not endorse any particular trade ally, manufacturer, product, system, or design by offering an incentive. The Program Administrator and ENO are not responsible for any tax liability imposed on the recipient as a result of the payment of incentives. The Program Administrator and ENO make no representation or warranty and assume no liability with respect to the quality, safety, performance, or other aspect of any design, consulting, product, system, equipment, Project, or appliance installed or received and expressly disclaims any such representations, warranties, and liability, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The Program Administrator and ENO do not guarantee that installation and operation of energy-efficient equipment will result in reduced usage or in cost savings. The Program Administrator and ENO are not responsible for the proper disposal or recycling of any waste generated as a result of any Project. The Program Administrator and ENO are not liable for any damages, including any incidental or consequential damages, arising out of the operation or malfunction of any Project, products, equipment, or appliances, or the installation thereof.

14. Default and termination
(i) This Agreement shall remain in effect until the Project Completion Deadline as specified in the Application hereof unless a Party is in breach of any provision of this Agreement.
(ii) In the event that ENO terminates, for any cause, Program Administrator's Contract, which terminates Program Administrator's right to act as Program Administrator of the Energy Smart Program, responsibility for this Agreement transfers to the new Program Administrator or ENO until a new Program Administrator is named.
(3) This Agreement may be terminated at Program Administrator's sole discretion if Applicant does not complete implementation of the Project on or before the Project Completion Deadline, unless the Project Completion Date is extended by mutual written agreement of the Parties.
(4) Program Administrator as approved by ENO reserves the right to change or discontinue any Program at any time with 45-day notification, and reserves the right to terminate or amend this Agreement upon the change or discontinuance of any such Program, or as directed by the Council of the City of New Orleans or pursuant to a change in laws or regulations applicable to a Program.

15. Indemnification and damages
The Applicant shall protect, indemnify, defend, and hold harmless Program Administrator, ENO, and the City of New Orleans (the "City") respective affiliates, subsidiaries, parent companies, officers, directors, agents, and employees, (collectively the "Indemnitees") against all losses, damages, expenses, fees, costs, and liability arising from the Program, any Project, design, consulting, product, system, equipment, or appliance, and claims thereof by Applicant or any third party. The Applicant agrees that such obligations under this Article shall survive any expiration or termination of this Agreement or an Application, and shall not be limited by any enumeration herein of required insurance coverage. To the maximum extent permitted by law, the Applicant agrees to limit Program Administrator's, ENO's, and the City's liability to the total amount of the Project Payments identified in the Application for the Project giving rise to such liability. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. Under no circumstances shall Indemnitees be liable for any special, indirect, or consequential damages, including, but not limited to, lost profits, loss of earning, or loss of use, however the same may be caused.

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14. Publicity
The Applicant shall not use the Program, Program Administrator's or ENO's corporate name, logo, identity, any affiliation, or any related logo including the "Energy Smart" name, logo, or identity, for any marketing, advertising, or solicitation without prior written consent of Program Administrator and ENO, which may be withheld for any or no reason. Program Administrator and ENO reserve the right to publicize the Applicant's participation in the Energy Smart program unless requested otherwise in writing and submitted to info@energysmartnola.com at the time the Application is submitted. For purposes of the foregoing, to the extent applicable, Applicant grants Program Administrator and its contractors a nonexclusive, fully paid up, irrevocable license to Applicant's name and logo solely for the purpose of publicizing Applicant's participation in the Program.

15. Review and disclaimer
Execution of this Agreement and any review of the design, construction, operation, or maintenance of the Project by any Program representative or any of their subcontractors shall not constitute any representation or warranty by the Program, Program Administrator, or ENO as to the economic or technical feasibility, operational capability, or reliability of any renewable or energy efficiency measures or the capability or reliability of any market provider performing any work on the Project. The Applicant shall in no way represent to any third party that the execution of this Agreement or an Application, or any reviews by Program representatives or their subcontractors, including, but not limited to, review of the design, construction, operation, or maintenance of the Project is a representation or warranty by the Program, Program Administrator, or ENO as to the economic or technical feasibility, operational capability, or reliability of the renewable or energy efficiency measures or an endorsement of the contractor performing work on the Project. The Applicant is solely responsible for the technical feasibility, operational capability, and reliability of the renewable or energy efficiency measures.

16. Miscellaneous
(1) Governing Law. All Applications, Incentive Agreements, and these Terms and Conditions shall be governed, construed, and enforced in accordance with the laws and regulations of the State of Louisiana, without regard to any conflicts of laws or principles that may direct the application of the laws of another jurisdiction. The Applicant irrevocably submits to the jurisdiction of the state and federal courts sitting in New Orleans, Louisiana, with regard to any controversy in any way relating to the execution, delivery, or performance of an Application or this Agreement. Suits, claims, or actions founded upon such controversies shall be brought or filed exclusively in such courts and nowhere else. The exclusive venue for any dispute or controversy arising under an Application or Incentive Agreement shall be the Orleans Parish Civil District Court or the Federal District Court for the Eastern District of Louisiana.
(2) Compliance with Applicable Laws. The Applicant shall at all times comply with and observe all federal and Louisiana state laws and published circulars, local laws, ordinances, rules, and regulations which are in effect from the time at which Applicant submits an Application or enters into this Agreement through Applicant's receipt of a Program Payment as they pertain to this Program. All references to statutes or regulations contained in any Application or this Agreement shall be construed to include successors thereto.
(3) Assignment. Upon consent of ENO, Program Administrator may assign, transfer, or convey any Application or any of its rights, obligations, interests, or responsibilities thereunder, in whole or in part, without the consent of the Applicant. Neither an Application nor any rights or obligations hereunder or thereunder may be sold, assigned, transferred, or otherwise disposed by Applicant, whether pursuant to a change of control, by operation or law, or otherwise, without Program Administrator's prior written consent.
(4) Severability. If any provision of any Application or this Agreement is construed by a court of competent jurisdiction to be illegal, invalid, or unenforceable under present or future laws, such provision shall be fully severable and the Application or this Agreement shall be construed and enforced as if the illegal, invalid, or unenforceable provision had never comprised a part thereof. Furthermore, in lieu of such illegal, invalid, or unenforceable provision, the Application or this Agreement shall be reformed with a similar provision that is legal, valid, and enforceable.
(5) Risk of Loss. The Program Administrator and ENO at no time assume risk of loss for any personal property of the Applicant or any third party.
(6) Waiver. Failure or delay on the part of either party to exercise any right, power, privilege, or remedy hereunder shall not constitute a waiver thereof. A waiver of any default shall not operate as a waiver of any other default or of the same type of default on a future occasion.

17. Acceptance
The Applicant is required to acknowledge its understanding and acceptance of the terms and conditions of this Agreement by signing and returning executed copy of the Energy Smart Program Application to the Program Administrator at the address or email identified in this form on or before the required Deadline. If a completed Application is not received by the Project Pre-Approval or Application deadline, Program Administrator will consider that Applicant's decision is to decline the terms and conditions contained herein, and this Agreement will be of no force and effect.

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New Construction Code Compliance Collateral





New Construction Code Compliance

In July 2023, the State of Louisiana adopted an advanced building energy code. In order to help commercial building owners meet this new code, Energy Smart is offering financial incentives for the installation of high efficiency equipment through the Energy Smart New Construction Code Compliance offering.

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.

Incentive offerings

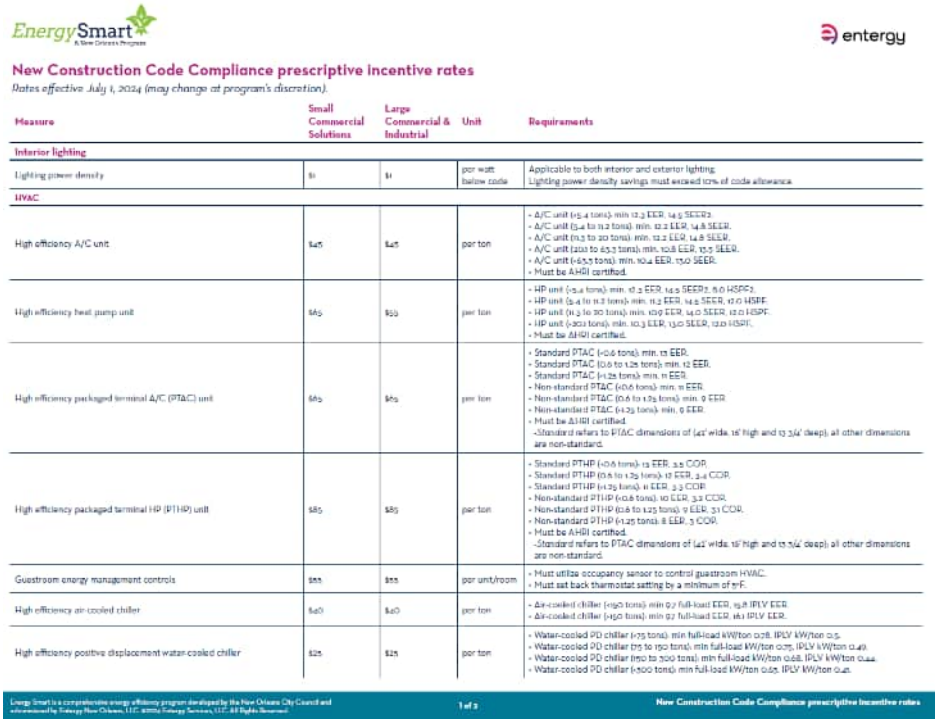
Prescriptive incentives	Custom incentives	Whole building performance incentive	Interior and exterior lighting incentives
Measures with deemed energy efficiency savings and incentives.	Available for all other measures and requires calculated energy savings analysis.	Available for projects that perform energy modeling, resulting in holistic design and construction energy efficiency improvements.	Based on the proposed system's lighting power density compared to the maximum wattage allowed by code.

Visit **energysmartnola.com** or **scan the QR code** to download application materials.

energysmartnola.com | info@energysmartnola.com | 504-229-6868

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New Construction Code Compliance prescriptive incentive rates



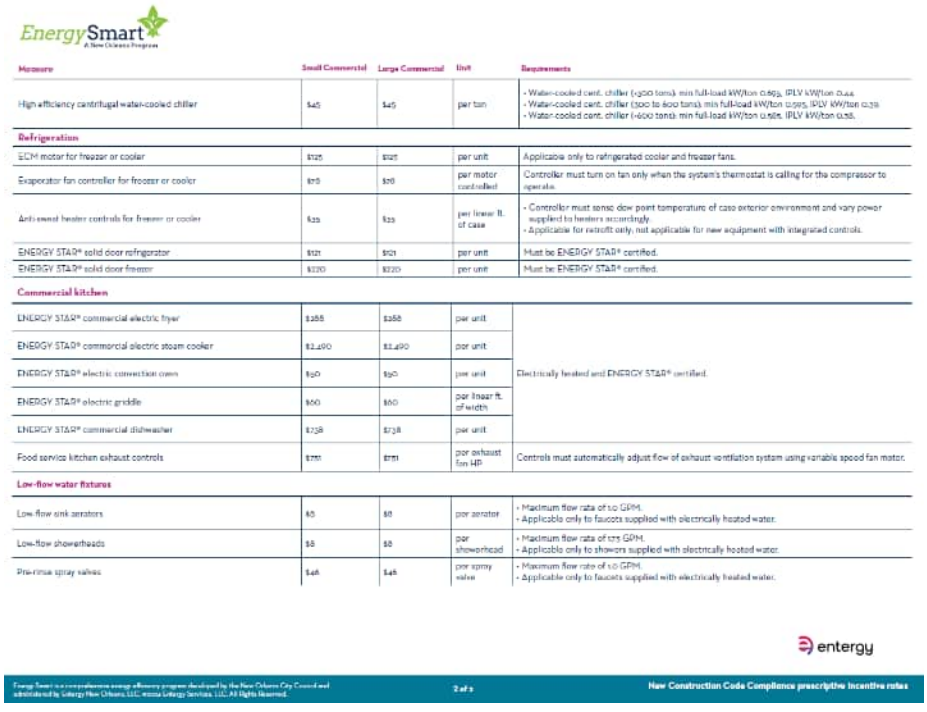
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New Construction Code Compliance prescriptive incentive rates

Rates effective July 1, 2024 (may change at program's discretion).

Measure	Small Commercial Solutions	Large Commercial & Industrial	Unit	Requirements
Interior lighting				
Lighting power density	$1	$1	per watt below code	Applicable to both interior and exterior lighting. Lighting power density savings must exceed 10% of code allowance.
HVAC				
High efficiency A/C unit	$45	$45	per ton	• A/C unit (≥5.4 tons): min 12.2 EER, 14.5 SEER2. • A/C unit (5.4 to 11.2 tons): min. 12.2 EER, 14.8 SEER. • A/C unit (11.3 to 20 tons): min. 12.2 EER, 14.8 SEER. • A/C unit (>20 to 63.3 tons): min. 10.8 EER, 13.5 SEER. • A/C unit (>63.3 tons): min. 10.4 EER, 13.0 SEER. • Must be AHRI certified.
High efficiency heat pump unit	$65	$59	per ton	• HP unit (<5.4 tons): min. 12.2 EER, 14.5 SEER2, 8.0 HSPF2. • HP unit (5.4 to 11.2 tons): min. 11.5 EER, 14.5 SEER, 12.0 HSPF. • HP unit (11.3 to 20 tons): min. 10.9 EER, 14.0 SEER, 12.0 HSPF. • HP unit (>20 tons): min. 10.3 EER, 13.0 SEER, 12.0 HSPF. • Must be AHRI certified.
High efficiency packaged terminal A/C (PTAC) unit	$69	$69	per ton	• Standard PTAC (<0.6 tons): min. 13 EER. • Standard PTAC (0.6 to 1.25 tons): min. 12 EER. • Standard PTAC (>1.25 tons): min. 11 EER. • Non-standard PTAC (<0.6 tons): min. 11 EER. • Non-standard PTAC (0.6 to 1.25 tons): min. 9 EER. • Non-standard PTAC (>1.25 tons): min. 9 EER. • Must be AHRI certified. -Standard refers to PTAC dimensions of (42" wide, 16" high and 13 3/4" deep); all other dimensions are non-standard.
High efficiency packaged terminal HP (PTHP) unit	$85	$85	per ton	• Standard PTHP (<0.6 tons): 13 EER, 3.5 COP. • Standard PTHP (0.6 to 1.25 tons): 12 EER, 3.4 COP. • Standard PTHP (>1.25 tons): 11 EER, 3.3 COP. • Non-standard PTHP (<0.6 tons): 10 EER, 3.2 COP. • Non-standard PTHP (0.6 to 1.25 tons): 9 EER, 3.1 COP. • Non-standard PTHP (>1.25 tons): 8 EER, 3 COP. • Must be AHRI certified. -Standard refers to PTAC dimensions of (42" wide, 16" high and 13 3/4" deep); all other dimensions are non-standard.
Guestroom energy management controls	$55	$55	per unit/room	• Must utilize occupancy sensor to control guestroom HVAC. • Must set back thermostat setting by a minimum of 7°F.
High efficiency air-cooled chiller	$40	$40	per ton	• Air-cooled chiller (<150 tons): min 9.7 full-load EER, 13.8 IPLV EER. • Air-cooled chiller (>150 tons): min 9.7 full-load EER, 16.1 IPLV EER.
High efficiency positive displacement water-cooled chiller	$25	$25	per ton	• Water-cooled PD chiller (<75 tons): min full-load kW/ton 0.78, IPLV kW/ton 0.5. • Water-cooled PD chiller (75 to 150 tons): min full-load kW/ton 0.75, IPLV kW/ton 0.49. • Water-cooled PD chiller (150 to 300 tons): min full-load kW/ton 0.68, IPLV kW/ton 0.44. • Water-cooled PD chiller (>300 tons): min full-load kW/ton 0.65, IPLV kW/ton 0.41.



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Measure	Small Commercial	Large Commercial	Unit	Requirements
High efficiency centrifugal water-cooled chiller	$45	$45	per ton	• Water-cooled cent. chiller (>300 tons): min full-load kW/ton 0.603, IPLV kW/ton 0.44. • Water-cooled cent. chiller (300 to 600 tons): min full-load kW/ton 0.595, IPLV kW/ton 0.39. • Water-cooled cent. chiller (>600 tons): min full-load kW/ton 0.585, IPLV kW/ton 0.38.
Refrigeration				
ECM motor for freezer or cooler	$125	$125	per unit	Applicable only to refrigerated cooler and freezer fans.
Evaporator fan controller for freezer or cooler	$16	$16	per motor controlled	Controller must turn on fan only when the system's thermostat is calling for the compressor to operate.
Anti-sweat heater controls for freezer or cooler	$23	$23	per linear ft. of case	• Controller must sense dew point temperature of case exterior environment and vary power supplied to heaters accordingly. • Applicable for retrofit only; not applicable for new equipment with integrated controls.
ENERGY STAR® solid door refrigerator	$121	$121	per unit	Must be ENERGY STAR® certified.
ENERGY STAR® solid door freezer	$220	$220	per unit	Must be ENERGY STAR® certified.
Commercial kitchen				
ENERGY STAR® commercial electric fryer	$288	$288	per unit	Electrically heated and ENERGY STAR® certified.
ENERGY STAR® commercial electric steam cooker	$2,490	$2,490	per unit	
ENERGY STAR® electric convection oven	$90	$90	per unit	
ENERGY STAR® electric griddle	$60	$60	per linear ft. of width	
ENERGY STAR® commercial dishwasher	$738	$738	per unit	
Food service kitchen exhaust controls	$711	$711	per exhaust fan HP	Controls must automatically adjust flow of exhaust ventilation system using variable speed fan motor.
Low-flow water fixtures				
Low-flow sink aerators	$5	$5	per aerator	• Maximum flow rate of 1.0 GPM. • Applicable only to faucets supplied with electrically heated water.
Low-flow showerheads	$8	$8	per showerhead	• Maximum flow rate of 1.75 GPM. • Applicable only to showers supplied with electrically heated water.
Pre-rinse spray valves	$46	$46	per spray valve	• Maximum flow rate of 1.0 GPM. • Applicable only to faucets supplied with electrically heated water.

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New Construction Code Compliance email campaign

EnergySmart
A New Orleans Program



Energy Smart is excited to announce significant changes to the New Construction offering

New Construction Code Compliance

What's new?

In July 2023, the State of Louisiana adopted the advanced building energy code IECC 2021. In order to help commercial building owners meet this new code, Energy Smart is offering financial incentives for the installation of high efficiency equipment through the New Construction Code Compliance offering.

$1,000 trade ally bonus

Prescriptive and custom incentive rates have been increased significantly and Energy Smart is now offering a New Construction Code Compliance Trade ally bonus of $1,000 for trade allies that submit qualifying project documentation.

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.

Incentive offerings

- Prescriptive incentives.
- Whole building performance incentives.
- Custom incentives.
- Interior and exterior lighting incentives.

Click here to learn more and download program materials

Please contact Energy Smart with questions or concerns at info@energysmartnola.com or 504-229-6868.

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New Construction Code Compliance

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Our mailing address is:
Energy Smart
1100 Poydras St., Suite 2060
New Orleans, LA 70163

Case Studies



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New Orleans Ernest N. Morial Convention Center

Challenge

As one of the largest buildings in the region, with 3 million square feet under one roof, the New Orleans Ernest N. Morial Convention Center faced the daunting task of minimizing its overall environmental impact while maintaining operational efficiency and comfort.

Project summary

The NOEMCC team is committed to reducing environmental impacts and helping their customers meet their sustainability goals. Since 2018, they have actively engaged with the Energy Smart program, implementing various energy-saving initiatives. To date, Energy Smart incentives have funded 21 projects. These projects include lighting upgrades, HVAC optimization, chiller replacements as well as the 40-acre cool roof installation and additional lighting upgrades that are currently in progress. These upgrades have not only reduced operating costs significantly but have also contributed to environmental conservation.

"In lockstep with our mission and values, NOENMCC and Energy Smart forged an alliance and illuminated a pathway toward sustainable excellence and shared value. We are grateful for the partnership and proud to be a leader in the community so that others can follow and take benefit from the program."

Adam J. Straight
Chief Operating Officer
New Orleans Ernest N. Morial Convention Center

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Project facts:

$987,913
in incentives.

$1,569,745.81
estimated annual savings.

14,028,112
kWh saved.

21
total projects.

425,668*
Bags of recycled trash.

*Calculated using the EPA Greenhouse Gas Equivalency Calculator.

Save energy and money through standard upgrades such as:

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

About Energy Smart

Since 2010, Energy Smart has helped Entergy New Orleans customers save energy and money by providing cash incentives for completing energy efficiency upgrades.

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A+ in energy savings

On average, a school's electricity costs are about $1.10 per square foot annually. Lighting and HVAC are responsible for up to 56% of a school's energy use. By making energy-efficient upgrades to these systems, schools can achieve 10-20% in energy savings. When these savings are reinvested into school programs, it can have a positive impact on students' lives and their educational experiences. Lycée Français de la Nouvelle-Orléans (LFNO), the only PreK-12 French public school in New Orleans, understood the positive impact that energy efficiency upgrades, implemented with incentives from Energy Smart, would have on their bottom line and on the success of their students.

Project summary

Lycée Français de la Nouvelle-Orléans has been utilizing Energy Smart incentives for equipment upgrades since 2019, when they replaced a water-cooled chiller and cooling tower with an efficient air-cooled chiller. Outside air ductwork was also installed to mitigate condensation, humidity and temperature issues. Later projects consisted of LED lighting and fixture upgrades as well as upgrading their existing HVAC equipment with control solutions and web-based building automation for better control over heating and cooling costs. The cost savings for these upgrades can save thousands of dollars on utilities annually.

"As a school network, we're witnessing significant cost reductions. These project initiatives have the potential to annually save our school at least $50,000 across energy, maintenance and HVAC expenses. These savings represent a substantial investment that LFNO can utilize to broaden our capabilities for serving our students and providing a high-quality education environment."

Danielle Dufauchard
Deputy Superintendent, Lycée Français de la Nouvelle-Orléans

"Empowering schools to embrace and implement energy-saving upgrades isn't just about saving resources – it's about investing in the future of education and sustainability for generations to come. Our program offerings and cash incentives are designed to do exactly that."

Derek Mills
Demand Side Management Manager, Entergy New Orleans

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Lycée Français de la Nouvelle-Orléans

$349,329
in incentives.

679,851 kWh
saved.

10
total projects.

87,332*
school lunches.

**Equates to number purchased with incentives based on LFNO lunch cost of $4.*

Save energy and money through standard upgrades such as:

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

About Energy Smart

Since 2010, Energy Smart has helped Entergy New Orleans customers save energy and money by providing cash incentives for completing energy efficiency upgrades.

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Southern University at New Orleans

Challenge

Like many college campuses, the buildings at Southern University at New Orleans were not as energy efficient as they could have been due to outdated and obsolete equipment. Implementing energy efficiency measures would not only contribute to reducing SUNO's annual utility costs, but distinguish them as environmental leaders to staff, students and alumni.

Project summary

In 2022, SUNO began implementing energy-saving measures through the Energy Smart program. The costs to upgrade their existing equipment were partially funded with the cash incentives from Energy Smart. SUNO utilized these incentives to implement LED lighting upgrades in the gym, replace the existing HVAC building control systems with building automation upgrades in four academic buildings and replace a chiller in their central plant. These incentives covered nearly 50% of the total project costs, and the equipment upgrades contributed significantly to lowering their operating costs.



Project facts:

$311,720.35
in incentives.

2,028,661.40
kWh saved.

$237,232.14
estimated annual savings.

6
total projects.

61,558*
Bags of recycled trash.
**Calculated using the EPA Greenhouse Gas Equivalency Calculator.*

> As an institution of higher learning, SUNO should be leading the quest for a sustainable future for the betterment of not just our SUNO community, but for our planet as a whole.
>
> **Dr. James H. Ammons, Jr.**
> **Chancellor, Southern University at New Orleans**

Save energy and money through standard upgrades such as:

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

About Energy Smart

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Loews New Orleans Hotel

Challenge

On average, hotels spend $2,196 per room each year on energy. Lighting and HVAC are responsible for up to 45 percent of hotel energy use. Making upgrades to these systems can save energy and money and have a positive impact on your bottom line.

Project summary

Loews Hotel replaced all guest room and meeting room thermostats with programmable energy-efficient thermostats that connect directly with the property management system. The thermostat is placed in vacant mode when a guest checks out, allowing for substantial energy savings. Loews Hotel also upgraded its HVAC system to include chilled water pump variable speed controls, a chilled water flow meter and variable frequency drives for air handler supply fans. Lighting was upgraded to LEDs, replacing metal halide baseline lights with non-linear LEDs. Lastly, door gaskets for refrigerators and freezers were replaced. These upgrades saved Loews Hotel energy and reduced operating expenses while demonstrating its commitment to climate stewardship

"The Energy Smart team assisted our operations and business staff through every step of the process, starting with the application submission to issuing our incentive payment. The positive impact these facility upgrades have on our bottom line and overall guest experience will be key to the hotel's sustained growth and success."

Vince McCartney
Director of Engineering
Loews New Orleans Hotel

Ready to get Energy Smart?

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Project facts:

$286,459
in incentives.

1,229,002
kWh saved.

8
total projects.

Energy savings equal to over
430
hotel rooms booked.

Save energy and money through standard upgrades such as:

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

About Energy Smart

Since 2010, Energy Smart has helped Entergy New Orleans customers save energy and money by providing cash incentives for completing energy efficiency upgrades.

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A New Orleans Program

McDonalds

Challenge

Fast food restaurants can be some of the most energy-intensive buildings. On average, high-volume fast food restaurants may use up to 10 times more energy per square foot than other commercial buildings. The biggest drivers of energy costs are refrigeration, lighting and cooling, contributing to about 55% of the total energy use – making these systems the best targets for energy savings.

Project summary

McDonald's performed an LED lighting upgrade. They changed out their metal halide baseline lights to non-linear LED, and T8 baseline lights to linear LED. Converting from metal halides to LEDs is more energy efficient and can produce more lumens with less energy, which means brighter lighting and lower utility bills. LEDs have low maintenance requirements, allowing your employees to reallocate their time changing bulbs to doing other tasks. Commercial kitchen upgrades such as strip curtains and door gaskets were installed and lastly, the HVAC system was upgraded with new units and an A/C tune-up.



Project facts:

$16,986
in incentives.

163,922
kWh saved.

4
energy-saving projects completed.

Equal to over
2,887
Happy Meals.

> We have seen a tremendous decrease in our bills since working with Energy Smart, and those savings have been instrumental in our success throughout the COVID-19 crisis.
>
> **Teddy Scott**
> **President & CEO**
> **Scott Management Team**
> **McDonalds**

Save energy and money through standard upgrades such as:

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

About Energy Smart

Since 2010, Energy Smart has helped Entergy New Orleans customers save energy and money by providing cash incentives for completing energy efficiency upgrades.

Ready to get Energy Smart?

Visit energysmartnola.com, call 504-229-6868 or scan the QR code today.

Energy Smart is a comprehensive energy efficiency program developed by the New Orleans City Council and administered by Entergy New Orleans, LLC. ©2024 Entergy Services, LLC. All Rights Reserved.

entergy

Outreach Events

Dillard Housing and Health Fair – March 23, 2024



Love Your City & Riverside Hilton Earth Day Celebration – April 22, 2024



Senior Fest – May 24, 2024



Preservation Resource Center Mid Mod Home Tour – June 25, 2024



Urban League National Health and Family Conference – July 27, 2024





President’s Cup Golf Tournament – October 4, 2024





Bayou Road Home Fest – October 20, 2024



Agenda for Children Fall Festival – October 25, 2024



Mayor’s Neighborhood Summit – November 16, 2024



Entergy Customer Appreciation Day – November 18, 2024





EVALUATION, MEASUREMENT & VERIFICATION OF THE PROGRAM YEAR FOURTEEN ENERGY SMART PROGRAMS

SUBMITTED TO: ENTERGY NEW ORLEANS

SUBMITTED ON: AUGUST 11, 2025

SUBMITTED BY: ADM ASSOCIATES, INC.

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ACRONYMS/ABBREVIATIONS

TABLE 1 ACRONYMS/ABBREVIATIONS

Acronym	Term
AC	Air Conditioner
AOH	Annual operating hours
APS	Advanced Power Strip
AR&R	Appliance Recycling & Replacement
BP	Behavioral Program
BYOT	Bring Your Own Thermostat
C&I	Commercial and Industrial
CEE	Consortium for Energy Efficiency
CF	Coincidence factor
CFL	Compact fluorescent lamp (bulb)
CFM	Cubic feet per minute
CRE	Commercial Real Estate
DI	Direct install
DLC	Direct Load Control
DLC	Design Lights Consortium
EER	Energy efficiency ratio
EFLH	Equivalent full-load hours
EISA	Energy Independence and Security Act
EL	Efficiency loss
EM&V	Evaluation, Measurement, and Verification
ES	ENERGY STAR®
EUL	Estimated Useful Life
GPM	Gallons per minute
HDD	Heating degree days
HID	High intensity discharge
HOU	Hours of Use
HP	Heat pump
HPwES	Home Performance with ENERGY STAR
HSPF	Heating seasonal performance factor
HVAC	Heating, Ventilation, and Air Conditioning
IEER	Integrated Energy Efficiency Ratio
IEF	Interactive Effects Factor
IPLV	Integrated part load value
IQW	Income Qualified Weatherization
ISR	In-Service Rate
kW	Kilowatt

Acronym	Term
kWh	Kilowatt-hour
LCA	Lifecycle Cost Adjustment
LED	Light Emitting Diode
M&V	Measurement and Verification
MFS	Multifamily Solutions
MW	Megawatt
MWh	Megawatt-hour
NC	New Construction
NTG	Net-to-Gross
PCT	Participant Cost Test
PFI	Publicly Funded Institutions
PY	Program Year
QA	Quality Assurance
QC	Quality Control
RCA	Refrigerant charge adjustment
RIM	Ratepayer Impact Measure
RLA	Retail Lighting and Appliances
ROB	Replace on Burnout
RR	Realization Rate
RUL	Remaining Useful Life
SEER	Seasonal Energy Efficiency Ratio
SK&E	School Kits and Education
TA	Trade Ally
TRC	Total Resource Cost Test
TRM	Technical Reference Manual
UCT	Utility Cost Test
VFD	Variable Frequency Drive

SAVINGS TYPES

TABLE 2 SAVINGS TYPES

Savings Types	Definition
Energy Savings (kWh)	The change in energy (kWh) consumption that results directly from program-related actions taken by participants in a program.
Demand Reductions (kW)	The time rate of energy flow. Demand usually refers to electric power measured in kW (equals kWh/h) but can also refer to natural gas, usually as Btu/hr., kBtu/hr., therms/day, etc.
Expected / *Ex Ante* Gross	The change in energy consumption and/or peak demand that results directly from program-related actions taken by participants in a program, regardless of why they participated.
Verified / *Ex Post* Gross	Latin for "from something done afterward" gross savings. The energy and peak demand savings estimates reported by the evaluators after the gross impact evaluation and associated M&V efforts have been completed.
Net / *Ex Post* Net	Verified / *Ex Post* gross savings multiplied by the net-to-gross (NTG) ratio. Changes in energy use that are attributable to a particular program. These changes may implicitly or explicitly include the effects of free-ridership, spillover, and induced market effects.
Annual Savings	Energy and demand savings expressed on an annual basis, or the amount of energy and/or peak demand a measure or program can be expected to save over the course of a typical year. The TRM provides algorithms and assumptions to calculate annual savings and are based on the sum of the annual savings estimates of installed measures or behavior change.
Lifetime Savings	Energy savings expressed in terms of the total expected savings over the useful life of the measure. Typically calculated by multiplying the annual savings of a measure by its EUL. The TRC Test uses savings from the full lifetime of a measure to calculate the cost-effectiveness of programs.

1 EXECUTIVE SUMMARY

1.1 Overview

This report provides a summary of the evaluation effort of the 2023 ("Program Year 14" or "PY14") Energy Efficiency (EE) and Demand Response (DR) portfolio by Entergy New Orleans (ENO). The Energy Smart Programs are administered between January 01, 2024, and December 31, 2024

The evaluation was led by ADM Associates Inc. (herein known as "ADM", or "the Evaluators").

1.2 Evaluation Objectives

The following activities were performed through the PY14 EM&V effort:

- Verify program tracking data and correctly apply the New Orleans Technical Reference Manual Version 7.0 (NO TRM V7.0) to calculate savings and estimate PY14 gross and net energy and demand impacts at the high impact measure, program, and portfolio levels.
- Adjust program-reported gross savings using the results of evaluation research, relying primarily on tracking system and engineering desk reviews, metered data analysis, on-site verification, and equipment metering and achieve a minimum precision of ±10% of the gross realized savings estimate with 90% confidence;
- In consultation with the Advisors, estimate net-to-gross (NTG) ratio values, which was performed following the NO TRM V7.0 and provide complete documentation and transparency of all evaluated savings estimates, and where relevant, compare with TRM calculations, as recommended;
- Provide ongoing technical reviews and guidance to implementers and ENO throughout the evaluation cycle and review tracking system data to assess data captured for new measure offerings following TRM protocols;
- Conduct EM&V research to support possible updates for the next version of the TRM, which may include information on commercial and residential envelope measures, business type lighting hours of use, and persistence of behavioral savings; and
- Complete a full process evaluation of the energy efficiency programs, but no process evaluation of the demand and behavioral programs in PY14.

1.3 Energy Smart Portfolio Overview

In PY14, the ENO Energy Smart portfolio included the following programs. The table below shows each programs' sector, type and who implemented the program for ENO.

TABLE 1-1 PY14 ENERGY SMART PORTFOLIO OF PROGRAMS

Program Name	Found in the Report As	Sector	Type	Third-Party Implementor
Home Performance with ENERGY STAR®	HPwES	Res	EE	Franklin
Income Qualified Weatherization	IQW	Res	EE	Franklin
Multifamily Solutions	MF Solutions	Res	EE	Franklin
A/C Solutions	A/C Solutions	Res	EE	Franklin
Retail Lighting and Appliances	RLA	Res	EE	Franklin
School Kits and Education	SK&E	Res	EE	National Theatre for Children
Appliance Recycling & Replacement	AR&R	Res	EE	Legacy Professional Services
Behavioral	Behavioral	Res	EE	Franklin
EasyCool Bring Your Own Thermostat	BYOT	Res	DR	Energyhub
Peak Time Rebate	PTR	Res	DR	APTIM
Battery Energy Storage System Pilot	BESS	Res	DR	EnergyHub
Electric Vehicle Charging Pilot	EV Charging	Res	DR	Sagewell
Small C&I Solutions	Small C&I	C&I	EE	APTIM
Large C&I Solutions	Large C&I	C&I	EE	APTIM
Publicly Funded Institutions	PFI	C&I	EE	APTIM
C&I Construction Solutions	C&I NC	C&I	EE	APTIM
Large C&I Automated Demand Response	Large C&I DR	C&I	DR	Honeywell

In PY14, ENO offered a portfolio of 17 programs; five demand responses (DR) and 12 energy efficiency programs which provided a comprehensive range of customer options focused on energy efficiency, demand reduction, and educational options.

ENO designed its programs to achieve the following objectives:

- PY14 *ex post* gross energy savings (kWh) goal of 107,828,001 kWh and a demand reduction (kW) target of 35,159.00 kW;[1]
- Significant energy-savings opportunities for all customers and market segments; and
- Broad ratepayer benefits.

The Evaluators calculated the results for PY14 for each C&I and residential program. Those programs are described below.[2]

- **Home Performance with ENERGY STAR® (HPwES):** This offering will achieve long-term, significantly cost-effective electric savings using local auditors and trade allies 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.

[1] These goals represent first-year energy and demand savings at the meter.

[2] The program descriptions below align with the ENO Application for Approval of the Implementation Plan for PY13 through PY14 of the Energy Smart Program. Filed July 29, 2022, in Docket Nos. UD-20-02 and UD-08-02.

HPwES will offer three levels of home energy audits. The Assessment will include a "walk-through" inspection and direct installation of low-cost measures, such as LEDs and water conservation measures. To generate additional savings at the time of the audit, demand response enabled smart thermostats to have been added as a direct install measure.

- **Retail Lighting and Appliances (RLA):** The objective of this offering is to increase the awareness and sales of efficient lighting and appliances to ENO's residential population. The offering will provide customers with the opportunity to purchase a variety of discounted products that are ENERGY STAR qualified or better. The two main program activities include (1) retailer recruitment and merchandizing and 2) administration of the incentive process (including program tracking).
- **Multifamily Solutions (MF Solutions):** This offering targets multifamily property owners (landlords) and managers, as well as apartment and condo renters. The offering will address these customers' unique needs through a combination of incentives for both direct install and prescriptive measures, and through property owner and tenant education.
- **Income Qualified Weatherization (IQW):** This offering is designed to offer qualifying customers free energy efficiency projects ranging from direct install measures, such as LED bulbs and water savings measures, to demand response enabled smart thermostats and comprehensive envelope measures.
- **A/C Solutions:** This offering will provide residential customers with a more comprehensive set of options to lower the energy consumption and cost associated with keeping their homes cool and comfortable in the summer. Customers with functioning ACs can improve the efficiency of their units with the help of a comprehensive AC tune-up or replacement. The offering will also include DR-enabled smart thermostats. The program will build capacity within the territory's HVAC trade ally network to provide value-added services to its customers.
  These services are eligible to be incentivized because they go above and beyond the standard industry practices and offerings in the marketplace.
- **School Kits and Education (SK&E):** This offering will continue to target middle school students in the New Orleans area. The program will work with local schools to enhance energy efficiency lessons and provide students with energy efficiency kits that they will install in their homes. The School Kit & Education offering will continue to provide the students with kits containing energy efficient items and the students will be able to use these items in their homes and track their energy savings.
- **Appliance Recycling and Replacement (AR&R):** This offering encourages early recycling of low efficiency appliances, such as refrigerators and freezers, for residential customers. The will also offer a refrigerator replacement option for income-qualified residential customers. This new offering will go beyond federal recycling requirements using environmentally friendly best practices for recycling all components of each appliance.
- **Behavioral:** Residential customers will receive a monthly Home Utility Report that compares them to similar and efficient households, shows their usage over time, provides tips for saving energy, and directs them to other program offerings.
- **EasyCool – Bring Your Own thermostat (BYOT):** This offering, in which residential customers purchase and install qualifying connected thermostats from device manufacturers on their own, voluntarily enroll those devices in the offering.

This offering will leverage EnergyHub's Mercury Distributed Energy Resource Management System ("DERMS"), which enables enrollment, monitoring, and load control of connected devices from the leading thermostat manufacturers and connected-home security providers.

- **Peak Time Rebate Pilot (PTR):** This offering provides incentives to residential customers for reducing their energy usage during short periods of high electricity usage. The offer was made available on a limited basis to the first customers to sign up during the Pilot phase.
- **Battery Energy Storage System Pilot (BESS):** This offering allowed customers to earn an incentive for enrollment and by participating in peak demand events. During these events, Entergy New Orleans, LLC (ENO) accessed stored energy from a home battery system to help provide more reliable power to the grid. The program allowed customers the ability to opt out without penalties. Participation was free with an eligible battery system. The program was limited to the first 30 customers who enrolled and met system qualifications. Customers qualified if they had a compatible solar photovoltaic system-connected BESS.
- **Electric Vehicle Charging Pilot (EV Charging):** This demand response pilot seeks to shift EV charging load to off-peak hours using a predetermined charging schedule. Sagewell uses software to identify potential EV chargers and invites them to participate in the program. Customers receive a monthly incentive for participating in the program. To qualify, customers must charge their car during off-peak hours at least three times a month and cannot override the charging schedule more than four times a month.
- **Small C&I Solutions:** This offering will provide small businesses (100 kW demand or less) and other qualified non-residential customers with the opportunity to achieve electricity savings through strategies designed specifically for this sector. This offering will help small business customers analyze facility energy use and identify energy efficiency improvement projects.
- **Large C&I Solutions:** The primary objective of this offering is to provide solutions for larger (greater than 100 kW demand) non-residential customers interested in energy efficiency through a prescriptive or custom approach. The Large C&I offering is designed to generate significant energy savings, as well as a longer-term market penetration by nurturing delivery channels, such as design professionals, distributors, trade allies, and Energy Service Companies (ESCOs).
- **Publicly Funded Institutions (PFI):** This offering is targeted at local publicly funded institutions. The offering will assist end use customers in overcoming barriers that are specific to publicly funded groups. Through hands-on expertise and consulting, the program benchmarks the institution's energy use and identifies a roadmap to success. Customers will be given guidance throughout their engagement with the program.
- **C&I Construction Solutions (C&I NC):** This offering will encourage customers to design and construct higher efficiency facilities than required by building codes or planned designs. This offering will be available to ground-up construction, additions, or expansions, building repurposing and commercial building restorations. The new construction offering will provide incentives for design assistance, prescriptive measures, and custom upgrades tailored to the customer's building operations.

- **Large C&I Demand Response (Large C&I DR):** This offering will be implemented by Honeywell. The objective of the program is to secure curtailable capacity from large C&I facilities. Honeywell, in coordination with ENO, will recruit, enroll, conduct DR Surveys, and install control equipment at customer sites to provide a turn-key solution for ENO Commercial customers. Specific load control shed measures are tailored to the individual customer facility and their operations.

Through its portfolio, ENO also 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 (kWh) or demand reduction (kW). The table below shows a list of the programs with their PY14 e*x post* gross goal.

TABLE 1-2 ENERGY SAVINGS (KWH) GOALS AND DEMAND REDUCTION (KW) TARGETS BY PROGRAM

Program	*Ex Post* Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh) Goal	% of kWh Goal	*Ex Post* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW) Target	% of kW Target
HPwES	3,748,121	3,404,313	110.1%	1,263.71	966.00	130.8%
IQW	3,598,721	3,220,972	111.7%	2,556.17	66.00	3873.0%
RLA	2,177,373	1,558,999	139.7%	232.10	16.00	1450.6%
MF Solutions	2,650,261	2,526,471	104.9%	801.60	145.00	552.8%
A/C Solutions	4,210,803	3,322,555	126.7%	1,861.19	1,453.00	128.1%
SK&E	707,601	797,089	88.8%	86.84	107.00	81.2%
AR&R	188,069	1,785,774	10.5%	23.29	26.00	89.6%
Behavioral	16,390,198	19,186,619	85.4%	2,765.00	0.00	N/A
EasyCool (BYOT)	0	0	N/A	6,251.00	11,600.00	53.9%
Peak Time Rebate Pilot	12,796	0	N/A	1,283.00	998.00	128.6%
BESS Pilot	0	53,347	0.0%	383.17	0.00	N/A
EV Charging Pilot	0	0	N/A	97.21	1,125.00	8.6%
Large C&I DR	36,961	0	N/A	2,494.77	8,870.00	28.1%
Small C&I Solutions	4,311,554	6,349,948	67.9%	818.08	1,112.00	73.6%
Large C&I Solutions	26,810,839	45,589,079	58.8%	4,207.24	7,291.00	57.7%
C&I NC Solutions	83,603	4,301,994	1.9%	14.42	987.00	1.5%
PFI	3,620,474	15,730,841	23.0%	471.95	397.00	118.9%
Total	**68,468,386**	**107,828,001**	**63.5%**	**25,585.64**	**35,159.00**	**72.8%**

Sums may differ due to rounding.

1.4 Sections of the Report

This report is structured as shown below:

- Section 1 Executive Summary;
- Section 2 Evaluation Findings;
- Section 3 Evaluation Methodology;
- Section 4 Home Performance with ENERGY STAR Program;
- Section 5 Income-Qualified Weatherization Program;
- Section 6 Retail Lighting and Appliances Program;
- Section 7 Multifamily Solutions Program;
- Section 8 A/C Solutions Program;
- Section 9 School Kits and Education Program;
- Section 10 Appliance Recycling & Replacement Program;
- Section 11 Behavioral Program;
- Section 12 EasyCool - Bring Your Own Thermostat Program;
- Section 13 EasyCool for Business Program;
- Section 14 Large Commercial & Industrial Demand Response Program;
- Section 15 Small Commercial & Industrial Solutions Program;
- Section 16 Large Commercial and Industrial Solutions Program;
- Section 17 Commercial & Industrial Construction Solutions Program;
- Section 18 Publicly Funded Institutions Program;
- Appendix A – Commercial Site Reports;
- Appendix B – Cost-Effectiveness Evaluation; and

2 EVALUATION FINDINGS

The following subsections provide a summary of the portfolio-level findings and any cross-cutting evaluation activities that occurred over the course of the PY14 EM&V effort. Specifically, this includes:

- A summary of EM&V activities and expenditures;
- A summary of program and portfolio performance; and
- High-level findings that cut across programs.

2.1 Summary of Evaluation Effort

The table below summarizes the total EM&V expenditures and total program expenditures.

TABLE 2-1 PORTFOLIO EM&V EXPENDITURES

Total PY14 EM&V Expenditures	Total PY14 Program Expenditures	EM&V as % of Expenditures
$1,069,502	$21,129,903	5%

Sums may differ due to rounding.

To facilitate a thorough evaluation, the Evaluators conducted several primary research and data collection activities, including site visits, interviews with program and implementer staff, customer surveys, and market actor interviews. The Evaluators conducted participant surveys for programs using the collected self-reported data to inform net impacts for those programs. The results of these analyses informed our calculation of NTG values.

The Evaluators followed the NO TRM V7.0 in designing both the focus and level of effort for each process evaluation. For all programs, the Evaluators performed telephone discussions with the primary program staff and the primary implementation staff for most programs.

2.1.1 SUMMARY OF DATA COLLECTION

The tables below provide an overview of site visits and process data collection in PY14. All process data collection was conducted between October 2024 and January 2025. Evaluators also conducted staff interviews for each of the programs.

TABLE 2-2 SITE VISIT DATA COLLECTION OVERVIEW

Program	Sample Design Quota	Recruitment Mode	Number of Times Contacted	Total Population	Population Targeted	Total Participants Called	Scheduled Site Visits	Response Rate	Number of Site Visits Completed	Precision
HPwES	68	Phone	1	5,128	459	346	66	19%	54	11%
RLA	25	Phone	1	9,925	293	15	7	47%	7	31%
MF Solutions	68	Phone & Email	3	7,067	1393	N/A	31	N/A	19	19%
IQW	35	Phone	1	4,576	475	134	55	41%	49	11%
A/C Solutions	35	Phone	1	3,867	1706	92	52	57%	31	15%
Total	**231**			**30,563**	**4,326**		**211**		**160**	

TABLE 2-3 SUMMARY OF PROCESS DATA COLLECTION

Program	Instrument	Mode	Number of Times Contacted	Population Targeted	Completed	Response Rate	Precision	Incentive Amount
HPwES	Participant Survey	Email/ Phone	3	1,773	62	3.5%	10.3%	$25
IQW	Participant Survey	Email/ Phone	3	1,745	43	2.5%	12.4%	$25
RLA	Participant Survey	Email/ Phone	3	8,742	266	3.0%	5.0%	$25
MF Solutions	Property Manager Interview	Email/ Phone	3	9	1	11.1%	82.3%	$25
A/C Solutions	Participant Survey	Email/ Phone	3	2,053	55	2.7%	10.9%	$25
SK&E	Participant Survey	Email/ Phone	3	4,104	165	4.0%	6.3%	$0
AR&R	NA	NA	NA	NA	NA	NA	NA	NA
Behavioral	NA	NA	NA	NA	NA	NA	NA	NA
EasyCool BYOT	NA	NA	NA	NA	NA	NA	NA	NA
PTR Pilot	Participant Survey	Email	1	5,049	580	11.5%	3.2%	$10
BESS Pilot	NA	NA	NA	NA	NA	NA	NA	NA
EV Pilot	NA	NA	NA	NA	NA	NA	NA	NA
Large C&I DR	NA	NA	NA	NA	NA	NA	NA	NA
Small C&I Solutions	Participant Interviews	Email/ Phone	3	123	6	4.9%	NA	$25
Large C&I Solutions	Participant Interviews	Email/ Phone	3	65	4	6.2%	NA	$25
C&I NC Solutions	NA	NA	NA	NA	NA	NA	NA	NA
PFI	Participant Interviews	Email/ Phone	3	16	5	31.3%	NA	$25
C&I Cross-Cutting	Nonparticipant Survey	Email/ Phone	3	19,652	34	0.2%	14.1%	$25
C&I Cross-Cutting	Trade Ally Interviews	Email/ Phone	3	78	8	10.3%	NA	$25

2.1.1.1 Impact Data Collection

The Evaluators collected and verified project data through residential site visits in PY14. Site visits were scheduled via telephone outreach efforts, reaching out to customers and property managers that participated in residential programs.

In PY14, a total of 152 residential site visits were completed to verify project measures. Among the site visits completed, 54 were for the HPwES program, 34 were for IQW program, two (2) were for MF Solutions program, and 55 were for the AC Solutions program. In addition to these site visits, the Evaluators completed three (7) ride-along assessments to accompany the third-party implementer (TPI) that administered the AR&R program.

The ride-along served to gather insights into the AR&R program. For commercial programs, the Evaluators conducted eight sites visits for sampled Small Commercial projects, nine for Large C&I and four for PFI.

The primary goal of these site visits was to verify the installation and accuracy of information collected on the application, with an emphasis on achieving 90% confidence and 10% precision. A random sampling process, with a focus on high-impact measures (HIM), determined the selected sites.

For the MF Solutions program, the Evaluators attempted to contact four (4) different property managers via telephone and via email communication, however, only two (2) responded to our outreach efforts. Ultimately, due to scheduling conflicts, only one of the property managers was available to accommodate a week's worth of site visits. In total, the Evaluators completed 16 site visits within one apartment complex in late January 2024.

Overall, the residential site visits achieved a precision of ± 9.0%.

More details about commercial site visits can be found in Section 3.4.1. The commercial site visits achieved a precision of ± 36.1%.

2.1.1.2 Process Data Collection

The Evaluators completed surveys and interviews with customers and active trade allies as part of the PY14 evaluation to collect information for use in verifying participation, assessing net savings, assessing the customer experience and satisfaction with programs, and levels of program awareness. The data collection is summarized above in Table 2-3.

The Evaluators also performed nine staff and implementer interviews with two program staff and nine implementer staff. Staff interviews with program staff provided insight into program management and operations.

The table below outlines the scale of staff interviews in PY14.

TABLE 2-4 SUMMARY OF STAFF INTERVIEWS

Programs	Organization	Interviewed Staff Roles	# Staff Interviewed
HPwES	ENO, APTIM, & Franklin,	ENO Energy Efficiency Project Manager, ENO DSM Manager, APTIM Program Director, Franklin Program Manager	4
RLA			
MF Solutions			
IQW			
A/C Solutions			
SK&E	ENO, APTIM, & NCT	ENO Energy Efficiency Project Manager, ENO DSM Manager, National Children's Theater	3
AR&R	Legacy Professional Services	ENO EE Project Manager, ENO DSM Manager, Legacy Program Manager, Legacy Outreach Lead, Legacy Marketing Specialist	5
Behavioral	ENO, APTIM, Franklin	ENO EE Project Manager, ENO DSM Manager, APTIM Program Director, Franklin Program Manager	4

EasyCool BYOT	ENO, APTIM, EnergyHub	ENO EE Project Manager, ENO DSM Manager, EnergyHub Associate Director, APTIM Program Director	4
PTR	ENO & APTIM	ENO EE Project Manager, ENO DSM Manager, APTIM Program Director	4
Residential Battery Pilot	ENO, APTIM, EnergyHub	ENO EE Project Manager, ENO DSM Manager, APTIM Program Director, EnergyHub Associate Director	4
EV Pilot	ENO & Sagewell	ENO EE Project Manager, ENO DSM Manager, Sagewell Project Manager	3
C&I NC	ENO & APTIM	ENO EE Project Manager, ENO DSM Manager, APTIM Program Director, APTIM Commercial Program Manager,	4
Small C&I Solutions			
Large C&I Solutions			
PFI			
Large C&I DR	ENO & Honeywell	ENO EE Project Manager, ENO DSM Manager, Former Honeywell Program Manager, New Honeywell Program Manager Honeywell Energy Products Manager	5

2.1.2 IMPACT EVALUATION FINDINGS

The Energy Smart portfolio achieved 63.5% of planned *ex post* gross energy (kWh) savings and 72.8% of planned *ex post* gross demand reduction (kW). In addition to verifying the savings reported by ENO, the Evaluators calculated lifetime impacts. As part of this process, in the body of the report we refer to the impacts (energy savings (kWh) or peak demand reduction (kW)) accrued during the program year being evaluated (PY14) as "third year" impacts.

The tables below show the ENO goals, third year *ex ante* gross energy savings (kWh) (107,828,001 kWh) and *ex ante* gross demand reductions (35,159.00 kW), gross realization rates (96.5% for kWh, 162.7% for kW), net impacts (66,252,206 kWh and 25,136.82 kW), net-to-gross (NTG) ratios, and *ex post* gross (635,270,631 kWh) and *ex post* net (609,234,344 kWh) lifetime impacts.[3] The levelized cost of energy savings (kWh) for the PY14 portfolio is $0.0567 ($/kWh).

The figure below summarizes energy savings for each program in the portfolio.

[3] Lifetime impacts are the sum of energy savings over the course of the measure's effective useful life (EUL) and the weighted average demand reduction across the lifetime of the measure divided by the EUL (in years).



FIGURE 2-1 ENERGY SAVINGS (KWH) SUMMARY BY PROGRAM

TABLE 2-5 PORTFOLIO ENERGY SAVINGS (KWH) RESULTS

PY14 Programs	*Ex Ante* Energy (kWh)	*Ex Post* Gross Energy (kWh)	*Ex Post* Net Energy (kWh)	*Ex Post* Gross Energy (kWh) Goal	RR	NTG Ratio	% to kWh Goal
HPwES	3,753,820	3,748,121	3,670,030	3,404,313	99.8%	97.9%	110.1%
IQW	3,581,137	3,598,721	3,598,721	3,220,972	100.5%	100.0%	111.7%
RLA	2,215,406	2,177,373	1,803,832	1,558,999	98.3%	82.8%	139.7%
MF Solutions	2,847,865	2,650,261	2,389,569	2,526,471	93.1%	90.2%	104.9%
A/C Solutions	4,023,456	4,210,803	4,016,197	3,322,555	104.7%	95.4%	126.7%
SK&E	664,109	707,601	707,601	797,089	106.5%	100.0%	88.8%
AR&R	196,844	188,069	97,658	1,785,774	95.5%	51.9%	10.5%
Behavioral	16,783,105	16,390,198	16,390,198	19,186,619	97.7%	100.0%	85.4%
EasyCool (BYOT)	0	0	0	0	NA	NA	NA
Peak Time Rebate Pilot	0	12,796	12,796	0	NA	100.0%	NA
BESS Pilot	0	0	0	53,347	NA	NA	0.0%
EV Charging Pilot	0	0	0	0	NA	NA	NA
Large C&I DR	43,300	36,961	36,961	0	85.4%	100.0%	NA
Small C&I Solutions	4,570,580	4,232,566	4,056,652	6,349,948	92.6%	95.8%	66.7%
Large C&I Solutions	28,482,645	26,810,839	26,050,437	45,589,079	94.1%	97.2%	58.8%
C&I NC Solutions	102,518	83,603	57,050	4,301,994	81.5%	68.2%	1.9%
PFI	3,713,186	3,620,474	3,364,504	15,730,841	97.5%	92.9%	23.0%

PY14 Programs	*Ex Ante* Energy (kWh)	*Ex Post* Gross Energy (kWh)	*Ex Post* Net Energy (kWh)	*Ex Post* Gross Energy (kWh) Goal	RR	NTG Ratio	% to kWh Goal
Total	**70,977,972**	**68,468,386**	**66,252,206**	**107,828,001**	**96.5%**	**96.8%**	**63.5%**

Sums may differ due to rounding.

TABLE 2-6 PORTFOLIO DEMAND REDUCTIONS (KW) RESULTS

PY14 Programs	*Ex Ante* Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	*Ex Post* Net Savings (kW)	*Ex Post* Gross Savings (kW) Target	RR	NTG Ratio	% to kW Target
HPwES	1,227.32	1,263.71	1,236.13	966.00	103.0%	97.8%	130.8%
IQW	2,551.22	2,556.17	2,556.17	66.00	100.2%	100.0%	3873.0%
RLA	218.15	232.10	186.32	16.00	106.4%	82.8%	1450.6%
MF Solutions	768.80	801.60	722.75	145.00	104.3%	90.2%	552.8%
A/C Solutions	1,769.56	1,861.19	1,766.36	1,453.00	105.2%	94.9%	128.1%
SK&E	82.08	86.84	86.84	107.00	105.8%	100.0%	81.2%
AR&R	22.89	23.29	12.12	26.00	101.8%	52.0%	89.6%
Behavioral	0.00	2,765.00	2,765.00	0.00	NA	100.0%	NA
EasyCool (BYOT)	0.00	6,251.12	6,251.12	11,600.00	NA	100.0%	53.9%
Peak Time Rebate Pilot	0.00	1,282.51	1,282.51	998.00	NA	100.0%	128.5%
BESS Pilot	332.28	383.17	383.17	0.00	115.3%	100.0%	NA
EV Charging Pilot	0.00	97.21	97.21	1,125.00	NA	100.0%	8.6%
Large C&I DR	2,925.90	2,494.77	2,494.77	8,870.00	85.3%	100.0%	28.1%
Small C&I Solutions	893.58	792.98	760.02	1,112.00	88.7%	95.8%	71.3%
Large C&I Solutions	4,445.74	4,207.24	4,087.92	7,291.00	94.6%	97.2%	57.7%
C&I NC Solutions	21.98	14.42	9.84	987.00	65.6%	68.2%	1.5%
PFI	462.05	471.95	438.59	397.00	102.1%	92.9%	118.9%
Total	**15,721.56**	**25,585.27**	**25,136.83**	**35,159.00**	**162.7%**	**98.2%**	**72.8%**

Sums may differ due to rounding.

TABLE 2-7 PORTFOLIO LIFETIME ENERGY SAVINGS (KWH) RESULTS

PY14 Programs	*Ex Post* Gross Energy Savings (kWh)	*Ex Post* Net Energy Savings (kWh)	EUL	*Ex Post* Gross Lifetime Energy Savings (kWh)	*Ex Post* Net Lifetime Energy Savings (kWh)
HPwES	3,748,121	3,670,030	14.2	53,357,417	52,207,314
IQW	3,598,721	3,598,721	15.5	55,673,337	55,673,337
RLA	2,177,373	1,803,832	8.8	19,055,909	16,128,394
MF Solutions	2,650,261	2,389,569	14.6	38,710,100	34,902,395
A/C Solutions	4,210,803	4,016,197	9.2	38,751,537	38,858,193

SK&E	707,601	707,601	7.7	5,431,735	5,431,735
AR&R	188,069	97,658	10.9	2,049,177	1,070,079
Behavioral	16,390,198	16,390,198	1.0	16,390,198	16,390,198
EasyCool (BYOT)	0	0	1.0	0	0
Peak Time Rebate Pilot	12,796	12,796	1.0	12,796	12,796
BESS Pilot	0	0	1.0	0	0
EV Charging Pilot	0	0	1.0	0	0
Large C&I DR	36,961	36,961	1.0	36,961	36,961
Small C&I Solutions	4,311,554	4,132,357	8.4	35,732,322	34,247,212
Large C&I Solutions	26,810,839	26,050,437	10.9	293,424,504	285,102,479
C&I NC Solutions	83,603	57,050	15.0	1,251,444	853,984
PFI	3,620,474	3,364,504	13.4	48,451,412	45,025,859
Total	**68,468,386**	**66,252,206**	**8.9**	**608,328,849**	**585,940,937**

Sums may differ due to rounding.

Each bar in the figure below shows the contributions to *ex ante* gross energy savings (kWh) for each measure in the commercial sector. LED lighting (51%), building automation software (23%), and HVAC (18%) were the high impact measures, and equal to 92% of C&I *ex post* energy savings.

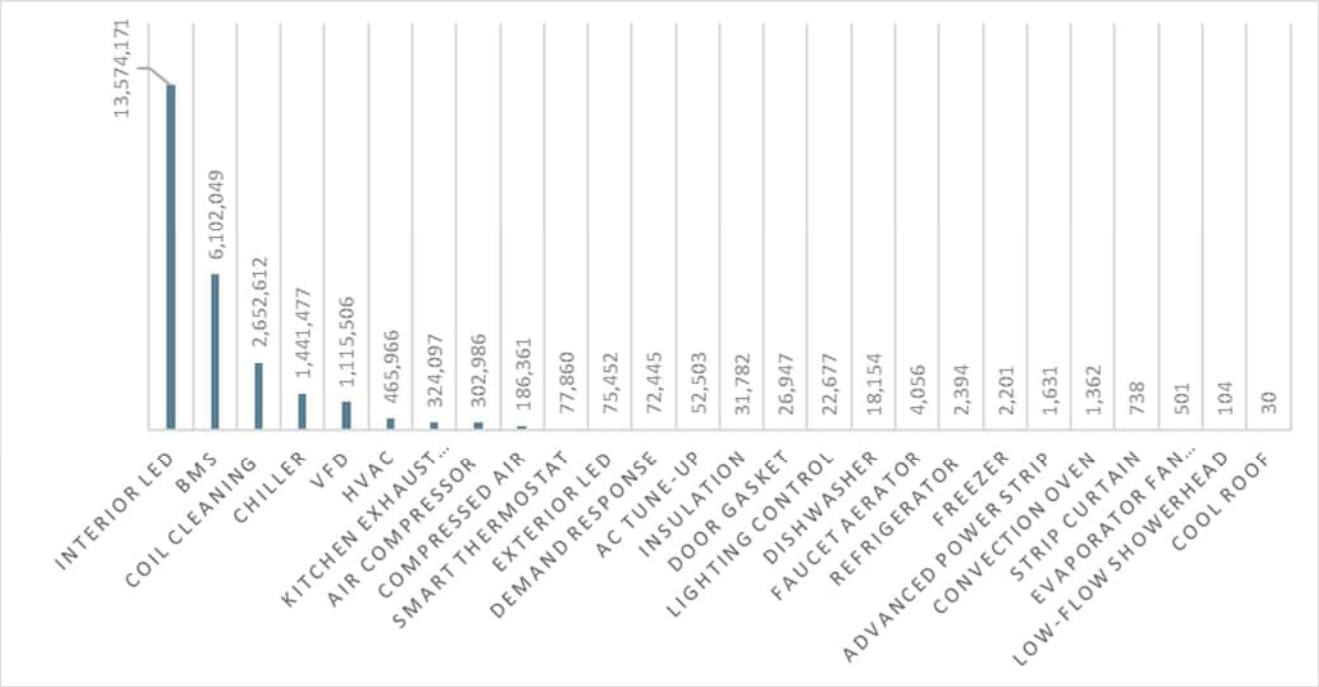


FIGURE 2-2 C&I *EX POST* KWH BY MEASURE

Each bar in the figure below shows the contributions to energy savings for each measure in the residential sector. LED lamps (54%), duct sealing (21%), and behavioral (15%) are the high impact measures, and equal to 91% of residential *ex post* energy savings.

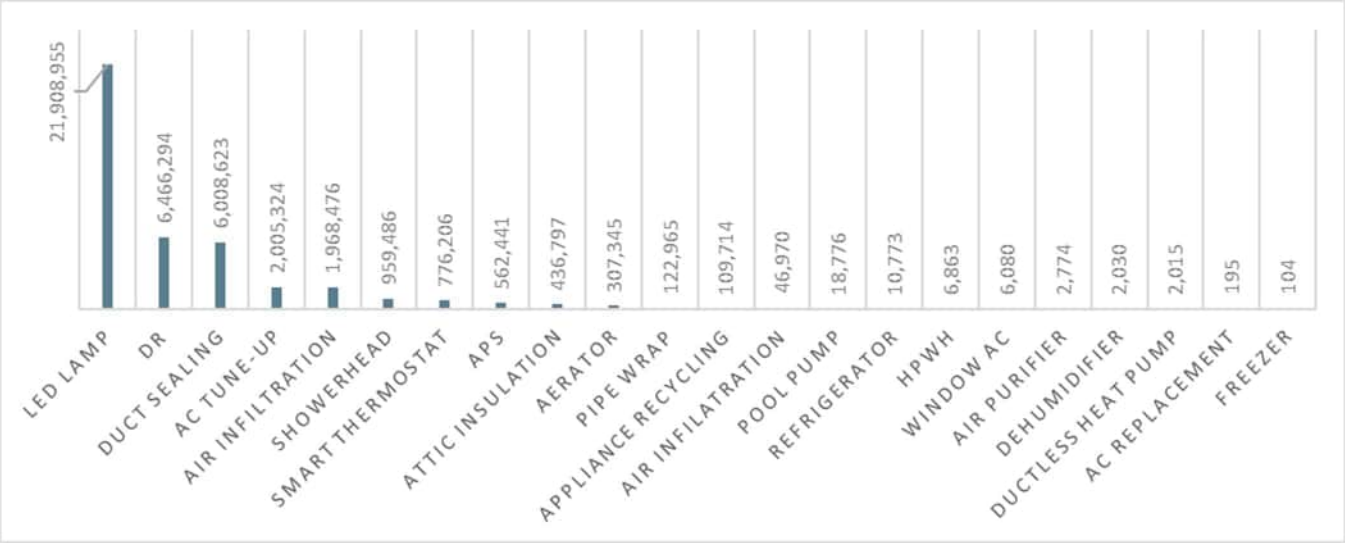


FIGURE 2-3 RESIDENTIAL *EX POST* BY MEASURE

A summary of participation and gross incentive spent by program can be found in the table below.

TABLE 2-8 PARTICIPATION AND INCENTIVE SPEND BY PROGRAM

Program	Count of Participants	Gross Incentive Expenditures ($)
HPwES	5,128	$985,388
IQW	9,925	$1,954,318
RLA	7,067	$938,236
MF Solutions	4,576	$612,533
A/C Solutions	3,867	$673,431
SK&E	24,612	$83,880
AR&R	271	$88,450
Behavioral	131,430	$0
EasyCool (BYOT)	5,085	$229,825
Peak Time Rebate Pilot	4,900	$82,100
BESS Pilot	78	$34,201
EV Charging Pilot	0	$13,727
Large C&I DR	191	$146,139
Small C&I Solutions	25	$704,568
Large C&I Solutions	12	$4,008,341
C&I NC Solutions	17	$17,916
PFI	238	$439,412
Total	**198,108**	**$11,012,464**

Sums may differ due to rounding.

Budgets and expenditures are summarized in the table below.

TABLE 2-9 BUDGETS AND ACTUAL SPEND SUMMARY

Program	Budgeted Expenditures	Actual Expenditures	Spending (% of Budget)	Energy Savings (% of Goal)	Levelized ($ per kWh)

HPwES	$1,791,010	$1,511,479	89.5%	110.1%	$0.048
RLA	$1,125,629	$1,465,289	127.2%	139.7%	$0.119
MF Solutions	$1,000,035	$933,555	92.8%	104.9%	$0.045
IQW	$2,395,956	$2,587,745	110.5%	111.7%	$0.084
A/C Solutions	$1,498,799	$880,110	61.5%	126.7%	$0.027
SK&E	$319,682	$306,886	70.7%	88.8%	$0.057
AR&R	$581,634	$365,064	64.2%	10.5%	$0.227
Behavioral	$507,224	$476,318	101.6%	85.4%	$0.031
EasyCool (BYOT)	$961,380	$811,126	86.6%	NA	$0.000
PTR Pilot	$246,253	$251,020	112.6%	NA	$21.670
BESS Pilot	$236,466	$159,201	68.1%	0.0%	$0.000
Small C&I Solutions	$1,454,957	$1,201,341	98.2%	66.7%	$0.090
Large C&I Solutions	$9,163,958	$7,050,189	81.7%	58.8%	$0.043
PFI	$3,600,302	$1,415,561	40.2%	23.0%	$0.060
C&I NC Solutions	$991,962	$660,165	66.7%	1.9%	$0.545
Large C&I DR	$782,004	$423,023	21.8%	NA	$4.621
EV Charging Pilot	$258,550	$145,464	6.5%	NA	$0.000
Total	**$26,915,801**	**$20,643,536**	**78.5%**	**63.5%**	**$0.057**

Sums may differ due to rounding.

2.1.3 PROCESS EVALUATION FINDINGS

The process evaluation for the residential and commercial and industrial (C&I) programs encompassed a wide array of activities aimed at comprehensively assessing program efficacy and operational processes. These activities included:

- Staff Interviews: Engaging program staff in interviews to gain insights into program implementation, challenges, and successes, as well as to gather perspectives on areas for improvement.
- Site Visits: Conducting on-site visits to program locations to observe operations, assess program delivery, and gather firsthand information on program execution and impact.
- Participant Surveys and Interviews: Administering surveys and interviews to program participants to solicit feedback on their experiences, satisfaction levels, and perceptions of program effectiveness.
- Nonparticipant Surveys: Administering surveys to nonparticipants to understand barriers to participation and perceptions of Entergy.
- Trade Ally Interviews: Interviewing trade allies involved in program delivery to understand their perspectives, challenges, and recommendations for enhancing collaboration and program outcomes.
- Property Manager Interviews: Interviewing property managers to gather insights into their engagement with the program, experiences with program implementation, and suggestions for program improvement.
- Review of Program Documentation: Thoroughly reviewing program documentation, including program guidelines, protocols, and procedural documents, to assess program structure and alignment with objectives.
- Review of Forward-Facing Materials: Analyzing forward-facing materials such as program brochures, websites, and promotional materials to evaluate their effectiveness in communicating program offerings and engaging stakeholders.

By undertaking these comprehensive evaluation activities across various program components and stakeholder groups, the evaluation team was able to gain a multifaceted understanding of program dynamics, strengths, and areas for enhancement. This holistic approach facilitated the generation of actionable insights and recommendations to inform program refinement and optimization efforts.

2.1.3.1 Energy Smart Cross-Cutting Findings

2.1.3.1.1 *Energy Smart Cross-Cutting Trade Ally Findings*

In PY14, evaluators expanded on previous research by conducting a benchmarking study of other utility trade ally programs and further investigating the trade ally participation barriers identified by PY13 focus group participants. This research aimed to provide ENO with insights into how other utilities manage their trade ally networks and help identify potential strategies and tactics for improving ENO's own network.

Three research questions were considered:

- How do other utilities structure their Trade Ally driven programs?
- How do other utilities approach the key issues identified during PY13's focus groups?
- What are best practices for identifying and engaging diverse contractors?

Evaluators identified seven utilities or program administrators to include in a benchmarking study. The team considered program design (in particular, program designs with different elements from Entergy New Orleans' program), programs leading in diversity, equity, and inclusion, programs with successful workforce development aspects, and programs in similar territories (including geography, number of customers, demographics and socio-economic factors). The seven utilities included in this research along with why they were chosen are outlined below.

- Tennessee Valley Authority (TVA) offers a minority contractor training program, has financial compensation for trade allies, and a lead referral program.
- ComEd offers a diverse energy efficiency service provide incubator program.
- NYSERDA has multiple innovative and unique workforce development programs as well as a robust trade ally network.
- Energy Trust of Oregon (Energy Trust) has one of the largest and most robust trade ally networks in the country.
- Entergy Mississippi is the same company with similar geography, but in a different state with slightly different program design.
- Salt River Project (SRP) contractors receive a percentage of their customers' rebates and SRP's network is open.
- Eversource has workforce development elements and compensation for the trade ally network.

Evaluators started with a literature review of each peer utilities' publicly available information such as websites, implementation plans, evaluation plans, regulatory findings, or conference papers.

Parallel to the literature review, evaluators developed a draft and final interview guide for peer Utility program managers or trade ally managers. The goal was to conduct three to five interviews with the peer utilities to explore the topics not found in the literature review; evaluators interviewed at least one, and sometimes multiple, representative each from six of the seven utilities above. To anonymize conversations, the terms Utility 1, Utility 2, etc. are used throughout this section. The numbers were assigned randomly to utilities and are not related to the order of bullets earlier in this section.

2.1.3.1.1.1 Program Structure

All the programs included in the Utility benchmarking have the same basic program structure. They all utilize a 3rd party implementation contractor and have a closed trade ally network. Trade allies contract with the implementation contractor in four of the interviewed utilities, while two utilities contract directly with the trade allies. All utilities interviewed described their implementation contractor as an integral part of their internal team. In many cases, trade allies were unaware that the implementation contractor belonged to a separate organization. With one exception, the implementation contractor acts as a project manager for all the utilities—they are responsible for recruiting trade allies, training trade allies on the program processes, conducting pre-and-post inspections, quality assurance activities, and for troubleshooting any issues that arise.

One Utility reported using their implementation contractor in limited circumstances to complete projects. This Utility discussed how “weatherization contractors don’t exist” in the rural parts of their service territory. In these cases, the implementation contractor’s in-house field team completes weatherization projects in the rural parts of their service territory. The implementation contractor has completed about 200 weatherization projects across multiple years using their in-house team, which the Utility reported to be a very small fraction of their portfolio. This Utility uses local trade allies in rural parts of their service territory for other project types, such as HVAC.

2.1.3.1.1.2 Awareness Building

Five of the six utilities included in this research are actively working to expand and diversify their trade ally network. Of these five utilities, four use their implementation contractor to conduct outreach and engagement with contractors. The implementation contractors’ account managers generally conduct the following types of activities to raise awareness amongst non-participating contractors:

- Social media campaigns
- Printed media, such as newsletters, campaigns
- Conducting webinars
- Attending local events
- Reaching out to contractors seen on vans or billboards by field staff
- Asking customers for referrals
- Tapping into the implementation contractors’ network of relationships

To engage diverse contractors the only activities different from those listed above discussed by interviewed utilities were translating all materials into Spanish and having a native Spanish-speaking outreach staff member employed by the implementation contractor.

Outside of these typical outreach and engagement activities conducted by most utilities and implementation contractors in the energy efficiency industry, three of the utilities also include less typical elements to raise awareness amongst and engage non-participating contractors, which are described below.

Collaborate with other utilities. One Utility has recently started working with the other utilities in the state with similar programs to engage and enroll contractors who may be servicing the same customers given the overlap in service territories. This way the programs can use consistent messaging and offer joint programming and referrals to contractors. This Utility's staff, not the implementation contractor staff, also work with local CBOs who do planning, outreach, and education to aid recruitment into the Utility's programs. The Utility staff align their work with the mission and vision of the CBOs, and provide funding to the CBO.

Use an internal outreach team to build relationships. Utility 6 has an internal outreach team in addition to their implementation contractor. This internal Utility team is the "boots on the ground face of the organization in the community" who engages with CBOs, schools, and workforce boards. While there is some overlap, Utility 6 focuses their internal outreach team on building robust relationships with organizations that represent underrepresented contractors, including providing training to these organizations. The outreach and engagement efforts of Utility 6's implementation contractor and internal outreach staff have built a large trade ally network of nearly 1,000 trade allies. Their intentional efforts to increase enrollment of diverse trade allies has worked – they enrolled 26 minority and/or women-owned trade allies in 2023, an 86% increase compared to 2022. However, the increased enrollment has not resulted in increased engagement from these trade allies. A recent evaluation found just ten trade allies represented 76% of total projects and 74% of measure incentives.

Recruit through a formal RFP process. Utility 5 enrolls contractors into their trade ally program through an RFP process, conducted at the beginning of each triannual plan. This Utility markets their programs and the RFP through quarterly newsletters and by hosting networking events across their service territories, both of which are extended to new and existing contractors. The Utility also hosts two diverse supplier events per year. The events are hosted in different geographies, are in-person, and geared towards diverse contractors. They have presentations on the programs and have booths set up for varies types of attendees such as engineering companies, property management companies, or HVAC contractors. They have found these presentations attract contractors who fit within their programs.

Another strategy involves leveraging workforce development programs to recruit trade allies. The three utilities with such programs (detailed in the Workforce Development section) use them to expand their trade ally networks.

Evaluators also observed differences in how the utilities approach trade ally engagement and program structure. The trade ally model used by five of the utilities are all predicated on the same assumption as Entergy New Orleans: that contractors will find the benefits of co-branding such as being listed on the Utility's website, offering customers incentives, and program training, valuable. However, as one interviewee said, these assumptions lead to a transactional relationship.

2.1.3.1.1.3 Trade Ally Benefits

in focus groups, Entergy New Orleans' non-participating contractors reported that one of the biggest hurdles to participation is that "time is money" and that participating in a Utility program needs to bring value to the contractors. In this research and conversations with other utilities, compensation is a universal barrier especially prevalent with small and diverse contractors. Evaluators found that compensation fell within two buckets:

- **Financial compensation**: Participating trade allies receive direct monetary compensation for completing projects.
- **Other benefits:** Participating trade allies receive indirect benefits, such as being listed on the Utility website or training and education, from being an approved trade ally.

The findings for each of these types of benefits are discussed in the following sections.

2.1.3.1.1.3.1 Financial Compensation

Four of the seven utilities included in this research offer direct financial compensation to participating trade allies.

Utility 1 provides participating trade allies in their residential and small commercial programs direct compensation. For small commercial, the Utility pays trade allies 80% of the project costs up to $10,000 which includes the cost of labor and materials. Trade allies in the residential programs are paid a flat amount for each project type. This offers participating trade allies the visibility of what project costs will be covered and what they will be paid.

To help offset the burden of the Utility's program requirements, Utility 2 offers a "cash rewards" incentive to trade allies, providing a flat fee of $50 per job. Additionally, due to the limited number of participating trade allies in its rural areas, serving rural customers has been a program challenge. To address this, the Utility pays trade allies up to $400 per job to work outside their usual service territory. Trade allies who take on jobs beyond their service area also receive compensation for travel costs.

The evaluators were not able to interview Utility 7. However, the program information available online discusses contractor awards of 5-10% of any eligible rebate amount. It gives the example: if a customer receives a rebate of $4,000 from the Utility, the trade ally can receive a "reward" of $200-$400. The customer can also choose to have their rebate assigned to the contractor who submits the project.

While not direct financial compensation for executing projects, to help support workforce development and the diversity within their network Utility 3 financially compensates trade allies who mentor trade allies who are new to energy efficiency or new to the Utility's network. This also helps trade allies develop relationships with each other.

2.1.3.1.1.3.2 Other Benefits

The non-financial benefits offered by utilities to participating trade allies are summarized in Table 2 below. All 6 utilities identify trade allies as being in business with the Utility, list trade allies in their directories or databases for customer use, provide program training, and offer free network membership. All utilities also offer customer incentives to support trade allies to generate leads and close deals. At least half of the utilities offer participating trade allies co-branded materials, marketing materials, technical assistance, network newsletters and networking events.

Utility 6's approach to customer support materials goes beyond what the other utilities provide. This Utility supplies support with pre-approved marketing projects, advertisements, brochures, apparel, and website. In a somewhat similar manner, Utility 5 supports their trade allies with customer brochures and sales tools. Interestingly, amongst the utilities, Utility 5 is the only Utility to host networking events geared toward diverse suppliers. A common theme heard during Utility interviews was trade allies have a desire to network with others in their field and are eager for opportunities to connect.

Utilities 2,3,5, and 6 offer non-monetary benefits not seen widely across programs. Utility 2 finds the majority of the work and refers projects to trade allies that are a part of their low-income program network. Outside of the low income program, Utility 2 also has a customer referral program by which the Utility provides jobs to the trade allies, though the majority of the projects are developed by the trade allies. This type of referral program is something participants in the focus groups expected from Entergy New Orleans. Two utilities include more formal mentorship opportunities, one of which compensates mentors of other contractors for their time. Utility 2 and 5 have customer financing opportunities. Lastly, two utilities offer training beyond the typical how to participate in the program training. Utilities 2 and 6 offer trade allies training on soft skills such as learning effective communication and teamwork. Table 2 on the following page provides a summary of the non-financial benefits provided to trade allies across the utilities we interviewed.

TABLE 2-10 NON-FINANCIAL TRADE ALLY BENEFITS

Commonly Offered Benefits	Utility 1	Utility 2	Utility 3	Utility 4	Utility 5	Utility 6
Identification of business as a trade a Utility trade ally	x	x	x	x	x	x
Company name in directory/database	x	x	x	x	x	x

Co-branding	x	x	x		x	
Program training	x	x	x	x	x	x
Promotion of incentives	x	x	x	X	x	x
Technical assistance		x			x	x
Network newsletters		x	x		x	
Free network membership	x	x	x	x	x	x
Networking events		x	x		x	
Customer marketing materials			x		x	x
Unique Benefits						
New leads through referral process		x				
Mentorship			x	x		
Customer financing		x			x	
Soft skills training		x				x

2.1.3.1.1.4 Workforce Development

Of the six utilities interviewed, three utilities offer robust workforce development training programs. These programs go beyond the traditional "training" typically offered in Utility programs – training on the nuts and bolts of participation such as how to fill out the application, what equipment qualifies for incentives, and quality assurance requirements. These Utility programs have a strategic objective to recruit and train diverse contractors. These thoughtful program designs work to address common barriers faced by trade allies. With the help of community and intentional partnerships these utilities can open up new channels for participation by diverse individuals. In the interview process utilities reported that relationships with their customers and their reputation locally played an important role in who they sought to uplift and bring into their programs. As a result, contractors who complete the training successfully are offered opportunities to join the utilities trade ally network.

2.1.3.1.1.4.1 Utility 2

Utility 2 runs a workforce development program launched in 2019. The program recruits and trains contractors for its trade ally network to deliver weatherization services as part of their two low-income programs. Utility 2 intentionally works to recruit diverse contractors into their workforce development program, with an emphasis on minority and veteran owned businesses.

They have several partnerships within the community and affinity groups to help with awareness building and recruitment of diverse contractors into the training program. Utility 2 works closely with Goodwill serving two cities within the Utility's service territory. One Goodwill has close relationships with local incarceration facilities

and organizations helping formerly incarcerated individuals find employment. The other Goodwill supports Utility 2 to produce culturally relevant messaging to share the job opportunities with potential workers who speak Spanish. Outside of Goodwill, Utility 2 engages in the community by going to local events and churches to share about the workforce development program. Lastly, the Utility goes to local high schools to educate students on careers in the clean energy field and construction job opportunities. This shows them they have viable high paying job options in the future if they are interested.

Contractors who participate in the workforce development program receive a number of benefits, including both technical and soft skills training. On the technical side participants learn about air sealing, attic insulation and duct sealing best practices. The goal of soft skills training is to support the contractors to become better professionals. Soft skills training includes the importance of timeliness, job mobility, and the consequences of job hopping. Beyond training offerings, participants receive gas cards or assistance with licensing to help overcome transportation barriers. Lastly, the Utility is working to expand training opportunities to include welding and to offer childcare.

Once contractors have completed the workforce development trainings, they can participate in a job fair or go on to work for the two Utility programs' low-income programs as a trade ally. As shown in Table 2, Utility 2 has a referral program for trade allies participating in their low-income programs. This referral program helps to bolster the new trade ally's business base.

Utility 2 reported that their 2019 pilot resulted in recruiting 28 new minority contractors into the Quality Contractor Network. In 2021, 10 contractors participated in the training program.

2.1.3.1.1.4.2 Utility 3

Utility 3 has an incubator program that targets diverse contractors. The incubator trains diverse contractors on the skills needed to be a trade ally within their network with the goal of enabling diverse contractors to join the trade ally network at the conclusion of the incubator program. In a cohort style approach, the incubator provides back-office training and support, assistance with obtaining required certifications, training on project financing, how to complete energy efficiency projects, how to represent the portfolio to customers, how to utilize community-based agency partnerships, and how to resolve barriers to building a successful business in the energy efficiency industry.

Contractors are recruited into their program through the Utility's implementation contractor's connections and resources as well as through the Utility's partnership with local CBOs. The CBOs do planning, outreach, and education to aid recruitment. The CBOs are provided funding for their time, and the Utility has chosen partners who align with the Utility program on mission and vision. This year they are also starting to see contractor referrals from incubator graduates.

Participants in the incubator program are financially compensated for their participation in the incubator program; participants receive stipends for days of work missed. In addition to financial support, incubator participants receive wrap-around services such as gas cards to help offset the cost of travel.

The program offers benefits beyond financial benefits to its participants. One benefit is a mentorship relationship between current trade allies and incubator cohort members. Another advantage is support to cohort members' business growth plans by offering additional training through its [name redacted for anonymity] Program, which trains individual workers to apply for entry-level positions in the construction industry. The Utility also assists contractors through the process of getting diverse certifications (MWBE) and for getting BPI certified.

Upon graduation, the Utility partners with their implementation contractor to facilitate on the job training sessions with the intent to hire some of the trainees who went through the incubator program. Graduates who have their own or form their businesses can join the trade ally network. The Utility also said they give the list of folks who graduate to the trade ally network so they're aware of incubator program graduates, sort of like a "roster" they share.

Graduates also can go on to become mentors to current students in the program. Mentors are compensated financially for their time having conversations and coaching. The Utility reported that in 2020 20 contractors were recruited into the incubator and 17 graduated. Of those 17, eight were accepted into the trade ally network. Last year there were 50 graduates from the incubator program.

2.1.3.1.1.4.3 Utility 4

Utility 4 has two workforce development programs. One is designed to train new workers and the other provides funding for on-the-job training. Both programs focus on creating career pathways for new and existing trade allies to enter into the labor market with adequate subsidized trainings and services to reduce barriers to participation.

The purpose of the training program is to provide a pipeline of skilled talent to support the state to meet their clean energy and equity goals established by their Climate Act. The program provides technical training, experiential learning, and placement into paid internships, apprenticeships, full-time jobs, or advanced formal training to ensure that both new and existing workers, apprentices, journeypersons, and students, as applicable, have the skills, experience, and qualifications required to meet industry demand.

The actual training is conducted by vendors chosen by Utility 4 through an RFP process. Host organizations plan and execute training and recruit and screen participants (including marketing, outreach, interviewing, and placement).

Of the utilities included in this research, Utility 4 has the most comprehensive benefits to trade allies that follow many of the best practice ideas discussed in the framework later in this document. Participants receive the following benefits through the Clean Energy Training program:

- Work preparation activities (e.g., job readiness, coaching/mentoring, financial literacy)
- Wrap around services such as case management, transportation, child support services, homelessness prevention, mental health counseling, legal assistance, and immigrant resources
- Stipends to support individuals with barriers to employment.

After the completion of the training, trade allies are supported through job placement. Whether that is paid internships, apprenticeships, full-time job, or advanced formal training to ensure that both new and existing workers, apprentices, journeypersons, and students, as applicable, have the skills, experience, and qualifications required to meet industry demand. Utility 4 is conscious about the whole experience for participants from start to finish.

The On-The-Job training (OTJ) program provides wage subsidies to eligible businesses to help reduce the financial risk of hiring and training new workers. This program enables the state to meet the objectives of clean energy funding and to advance their climate equity and Just Transition goals by developing a workforce equipped to perform jobs in energy efficiency and clean technology and supporting disadvantaged communities and priority populations.

Utility 4 uses a mix of internal resources and external support to manage their recruitment efforts. Internally, the Utility utilizes the other programs within their clean energy network to recruit participants. Utility staff host presentations and webinars on the program with other agencies in the state. The Utility's marketing team post case studies from the program on social media. Utility 4 also creates business user guides. These guides walk businesses through the program step by step, making it more accessible for businesses and contractors to participate in the program. The state's Department of Labor (DOL) has a Virtual Career Center that all businesses in the state can access for free. The virtual career center aims to get businesses and new employees into the training programs. The virtual career center functions as a job board that notifies businesses of employees who may be suitable for their job postings and vice versa.

The following figure summarizes the reimbursement rates and durations by the type of position the new employee is hired into and the business size. There are several elements in the reimbursement aimed to support hiring diverse individuals:

- If the hiring business is a MWBE, instead of the traditional 50% wage reimbursement, they'll receive 75% reimbursement for four or six months, depending on whether they hire an individual from a disadvantaged or priority population.
- If the hiring business is small and the new hire Is from a disadvantaged or priority population, the business will receive the reimbursement for an additional two months.

- If the hiring business is large and not a MWBE but hires an individual from a disadvantaged or priority population they are eligible for reimbursement.

The Utility has a map for businesses to use to determine if a new hire is from a disadvantaged community or not.

FIGURE 2-4 REIMBURSEMENT RATES AND DURATION

Position Type	Business Classification	Business Size	Reimbursement Rate	Reimbursement Period	
				Non-Disadvantaged Community/Priority Population Worker	Disadvantaged Community/Priority Population Worker
General Clean Energy	Business not registered/certified as MBE/WBE/SDVOB	2 – 100 employees	50%	16 Weeks	24 Weeks
		101 or more employees	50%	Not Eligible	24 Weeks
	Business registered/certified as MBE/WBE/SDVOB	Any Size	75%	16 Weeks	24 Weeks
Solar Electric, Solar Thermal, or Wind	Business not registered/certified as MBE/WBE/SDVOB	2 employees or more	50%	Not Eligible	24 Weeks
	Business registered/certified as MBE/WBE/SDVOB	Any Size	75%	16 Weeks	24 Weeks
Heat Pumps	Business not registered/certified as MBE/WBE/SDVOB	2 employees or more	75%	16 Weeks	24 Weeks
	Business registered/certified as MBE/WBE/SDVOB	Any Size	75%	16 Weeks	24 Weeks

The Utility works closely with the State's Department of Labor (DOL) to deliver the program and help develop job skills for new workers in energy efficiency and clean technology businesses. The DOL assists participating businesses with developing OJT training plans as well as assessing the necessary skills and identifying available workers that match those skills.

The Utility encourages participation in both workforce development programs. Trainees coming out of the training program can be hired by any of the participating businesses in the OTJ program. The Utility reported the OTJ program has supported about 257 businesses with 2,082 employees hired in the past four to five years.

2.1.3.2 C&I Cross-Cutting Research

2.1.3.2.1 *C&I Cross-Cutting Participant Findings*

The Evaluators conducted interviews with customers who participated in Small C&I Solutions, Large C&I Solutions, Publicly Funded Institutions, and CI Construction Solutions to gain insight into customer satisfaction and feedback. All customers with valid email addresses included in the program's tracking data were emailed an invitation to be interviewed (n=198). With a target of 5-7 interviews per program, 15 in-depth one-on-one interviews were conducted with contacts from businesses participating in at least one Entergy New Orleans Energy Smart program. Interviews lasted about 45 minutes from October 16 to November 28, 2024.

Table 2-11 contains a breakdown of the recruitment details.

TABLE 2-11 RESEARCH SAMPLE RECRUITMENT DETAILS

Contact Details		
Total Points of Contact on Respondent List	204	
Contacts with Email Addresses	198	*Minimum 2 emails per contact*
Contacts with Phone Numbers	188	*Minimum of 2 phone calls and 1 text per contact number*
Non-contactable Entries on List	39	*Includes bad numbers, issues with voicemail, etc.*
Response Details		
Successful Interviews	15	*Replied positively, scheduled, and completed interview*
Declined or Not Qualified	37	*Declined invitation / Did not meet qualifying criteria*
Interested but Unresponsive	17	*Indicated interest via email or text but did not respond to repeated calls for further screening*
Missed Rescheduling Opportunity	4	*Did not respond to calls to reschedule missed interview appointment*

The following sections contain key C&I cross-cutting findings.

2.1.3.2.1.1 Sustainability and Energy Efficiency Perspectives

While the importance of sustainability varies among businesses, it plays a key role in operations and decision-making. Many commercial businesses engage in sustainable practices such as recycling, waste reduction, solar panels, energy management systems, water conservation, and energy-efficient appliances. Seven of 15 businesses identified sustainability as important or a priority.

> *"We try to focus on sustainability as much as possible, as much as fiscal will allow. [Sustainability is] lower waste, lower emissions... the majority of things that we do are 100% biodegradable and not contributing to landfills or wastage of water."*
> *– Owner, Coffee Shop, Small Commercial & Industrial Solutions*

> *"Our corporate office is always looking to be more energy efficient."*
> *– Manager, Hotel, Large Commercial & Industrial Solutions*

2.1.3.2.1.2 Commercial Program Benefits

The Energy Smart programs offer significant benefits to businesses in New Orleans, primarily through cost savings and energy efficiency improvements. Many businesses have reported noticeable reductions in their energy bills after implementing measures such as LED lighting upgrades, HVAC improvements, and building

automation systems. The programs also provide valuable education and guidance on energy-saving practices, with knowledgeable representatives assisting businesses in identifying areas for improvement. Additionally, the rebates and incentives offered make it financially feasible for businesses to undertake energy efficiency projects that they might not have been able to afford otherwise.

All 15 businesses highlighted the financial benefits, such as rebates and cost savings, making upgrades easier and more accessible. Many see noticeable savings on their monthly bills, reinforcing the value of energy-efficient improvements.

> *"I would say the money is always nice. The rebates are always nice. The savings and energy costs are nice."*
> *– Manager, Hotel, Large Commercial & Industrial Solutions*

> *"I went through my bills from when I had the lights installed on April 3. So, I compared my expenses through Entergy with each month pertaining to last year's cost, and I saw a big difference."*
> *– Owner, Salon, Small Commercial & Industrial Solutions*

Eight of 15 businesses cited energy efficiency improvements and the environmental benefits of sustainability as major advantages of the Energy Smart programs.

> *"It felt good to do it, just knowing that you're contributing to make a better situation that's just better for the environment."*
> *– Owner, Retail Property, Large Commercial & Industrial Solutions*

Six of 15 businesses appreciated the ease of the process and the professionalism of the vendors and installers.

> *"The process was very easy, straightforward and streamlined."*
> *– Owner, Coffee Shop, Small Commercial & Industrial Solutions*

> *"They came in, and they were incredibly professional and timely. One of the best vendors I've ever had the pleasure of working with."*
> *– Manager, Hotel, Large Commercial & Industrial Solutions*

2.1.3.2.1.3 C&I Cross-Cutting Participant Challenges and Successes

While many businesses had a positive experience with the Energy Smart program, some encountered challenges related to upfront costs, application complexity, contractor availability, and installation logistics. A few businesses struggled with the time-consuming application process, unclear program details, and confusion around workbooks. Limited contractor availability and scheduling constraints also created hurdles, particularly for businesses with seasonal operations or older infrastructure. Some businesses faced delays in receiving equipment or coordinating across departments, while others noted changes in lighting intensity after upgrades. Despite these challenges, many participants reported smooth installations and highly professional service.

Addressing concerns related to process clarity, contractor access, and financial support could further improve engagement and program outcomes. Program Challenges

2.1.3.2.1.3.1.1 FINANCIAL BARRIERS

Some businesses found that even with rebates, upfront costs remained a challenge, particularly for smaller organizations with limited budgets.

> *"The only thing I would say is that if you're prioritizing schools and hospitals, that's probably more helpful where they get a higher percentage of money, so they don't have out-of-pocket costs."*
> *– Chief Operating Officer, Charter School, Publicly Funded Institutions*

2.1.3.2.1.3.1.2 PROGRAM SCOPE AND CLARITY

Three of 15 businesses reported confusion about the scope of assistance available.

> *"In the beginning, I don't think they hammered down or were advertising their full scope of what they would do for a business."*
> *– Owner, Coffee Shop, Small Commercial & Industrial Solutions*

2.1.3.2.1.3.1.3 APPLICATION COMPLEXITY

Two businesses noted that the application process was time-consuming, particularly for those unfamiliar with it.

> *"For me, I don't have a lot of time just sitting down and figuring out what to apply for and what works and doesn't is just too time-consuming for me."*
> *– Chief Operating Officer, Charter School, Publicly Funded Institutions*

2.1.3.2.1.3.1.4 WORKBOOK CONFUSION

Two businesses described the workbooks and available options as confusing.

> *"When I started with it, I think the workbooks were a little confusing."*
> *– Director of Engineering, Commercial Spaces, Large Commercial & Industrial Solutions*

> *"I wish going forward that we'll be presented with an option of what light best works for you in the sample of that lighting."*
> *– Chief Operating Officer, Rec Center, Publicly Funded Institutions*

Clearer communication, educational materials, direct outreach, and case studies could help businesses better understand and engage with the program.

2.1.3.2.1.3.1.5 CONTRACTOR AVAILABILITY AND SCHEDULING

Two businesses reported difficulty securing contractors due to high demand.

> *"All the electricians in the program were booked out solid, so I couldn't use that program."*
> *– Owner, Leased Property, Small Commercial & Industrial Solutions*

Two businesses also mentioned scheduling constraints due to business operations or existing infrastructure.

> *"Contractors had to work with our schedule around particular sporting seasons" and "work with our rec centers regarding when things are offline."*
> *– Chief Operating Officer, Rec Center, Publicly Funded Institutions*

> *"Sometimes it's a little bit harder just due to the age of facilities."*
> *– Chief Operating Officer, Charter School, Publicly Funded Institutions*

2.1.3.2.1.3.1.6 EQUIPMENT AND TIMING ISSUES

One business cited delays in receiving equipment.

> *"It took a little time to get the actual fixtures in. I don't think anybody could control that."*
> *– Manager, Hotel, Large Commercial & Industrial Solutions*

Another mentioned coordination challenges across multiple departments.

> *"The only thing is sometimes the equipment, sometimes it's hard to nail down the original dates you put in the workbook."*
> *– Director of Engineering, Commercial Spaces, Large Commercial & Industrial Solutions*

2.1.3.2.1.3.1.7 LIGHTING CONCERNS

One business noted changes in lighting intensity post-installation.

> *"Sometimes, our ballparks went from real bright on the field to a little less bright with the LEDs."*
> *– Chief Operating Officer, Rec Center, Publicly Funded Institutions*

2.1.3.2.1.3.2 Program Successes

Despite these challenges, seven of 15 businesses reported no major hurdles and were highly satisfied with the installation process.

> *"No, actually, he came in, we had a great conversation. I didn't even know he knew how to repair a balance."*
> *– Owner, Salon, Small Commercial & Industrial Solutions*

2.1.3.2.1.4 C&I Cross-Cutting Participant Program Engagement

All 15 businesses expressed interest in participating in Entergy's Energy Smart programs again. Cost incentives were the primary motivator, with businesses appreciating both the upfront rebates and long-term energy cost savings. While financial benefits were the strongest driver, six businesses also valued the environmental impact and the push toward greater energy efficiency. Five businesses highlighted how the program helped them replace outdated systems, achieve corporate initiatives, and improve overall operations.

> *"Just getting my energy bill every month. I was like, whoa."*
> *– Office Manager, Shipping, Small Commercial & Industrial Solution*

> *"Because of this program, I've been able to replace a lot of this old equipment... It's helped me improve my service to the tenants."*
> *– Director of Engineering, Commercial Spaces, Large Commercial & Industrial Solutions*

> *"Our corporate office is always looking to be more energy efficient."*
> *– Manager, Hotel, Large Commercial & Industrial Solutions*

The Energy Smart program enabled businesses to install energy-efficient upgrades they might not have otherwise pursued. Six businesses stated they would not have completed the upgrades without the rebates, while five said they would have, but at a smaller scale or over a longer period.

> *"Absolutely not. I never would have been able to convince them to do these projects, nor would we have found the funding to do it."*
> *– Contractor, Lighting, Small Commercial & Industrial Solutions*

> *"I would have, just not on the scale that I did. Definitely the ballroom because I had no choice. But there's no way, without those rebates, I would have done all the guest floors."*
> *– Manager, Hotel, Large Commercial & Industrial Solutions*

2.1.3.2.1.5 C&I Cross-Cutting Participant Suggestions

Most businesses plan to continue engaging with Entergy's Energy Smart programs, driven by positive experiences and clear benefits. However, participants offered several suggestions to improve program accessibility and effectiveness. Key suggestions included enhancing outreach and marketing, simplifying the application process, expanding eligible upgrades, increasing rebate amounts, and improving contractor availability.

The following subsections include participants' suggestions. Program-specific evaluator recommendations begin in section 2.1.3.3.

2.1.3.2.1.5.1 Improving Outreach and Awareness

Five of 15 businesses emphasized the need for better marketing and communication to increase awareness of available programs.

> *"I just think the reach, the general reach of those who are aware of the program, needs improvement."*
> *– Owner, Coffee Shop, Small Commercial & Industrial Solutions*

> *"Maybe they could have a list of [possible updates] They could go to people's buildings and say, 'Hey, this program can do so much more in lighting.'"*

– Director of Engineering, Commercial Spaces, Large Commercial & Industrial Solutions

2.1.3.2.1.5.2 Simplifying the Application Process

Three businesses recommended streamlining the application process to make it more accessible, particularly for busy business owners.

"For me, who I don't have a lot of time, just sitting down and figuring out what to apply for and what works and doesn't work is just too time-consuming for me."
– Chief Operating Officer, Charter School, Publicly Funded Institutions

2.1.3.2.1.5.3 Expanding Eligible Upgrades and Rebates

Two businesses suggested expanding the program to cover more comprehensive HVAC upgrades.

"I guess I would like more information or engage a little more on that HVAC side."
– Director of Facilities, Private Catholic High School, Publicly Funded Institutions

Two businesses also suggested increasing rebate amounts or offering full coverage for certain projects.

"I know they haven't increased it for years. The Original project I did with the chiller plant, there was a max of $50,000, which the project was probably close to $2 million." – Director of Engineering, Commercial Spaces, Large Commercial & Industrial Solutions

2.1.3.2.1.5.4 Community Education and Awareness

Two businesses suggested incorporating educational efforts to promote energy efficiency awareness.

"Maybe do some little educational programs too for kids."
– Owner, Retail Property, Large Commercial & Industrial Solutions

"I think they should continue to try to increase people doing more energy-smart options."
– Manager, Hotel, Large Commercial & Industrial Solutions

2.1.3.2.1.5.5 Expanding Contractor Availability

One business recommended growing the contractor network to improve installation scheduling and availability.

"Have more people available to actually do the work."
– Owner, Leased Property, Small Commercial & Industrial Solutions

Enhancing outreach, simplifying processes, expanding program offerings, and increasing contractor availability could make Entergy's Energy Smart programs more accessible and beneficial for a wider range of businesses and institutions.

2.1.3.2.2 *C&I Cross-Cutting Trade Ally Findings*

Evaluators conducted interviews with trade allies who participated in at least one Entergy New Orleans Energy Smart program. All trade allies with valid email addresses in the program's tracking data (n=71) were invited to participate. In total, MDRG interviewed eight trade allies: five from the Small Commercial & Industrial program, three from Large Commercial & Industrial Solutions, one from Publicly Funded Institutions, and one from Commercial & Industrial Construction Solutions. Two trade allies had worked with both the small and large C&I programs. Interviews lasted approximately 45 minutes and took place from October 28 to October 31, 2024.

Table 2-12 contains a breakdown of the recruitment details.

TABLE 2-12 RESEARCH SAMPLE RECRUITMENT DETAILS

Contact Details		
Total Points of Contact on Respondent List	78	
Contacts with Email Addresses	71	*Minimum 2 emails per contact*
Contacts with Phone Numbers	73	*Minimum of 2 phone calls and 2 texts per contact number*
Non-contactable Entries on List	19	*Includes bad numbers, issues with voicemail, etc.*
Response Details		
Successful Interviews	8	*Replied positively, scheduled, and completed interview*
Declined or Not Qualified	15	*Declined invitation / Did not meet qualifying criteria*
Interested but Unresponsive	7	*Indicated interest via email or text but did not respond to repeated calls for further screening*
Missed Rescheduling Opportunity	2	*Did not respond to calls to reschedule missed interview appointment*

The following sections contain key C&I cross-cutting findings from interviews with trade allies.

2.1.3.2.2.1 Sustainability and Energy Efficiency Perspectives

Most trade allies interviewed value sustainability, with six of eight indicating it is important to their business and clients. They implement sustainable practices through energy-efficient installations, freon recapture and recycling, energy-conscious business operations, and promoting energy-efficient products.

> *"We look at water-energy water reduction methods. We look at material selection. Sometimes, our lighting electrical engineers look at ways to reduce lighting power and lighting consumption." – Design Engineer, Electrical and Mechanical, Commercial & Industrial Construction Solutions*

> *"We recycle all the bulbs and things that come out of these facilities."*
> *– Manufacturer, Lighting, Large Commercial & Industrial Solutions*

> *"When we're doing air conditioner installs on new equipment, everybody wants Energy Star-rated air conditioners." – Owner/Installer, HVAC, Small Commercial & Industrial Solutions*

2.1.3.2.2.2 Trade Ally Program Benefits

Trade allies are generally very satisfied with the Energy Smart programs, describing them as easy to work with. They appreciate the program representatives for connecting them with the right customers and providing timely support. The financial benefits are especially valuable, making energy efficiency upgrades more affordable and accessible for their clients. Many trade allies also see the program as a marketing advantage, allowing them to offer progressive solutions that help customers reduce energy costs.

2.1.3.2.2.2.1 Financial Benefits

Six of eight trade allies highlighted the program's strong economic incentives and rebates, which help businesses and customers save money.

> *"It works well from my end because it doesn't require much involvement from me; it just needs more feeding information, and it doesn't take up too much of my time. Then, the owners are happy because they can get credits they otherwise wouldn't have known about. So, it works out well." – Design Engineer, Electrical and Mechanical, Commercial & Industrial Construction Solutions*

2.1.3.2.2.2.2 Customer Satisfaction

Five trade allies noted that customers are highly satisfied with the program, appreciating both facility improvements and the energy savings.

> *"I like it when I finish, and the customer sees all the lighting and how nice it is, and they really like it. You know, in the end, everyone was satisfied."*
> *– Installer, Electrical Contracts, Small Commercial & Industrial Solutions*

2.1.3.2.2.2.3 Marketing and Business Growth

Three trade allies cited participation in the program as a valuable marketing tool that helps attract new clients.

> *"It's a good marketing tool for us because it is something that not many people know about or are doing. So, we can show the owners that we can find different avenues to save them money and energy. I think it helps with marketing our firm versus other firms."*
> *– Design Engineer, Electrical and Mechanical, Commercial & Industrial Construction Solutions*

2.1.3.2.2.3 C&I Cross-Cutting Trade Ally Challenges

Trade allies face several challenges when engaging with Entergy's Energy Smart programs, including preapproval requirements, scheduling, and financial risks. Many also find the paperwork and administrative processes for rebate applications time-consuming, particularly for smaller projects. Frequent changes in calculation tools and rebate structures can lead to confusion, and some trade allies note the limited scope of prescriptive measures as a barrier to efficiency.

2.1.3.2.2.3.1 Administrative Burden

Four of eight trade allies identified the rebate application process as a major hurdle, citing the extensive paperwork required for relatively small incentives.

> *"It takes six to eight weeks to get a hundred-dollar check...I can go out there and do the job in an hour. And she spends two hours trying to process and get all the pictures; I mean, they have a booklet you must fill out to process a $100 rebate. It's insane. There's a lot of work that goes into the hundred bucks."*
> *– Owner/Installer, HVAC, Small Commercial & Industrial Solutions*

> *"The amount of work it takes me to turn in one rebate. And I'm not doing high-dollar projects for them or rebate incentives. I spend a lot of time for my little, tiny bit of money." – Owner/Installer, HVAC, Small Commercial & Industrial Solutions*

2.1.3.2.2.3.2 Frequent Changes in Program Tools and Requirements

Two trade allies reported that ongoing changes to calculation tools and rebate structures create confusion and extra work.

> *"The only gripes we've had over the years concern how often some of these calculators or the tools we're using to determine the rebates have changed."*
> *– Installer, Lighting, Small & Large Commercial & Industrial Solutions*

2.1.3.2.2.3.3 Limited Scope of PrescriptIve Measures

Two trade allies noted that the current prescriptive measures, particularly in lighting, are too narrow, requiring custom applications for standard retrofits.

> *"Looking at the prescriptive measures, they're not all-inclusive. It's fairly limited to replacing metal halide only. If there could be some prescriptive, this is in the lighting aspect, such as any LED fixtures. Replacing fluorescent would be terrific."*
> *– Distributor, Lighting, Small Commercial & Industrial Solutions*

2.1.3.2.2.3.4 Customer Misconceptions about Rebates

One trade ally reported that some customers misunderstand the rebate amounts they are eligible for, leading to confusion.

> *"I still get some customers that believe they are getting the full $50,000 or something like that, and that's what I would assume is just a misconception of the customer."*

– Installer, Lighting, Small & Large Commercial & Industrial Solutions

2.1.3.2.2.4 C&I Cross-Cutting Trade Ally Engagement

Trade allies express high satisfaction with the Energy Smart program, with six of eight explicitly stating they were satisfied or very satisfied, while two had mixed feelings. Positive experiences stem from customer benefits, ease of use, and strong support from program representatives. The primary concerns were administrative processes and changes in rebate calculations.

"I'm very satisfied. The owners are pretty happy with the end results." – Design Engineer, Electrical and Mechanical, Commercial & Industrial Construction Solutions

"I'm very satisfied. It's a major part of my business."
– Installer, Lighting, Small & Large Commercial & Industrial Solutions

Trade allies engage in the Energy Smart program because it benefits both their clients and their businesses. The program makes upgrades more accessible, enhances marketability for trade allies, and supports business growth. Many also appreciate the broader impact on their communities and the environment.

"It's a good marketing tool for us because it is something that not many people know about or are doing. And then the owners are also happy because they can get some credits they otherwise wouldn't have known about." – Design Engineer, Electrical and Mechanical, Commercial & Industrial Construction Solutions

"To help fund the projects... It does play a role in which projects are going to happen." – Consultant, HVAC, Small & Large Commercial & Industrial Solutions

"To try to give back a little bit. We are in the New Orleans, Louisiana area, and we have a very large population of low-income people here."
– Owner/Installer, HVAC, Small Commercial & Industrial Solutions

"Honestly, I think one of the best parts about it is that it's helping people change and make the jump to LED, and it's incentivizing them to do it."
– Manufacturer, Lighting, Large Commercial & Industrial Solutions

2.1.3.2.2.5 C&I Cross-Cutting Trade Ally Suggestions

Trade allies generally have positive views of Entergy New Orleans' Energy Smart programs, recognizing their value in supporting businesses and customers, particularly low-income customers and small businesses. Many trade allies plan to continue participating in the programs, though they identified areas for improvement.

Key recommendations included streamlining administrative processes, particularly rebate applications and calculations, and providing more consistent and timely updates on program changes. Trade allies also suggested increased support in securing projects, expanding prescriptive measures to include common upgrades like LED replacements for fluorescent lighting, and enhancing customer outreach to raise awareness about available programs. Some expressed interest in exploring additional Entergy programs, such as those focused on compressed air systems, chillers, and new construction. Despite these areas for improvement, all eight trade allies stated they would continue working with Entergy New Orleans on future projects.

The following subsections include participants' suggestions. Program-specific evaluator recommendations begin in section 2.1.3.3.

2.1.3.2.2.5.1 Streamlining Administrative Processes

Four of eight trade allies suggested simplifying rebate applications and extending submission deadlines to allow more flexibility.

> *"On average, the submission deadline was within 30 days. Sometimes, it's nice to see windows; when [an] installation is completed, it takes more than 30 days to submit all the paperwork." – Distributor, Lighting, Small Commercial & Industrial Solutions*

2.1.3.2.2.5.2 Expanding Program Offerings

Three trade allies recommended expanding prescriptive measures, increasing HVAC incentives, and incorporating more control options.

> *"The incentives for HVAC could be higher compared to other programs, ... some additional controls added. So, like, advanced rooftop controls would be good."*
> *– Consultant, HVAC, Small & Large Commercial & Industrial Solutions*

2.1.3.2.2.5.3 Enhancing Customer Outreach

Three trade allies emphasized the need for better outreach and customer education to generate more project opportunities.

> *"I think if they could do a better job of influencing the customers to call and find us instead of us having to find them, it would be a big thing."*
> *– Installer, Electrical Contracts, Small Commercial & Industrial Solutions*

Trade allies value the Energy Smart programs and their role in promoting energy efficiency. Addressing administrative inefficiencies, expanding eligible upgrades, and improving outreach efforts could enhance program engagement and accessibility.

2.1.3.2.3 *C&I Cross-Cutting Nonparticipant Survey Findings*

Evaluators conducted a survey of C&I nonparticipants to gain insight into their awareness of Entergy energy-efficiency programs, willingness to participate in those programs, the perception of energy-efficiency, and the perception of ENO. Hundreds of program participants were initially contacted to complete the online survey. Of the total emails sent (including reminders), about half opened the emails; however, under 1 in 10 completed the

survey. To help increase the number of respondents, respondents who had not completed the survey, had not opened the survey, or had a different email listed were then contacted via phone through NOLA perspectives to complete the survey. A further 25 respondents were gathered via phone survey. A $25 incentive was offered to customers who completed the survey.

Further details of the survey campaign can be found in Table 2-13.

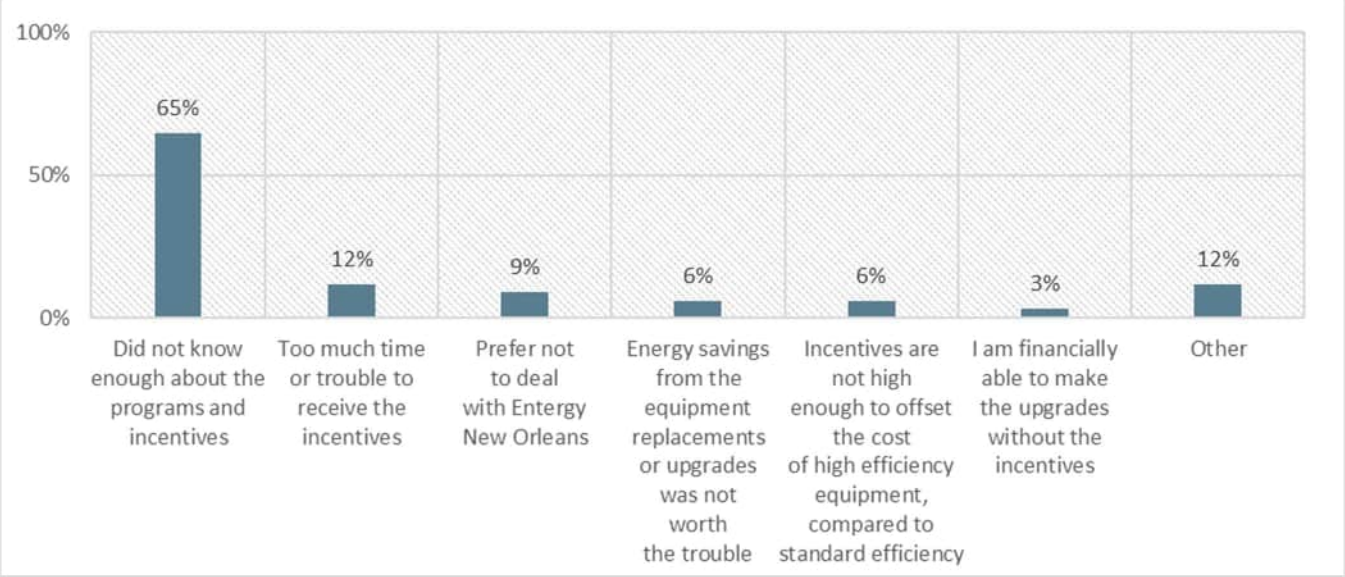
TABLE 2-13 EMAIL CAMPAIGN AND RESPONSE RATE

Nonparticipant Survey Response Breakout	
Email Completes	34
Email Incompletes	177
Email Disqualified	69
Total Email Survey Starts	280
Email IR%	12%
Email's Opened	7,855
Email Total Survey Starts of Opened %	4%
Completes of Opened %	0.4%
Email's Sent Out	19,652
Emails Opened of Email's Sent Out %	40%
Total Survey Starts of Email's Sent Out %	1%

2.1.3.2.3.1 Perceptions of Entergy

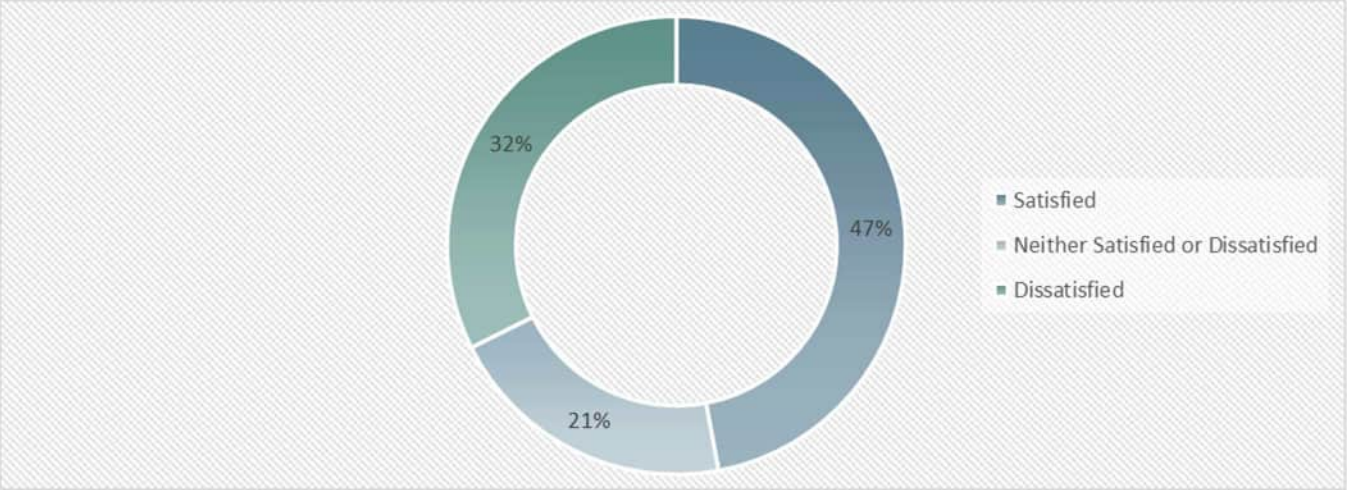
Nearly two-thirds indicate that they did not know enough about the program and its incentives to participate.

FIGURE 2-5 REASONS FOR NOT PARTICIPATING IN ENTERGY NEW ORLEANS ENERGY SMART PROGRAMS FOR BUSINESSES (N=34)



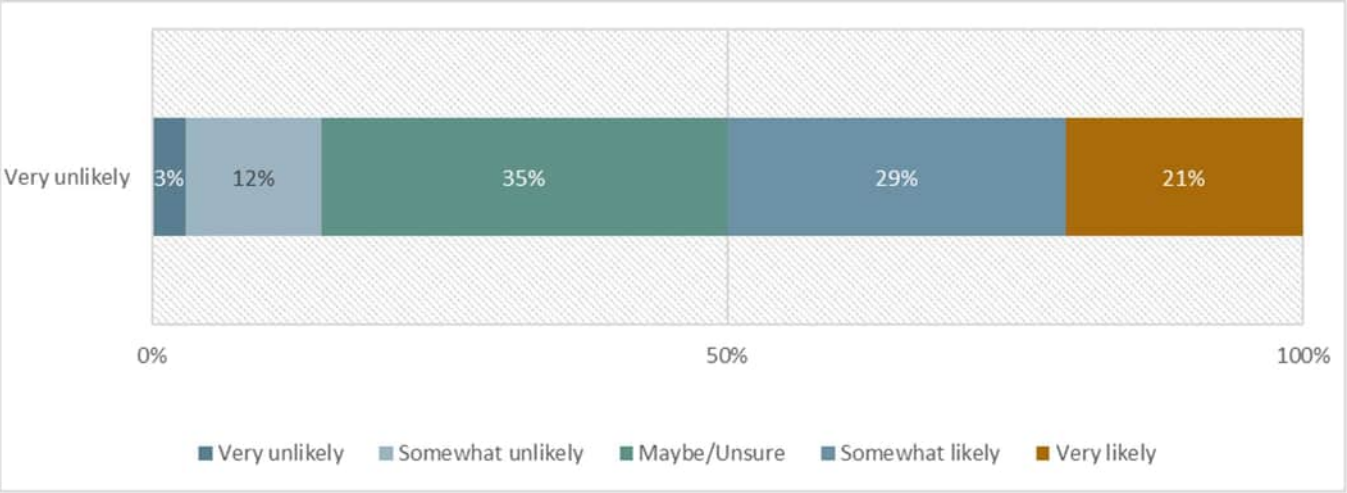
Among those not participating in programs run by Entergy New Orleans, slightly more respondents are satisfied with the utility rather than dissatisfied.

FIGURE 2-6 SATISFACTION WITH ENTERGY (N=34)



Half of nonparticipants would be somewhat or very likely to switch electric utility companies if one were available.

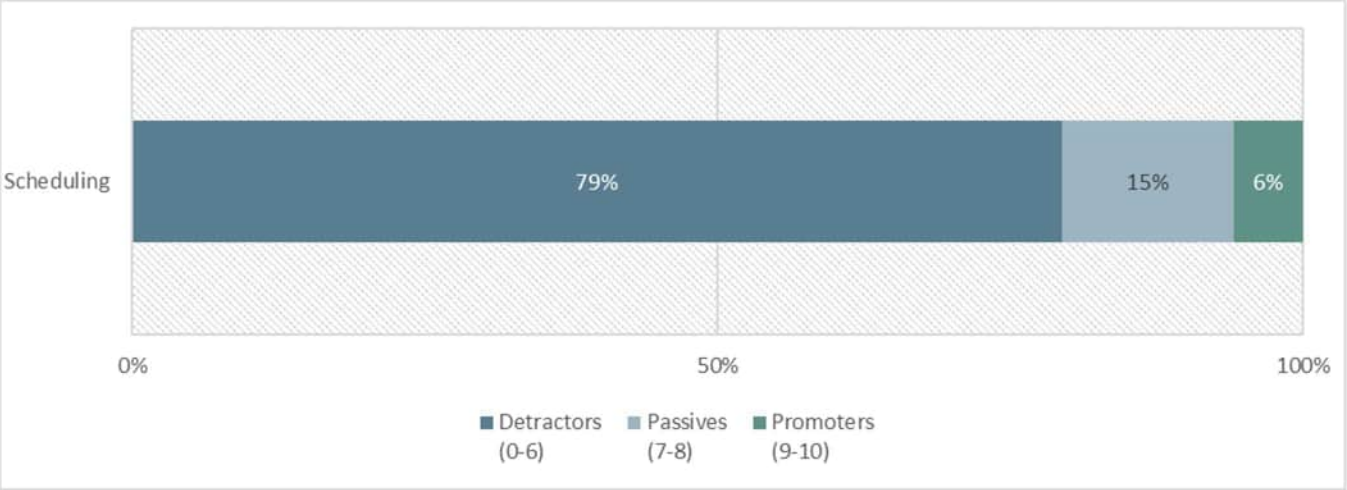
FIGURE 2-7 LIKELIHOOD TO SWITCH TO A NEW ELECTRIC UTILITY COMPANY IF ONE WERE AVAILABLE (N=34)



Many of those likely to switch if a new utility company were available often cite power outages, poor customer service, and costs as reasons to why they would switch.

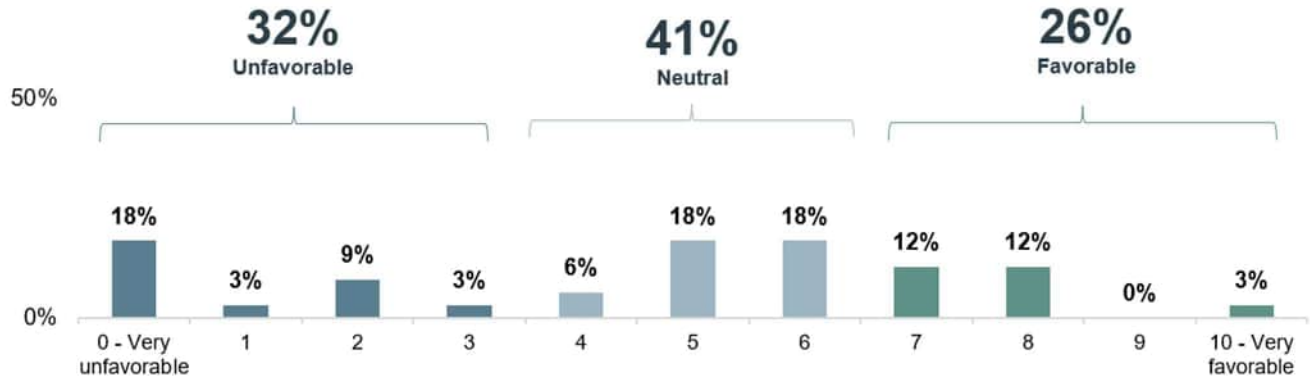
Very few would promote the brand, with just 6% likely to recommend Entergy New Orleans to a friend or colleague. Most (79%) are considered detractors of the brand, with overall NPS at -74.

FIGURE 2-8 LIKELIHOOD OF RECOMMENDING ENTERGY NEW ORLEANS TO A FRIEND OR COLLEAGUE, ASSUMING UTILITY PROVIDER OPTIONS (N=34)



Favorability of Entergy among nonparticipants was more neutral or unfavorable. Nearly 1 in 3 have an unfavorable view of the brand while just 1 in 4 have a favorable view.

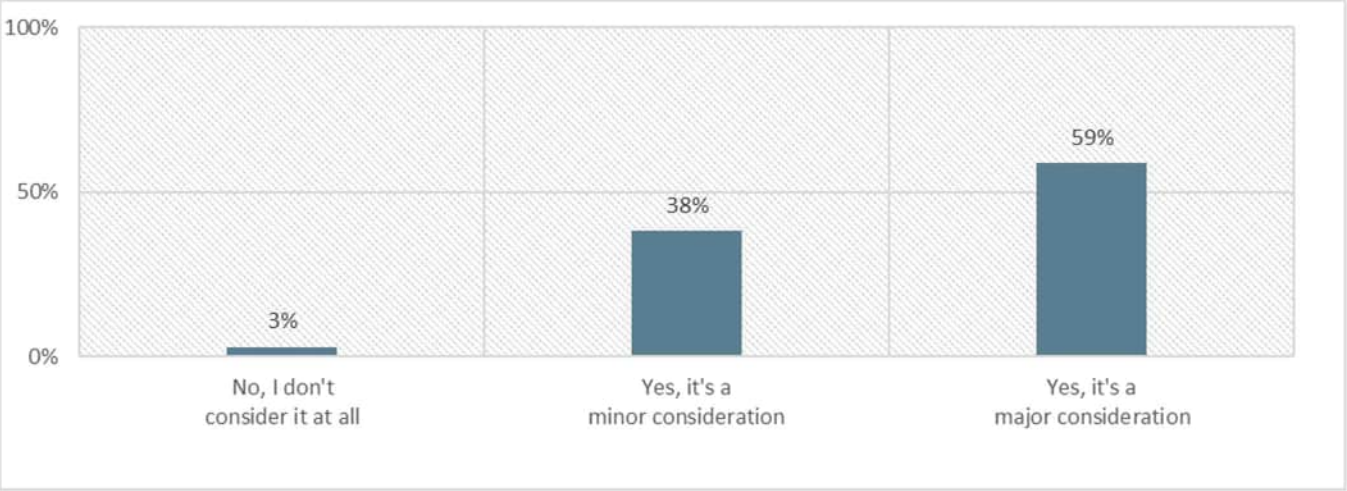
FIGURE 2-9 OVERALL IMPRESSION OF ENTERGY (N=34)



2.1.3.2.3.2 Program Awareness

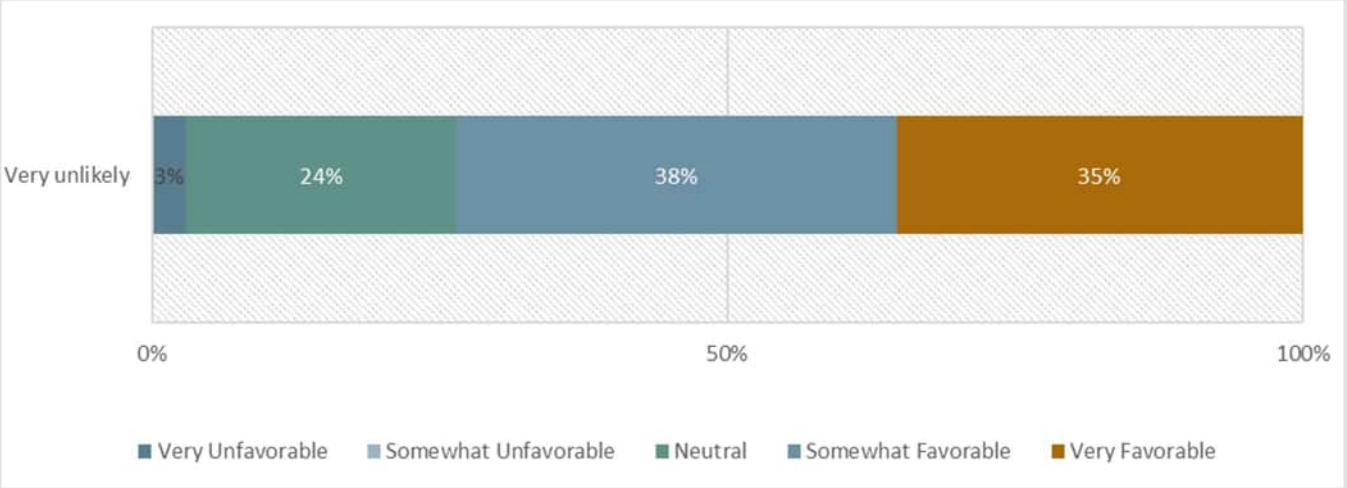
Most (97%) respondents do consider energy efficiency—with most as a major consideration—when purchasing electric appliances.

FIGURE 2-10 CONSIDERATION OF ENERGY EFFICIENCY WHEN PURCHASING ELECTRIC APPLIANCES FOR BUSINESS (N=34)



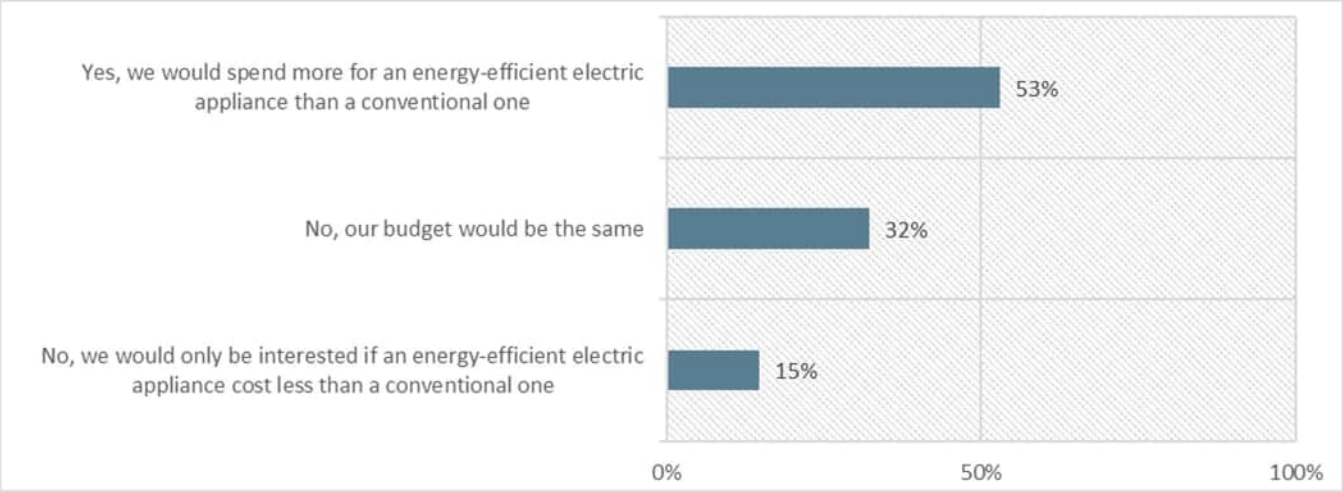
About 3 in 4 have a favorable opinion of energy conservation behaviors.

FIGURE 2-11 OVERALL IMPRESSIONS OF BEHAVIORS THAT IMPROVE ENERGY EFFICIENCY, REDUCE ENERGY CONSUMPTION AND ARE GOOD FOR THE ENVIRONMENT (N=34)



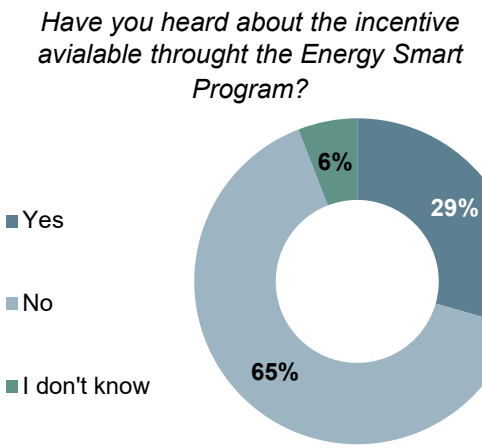
Just over half say they would be willing to spend more for an energy-efficient appliance over a conventional one.

FIGURE 2-12 BUSINESS WILLINGNESS TO SPEND MORE FOR ENERGY-EFFICIENT APPLIANCES (N=34)



About 3 in 10 have heard of the financial incentives for commercial customers through the Energy Smart Program. Among those, most heard through a mailer or an email.

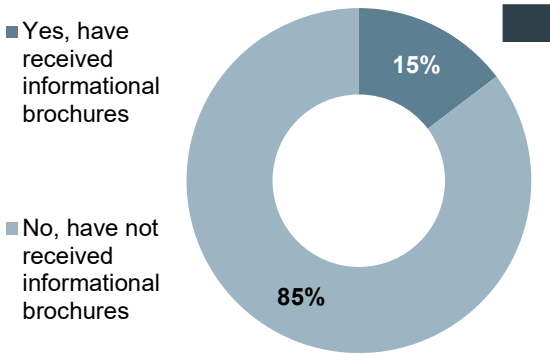
FIGURE 2-13 AWARENESS AND DISCOVERY OF FINANCIAL INCENTIVES FOR COMMERCIAL CUSTOMERS THROUGH THE ENERGY SMART PROGRAM (N=34)



Sources of Information on Energy Efficiency Program Offerings	(n=10)
Energy Smart mailer or bill insert	40%
Email from Energy Smart	30%
Email from Entergy New Orleans	20%
Entergy New Orleans mailer or bill insert	10%
Word of mouth from a personal contact	10%
Entergy New Orleans website	10%

Among those who received an informational brochure, 6 in 10 recalled that the brochure covered lighting equipment; 4 in 10 recalled HVAC equipment and commercial kitchen equipment.

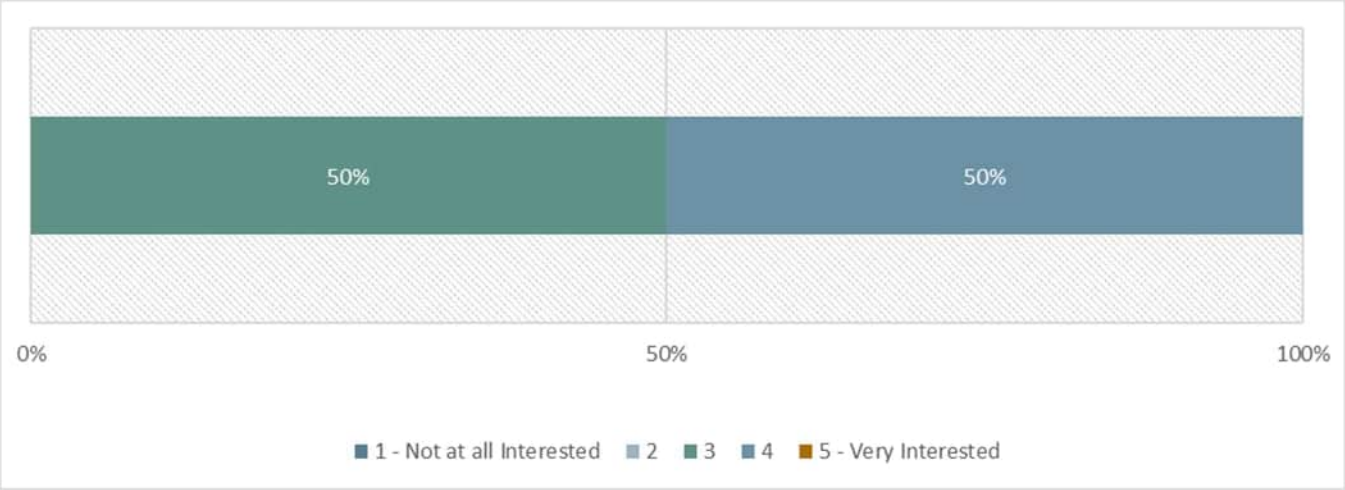
FIGURE 2-14 RECEIVED ENTERGY ENERGY SMART PROGRAM BROCHURES; RECALL OF EQUIPMENT AND SERVICES COVERED (N=34)



Types of Equipment and/or Services Brochure Covered	(n=5)
Lighting	60%
HVAC equipment	40%
Commercial kitchen equipment	40%
Lighting controls	20%
I don't remember	40%

Of the two nonparticipants who received informational materials, one felt the materials effectively encouraged them to think about purchasing new or upgrading equipment for better efficiency. The second nonparticipant suggested that these materials would be more effective if incentives were higher.

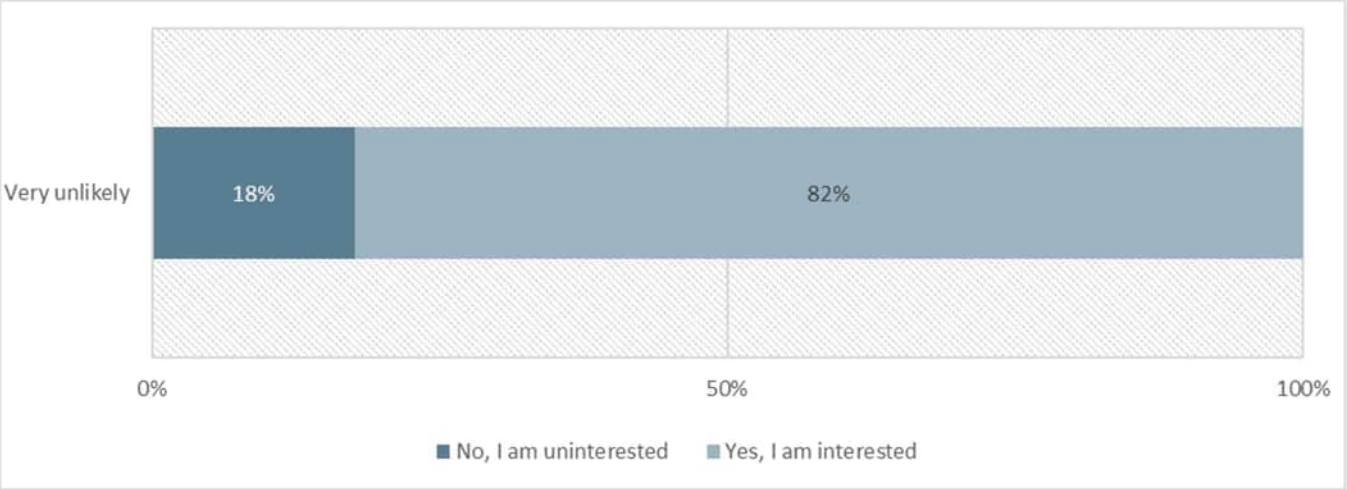
FIGURE 2-15 EFFECTIVENESS OF MATERIALS IN ENCOURAGING THE PURCHASE OR UPGRADE OF EFFICIENT HVAC EQUIPMENT (N=2)



2.1.3.2.3.3 Participation Barriers

About 8 in 10 participants are interested in making energy efficient upgrades or participating in energy efficiency programs.

FIGURE 2-16 INTEREST IN MAKING ENERGY EFFICIENT UPGRADES OR PARTICIPATING IN ANY OF ENTERGY NEW ORLEANS'S ENERGY EFFICIENCY PROGRAMS FOR YOUR BUSINESS (N=34)



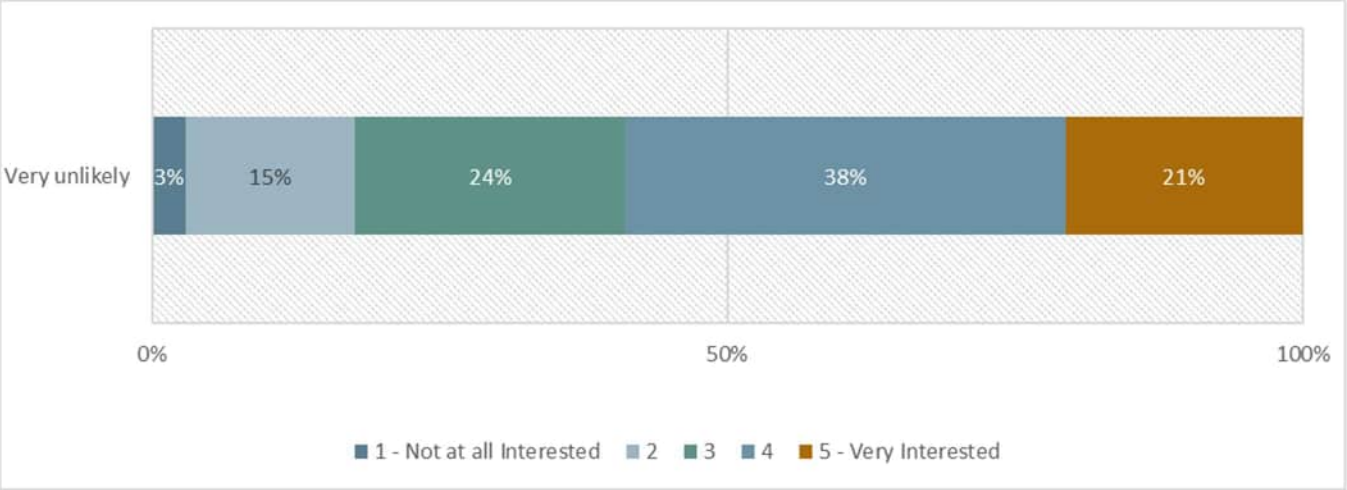
Among nonparticipants, the highest interest was expressed in energy efficiency upgrades or programs for HVAC systems/chillers and lighting. Additionally, nonparticipants expressed some interest in improved energy efficiency and programs in lighting controls, refrigeration equipment and kitchen equipment.

TABLE 2-14 INTEREST IN ENERGY EFFICIENCY UPGRADES OR PROGRAMS FOR YOUR BUSINESS (IF YES IN CHART 11) (N=28)

Energy Efficiency Upgrades or Programs	(n = 28)
HVAC systems and chillers	75%
Lighting	68%
Lighting controls	46%
Refrigeration equipment	36%
Kitchen equipment	36%
Air compressors	7%
Motors	4%
Variable frequency drivers	4%
Other	14%

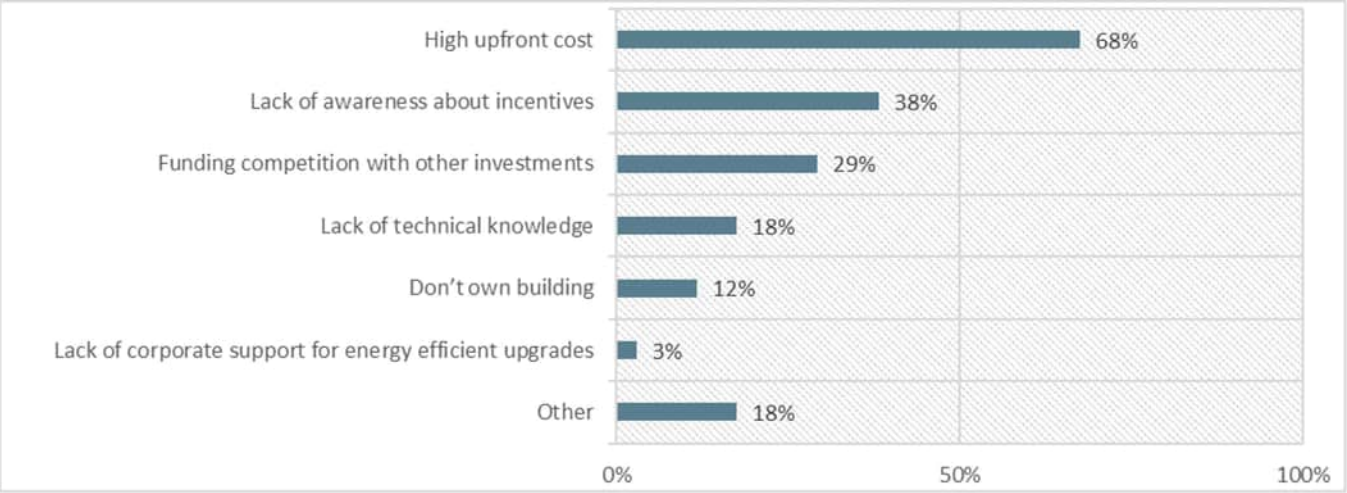
Nearly 6 in 10 nonparticipants would be interested in participating in Entergy's energy efficiency program.

FIGURE 2-17 INTEREST IN PARTICIPATING IN ENTERGY'S ENERGY EFFICIENCY PROGRAM FOR YOUR BUSINESS (N=34)



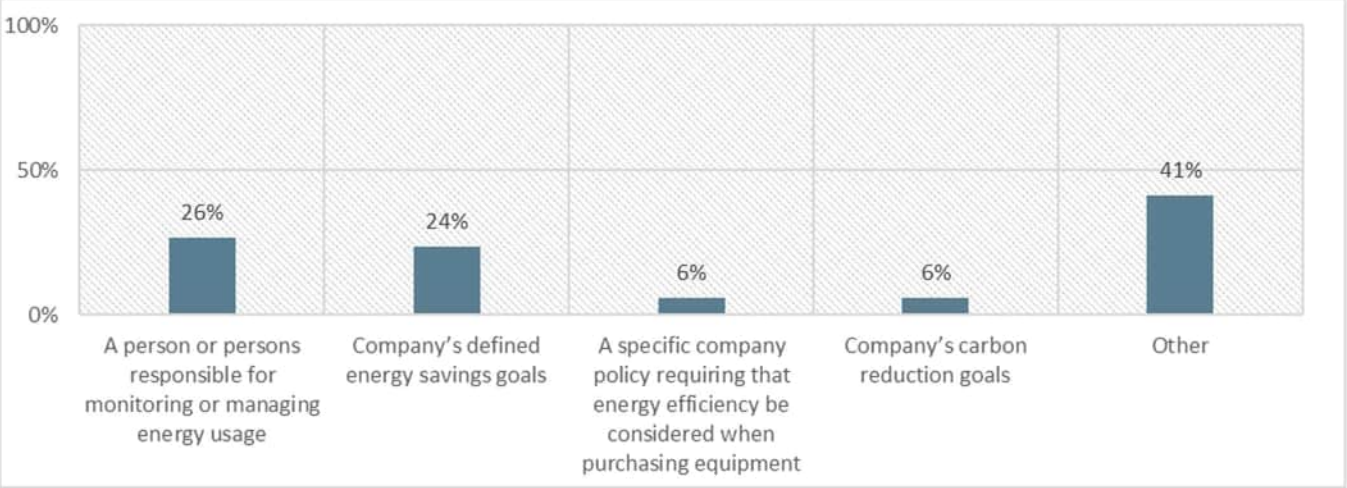
The largest barrier to participating in the Entergy program is high upfront costs. Four of ten aren't aware of incentives which makes it difficult for them to commit to participating.

FIGURE 2-18 POTENTIAL BARRIERS TO PARTICIPATING IN ENTERGY NEW ORLEANS PROGRAMS FOR YOUR BUSINESS (N=34)



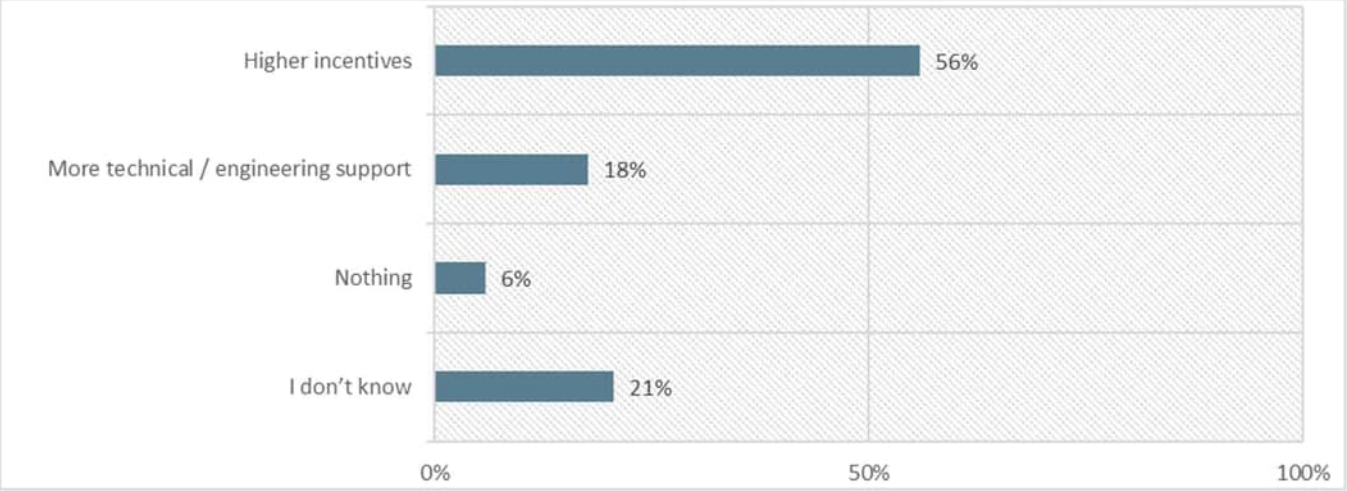
Most decisions are made about energy efficiency equipment through the company's person(s) responsible for monitoring energy usage; and in accordance with the company's defined energy savings goals.

FIGURE 2-19 PEOPLE AND POLICIES INVOLVED IN DECIDING TO INSTALL NEW ENERGY EFFICIENT EQUIPMENT FOR YOUR BUSINESS (N=34)



Companies are most interested in incentives that help to offset the cost of investing in energy-efficient equipment.

FIGURE 2-20 MOST BENEFICIAL ACTIONS BY ENTERGY NEW ORLEANS TO HELP ORGANIZATIONS OVERCOME CHALLENGES IN INVESTING IN ENERGY EFFICIENT EQUIPMENT (N=34)



Respondents' preferred method of receiving updates on Energy Smart offerings and opportunities.

TABLE 2-15 PREFERRED METHODS FOR RECEIVING UPDATES ON THE ENERGY SMART COMMERCIAL PROGRAM OFFERINGS AND OPPORTUNITIES (N=34)

Method	(n = 34)
Email	79%
Mailer or bill insert	9%
In-person visit	6%

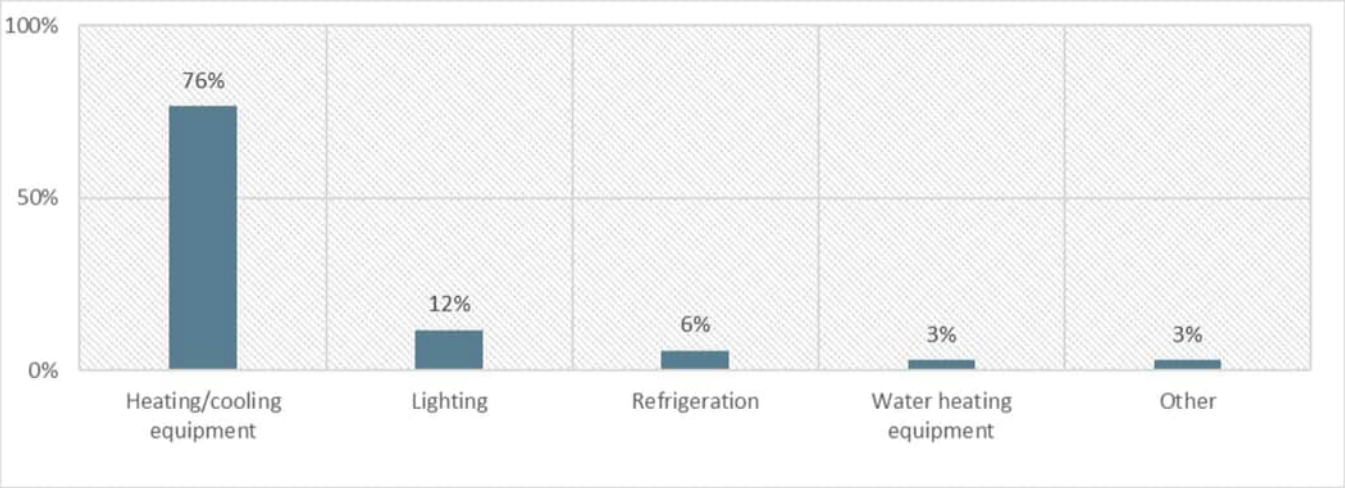
Phone call	3%
Other	5%

Some suggestions that respondents believe could encourage more participation in the program are simplifying and providing clearer guidance on how to reduce power usage with specific appliance recommendations, offering higher incentives, making the application process easier, and ensuring replacement products are compatible with existing equipment.

2.1.3.2.3.4 End Uses

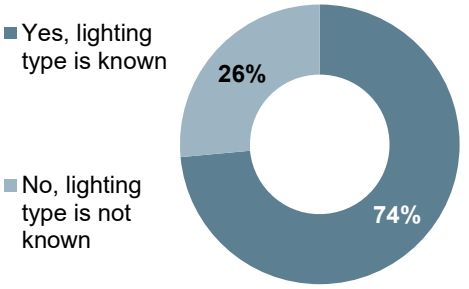
Heating and cooling equipment are by far the largest uses of energy in buildings. Lighting and refrigeration are smaller but not insignificant users of energy.

FIGURE 2-21 LARGEST ENERGY CONSUMER IN THE BUILDING (N=34)



Nine in ten have air conditioning in their facility, the majority of which are central A/C systems. Smaller numbers have a mini-split, heat pump or wall/window unit.

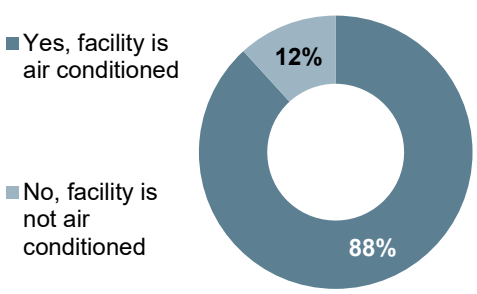
FIGURE 2-22 TYPES OF LIGHTING INSTALLED IN YOUR FACILITY (N=34)



Type of Lighting Installed in Facility	(n=25)
LED	68%
Fluorescent	16%
CFL bulbs or fluorescent tubes	16%

Nine in ten have air conditioning in their facility, the majority of which are central A/C systems. Smaller numbers have a mini-split, heat pump or wall/window unit.

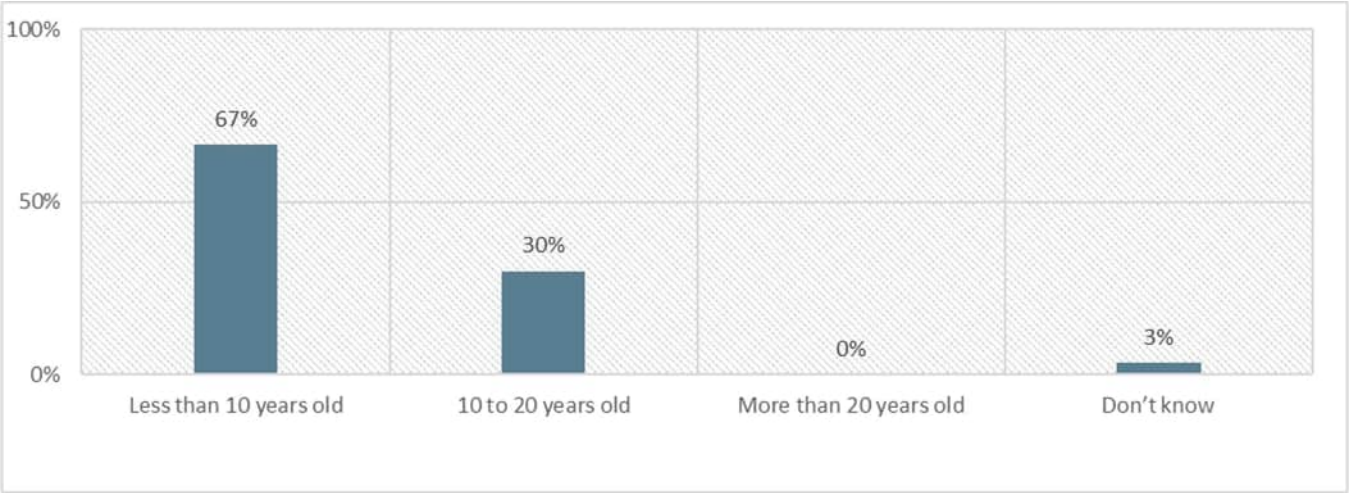
FIGURE 2-23 AIR CONDITIONING STATUS AND TYPE OF A/C IN YOUR FACILITY (N=34)



Type of A/C Installed in Facility	(n=30)
Central A/C	83%
Mini-split	10%
Heat Pump	3%
Wall or window mounted A/C unit	3%

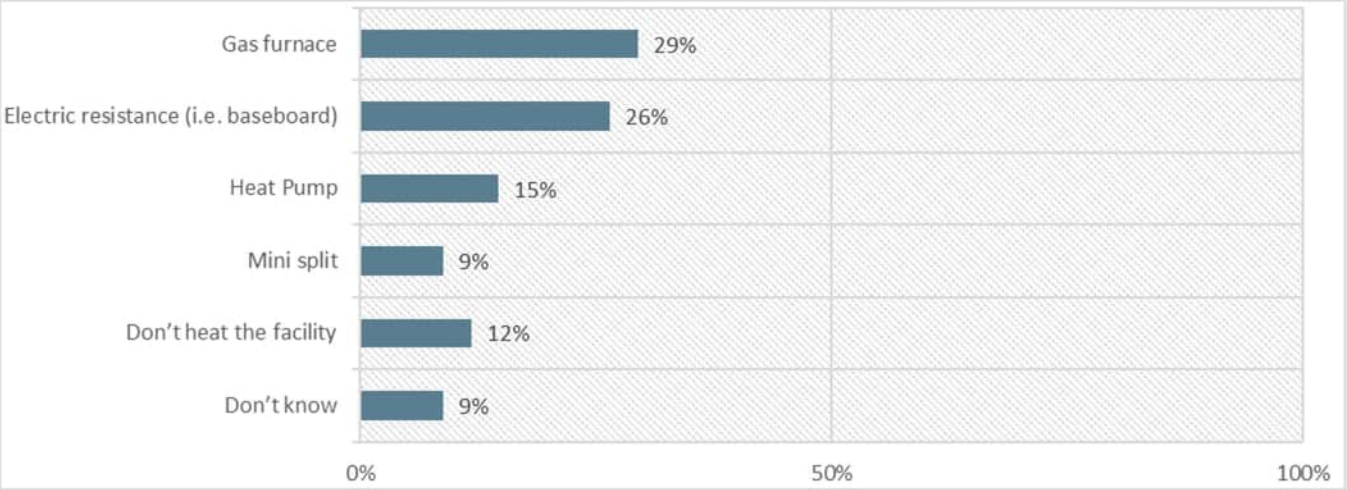
Two-thirds of air conditioning systems are less than 10 years old, and the remainder are less than 20 years old.

FIGURE 2-24 AGE OF THE AIR CONDITIONING SYSTEM (N=30)



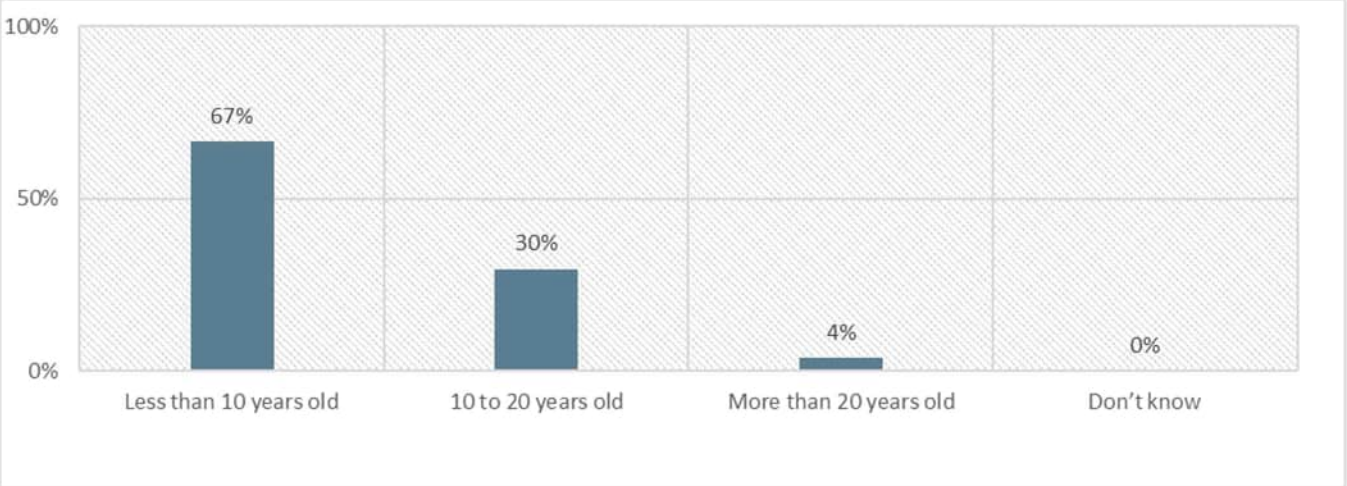
The two most common heating systems installed in facilities are gas furnaces and electric resistance. Smaller numbers use heat pumps or mini splits.

FIGURE 2-25 TYPE OF HEATING SYSTEM IN YOUR FACILITY (N=34)



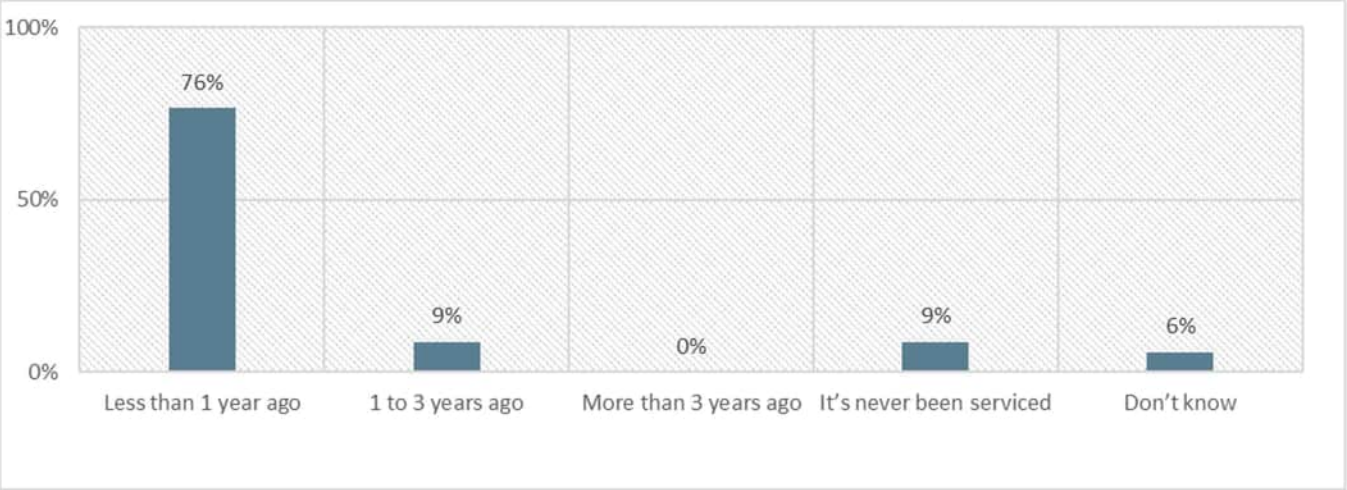
Two-thirds of heating systems are less than 10 years old; nearly all the rest are less than 20 years old.

FIGURE 2-26 AGE OF THE HEATING SYSTEM (N=27)



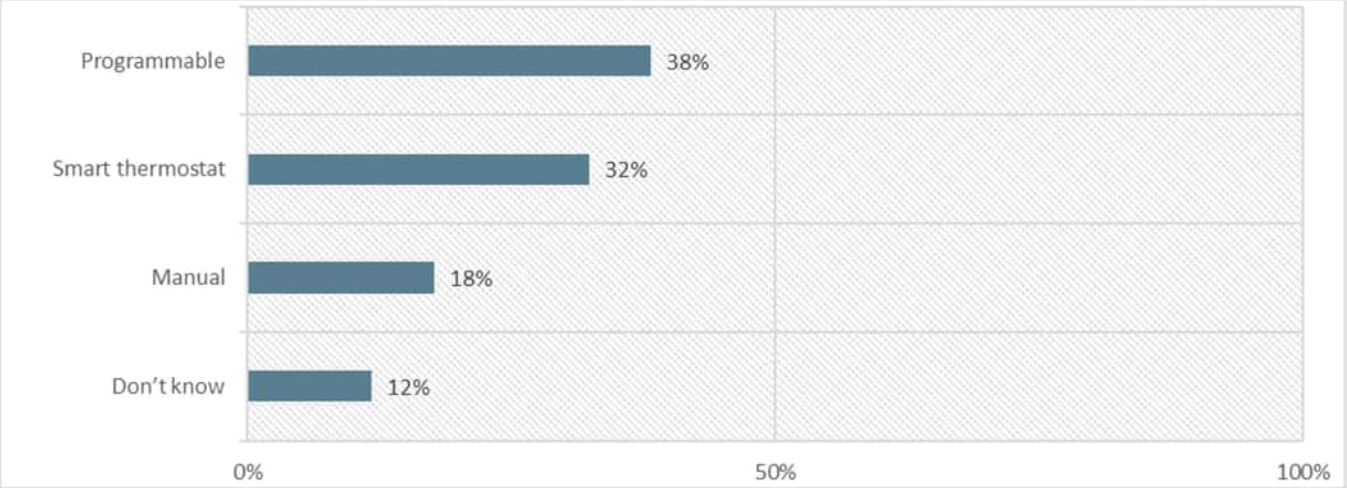
Most (76%) have had their heating and cooling systems serviced within the past year, and another 9% have had them serviced between 1 and 3 years ago.

FIGURE 2-27 LAST SERVICE DATE FOR HEATING AND/OR COOLING SYSTEM (N=34)



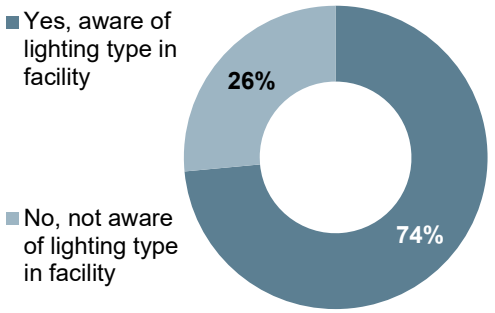
The most common type of thermostat used is a programmable one (38%) followed by a smart thermostat (32%).

FIGURE 2-28 TYPE OF THERMOSTAT IN USE (N=34)



Three quarters of respondents know the type of lighting in their facilities, the majority of which is LED lighting (68%). Smaller percentages have fluorescent and CFL bulbs or fluorescent tubes.

FIGURE 2-29 AWARENESS AND TYPE OF LIGHTING INSTALLED (N=34)



Type of Lighting Installed	(n=25)
LED	68%
Fluorescent	16%
CFL bulbs or fluorescent tubes	16%

2.1.3.2.3.5 Firmographics

The following table presents nonparticipant firmographics.

TABLE 2-16 COMMERCIAL NONPARTICIPANT FIRMOGRAPHICS

Characteristic	
Rented or Owned Property	
Owned and Occupied	59%
Rented	29%
Owned, But Rented to Someone Else	6%
Not Sure / Prefer not to state	6%
Property Type	
Company's only location	53%
One of several locations owned by company	26%
The headquarter location of a company with several locations	15%
Don't know / Prefer not to state	6%
How Organization is Billed for Electricity at Property	
Billed directly by ENTERGY New Orleans	100%
Electricity bill handled by another part of our company or a third-party service	--
Cost for electricity is included in rent / lease	--
Don't know / Prefer not to state	--
Property Type	
Restaurant (not fast food)	18%
Small office	15%
Retail	9%
Industrial/manufacturing	6%
Warehouse or distribution center	6%

College or university	3%
School K-12	3%
Large office	3%
Real Estate / Property Management	12%
Church	9%
Other	6%
Don't know / Prefer not to state	12%

2.1.3.3 HPwES Findings and Recommendations

Key Findings:

- Expanded Eligibility and Deeper Savings: The program now includes multifamily buildings with four or fewer units to better serve New Orleans' unique housing stock. Trade allies are performing more comprehensive upgrades, increasing per-home savings.
- Evolving Measure Offerings: Due to EISA regulations, LED savings will phase out by 2025. Staff are considering whether to continue offering non-lighting measures, such as faucet aerators and showerheads, in kits.
- Trade Ally-Driven Participation: The program relies heavily on trade allies for customer recruitment and project implementation. Staff enhanced the trade ally navigator tool in PY14 to streamline participation.
- Customer Awareness and Motivation: Nearly half of participants heard about the program through email, but word-of-mouth referrals have become an increasingly significant driver of participation. Most participants joined to save money on their utility bills, but only two in five were satisfied with their actual savings.
- Impact of Major Measure Improvements: Customers who received air sealing, duct sealing, and insulation upgrades reported energy efficiency improvements, with most stating they would not have completed these upgrades without the program. Cost remains a primary barrier to completing all recommended measures.

Recommendations:

- Strengthen Trade Ally Recruitment and Support: Given trade allies' central role, staff could expand recruitment efforts and provide additional training or incentives to encourage consistent participation and quality upgrades. The benchmarking research on utility trade ally programs provides information on different approaches utilities have used to engage and manage trade allies.
- Refine Measure Offerings for Lead Generation: Since past lighting kits helped convert participants into other programs, staff could explore alternative lead generation methods, such as targeted outreach to previous kit recipients or bundling efficiency measures with other residential offerings.
- Improve Customer Communication on Cost Savings: Since most participants are motivated by bill savings, but only a third are satisfied with realized savings, consider providing clearer expectations and guidance on long-term savings potential. Implement follow-up engagement, such as personalized energy reports or online tools to help customers track and understand their savings over time.

- Expand Outreach Strategies: With word-of-mouth becoming a significant driver of participation, staff could leverage referral incentives, testimonials, and community-based outreach efforts to attract new customers. Partnering with local organizations and neighborhood groups could further enhance program awareness.

2.1.3.4 IQW Findings and Recommendations

Key Findings:

- Comprehensive Energy Savings Approach: The IQW program provides home assessments and direct installation of energy efficiency measures, followed by deeper upgrades through trade allies. It aims to educate low-income customers on energy usage while offering upgrades at low or no cost.
- Community Partnerships for Outreach: To increase participation, staff have collaborated with community organizations such as Vietnamese Initiatives, AmeriHealth, Public Community Action, and Thrive to promote the program and connect with eligible residents. Word-of-mouth has proven to be a strong recruitment tool, with many participants learning about the program from friends and family members.
- Customer Satisfaction and Savings Expectations: Nearly all participants joined to reduce their utility bills, yet fewer than half expressed satisfaction with the actual savings realized.
- Effectiveness of Home Energy Assessments: Most participants found scheduling an assessment easy and useful for identifying potential energy savings.

Recommendations:

- Expand Community-Based Outreach: If participation growth is a priority, staff could explore additional partnerships with trusted local organizations, including faith-based groups, housing authorities, and neighborhood associations, to further increase program visibility.
- Optimize Trade Ally Coordination: To enhance program effectiveness, staff could consider streamlining communication between assessment teams and trade allies, ensuring seamless follow-through on deeper energy efficiency upgrades. Providing clearer handoffs and tracking mechanisms may improve project completion rates.
- Improve Clarity on Cost Savings Expectations: Given that cost savings are a primary motivation but satisfaction with actual savings is lower, staff should set clearer expectations in customer communications. Providing data-driven estimates or post-installation follow-ups could help manage customer expectations and reinforce long-term energy-saving behaviors.

2.1.3.5 RLA Findings and Recommendations

Key Findings:

- Program Shift Due to Regulatory Changes: With new EISA regulations limiting reliance on lighting measures, staff pivoted program focus in PY14 to emphasize air purifiers and smart thermostats as lower-cost, lower-commitment entry points to broader energy efficiency upgrades.

- Enhanced Online Marketplace: A website refresh at the end of PY13 improved functionality and integration with marketing efforts, including prompts for smart thermostat buyers to enroll in the BYOT program.
- Targeted Lighting Promotions: While general lighting incentives have been reduced, staff continue to promote them in low-income neighborhoods and specific retailers, such as dollar stores and restores, where savings are still applicable.

Recommendations:

- Strengthen Customer Engagement for New Measures: If increasing participation in air purifiers and smart thermostats is a priority, staff could explore targeted outreach strategies, such as personalized email campaigns to past program participants or bundling incentives with other efficiency offerings.
- Leverage Online Marketplace Improvements: To maximize the impact of the website refresh, staff could assess user behavior and refine promotional strategies, such as highlighting product comparisons or customer testimonials to encourage purchases and program participation.
- Refine Incentive Strategies: Given the varying influence of rebates on different products, staff could focus higher rebates on items like dehumidifiers and pool pumps, where rebates strongly impact purchase decisions. For less rebate-sensitive items like smart thermostats, additional engagement strategies, such as annual energy savings incentives, could maintain interest and participation.

2.1.3.6 MF Solutions Findings and Recommendations

Key Findings:

- High Satisfaction: The interviewed property manager reported a smooth installation process, clear communication, and noticeable energy savings for residents.
- Minimal Challenges: No major issues were identified, though some older residents struggled with using smart thermostats.

Recommendations:

- Improve Smart Thermostat Support: If resident usability remains a concern, staff could provide instructional pamphlets or brief training sessions to help residents better understand and operate their smart thermostats.
- Address Resident Needs: To ensure all residents fully benefit from energy-efficient upgrades, staff may consider periodic follow-ups or optional educational materials tailored for different resident groups.

2.1.3.7 A/C Solutions Findings and Recommendations

Key Findings:

- Trade Ally-Driven Model: Staff emphasized that AC Solutions operates entirely through trade allies, with program staff primarily facilitating connections between Home Performance with ENERGY STAR (HPwES) customers and qualified HVAC contractors. Unlike other residential programs, trade allies handle customer outreach and deduct incentives directly from customer invoices.

- Program Enhancements: In PY14, staff streamlined the trade ally application process, aiming to make participation easier. Direct-to-customer marketing, including bill inserts, emails, postcards, and social media advertisements, remained part of the outreach strategy.
- Increased Consumer Awareness: Word-of-mouth referrals and direct email campaigns remain the top sources of program awareness. Many participants reported that they learned about AC Solutions through Entergy communications or recommendations from friends and family.

Recommendations:

- Expand Trade Ally Engagement: If increasing participation is a priority, staff could explore additional trade ally recruitment strategies, such as targeted outreach to HVAC contractors not currently in the program or offering periodic program refresher sessions to ensure engagement remains high.
- Enhance Customer Outreach & Education: If increasing customer participation remains a priority, staff could further integrate AC Solutions within HPwES assessments by ensuring HVAC efficiency recommendations are clearly highlighted in assessment reports. Additional outreach, such as targeted email campaigns to past HPwES participants with aging HVAC systems, could help drive engagement.
- Improve Customer Communication on Cost Savings: Providing clearer expectations on expected savings and offering post-installation check-ins could enhance customer satisfaction. Case studies and testimonials from satisfied participants could further bolster trust in the program.

2.1.3.8 SK&E Findings and Recommendations

Key Findings:

- Program Reach and Engagement: In PY14, the National Children's Theater implemented the School Kits Program for a second year, distributing 4,100 kits across 21 public and charter schools in Entergy New Orleans' service territory. Staff reported that the theatrical performances were well-received, fostering student and teacher engagement in energy efficiency education.
- High Satisfaction: Teacher survey responses were very positive. Educators rated the program's educational value at an average of 6.3 out of 7, with every teacher indicating a willingness to participate again and recommending the program to colleagues. They noted that students especially enjoyed the interactive presentation. Student survey results were similarly encouraging, with an average satisfaction score of 4.4 on a 5-point scale. Within the kit components, lightbulbs received the highest satisfaction rating (4.1), whereas weatherstripping was rated the lowest (3.7).
- Survey Improvements and Installation Trends: Separating surveys from kits and incentivizing teachers led to a higher response rate. Staff noted that weatherstripping and LEDs were the most commonly installed items, while other measures saw lower adoption.

Recommendations:

- Expand School Recruitment Strategies: If increasing school participation remains a priority, staff could strengthen direct outreach by leveraging district partnerships, encouraging past participants to refer other schools, and expanding digital engagement with success stories and program impact data. Schools may also respond well to early sign-ups and flexible scheduling options to accommodate academic calendars.

- Address Savings Limitations: Since LEDs no longer contribute to savings under EISA regulations, staff should consider identifying alternative cost-effective measures that align with program goals. One promising option is the integration of Advanced Power Strips (APS) into the kit offering. These units could either supplement the current kit or replace the LED lamps as the impacts of EISA policy become more pronounced following the July 1st, 2023 enforcement. Evaluators have observed successful implementation of APS in similar programs. Additionally, incorporating enhanced classroom engagement strategies—such as interactive lesson plans or hands-on student activities—could further encourage broader installation of kit items.

2.1.3.9 AR&R Findings and Recommendations

Key Findings:

- Program Success & Improvements: Staff reported that the transition to Legacy in PY14 improved program operations, particularly in customer support and qualification clarity. They noted that these changes contributed to the program successfully meeting its recycling and replacement goals.
- Marketing Impact: Expanded outreach, including targeted emails and a Google search campaign, successfully increased participation, particularly in the recycling component.
- Ongoing Challenges: Customers continue attempting to replace non-functional units, and some appliances are taken by others before collection teams arrive. Expanding eligibility to additional appliances, such as window air conditioning units, was considered but found to be cost-prohibitive.

Recommendations:

- Reduce Premature Appliance Removal: If appliances are being taken before scheduled pickup, staff could consider strategies such as instructing participants to store items indoors or in a secure location until collection time. Providing stickers or signage that clearly indicate "Scheduled for Recycling—Do Not Remove" could also help deter unauthorized removal.
- Sustain Outreach Efforts: To maintain engagement, staff could continue targeted marketing efforts, leveraging data from past participation trends to refine messaging and reach potential new participants effectively. If desired, additional outreach strategies, such as community-based promotions or utility bill inserts, could further expand program awareness.

2.1.3.10 Behavioral Findings and Recommendations

Key Findings:

- Program Consolidation: Staff reported that in PY14, the Behavioral Program transitioned to a single cohort model, simplifying implementation by using non-participating neighbors as the comparison group.
- Shift in Engagement Approach: The program removed gamification and rewards, instead relying on informational emails and mailings. Staff also noted that switching from billing data to AMI data improved the ability to deliver targeted insights and personalized energy-saving recommendations.

2.1.3.11 EasyCool BYOT Findings and Recommendations

Key findings:

- Shift to Residential Focus: Staff noted that the program initially included small businesses but was refocused on residential customers due to low participation in the business sector. Most enrollments occur through smart thermostat brands rather than Entergy New Orleans marketing.
- Enrollment and Energy Savings Trends: Staff reported that while the program aims for 2,000 new customers, enrollment has slowed over time, a trend typical for similar programs. Energy savings vary by event frequency, with higher savings at the start of events, gradually declining as some participants opt out.

Recommendations:

- Sustain Enrollment Efforts: If increasing participation remains a priority, staff could explore ways to enhance direct outreach beyond smart thermostat brand marketing. This could include targeted emails to eligible customers, incentives for referring new participants, or integrating enrollment prompts into other Entergy New Orleans customer interactions, such as bill inserts or online account dashboards.
- Optimize Event Engagement: If reducing opt-outs is a concern, staff could explore refining pre-cooling strategies, such as increasing the pre-cool period for homes with higher cooling demands. Additionally, offering a tiered incentive structure—where customers who participate in a higher percentage of events receive an additional bonus—may encourage more consistent engagement.

2.1.3.12 PTR Pilot Findings and Recommendations

The following summarizes the key findings and conclusions from the PY14 evaluation.

- The PTR pilot achieved 128% of its *ex-post* demand reduction (kW) target.
- The PTR pilot was fully subscribed in PY14.
- 5% of BYOT participants listed in the tracking data were missing AMI data and assumed inactive accounts. The Evaluators found that 95% of participants had AMI data during the evaluation period. The remaining were missing from the project data provided to the Evaluators. The likely explanation is that customers missing AMI data were inactive accounts.
- 18% of PTR participants had cross participation with the EasyCool BYOT program. The Evaluators adjusted ex-post savings for cross participants with the EasyCool BYOT program.
- Demand response event start, and end times were the same for customers with cross participation. The Evaluators provided this as a recommendation in PY13 and this may have helped ensure more accurate baselines could be utilized, which may have contributed to higher per participant savings (0.26 kW in PY14 versus 0.08 kW in PY13).
- Demand response events began and ended on the hour. This ensured that savings impacts could be accurately measured with hourly AMI interval data and was a key recommendation by the Evaluators in PY13.

- Interval AMI data was aggregated to hourly based on the hour ending datetime. This was a key recommendation by the Evaluators in PY13 and ensured that savings impacts could be accurately estimated for each event.
- Program Growth & Customer Engagement: Staff reported enrollment nearly doubled from PY13 to PY14, reaching 5,000 customers. However, because participation is not automated, many customers forget to shift their energy use, leading to inconsistent engagement and missed incentives. Survey results showed that while 81% of participants modified their behaviors during events.
- Limited Control & Feedback: Staff noted that Entergy does not have time-based variable rates, and implementers receive only monthly AMI data, making it difficult to provide real-time feedback and encourage additional savings. Survey respondents also cited practical barriers, such as already reducing energy use as much as possible (22.1%) and having people or pets at home limiting further adjustments (16.9%).
- Awareness Gaps & Communication Shortcomings: Although respondents rated the program materials as useful, their overall understanding of the program remained limited. Among those who received materials before enrolling, 71.2% found them very useful or extremely useful, and 79.7% of those who received materials after enrollment rated them similarly. However, only 44.7% of respondents reported having a very good or complete understanding of the program before enrolling, with this figure increasing modestly to 57.8% after enrollment. This indicates a need for more comprehensive and effective communication to ensure deeper understanding and engagement with program details and expectations.

Recommendations

All the recommendations from PY13 were adopted by ENO in PY14 and greatly improved the accuracy of savings estimates for the program. The Evaluators continue to offer the same recommendations provided in PY13 to ensure continuity in future program years.

- Demand response event start, and end times should be the same for customers with cross participation (e.g., customers participating in both BYOT and PTR) to accurately measure savings impacts. The offset adjustment hour used in some baseline models is adversely impacted (i.e., pushed further from the event time) if events in one program begin prior to events in another program. This is especially true for the BYOT program which has pre-cooling that already pushes the offset adjustment hour back one hour. Furthermore, because reductions during events are often higher at the start of events, adjusting reductions for interactive effects from cross participation is hampered because cross participants are being measured during different time intervals than participants without dual enrollments. In addition, if an event ends earlier for one program and later for another program, the snapback from the first program will impact the ability to measure savings in the other program during hours when snapback overlaps with the ongoing event.

- Demand response events should begin and end on the hour if hourly interval AMI data is provided. If demand response events are called on the half hour, then 30-minute interval data should be provided, with an interval measuring usage aggregated at the end of the interval (e.g., 4:30 PM represents usage from 4 PM to 4:30 PM). This will ensure that the complete duration of the event can be used for measuring reductions.
- Interval AMI data should be aggregated to hourly based on the hour ending datetime and should not aggregate usage across more than one hour. For example, a datetime ending at 4 PM should represent usage from 3 PM to 4 PM and not usage from 4 PM to 5 PM, or 3:45 PM to 4:45 PM.
- Implementers of demand response programs with cross participants should consider the number of demand response events that are called across all programs in that sector (e.g., residential DR programs). If too many events are called in future program years, this will adversely impact the number of proxy days available for testing baseline models. The Evaluators typically utilize 8 proxy days for residential programs. One way to minimize this potential problem is to ensure that events for residential DR programs are called on the same dates.
- Utilize the MISO WSA baseline model to estimate kWh savings for customers and for defining saver types to avoid underestimating program impacts.

The recommendations from the PY14 survey findings are as follows:

- Refine Program Messaging & Educational Materials: Enhance clarity around load-shifting strategies using plain language and instructional videos. Clearly explain key actions (such as pre-cooling or scheduling appliances) and the methods behind rebate calculations to build trust and understanding. Communicating these materials at the beginning of the peak period season will help to remind participants. Email communications could also be sent at relatively low cost that present reminders of strategies participants can use.
- Enhance Awareness Through Multi-Channel Outreach: Given limited recall of pre-enrollment materials, explore additional communication methods, such as text message reminders or app notifications, to reinforce program expectations. Messages timed closer to enrollment and initial events may improve understanding and engagement.

2.1.3.13 Residential Battery Pilot Findings and Recommendations

Key Findings:

- Achievement of Demand Reduction Target: The program did not have an *ex post* demand reduction target in PY14.
- Program Subscription: In the second year of the pilot, Tesla and EnPhase batteries were added to eligible equipment, which has allowed for program growth and increased customer engagement. The number of participants increased from 17 in PY13 to 78 in PY14. However, due to approval and contract delays, no demand response events occurred in 2024. Full implementation is planned for 2025.

- AMI Data: The Evaluators utilized Channel 2 AMI data containing kW delivered and kW received from the perspective of ENO, which allows for the calculation of net usage that incorporates exports to the grid (e.g., from solar and battery) and usage values imported from the grid.
- Feasibility Assessment & Enrollment Goals: The pilot aims to assess the viability of interconnected residential batteries for demand response. The 2025 enrollment goal is 100 customers, though staff anticipate 50 may be more realistic given the program's early stage.

The Evaluators have the following recommendations after completing the PY14 evaluation.

- AMI Data: ENO should provide Channel 2 AMI data containing kW delivered and kW received from the perspective of ENO for each participant, which allows for the calculation of net usage that incorporates exports to the grid (e.g., from solar and battery) and usage values imported from the grid. AMI data utilized for other EE and DR programs does not include usage discharged to the grid and cannot be used for the impact evaluation of the BESS program.
- Alignment of Demand Response Event Times: It is recommended to synchronize the start and end times of demand response events for customers participating in multiple programs (e.g., BYOT and PTR). Misalignment of event times can distort the accuracy of savings measurements, particularly impacting baseline models. For instance, if events in one program begin prior to events in another program, it can push the offset adjustment hour further from the event time, complicating measurements of interactive effects from cross participation. Additionally, discrepancies in event end times across programs can impede the measurement of savings during overlapping periods.
- Standardization of Event Timing: Demand response events should ideally commence and conclude on the hour, especially when hourly interval AMI data is available. If events are called on the half hour, 30-minute interval data should be provided to ensure precise measurement of reductions. This standardization facilitates the comprehensive utilization of event durations for accurately assessing energy savings.
- Consideration of DR Event Frequency: Implementers of demand response programs with cross participants should monitor the frequency of demand response events across all programs within a sector (e.g., residential DR programs). Excessive event scheduling can reduce the availability of proxy days for testing baseline models, impacting the accuracy of savings estimation. To mitigate this issue, events for residential DR programs should be scheduled on the same dates to optimize the use of proxy days.
- Utilization of MISO SMA Baseline Model: It is recommended to utilize the MISO SMA baseline model for estimating energy savings and defining saver types. This model helps avoid underestimating program impacts by providing robust estimates of energy savings for customers. Leveraging this baseline model enhances the accuracy of savings calculations and ensures a comprehensive evaluation of program effectiveness.

- Optimize Outreach & Enrollment Strategies: Since participation may be lower than the 100-customer goal, targeted outreach to existing battery owners—through installation partners, solar advocacy groups, or tailored marketing campaigns—could improve enrollment.
- Ensure Technical Readiness for 2025 Events: Ahead of full program launch, staff should work with implementation partners to validate remote battery control capabilities, ensure customer communication channels are in place for event participation, and address any potential integration challenges.

2.1.3.14 EV Charging Pilot Findings and Recommendations

Key Findings:

- Performance of EV Pilot: The EV Pilot attained 9% of its ex-post demand reduction (kW) target.
- Creation of Matched Control Group: The Evaluators successfully established a matched control group for the baseline counterfactual, enhancing the accuracy of the evaluation.
- Statistically Significant Peak kW Reductions: The EV Pilot demonstrated statistically significant peak kW reductions, achieving an average reduction of 0.41 kW per participant.
- Target Achievement Projection: To meet the demand reduction target of 530 kW, the program aims to enroll nearly 1,000 customers by the third year of the pilot. This projection underscores the necessity of scaling up customer enrollment to achieve program objectives.
- Enrollment Challenges & Market Uncertainty: The program did not meet its PY13 or PY14 enrollment goals. The implementation team suspects that there are fewer EV owners in the service territory than expected or that many do not use Level 2 chargers at home. They also noted that the limited frequency of data updates on newly eligible customers constrains their outreach efforts.
- Participant Satisfaction & Compliance: Enrolled customers generally follow charging schedules and receive the full incentive, suggesting that the program is effective for those who do participate. However, limited awareness and unclear enrollment barriers hinder broader adoption.

Recommendations:

- Hourly Aggregation of Interval AMI Data: Interval AMI data should undergo aggregation to hourly intervals based on the hour ending datetime. It is imperative that usage is not aggregated across more than one hour. For instance, data ending at 4 PM should exclusively represent usage from 3 PM to 4 PM, ensuring accurate measurement and analysis.
- Procurement of Potential Control Customers: For future program years, the procurement of potential control customers should follow the same methodology utilized in 2023 and 2023. This includes sourcing control customers from various channels such as Sagewell's EV Finder algorithm, individuals who enrolled after the program year commenced, and participants who initiated but did not complete the enrollment process. This approach ensures consistency and reliability in selecting control groups for evaluation purposes.

- Adjust Enrollment Targets for Realistic Growth: According to 2023 EIA data, there are an estimated 188,026 residential ENO customers, and based on 2023 U.S. Census American Community Survey data, the average New Orleans household has 1.7 vehicles. If 1% of all vehicles are EVs, this suggests there are approximately 3,196 EVs in the customer base, with around 1,880 residential customers likely owning at least one EV. A target of 350 enrollments per year would require enrolling 18.6% of all EV-owning customers annually, which is likely high given that not all EV owners will be aware of the program, willing to participate, or have the necessary charging setup at home. Additionally, participation in voluntary programs tends to grow gradually over time rather than achieving high enrollment immediately. Adjusting expectations to align with a more gradual adoption rate would help set achievable goals while ensuring steady program growth.
- Optimize Recruitment Messaging: Test variations of email and direct mail campaigns with different value propositions (e.g., cost savings, environmental impact) to see which messaging resonates most with potential participants before investing in larger marketing efforts.

2.1.3.15 Large C&I DR Findings and Recommendations

Key Findings:

- Utilization of Hourly Interval AMI Data: Throughout PY14, the evaluation capitalized on hourly interval AMI data across all sites, ensuring comprehensive data coverage for robust analysis and evaluation.
- Enrollment Goals and Performance: The program achieved 28% of the demand target in PY14.
- Recruitment Strategies: Program recruitment primarily relies on word-of-mouth referrals, underscoring the significance of personal recommendations and positive experiences in driving participation. Additionally, program marketing initiatives encompass a range of strategies, including the distribution of informative handouts, dissemination of program details through the official website, hosting of educational sessions such as lunch-n-learns, and active participation in industry presentations. Staff members acknowledge the paramount role played by word of mouth in recruitment efforts, highlighting its effectiveness in fostering program engagement and participation within the target audience.
- Stable Program Operations & Recruitment Challenges: The Large C&I DR program remained largely unchanged in PY14, with ongoing participant recruitment and engagement efforts. While 23 customers were enrolled, staff turnover within participating companies and the challenges of older building infrastructure were identified as barriers to participation.
- Automated Demand Response & Minimal Comfort Impact: The program operates automatically once customers are enrolled, with most participants not experiencing noticeable comfort disruptions. Staff emphasize that this is a load-shifting program, not an energy savings program, and encourage participants to use pre-cooling strategies before events.

Recommendations:

- Strengthen Collaborative Partnerships: It is recommended that the program continues to foster relationships with other C&I programs. Leveraging partnerships with other C&I initiatives can serve as an

effective strategy for identifying and recruiting potential customers interested in participating in the demand response program. Collaborative efforts can enhance outreach and engagement efforts, ultimately expanding the program's reach and impact within the C&I sector.

- Conduct Educational Workshops: Consider organizing educational workshops focused on demand response for both prospective and current customers. Many customers face challenges in comprehending incentive structures and program mechanics related to demand response initiatives. Therefore, conducting educational workshops can address these knowledge gaps and provide customers with valuable insights into baseline measurement methodologies, the overall EM&V process, and the estimation of potential benefits. By enhancing customer understanding, these workshops can contribute to improved retention rates, particularly for key accounts that contribute significantly to kW reductions.
- Implement Cross-Promotion Strategies: Explore opportunities to cross-promote the Large C&I Demand Response program with relevant projects under the Large C&I Solutions umbrella. Large C&I Solutions initiatives often involve customer engagements centered on building commissioning or the deployment of building automation systems (BAS). Capitalizing on these engagements presents an ideal scenario to advocate for the registration of BAS-covered systems for demand response load shedding rebates. By aligning incentives and highlighting the synergies between demand response and BAS implementation, businesses can be incentivized to actively participate in demand response activities, thus furthering energy efficiency objectives and maximizing program impact.
- Strengthen Customer Retention Strategies: Given the impact of staff turnover at participating companies, develop materials tailored for new facility managers or sustainability officers to ensure continuity in program participation.
- Expand Targeted Outreach: Identify industries or business types with higher flexibility for load shifting and tailor recruitment efforts, such as direct outreach to large facilities with existing energy management systems

2.1.3.16 Small Commercial Solutions Findings and Recommendations

Key Findings:

- Increased Incentives & Proactive Outreach: In response to historically low participation, program staff raised incentive amounts in PY14 and shifted to a more direct marketing approach. Instead of waiting for customer inquiries, staff proactively identified potential projects and engaged a core group of active trade allies to conduct assessments and sales pitches.
- Participation & Implementation Challenges: According to staff, inflation, supply chain disruptions, and limited upfront capital continue to hinder small business participation. Additionally, delays in program approval postponed the program launch and restricted participant recruitment. Trade allies cited administrative burdens, slow rebate payments, and frequent updates to calculation tools as barriers that make it difficult to provide accurate quotes and manage their workflow.

- Positive Customer & Trade Ally Experience: Small business participants valued the financial benefits, sustainability impact, and ease of engagement. Meanwhile, trade allies appreciated the program's ability to generate business and foster long-term customer relationships. However, participants reported difficulties finding available contractors and noted a lack of awareness about the program prior to enrollment.

Recommendations:

- Optimize Trade Ally Participation & Payment Processing: The program relies heavily on trade allies, but administrative complexity and delayed rebate payments can limit engagement. Streamlining paperwork requirements—particularly for smaller projects—could improve efficiency without compromising oversight. Additionally, ensuring that rebate processing times are competitive with industry standards could help retain engaged trade allies. While trade allies requested fewer changes to calculation tools, some updates are necessary. A balance should be struck between maintaining consistency and making adjustments that improve accuracy.
- Expand Prescriptive Measures: While trade allies suggested expanding prescriptive measures and increasing HVAC incentives, any program adjustments should be carefully evaluated to ensure they align with cost-effectiveness thresholds and regulatory requirements. If specific measures (such as HVAC upgrades) are found to have a strong cost-benefit ratio, increasing incentives or streamlining the approval process for these upgrades could be considered.
- Improve Contractor Availability & Trade Ally Directory Management: A shortage of available contractors was a recurring issue among participants. Periodic reviews and updates to the trade ally directory, as well as continued recruitment efforts, could help ensure that businesses can more easily access qualified contractors. Exploring additional mechanisms, such as incentives for trade allies to prioritize Small C&I projects, may also help alleviate delays.

2.1.3.17 Large C&I Solutions Findings and Recommendations

Key Findings:

- Financial Incentives & Ease of Participation: Businesses and trade allies reported high satisfaction with the program, particularly appreciating its financial benefits, straightforward rebate structure, and ease of implementation. Participants valued the ability to complete energy efficiency projects with significant cost savings.
- Challenges with Application Process & Program Awareness: While generally well-received, some businesses found the initial application process confusing and time-consuming. Additionally, both participants and trade allies noted limited program awareness, suggesting that more businesses might participate if they were better informed.
- Administrative & Implementation Barriers for Trade Allies: Trade allies cited frequent changes in calculation tools and rebate structures as a challenge in providing accurate quotes and maintaining consistency in project planning. The preapproval process, while necessary, was sometimes seen as slowing down implementation.

Recommendations:

- Simplify & Streamline the Application Process: Given that some businesses found the application process complex, providing additional guidance—such as clearer instructions, pre-filled forms, or direct application assistance—could reduce the burden on participants. A dedicated support representative or an online step-by-step guide could help businesses, especially smaller organizations, navigate the process more easily.
- Increase Program Awareness & Outreach Efforts: Limited program awareness was a recurring theme across both businesses and trade allies. Expanding outreach efforts through direct engagement, industry events, and customer education campaigns could help more businesses take advantage of the program. Leveraging trade allies as outreach partners may also enhance awareness and recruitment.
- Enhance Trade Ally Support & Predictability in Incentive Structures: Frequent updates to rebate calculations and program tools can create uncertainty for trade allies and customers. Evaluators recommend balancing necessary updates with stability, ensuring changes are communicated clearly and well in advance. Additionally, trade allies suggested increasing incentives for specific technologies like HVAC, which could be evaluated for feasibility based on program cost-effectiveness metrics.
- Improve Preapproval Process to Reduce Delays: While preapproval ensures project validity, some trade allies found it to be a barrier to timely implementation. Exploring ways to streamline or expedite the process—such as implementing a fast-track option for certain projects—could improve efficiency while maintaining necessary oversight.

2.1.3.18 C&I New Construction Findings and Recommendations

Key Findings:

- Strict Preapproval Timelines: Staff indicated that the program's strict preapproval requirements create challenges in developing a customer pipeline, as projects must be approved before construction begins.
- Difficulty Connecting with Developers: Staff noted ongoing struggles in engaging construction firms and developers, which limits program participation. The long lead times for new construction projects further complicate recruitment efforts.
- Minimal Burden on Trade Allies: The single interviewed trade ally reported that program participation requires minimal effort while offering tangible energy efficiency benefits for clients. The trade ally found the program beneficial for business growth, allowing them to differentiate themselves by helping clients maximize energy savings.

Recommendations:

- Refine Preapproval Process: If feasible, consider adjusting the preapproval process to allow more flexibility in project timelines. Staff cited this as a primary challenge, and minor adjustments (such as an extended approval window or conditional approvals) could improve participation without compromising oversight.
- Expand Outreach to Developers: Strengthening direct outreach efforts to construction firms and developers could help address engagement challenges. Strategies may include targeted industry

presentations, networking with architecture and engineering firms, or partnering with permitting offices to identify eligible projects earlier in the design phase.

- Evaluate Alternative Engagement Strategies: Given the difficulty in building a strong customer pipeline, program staff could explore alternative ways to encourage participation, such as offering technical assistance early in the project design process or providing case studies that highlight the program's benefits to developers.

2.1.3.19 PFI Findings and Recommendations

Key Findings:

- Declining Participation from Key Public Entities: Key government agencies, such as the City of New Orleans and the Sewerage and Water Board, are not engaging with the program despite having the resources for upgrades. Staff are unsure why participation has dropped.
- Limited Awareness of Upgrade Options: Some participants wanted more upfront information on how different upgrades would impact their facilities, such as lighting brightness changes in gyms and ballparks.
- Application Process Complexity: Participants cited the application process as time-consuming, particularly for organizations with limited staff.
- Partial Cost Coverage: Some institutions found the rebates insufficient to cover full project costs, making it difficult to justify upgrades.

Recommendations:

- Develop Pre-Project Comparison Tools for Upgrade-Impacts: Participants expressed concerns about the impact of upgrades on their facilities, such as how lighting retrofits might affect brightness levels in schools and recreational spaces. Providing clearer pre-project assessments, such as case studies, visual comparisons, or pre- and post-installation energy savings estimates, would help institutions make more informed decisions. Site visits to facilities that have undergone similar upgrades could also offer firsthand insights into expected outcomes. By improving transparency about upgrade impacts, the program can increase confidence in participation.
- Streamline and Support the Application Process: Given that multiple participants cited the complexity of the application process as a barrier, simplifying and providing more guidance could improve accessibility. Offering a more user-friendly online portal with pre-filled forms based on previous submissions, creating step-by-step application guides, and providing dedicated program liaisons for publicly funded institutions could ease the burden. Additionally, hosting technical assistance sessions where program staff walk applicants through paperwork could ensure that interested organizations complete the process successfully.
- Reassess Incentive Structures for High Need Institutions: To increase participation among schools and other publicly funded institutions with budget constraints, program staff should consider increasing incentives for select customer segments, and exploring partnerships with third-party funders or state energy efficiency grants to offset remaining project costs.

2.1.4 COST-EFFECTIVENESS EVALUATION FINDINGS

See Appendix B: Cost-Effectiveness Analysis of this report for additional information on the approach.

2.1.4.1 Results by Program

The results of the cost effectiveness analysis are in the table below.

TABLE 2-17 COST TEST RESULTS BY PROGRAM

Program	TRC	UCT	RIM	PCT	SCT
HPwES	1.57	1.53	0.41	4.90	2.02
RLA	0.46	0.42	0.20	2.79	0.52
MF Solutions	1.40	1.71	0.42	3.71	1.78
IQW	1.54	1.58	0.58	2.81	2.03
A/C Solutions	5.83	2.26	0.50	31.91	7.27
SK&E	0.94	0.94	0.28	6.59	1.07
AR&R	0.03	0.03	0.02	1.92	0.03
Behavioral	2.01	2.01	0.43	NA	2.01
EasyCool (BYOT)	0.92	0.67	0.67	0.00	0.92
PTR Pilot	0.59	0.41	0.41	NA	0.59
BESS Pilot	0.27	0.21	0.21	NA	0.27
Small C&I Solutions	0.51	0.87	0.28	1.95	0.62
Large C&I Solutions	1.18	1.36	0.32	4.84	1.43
PFI	0.64	1.05	0.29	2.55	0.79
C&I NC Solutions	0.16	0.05	0.04	7.23	0.17
Large C&I DR	9.05	1.31	1.27	NA	9.05
EV Charging Pilot	2.82	0.51	0.51	NA	2.82
Total	**1.12**	**1.23**	**0.36**	**4.10**	**1.37**

2.1.4.2 Avoided Replacement Cost

The Evaluators included an adjustment to incremental costs accounting for ARC associated with LED lamps.

TABLE 2-18 AVOIDED REPLACEMENT COST SUMMARY BY PROGRAM

Program	*Ex Post* Gross ARC ($)	*Ex Post* Net ARC ($)
HPwES	$0	$0
RLA	$0	$0
MF Solutions	$0	$0
IQW	$0	$0
A/C Solutions	$0	$0
SK&E	$0	$0
AR&R	$0	$0
Behavioral	$0	$0
EasyCool (BYOT)	$0	$0
PTR Pilot	$0	$0
BESS Pilot	$0	$0
Small C&I Solutions	$41,940	$40,196
Large C&I Solutions	$115,646	$112,366
PFI	$67,349	$62,587

C&I NC Solutions	$107,273	$73,203
Large C&I DR	$0	$0
EV Charging Pilot	$0	$0
Total	**$332,207**	**$288,352**

Sums may differ due to rounding.

The method used in the evaluation is described in Section 3.4.1.3.

3 EVALUATION METHODOLOGY

The general approach for calculation of verified energy savings (kWh) and demand reductions (kW) was to use the NO TRM V7.0. Further detail can be found in each program chapter for relevant measures. For demand response programs, the general approach for calculation of verified demand reductions (kW) was to use a Billing Data Analysis.

The gross impact evaluation effort included the following:

- Desk Reviews: The Evaluators utilized the NO TRM V7.0 values in assessing *ex post* gross energy savings (kWh) and demand reductions (kW). In addition to the TRM, the Evaluators also examined Excel workbooks and supplemental documentation used by implementation staff to assess savings by measure. The workbook utilizes TRM savings algorithms with trade ally inputs to calculate savings based on the measure and input parameters. The Evaluators verified the factor tables for each measure to ensure the values were appropriate.
- Data Tracking Review: Project data from the implementers was reviewed to ensure that tracking systems followed the TRM.
- Site Visits: Site visits were conducted on an as needed basis, where sites with higher uncertainties in project documentation were selected for on-site verification.
- Survey Analysis: Where applicable, results from participant survey results were utilized to determine in-service-rates and verification of savings parameters.
- Billing Data Analysis: Billing data analysis was performed for all DR programs and the Behavioral program. Billing analysis is effective when there is a large, relatively homogenous pool of participant customers implementing similar measures. The analysis compares consumption during DR events with baseline consumption. A Site-Specific Billing Data Analysis was used for the Large C&I DR program. The analysis compares consumption during DR events with baseline consumption on a site-specific basis.

This section details general evaluation methodologies by program-type as well as data collection methods applied to this evaluation and methods and activities used in the PY13 evaluation. This section will present full descriptions of gross savings estimation; net savings estimation; sampling methodologies; process evaluation methodologies; and data collection procedures.

3.1 Glossary of Terminology

As a foundational step in elucidating the evaluation methodologies, the Evaluators have provided an extensive glossary of terms:

- Baseline: The conditions, encompassing energy consumption, anticipated to occur in the absence of the subject energy efficiency activity. Baseline conditions are sometimes denoted as "business-as-usual" circumstances.
- Deemed Savings: An estimation of the energy or demand savings outcome (gross savings) for a single unit of an installed energy efficiency measure. This estimate is derived from widely accepted data sources and analytical methods and is applicable to the evaluated situation (e.g., assuming 284 kWh savings for a low-flow showerhead).

- Effective Useful Life (EUL): Also known as measure life, this term often denotes persistence. EUL offers an estimate of the duration of savings from a particular measure.
- Evaluation: A comprehensive range of assessment studies and activities aimed at determining the effects of a program (and/or portfolio) and understanding or documenting program performance, market dynamics, energy savings, or program cost-effectiveness.
- Evaluation, Measurement, and Verification (EM&V): An overarching term for evaluation activities conducted at the measure, project, program, or portfolio level. EM&V encompasses impact, process, market, and planning activities and is distinct from Measurement and Verification (M&V).
- Savings: Presents the various types of savings.
- Impact Evaluation: The process of determining the program-specific, directly or indirectly induced changes attributable to an energy efficiency program.
- International Performance Measurement and Verification Protocol (IPMVP): A guiding document outlining a framework and definitions describing four M&V approaches, developed by the Energy Valuation Organization.
- Measure: The installation of a single piece of equipment, subsystem, or system, or a single modification of equipment, subsystem, system, or operation at an end-use energy consumer facility with the purpose of reducing energy and/or demand.
- Measurement and Verification (M&V): A subset of program impact evaluation that documents energy savings at individual sites or projects using various methods such as measurements, engineering calculations, statistical analyses, and computer simulation modeling.
- Portfolio: The collection of all programs conducted by an organization, addressing different customer segments or market sectors.
- Process Evaluation: A systematic assessment of an energy efficiency program or component aimed at documenting operations, identifying improvements, and increasing program efficiency or effectiveness while maintaining participant satisfaction.
- Program or Offering: An activity, strategy, or action undertaken by an implementer, defined by a unique combination of program strategy, participation pathway, market segment, marketing approach, and energy efficiency measure(s).
- Project: An activity involving one or multiple energy efficiency measures at a single facility or site.
- Gross Realization Rate: The ratio of Ex Post Gross Savings to Ex Ante Gross Savings, indicating the degree of realization of predicted savings.
- Rigor: The level of expected confidence and precision in evaluation results, with higher rigor indicating greater confidence in the accuracy and precision of the findings.
- Technical Reference Manual: A prepared resource document containing savings estimates, assumptions, guidelines, and supporting documentation for prescriptive energy efficiency measures, vetted by stakeholders.
- Uncertainty: The range or interval of doubt surrounding a measured or calculated value, within which the true value is expected to fall with some degree of confidence.
- Verification: An assessment confirming that the program or project has been implemented per the program design, ensuring installation rates, quality standards, and operational correctness align with the intended objectives.

3.2 Sampling Approach

3.2.1 SAMPLING

Programs are evaluated on one of three bases:

- Census of all participants.
- Simple Random Sample; and
- Stratified Random Sample

3.2.1.1 Census

A census of participant data was used for selecting programs where such review is feasible. All program measures were evaluated.

3.2.1.2 Simple Random Sampling

For programs with relatively homogenous measures (largely in the residential portfolio), the Evaluators conducted a simple random sample of participants. The sample size for verification surveys is calculated to meet 90% confidence and 10% precision (90/10). The sample size to meet 90/10 requirements is calculated based on the coefficient of variation of savings for program participants. Coefficient of Variation (CV) is defined as:

$$CV = \frac{Standard\ Deviation_x}{Mean_x}$$

Where x is the average kWh savings per participant. Without data to use as a basis for a higher value, it is typical to apply a CV of .5 in residential program evaluations. The resulting sample size is estimated at:

$$n_0 = \left(\frac{1.645 * CV}{RP}\right)^2$$

Where:

1.645 = Z Score for 90% confidence interval in a normal distribution
CV = Coefficient of Variation
RP = Required Precision, 10% in this evaluation

3.2.1.3 Stratified Sampling

For the C&I NC, PFI, Small and Large C&I Solutions programs, Simple Random Sampling is not an effective sampling methodology as the CV values observed in business programs are typically very high because the distributions of savings are generally positively skewed. Often, a relatively small number of projects account for a high percentage of the estimated savings for the program.

To address this situation, the evaluators use a sample design for selecting projects for the M&V sample that takes such skewness into account. With this approach, the evaluators select a number of sites with large savings for the sample with certainty and take a random sample of the remaining sites. To further improve the precision, non-certainty sites are selected for the sample through systematic random sampling. That is, a random sample of sites remaining after the certainty sites have been selected is selected by ordering them according to the magnitude of their savings and using systematic random sampling. Sampling systematically

from a list that is ordered according to the magnitude of savings ensures that any sample selected will have some units with high savings, some with moderate savings, and some with low savings. Samples cannot result that have concentrations of sites with atypically high savings or atypically low savings. As a result of this methodology, the required sample for the C&I NC, PFI, Small and Large C&I Solutions programs were reduced to the following strata.

TABLE 3-1 STRATIFIED SAMPLING SUMMARY

Program	Strata	Sites Sampled
Small C&I Solutions	5	27
Large C&I Solutions	4, plus 1 certainty	38
C&I NC	1	3 (census)
PFI	5	7

3.2.2 NET IMPACT CALCULATIONS

Table 3-2 summarizes the net savings approach used for each program.

TABLE 3-2 SUMMARY OF NET SAVINGS APPROACHES

Program	Participant Surveys	Literature Review	Billing Analysis/ Price Response Modeling	Deemed Value
HPwES	✓	✓		✓
HPwES Kits	✓	✓		✓
IQW		✓		✓
MF Solutions	✓	✓		✓
RLA	✓	✓		
A/C Solutions	✓			
SK&E and AR&R	✓	✓		✓
Behavioral			✓	
DR Program			✓	
Small C&I Solutions	✓			
Large C&I Solutions	✓			
PFI and C&I NC Solutions	✓			

3.3 Impact Evaluation

3.3.1 GROSS IMPACT

The Evaluators approach to savings analysis depends largely on the types of measures installed.

In the following subsections gross savings calculation methodologies are detailed by measure category, as is appropriate.

3.3.1.1 NO TRM V7.0

Whenever possible, deemed savings values and algorithms from the New Orleans Technical Reference Manual version 7.0[4] (herein referred to as the "New Orleans TRM" or simply, "NO TRM V7.0") were used to determine verified program impacts. Care was taken to ensure any assumptions were reasonable and current, and that there were no errors in the algorithms. For each measure in the program, total *ex post* gross energy savings (kWh) and demand reductions (kW) savings were determined as a product of the number of measures verified as qualifying for an incentive and the deemed savings per measure.

3.3.1.2 Deemed and Prescriptive Savings Calculations

For the PY13 evaluation, the Evaluators utilized the NO TRM V7.0 for deemed projects. The varied approaches are as follows below.

- Deemed Savings: The deemed savings approach involves analysis based on the NO TRM V7.0 or measure-specific work papers. This method utilizes predetermined savings values for measures with well-established and documented average savings. Verification of deemed values entails confirming installations through on-site inspection and/or telephone surveys. Implementation may entail using a single savings value for all installations of a specific measure (e.g., residential refrigerators) or conducting site-specific analyses using partially deemed unit energy savings algorithms (e.g., assessing savings from deemed commercial lighting retrofits). In the latter case, certain inputs into the savings calculation, such as lighting hours of use, are site-specific.
- Billing Data Analysis: Billing data analysis is applicable when there is a sizable, relatively homogeneous pool of participant customers implementing similar energy efficiency measures. This method is effective for programs installing multiple measures in individual homes, which impact similar end uses and exhibit interactive effects. The analysis typically involves regression modeling of participants and a nonparticipant control group, comparing energy use in both groups before and after participation. This analysis method is utilized on demand response and behavioral programs and could potentially extend to weatherization programs.
- Site-Specific Custom: This approach pertains to programs where savings calculations must be performed on a per-site basis using primary data collected on-site or facility bills for unique, premise-level analyses. It contrasts with the large-scale, whole-program analysis described under the "Billing Data Analysis" bullet point. Site-specific custom protocols are required for certain Commercial and Industrial (C&I) programs in the portfolio, necessitating tailored approaches such as those outlined in the International Performance Measurement and Verification Protocol (IPMVP).

The table below summarizes the approaches that were applied.

[4] The New Orleans TRM can be found here: https://www.entergy-neworleans.com/energy_efficiency/energy_smart_filings/

TABLE 3-3 SAVINGS ESTIMATION APPROACHES FOR ENERGY SMART PROGRAMS

Sector	Program	Approach to Savings Estimation
Residential	HPwES	Deemed Savings
	IQW	Deemed Savings
	MF Solutions	Deemed Savings
	A/C Solutions	Deemed Savings
	RLA	Deemed Savings
	SK&E	Deemed Savings
	EasyCool BYOT	Whole Program Billing Analysis
	PTR	Whole Program Billing Analysis
	BESS	Whole Program Billing Analysis
	EV Pilot	Whole Program Billing Analysis
	Behavioral	Whole Program Billing Analysis
	AR&R	Deemed Savings
C&I	Small C&I Solutions	Deemed Savings
	Large C&I Solutions	Deemed Savings/Site-Specific Custom
	PFI	Deemed Savings/Site-Specific Custom
	C&I NC	Site-Specific Custom/Site-Specific Custom
	Large C&I DR	Site-Specific Billing Analysis

3.3.1.3 Avoided Replacement Costs

Avoided replacement costs associated with energy efficiency measures were derived from the AR TRM Version 9.1: Protocol L3: Non-Energy Benefits of Avoided and Deferred Equipment Replacement Costs.

The Evaluator utilizes the following two Protocols to calculate avoided replacement costs for Replacement on Burnout (ROB) measures:

- ROB 1 – baseline and efficient measures that have different useful lifetimes under static baselines over the lifetime of the measures; and
- ROB 2 - baseline and efficient measures that have different useful lifetimes under changing baselines over the lifetime of the measures.

The avoided replacement costs are summarized mathematically as:

$$Avoided\ Replacement\ Cost = NPV(RDR, ML, RLCC_t)$$

$$NPV = Net\ Present\ Value\ function = \sum_{t=1}^{ML} \frac{RLCC_t}{(1+RDR)^t}$$

Where:

RDR = Real Discount Rate

ML = Program Measure Life (EUL)

$RLCC_t$ = Real Levelized Carrying Charge in year t (annualized baseline installed cost at RDR)

The following equation defines the ARCs for ROB 1, under the assumption of different EULs for baseline and efficient measures and static baselines:

$$Avoided\ Replacement\ Cost = -PV(RDR, ML - EUL_B, RLCC_B)/(1 + RDR)^{EUL_B}$$

Where:

RDR = Real Discount Rate

ML = Program Measure Life (EUL)

EUL_B = Baseline Equipment Life

$RLCC_B$ = -PMT (RDR, EUL_B, Baseline Installed Cost)

The following equations define the ARC for ROB 2, under the assumption of different EULs for baseline and efficient measures and changing baselines:

$$Avoided\ Replacement\ Cost = ARC\ (Tier\ 1) + ARC\ (Tier\ 2)$$
$$ARC\ (Tier\ 1) = -PV(RDR, NY - EUL_{T1}, RLCC_{T1})/(1 + RDR)^{EUL_{T1}}$$
$$ARC\ (Tier\ 2) = -PV(RDR, ML - NY, RLCC_{T2})/(1 + RDR)^{NY}$$

Where:

RDR = Real Discount Rate

ML = Program Measure Life (EUL)

EUL_{T1} = Baseline Equipment Life (Tier 1)

$RLCC_{T1}$ = -PMT (RDR, EUL_{T1}, Baseline Installed Cost (Tier 1))

EUL_{T2} = Baseline Equipment Life (Tier 2)

$RLCC_{T2}$ = -PMT (RDR, EUL_{T2}, Baseline Installed Cost (Tier 2))

NY = Number of years of Tier 1 installation

ARC estimates are found in each of the program chapters within this report.

3.3.1.4 Deviations from the New Orleans TRM

There were no diversions from the NO TRM.

3.3.1.5 Tracking System Review

The impact evaluation began with a review of program tracking data. The tracking data included a separate row for each measure installed. Every premise in the program had a unique incentive identifier, so each premise had multiple rows to reflect the different measures completed.

3.3.1.6 Literature Review

Literature reviews were performed to evaluate gross impacts of measures that were not found in site visits or had low samples. In cases where there are small samples, the literature review may be averaged with the site visit impact. Those literature reviews are found below.

TABLE 3-4 APS LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
2023 CPS Energy TRM	CPS Energy, TX	SF Smart Strip	DI in Wx	100.0%
2022 Hawaii TRM	NA	APS	DI in SF	100.0%
IL TRM V11.0	NA	APS	DI in SF	100.0%
MO Ameren PY21 EM&V	NA	APS	DI in SF	95.0%
PY23 EM&V Report	OG&E AR	APS	DI in SF	98.8%
				98.8%

TABLE 3-5 CEILING INSULATION LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
PY21 EM&V Report	Entergy, AR	SF Envelope	TA Installed Wx	100.0%
PY21 EM&V Report	Entergy, AR	MF Envelope	TA Installed Wx	100.0%
PY18 EM&V Report	RMP Utah	Envelope Wx	TA Installed Wx	100.0%
PY23 EM&V Report	OG&E AR	Ceiling Insulation	TA installed Wx	97.0%
PY8 SWEPCO EM&V Report	SWEPCO LA	Ceiling Insulation	TA installed Wx	100.0%
				99.4%

TABLE 3-6 ENERGY STAR DISHWASHER LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
Rhode Island TRM	RI TRM PY23	ENERGY STAR Dishwasher	Not specific	100.0%
PY2021 Residential Impact Report	Ameren IL PY2021	ENERGY STAR Dishwasher	Not specific	100.0%
				100.0%

TABLE 3-7 HEAT PUMP WATER HEATER LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
Rhode Island TRM	RI TRM PY23	HPWH	TA Installed	100.0%
PY2022 Black Hills EM&V Report	Black Hills, CO	HPWH	TA Installed	100.0%
PY21 - PY22 EM&V Report	Avista, WA	HPWH	TA Installed	100.0%
PY2022 EM&V Report	JCP&L, NJ	HPWH	TA Installed	100.0%
				100.0%

TABLE 3-8 SMART THERMOSTAT LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
2022 Hawaii TRM	NA	Smart thermostat	Not Specific	90.0%
PY22 EM&V Report	OG&E AR	Smart thermostat	TA Installed	100.0%
PY21 EM&V Report	SWEPCO AR	Smart thermostat	TA Installed	100.0%
2023 Rhode Island TRM	NA	Smart thermostat	Not Specific	100.0%
PY2022 Black Hills EM&V Report	Black Hills, CO	Smart thermostat	Not specific	100.0%
				98.0%

TABLE 3-9 BATHROOM AND KITCHEN AERATOR LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
PY21 EM&V Report	Entergy, AR	MF Domestic Hot Water	TA Installed Wx	100.0%
IL TRM V11.0	NA	Aerator	DI ISR	93.0%
New Orleans TRM V6.0	NA	Aerator	DI ISR	98.0%
IA TRM V7.0	NA	Aerator	DI ISR	95.0%
PY23 EM&V Report	OG&E AR	Aerator	TA installed Wx	100.0%
				97.2%

TABLE 3-10 HEAT PUMP REPLACEMENT LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
PY9 EM&V Report	SWEPCO LA	HP Replacement	TA Installed	100.0%
PY23 EM&V Report	OG&E AR	HP Replacement	TA Installed	100.0%
PY21 EM&V Report	SWEPCO AR	HP Replacement	TA Installed	100.0%
2023 Rhode Island TRM	NA	Central Heat Pump	TA Installed	100.0%
				100.0%

TABLE 3-11 LED LAMP LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
PY9 EM&V Report	SWEPCO LA	LED Lamp	TA Installed	100.0%
2023 CPS Energy TRM	CPS Energy, TX	LED Lamp	Not Specific	97.0%
AR TRM V9.1	NA	LED Lamp	Not Specific	97.0%
PY23 EM&V Report	OG&E AR	LED Lamp	DI in Wx	100.0%
Hawaii TRM PY2022	NA	LED Lamp	Not specific	97.0%
				98.2%

TABLE 3-12 LOW-FLOW SHOWERHEAD LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
PY21 EM&V Report	Entergy, AR	MF Domestic Hot Water	TA Installed Wx	100.0%
2022 Hawaii TRM	NA	Low-Flow Showerheads	DI ISR	93.0%
IL TRM V11.0	NA	Low-Flow Showerheads	DI ISR	96.0%
New Orleans TRM V6.0	NA	Low-Flow Showerheads	DI ISR	98.0%
IA TRM V7.0	NA	Low-Flow Showerheads	DI ISR	98.0%
PY23 EM&V Report	OG&E AR	Low-Flow Showerheads	TA installed Wx	100.0%
				97.5%

TABLE 3-13 DUCT SEALING LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
PY21 EM&V Report	SWEPCO AR	Duct Sealing	TA Installed	99.7%
PY21 EM&V Report	OG&E AR	Duct Sealing	TA Installed	100.0%
PY11 EM&V Report	Entergy NO	Duct Sealing	TA Installed	94.4%
2021 Rhode Island TRM	NA	Duct Sealing	Not Specific	100.0%
				98.5%

TABLE 3-14 ENERGY STAR CLOTHES DRYER LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
PY2022 EM&V Report	Nicor Gas	Clothes Dryer	Retail Buy-down	100.0%
PY21 - PY22 EM&V Report	Pacific Power CA	Clothes Dryer	Rebate	100.0%
PY20 Efficient Product EM&V Report	EfficiencyOne CA	Clothes Dryer	Rebate	100.0%
CT V20.0 TRM	NA	Clothes Dryer	Rebate	100.0%
				100.0%

TABLE 3-15 AIR CONDITIONER REPLACEMENT LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
PY11 EM&V Report	Entergy NO	AC Replacement	TA Installed	100.0%
PY21 EM&V Report	OG&E AR	AC Replacement	TA Installed	100.0%
PY21 EM&V Report	SWEPCO AR	AC Replacement	TA Installed	100.0%
2021 Rhode Island TRM	NA	Air Conditioning	TA Installed	100.0%
CT V20.0 TRM	NA	Window AC	Rebate	100.0%
				100.0%

TABLE 3-16 ENERGY STAR AIR PURIFIER LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
MA 2021 eTRM	NA	Room Air Cleaners	Not Specific	97.0%
RI 2021 TRM	NA	Room Air Cleaners	Not Specific	97.0%
PY21 EM&V Report	Entergy, AR	SF Appliances	DI in SF	78.2%
PY21 EM&V Report	OG&E AR	Air Purifiers	Mail-in-Rebate	100.0%
PY18 EM&V Report	RMP Utah	Appliances in SF	Mail-in-Rebate	100.0%
PY21 EM&V Report	SWEPCO AR	Air Purifier	DI in Wx	92.9%
				94.2%

TABLE 3-17 ENERGY STAR WINDOWS LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
PY2022 Statewide EM&V Report	Connecticut	Windows	Rebate	98.0%
PY2023 EM&V Report	SWEPCO AR	Windows	Rebate	100.0%
PY12 EM&V Report	New Orleans	Windows	Rebate	100.0%
				99.3%

TABLE 3-18 ENERGY STAR POOL PUMP LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
PY21 EM&V Report	DTE	Pool Pump	Mail-in-Rebate	85.0%
PY10 EM&V Report	Entergy NO	Pool Pump	Mail-in-Rebate	100.0%
2021 Rhode Island TRM	NA	Pool Pump	Mail-in-Rebate	100.0%
				95.0%

TABLE 3-19 AIR INFILTRATION LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
PY2022 Statewide EM&V Report	Connecticut	Air Sealing	TA Installed	92.0%
PY2023 EM&V Report	SWEPCO AR	Air Sealing	TA Installed	100.0%
PY2023 EM&V Report	OG&E AR	Air Sealing	TA Installed	99.0%
IL V11.0 TRM	NA	Air Sealing	TA DI	100.0%
				97.8%

TABLE 3-20 SCHOOL KIT LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
IL V11.0TRM	NA	Wx School Kit	Schools	58.0%
IL V11.0TRM	NA	School EE Kit	Schools	83.8%
Iowa V7.0 TRM	NA	School EE Kit	Schools	60.0%
Ameren Missouri PY21 TRM V2.0	NA	School EE Kit	Schools	90.0%
				73.0%

TABLE 3-21 FREEZER RECYCLING LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
MA - 1.3.2023 - eTRM	MASS Saves	Refrigerator/Freezer Recycling	TA Pickup	100.0%
Rhode Island 2023 TRM	National Grid	Freezer Recycling (ENERGY STAR Electric)	TA Pickup	100.0%
				100.0%

TABLE 3-22 REFRIGERATOR RECYCLING LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
MA - 1.3.2023 - eTRM	MASS Saves	Refrigerator/Freezer Recycling	TA Pickup	100.0%
Rhode Island 2023 TRM	National Grid	Recycling Refrigerator (SF Electric)	TA Pickup	100.0%
				100.0%

TABLE 3-23 REFRIGERATOR REPLACEMENT LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
MA - 1.3.2023 - eTRM	MASS Saves	Refrigerators (ENERGY STAR)	Rebate	100.0%
Rhode Island 23 TRM	National Grid	Replacement Refrigerator (SF)	Rebate	100.0%
				100.0%

TABLE 3-24 MAILER PULL KIT REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
IL V11.0 TRM	NA	Market Rate Kit	Direct mail	91.8%
IL V11.0 TRM	NA	LI Kit	Direct mail	60.0%
IL V11.0 TRM	NA	Wx Kit	Direct mail	68.0%
NO TRM V6.0	Entergy New Orleans	Mailer Kit	Direct mail	62.0%
Ameren MO TRM 2022	Ameren, MO	Mailer Kit	Direct mail	54.0%
Ameren MO TRM 2022	Ameren, MO	Mailer Kit	Direct mail	100.0%
				72.6%

TABLE 3-25 MAILER PUSH KIT LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
Vermont 2018 TRM	NA	Low-Flow Showerhead	Home Energy Kit	56.0%
Vermont 2018 TRM	NA	Aerator (bath/kitchen)	Home Energy Kit	57.0%
Vermont 2018 TRM	NA	Advanced Power Strips	Home Energy Kit	63.0%
Vermont 2018 TRM	NA	LED Lamp	Home Energy Kit	90.0%
IL V11.0 TRM	NA	Wx Measure	Home Energy Kit	60.0%
				65.2%

TABLE 3-26 PIPE INSULATION LITERATURE REVIEW RESULT

Source	Utility	Measure Name	Delivery Mechanism	In-Service Rate
CT V20.0 TRM	NA	Pipe Insulation (Residential)	TA DI	72.0%
IL V11.0 TRM	NA	Domestic Hot Water Pipe Insulation	TA DI	100.0%
RI 2023 TRM	NA	Pipe Insulation	TA DI	90.0%
				87.3%

3.3.1.7 In-Services Rates to be Applied

The table below outlines the ISR values to be applied in the residential desk reviews. The ISR values were estimated using participant survey responses, site visit observations, literature review results, past evaluation results.

TABLE 3-27 RESIDENTIAL ISR VALUES

Program	Measure	NO TRM V7.0 ISR	PY13 Survey ISR	PY13 Site Visit ISR	Lit Review ISR	PY12 (2022) ISR	PY14 ISR
A/C Solutions	AC Replacement	NA	NA	NA	100%	100%	100%
A/C Solutions	AC Tune-up	NA	NA	100%	NA	97%	99%
A/C Solutions	Duct Sealing	NA	NA	98%	99%	100%	99%
A/C Solutions	Ductless Heat Pump	NA	NA	NA	100%	100%	100%
A/C Solutions	Smart Thermostat	NA	NA	NA	98%	100%	99%
AR&R	Freezer Recycling	NA	100%	100%	100%	100%	100%
AR&R	Refrigerator Recycling	NA	100%	100%	100%	100%	100%
AR&R	Refrigerator Replacement	NA	NA	NA	100%	100%	100%
HPwES	Smart Thermostat	NA	100%	100%	98%	100%	100%

HPwES	Water Heater Pipe Insulation	NA	100%	100%	87%	96%	96%
HPwES	Low-Flow Showerhead	98%	NA	100%	98%	98%	98%
HPwES	DI - LED Lamp	NA	100%	99%	98%	92%	97%
HPwES	Aerator	98%	100%	100%	97%	50%	89%
HPwES	Pull Kit - Low-Flow Showerhead	62%	53%	100%	73%	59%	69%
HPwES	Pull Kit - LED Lamp	NA	33%	100%	73%	71%	69%
HPwES	Pull Kit - Aerator	45%	50%	100%	73%	44%	62%
HPwES	Duct Sealing	NA	100%	84%	99%	102%	96%
HPwES	Attic Insulation	NA	100%	100%	99%	100%	100%
HPwES	Air Infiltration	NA	86%	72%	98%	95%	88%
HPwES	Advanced Power Strip (Tier 2)	NA	100%	69%	99%	77%	86%
HPwES	Push Kit - LED Lamp (x3)	NA	NA	NA	65%	71%	68%
HPwES	Assessment	NA	NA	NA	NA	100%	100%
IQW	Smart Thermostat	NA	100%	100%	98%	100%	100%
IQW	Water Heater Pipe Insulation	NA	NA	100%	87%	96%	94%
IQW	Low-Flow Showerhead	98%	50%	100%	98%	100%	89%
IQW	LED Lamp	NA	54%	100%	98%	96%	87%
IQW	Aerator	98%	100%	100%	97%	97%	98%
IQW	Duct Sealing	NA	89%	99%	99%	98%	96%
IQW	Attic Insulation	NA	100%	75%	99%	100%	94%
IQW	Assessment	NA	NA	NA	NA	100%	100%
IQW	Air Infiltration	NA	86%	80%	98%	95%	90%
IQW	Advanced Power Strip (Tier 2)	NA	100%	77%	99%	94%	92%
MF Solutions	Smart Thermostat	NA	50%	NA	98%	100%	83%
MF Solutions	Water Heater Pipe Insulation	NA	100%	NA	87%	100%	96%
MF Solutions	Low-Flow Showerhead	98%	50%	75%	98%	100%	84%
MF Solutions	LED Lamp	NA	50%	94%	98%	100%	85%
MF Solutions	Aerator	98%	50%	93%	97%	100%	88%
MF Solutions	Duct Sealing	NA	50%	NA	99%	100%	83%
MF Solutions	Attic Insulation	NA	50%	NA	99%	NA	75%
MF Solutions	Air Infiltration	NA	50%	NA	98%	100%	83%
MF Solutions	Advanced Power Strip (Tier 2)	NA	0%	NA	99%	100%	66%
RLA	LED Lamp (OLM)	NA	92%	NA	98%	85%	92%
RLA	LED Lamp (Upstream Rebate)	NA	NA	NA	98%	98%	98%
RLA	Smart Thermostat	NA	81%	NA	98%	94%	91%
RLA	Pool Pump	NA	NA	NA	95%	100%	98%
RLA	Low-Flow Showerhead	98%	100%	NA	98%	79%	94%
RLA	Refrigerator Replacement	NA	100%	NA	100%	100%	100%
RLA	Advanced Power Strip (Tier 1)	NA	83%	NA	99%	65%	82%
RLA	Heat Pump Water Heater	NA	NA	NA	100%	98%	99%
RLA	Window Air Conditioner	NA	NA	NA	100%	98%	99%
RLA	Aerator	45%	100%	NA	97%	73%	79%
RLA	Water Heater Pipe Insulation	NA	100%	NA	87%	42%	76%
RLA	Air Purifier	NA	NA	NA	94%	NA	94%
RLA	Dehumidifier	NA	NA	NA	NA	100%	100%
RLA	Advanced Power Strip (Tier 2)	NA	NA	NA	99%	65%	82%

RLA	Freezer Replacement	NA	NA	NA	100%	NA	100%
SK&E	School Kit - LED Lamp 9W (A Type)	NA	77%	NA	73%	70%	73%
SK&E	School Kit - LED Lamp 14W (A Type)	NA	69%	NA	73%	71%	71%
SK&E	School Kit - Low-Flow Showerhead	62%	62%	NA	73%	62%	65%
SK&E	School Kit - Kitchen Aerator (1.5)	45%	67%	NA	73%	45%	57%
SK&E	School Kit - Bathroom Aerator (1.0)	45%	76%	NA	73%	45%	60%
SK&E	School Kit - Weather Stripping (17")	NA	78%	NA	73%	59%	70%

3.3.2 NET IMPACT

This section discusses the approaches used to estimate net savings. This section provides additional detail on the approaches outline for each program in Table 3-2.

3.3.2.1 Demand Response and Behavioral Programs

For DR and behavioral programs, it is typically assumed that there are neither spillover nor free-ridership effects (customers are not expected to curtail without participating).

For DR, although customers can find workarounds to make up for lost productivity due to demand response events, they are compensated only if they reduce their load during the peak demand window, the primary program goal.

As such, the NTG ratio for these programs is assumed to be 100%.

3.3.2.2 Low Income Programs

Assigned a NTG of 1.0 for the SK&E and IQW programs.

3.3.2.3 Non-Low Income Programs

This section discusses self-report methodologies used to estimate the net savings of the residential programs.

3.3.2.3.1 *AC Solutions, HPwES Major Measure Free-Ridership*

The major measure free ridership approach was applied to “major measures” (duct sealing, air sealing, attic insulation, smart thermostats, and pipe insulation) rebated through HPwES. To accomplish this, the Evaluators administered a survey to program participants that contained questions regarding the participants’ plans to implement the incentivized measures and the likelihood of implementing those measures in the absence of program incentives and informational support. Respondents who met all of the following criteria will be considered free riders; all others will not be considered free riders.

- The participant was planning to complete the same project/install the same measure in 2023 before learning about the program.
- The participant’s budget would accommodate the full cost of the project/measure in the absence of program support.
- The participant would have completed the same project or done something more efficient without program support.
- The participant would have completed the same project/installed the same measure or something more energy efficient within one year if the program was not available.

3.3.2.3.2 *HPwES Direct Install Measure Free-Ridership*

The calculation of free ridership for HPwES direct install measures was based on the responses to questions on the following topics:

- Prior experience with similar energy saving equipment;
- Prior planning to purchase energy efficiency measures provided through the program; and
- Likelihood of installing similar equipment without the program.

3.3.2.3.2.1 Prior Experience

The program is designed to encourage customers to use efficiency measures that they previously did not have experience with by providing them at no cost to the customer. As such, an indicator of the likelihood that a participant is a free rider, is whether he or she has previously purchased a similar measure. Previous experience is used as an indicator of whether the customer would have coincidently purchased the measure on their own.

Prior experience is assessed through the following question:

- FR1: Have you installed any of the following in your home, before receiving them free through the program?

Respondents indicating that they had not purchased the measures before receiving them for free through the program were considered to have minimal to no prior experience with them, meaning that the intervention of the program is likely significantly influential in the energy savings resulting from them. These respondents receive an overall free ridership score of 0 for this measure. Otherwise, free ridership is assessed using the following factors.

3.3.2.3.2.2 Prior Plans and Intentions

Customers were asked whether they had any plans to purchase any of the measures before receiving them through the program:

- FR2: Did you have plans to purchase and install the following item(s) before you learned about the Home Performance with ENERGY STAR Program?

Respondents who indicated that they had plans to purchase the measures were given a plans score of 1. Respondents who said they did not have plans (responded “Don’t Know” or “No” to FR2) were assigned a plans score of 0. Those that did not answer this question were not assigned a plans score.

3.3.2.3.2.3 Likelihood of Purchasing Measure

Participants were asked the following question to determine how likely they would have been to purchase the measure without the program:

- FR3: If you had not received the following for free, how likely is it that you would have installed them anyway within 12 months of when you received them?

The likelihood of purchasing was scored as:

- 1 - Very Unlikely (0)
- 2 - Unlikely (0.25)
- 3 - Neither unlikely or likely (0.5)

- 4 - Likely (0.75)
- 5 - Very likely (1)
- Don't know (0.5)

3.3.2.3.2.4 Free Ridership Score

For respondents with prior experience using the measures, their scores for previous plans and likelihood of purchasing the measures were averaged to calculate a measure-specific free ridership score. As noted earlier, respondents without prior experience with the measures were classified as non-free riders.

3.3.2.3.3 *RLA Non-Lighting*

The Evaluators conducted a survey of program participants to gather insights into their plans to implement incentivized measures and the likelihood of completing those measures without program incentives or informational support. For measures with few or no survey responses, the Evaluators referenced survey results from PY12 or PY13, if available, or conducted literature reviews to obtain net savings estimates. In most cases where literature review values were used, the Evaluators applied the same values reported in the PY13 evaluation report. However, literature reviews were conducted as part of the PY14 evaluation activities for air purifiers and freezers. The studies referenced and their results are presented in the tables below.

TABLE 3-28 AIR PURIFIER NET SAVINGS LITERATURE REVIEW

Reference Number	FR	SP	NTG	PY	State
1	23.0%	6.0%	83.0%	2023	IL
2	14.0%	0.0%	86.0%	2022	WI
Average	**18.5%**	**3.0%**	**84.5%**		

1. https://www.ilsag.info/wp-content/uploads/ComEd-Retail-Online-Program-Appliance-Rebate-Component-NTG-Memo-2023-09-01-Final.pdf
2. https://assets.focusonenergy.com/production/inline-files/Evaluation_CY_2022-Vol-II.pdf

TABLE 3-29 FREEZER NET SAVINGS LITERATURE REVIEW

Reference Number	FR	SP	NTG	PY	State
1	37.00%	0.00%	63.00%	2020	IL
2	45.90%	2.50%	56.60%	2024	IL
Average	**41.50%**	**1.30%**	**59.80%**		

1. https://www.ilsag.info/wp-content/uploads/ComEd-Appliance-Rebates-CY2020-Impact-Evaluation-Report-2021-03-31-Final.pdf
2. https://www.ilsag.info/wp-content/uploads/AIC-2024-Retail-Products-NTG-Memo_FINAL_2024-08-30.pdf

The survey included questions about participants' intentions and circumstances related to implementing incentivized measures. Specifically, program participants were asked:

- Whether they had plans to complete the project and if they could afford to do so without the program discount.
- The likelihood of completing the project without the discount or the incentivized assessment.
- How the timing of the project would be affected in the absence of the program.

3.3.2.3.3.1 Prior Plans

Respondents who indicated that they did not have plans to install the efficient measure were determined not to be free riders. Free ridership scores were developed for the remaining respondents using survey response data on likelihood of completing the efficiency project or installing the efficient equipment and the program's impact on when that would have occurred.

3.3.2.3.3.2 Likelihood of Project Completion

The score reflecting the likelihood of completing the project in the absence of the program was based on the following question: How likely is it that you would have installed the same measure that you completed through the if the rebate was not available?

A score was assigned to each response as follows:

- 1 - Not at all likely (0)
- 2 (0.25)
- 3 (0.5)
- 4 (0.75)
- 5 - Very likely (1)
- Don't know (0.5)

3.3.2.3.3.3 Timing

The Program effect on the timing is assessed with the following two questions:

- Did you purchase the [MEASURE] sooner than expected so you could take advantage of receiving the ENTERGY rebate?
- When might you have purchased the [MEASURE] if you had not participated in the program?

The information provided in response to these questions was used in the following manner:

- If the respondent states that they did not install the measure sooner because of the program or was unsure of the program effect on timing, the likelihood free ridership score was not adjusted (Timing Score was set to 1).
- If the respondent stated that they would have never installed the measure or in more than one year, the free ridership score was multiplied by 0, resulting in a final free ridership score of 0.
- If the respondent stated that they would have installed the measure in 6 months to one year, the free ridership score was multiplied by 0.67.
- If the respondent stated that they would have installed the measure withing 6 months, the preliminary free ridership score was multiplied by 0.33.

3.3.2.3.4 *Participant Spillover Assessment*

Program participants may implement additional energy saving measures without receiving a program incentive because of their participation in the program. The energy savings resulting from these additional measures constitute program participant spillover effects.

To assess participant spillover savings, survey respondents were asked whether or not they implemented any additional energy saving measures for which they did not receive a program incentive. Respondents that

indicated that they had installed additional measures were determined to have spillover savings if follow-up questioning suggested their program participation had influenced and/or been important in their decision to make the additional purchase or installation and sufficient information was collected to assign savings estimates.

3.3.2.4 Multifamily Solutions

The Evaluator developed free-ridership estimates using a savings-weighted average of the PY12 and PY13 free ridership estimates.

3.3.2.5 AR&R

The Evaluator developed free-ridership estimates using a savings-weighted average of the PY12 and PY13 free ridership estimates.

3.3.2.6 C&I NC Solutions, PFI, Small C&I Solutions, and Large C&I Solutions

The Evaluator developed free-ridership estimates using a savings-weighted average of the PY12 and PY13 free ridership estimates.

3.3.2.7 NTG Ratios to be Applied

The table below outlines the NTG values for residential programs by measure. SK&E and IQW have a NTG ratio of 100%.

TABLE 3-30 RESIDENTIAL MEASURE-LEVEL NTG VALUES

Program	Measure	2023 NTG	Free Ridership	Spillover	NTG	Source
AC Solutions	HVAC Systems and any other non Tune Up Measures	89.2%	0.0%	2.8%	102.8%	PY14 Survey Responses
AC Solutions	TUNEUP	89.2%	12.5%	2.8%	90.3%	PY14 Survey Responses
Appliance Recycling	Freezer Recycling	56.5%			56.5%	PY13 Results
Appliance Recycling	Refrigerator Recycling	51.0%			51.0%	PY13 Results
School Kits	All	100.0%	0.0%	0.0%	100.0%	Deemed 1.0
Multifamily Solutions	All	85.0%	9.8%	0.0%	90.2%	Weighted Average of PY12 and PY13 Results
RLA	Upstream LED Lamp	58.0%			58.0%	Literature review
RLA	OLM LED Lamp	74.0%			74.0%	Literature review
RLA	Refrigerators	86.6%			53.5%	PY12 and PY13 Participant Survey
RLA	Window AC	73.0%			73.0%	PY12 Participant Survey
RLA	Dehumidifier	100.0%			79.7%	PY12 and PY14 Participant Survey
RLA	APS	72.0%			72.0%	Literature review
RLA	Air Purifier	N/A			84.5%	Literature review
RLA	Showerhead	94.0%			94.0%	Literature review

RLA	Kitchen Aerators	92.0%			92.0%	Literature review
RLA	Pipe Insulation	88.0%			88.0%	Literature review
RLA	Pool Pump	100.0%			100.0%	PY12 Participant Survey
RLA	Freezer	N/A			59.8%	Literature review
RLA	Bath Aerator	92.0%			92.0%	Literature review
RLA	Heat Pump Water Heater	74.3%			74.3%	Literature review
RLA	Water Cooler	53.0%			53.0%	Literature review
RLA	Smart Thermostat	86.5%			88.5%	PY12 and PY13 Participant Survey
HPwES	Smart Thermostat	94.9%	2.7%	0.5%	97.8%	PY14 Survey Responses
HPwES	Duct Sealing	96.7%	2.7%	0.5%	97.8%	PY14 Survey Responses
HPwES	Attic Insulation	98.1%	2.7%	0.5%	97.8%	PY14 Survey Responses
HPwES	Air Infiltration	97.0%	2.7%	0.5%	97.8%	PY14 Survey Responses
HPwES	LED Light Bulbs	61.2%	1.9%	0.5%	98.6%	PY14 Survey Responses
HPwES	Bathrooom Faucet Aerators	96.1%	1.9%	0.5%	98.6%	PY14 Survey Responses
HPwES	Kitchen Faucet Aerators	96.1%	1.9%	0.5%	98.6%	PY14 Survey Responses
HPwES	Showerheads	92.6%	1.9%	0.5%	98.6%	PY14 Survey Responses
HPwES	Pipe Insulation	100.9%	1.9%	0.5%	98.6%	PY14 Survey Responses
HPwES	Advanced Power Strips	88.8%	1.9%	0.5%	98.6%	PY14 Survey Responses
HPwES	Unsampled Direct Install Measures	NA	1.9%	0.5%	98.6%	PY14 Survey Responses

For the commercial programs, surveys were performed to estimate NTG. The NTG for Small C&I Solutions is 95.8%, Large C&I Solutions is estimated at 97.2%, PFI NTG is 92.9% and C&I NC Solutions is estimated at 68.2%.

3.4 Process Evaluation

3.4.1 APPROACH

The Evaluator's general approach to process evaluation begins with a review of the tests for timing and appropriateness of process evaluation. In this review, the Evaluators determined what aspects of the program warrant a process evaluation.

In general, process evaluations assess organizational and procedural aspects of programs to provide feedback on features of programs that are functioning well and contribute recommendations when areas of improvement are identified. These evaluations are based on criteria that justify conducting a process evaluation. Table 3-31 provides details on those criteria that should be met prior to proceeding with a process evaluation.

TABLE 3-31 GENERAL OVERVIEW OF PROCESS EVALUATION GUIDANCE

PROCESS EVALUATION GUIDANCE
Process evaluation required if: ▪ Program is new. ▪ No process evaluation has been undertaken during current funding cycle.
Process evaluation potentially needed if: ▪ Program impacts are lower than expected. ▪ Goals (both informational and educational) are not being achieved. ▪ Rates of participation are lower/slower than expected. ▪ Program operational system is slow to get up and running. ▪ Cost-effectiveness of the program is less than expected. ▪ Participants (both customers and market actors) report problems/low rates of satisfaction with program.

A process evaluation is a culmination of information from a variety of sources, including program staff, trade allies, and program participants (collectively referred to as market actors). To increase the validity of the findings, the Evaluators gathered data from multiple sources and then "triangulated" the data to compare it across multiple groups. This methodology increases the overall validity of the findings.

It should also address a variety of issues, including:

- Help program designers and managers structure programs to achieve cost-effective savings while maintaining high levels of customer satisfaction;
- Determine program awareness levels to refine marketing strategies and reduce barriers to program participation;
- Provide recommendations for changing the program's structure, management, administration, design, delivery, operations, or target;
- Test for use of best practices and determine what best practices should be incorporated; and
- Gather data from a variety of sources to minimize bias in the findings.

TABLE 3-32 KEY PROCESS EVALUATION ACTIVITIES

	Process Evaluation Activity					
Key Researchable Issues	Materials Review	Database Review	Staff Interview	Part. Customer Survey/Interviews	Near Participant Market Actor Interviews	Nonparticipant Market Actor Focus Groups
Program Effectiveness	✓		✓	✓		
Tracking Systems		✓	✓			
Rebate Application Processing		✓	✓			

Trade ally Reporting/ Tracking		✓	✓			
Overall Program Satisfaction				✓		
Satisfaction with Trade allies			✓	✓		
Satisfaction with Utility				✓		
Satisfaction with Implementer			✓			
Market Effects	✓		✓	✓		
Changes in Stocking Practices			✓			
Barriers to Participation			✓	✓	✓	✓
Awareness Levels				✓	✓	✓
Reasons for Participation				✓		
Reasons for Non-Participation					✓	✓

The process evaluation for PY14 consists of a multiple step process that is outlined in the following section.

3.4.2 REVIEW OF PROGRAM MATERIALS

The Evaluators reviewed reports and supporting materials for clarity and consistency with program objectives. As an initial step in the PY14 process evaluation, the Evaluators reviewed available program documents such as delivery schedules, sample reports and samples of any additional engagement materials. The purpose of reviewing these materials is to understand what information is communicated to participants, how it is communicated, and to identify any gaps or opportunities for improvement.

3.4.3 PROGRAM STAFF AND IMPLEMENTER INTERVIEWS

The program staff in-depth interviews were conducted via Teams calls and addressed the key process evaluation objectives discussed previously. The initial evaluation interviews focus on the program history, design, and identifying areas for improvement, while the subsequent process evaluation interviews focused on “lessons learned” and the overall effectiveness of the program. These interviews are open-ended, in that there is a discussion guide, but responses will not be limited to a specific set of choices. Moreover, all respondents are promised confidentiality throughout the interview process to assure that these findings truly reflect program operations and activities. The results of these interviews were summarized for each program. Overall themes from these interviews are summarized for the entire portfolio.

The third-party implementer interviews were also conducted on Teams. Particular attention was paid to the program implementers' perceptions of how the programs operate, what program data is tracked and captured, how that data is managed and maintained, and how the programs are promoted to motivate trade allies and customers.

3.4.4 PARTICIPANT SURVEYS AND INTERVIEWS

The Evaluators conducted surveys and interviews across the residential and commercial energy efficiency programs. These activities focused on program awareness, participants' decision-making process, program operations, customer satisfaction with eligible measures, and satisfaction with the program. These instruments also included questions to verify measure installations and collected other data necessary to support the impact evaluation. Survey and interview summaries can be found in each program chapter.

3.4.5 NEAR-PARTCIPANT TRADE ALLY INTERVIEWS & NONPARTICIPANT TRADE ALLY FOCUS GROUPS

The Evaluators conducted near participant trade ally interviews and nonparticipant trade ally focus groups. The specifics of these trade ally activities are described more fully in the subsequent program chapters. These interviews focused on identifying levels of program awareness, interest in program engagement, and challenges to program participation. areas of program effectiveness, overall satisfaction, and identifying barriers to program participation. The results from these interviews are summarized at the program and portfolio level.

3.5 Cost-Effectiveness Evaluation

See Appendix B: Cost-Effectiveness Analysis for additional details on this approach. The results by each program and the portfolio for cost test is shown in the table below.

TABLE 3-33 PY13 COST-EFFECTIVENESS RESULTS

Program	TRC	UCT	RIM	PCT	SCT
HPwES	1.57	1.53	0.41	4.90	2.02
RLA	0.46	0.42	0.20	2.79	0.52
MF Solutions	1.40	1.71	0.42	3.71	1.78
IQW	1.54	1.58	0.58	2.81	2.03
A/C Solutions	5.83	2.26	0.50	31.91	7.27
SK&E	0.94	0.94	0.28	6.59	1.07
AR&R	0.03	0.03	0.02	1.92	0.03
Behavioral	2.01	2.01	0.43	NA	2.01
EasyCool (BYOT)	0.92	0.67	0.67	0.00	0.92
PTR Pilot	0.59	0.41	0.41	NA	0.59
BESS Pilot	0.27	0.21	0.21	NA	0.27
Small C&I Solutions	0.51	0.87	0.28	1.95	0.62
Large C&I Solutions	1.18	1.36	0.32	4.84	1.43
PFI	0.64	1.05	0.29	2.55	0.79
C&I NC Solutions	0.16	0.05	0.04	7.23	0.17
Large C&I DR	9.05	1.31	1.27	NA	9.05
EV Charging Pilot	2.82	0.51	0.51	NA	2.82
Total	**1.12**	**1.23**	**0.36**	**4.10**	**1.37**

The portfolio and most programs pass the TRC and the UCT, with the exception of RLA, SK&E, AR&R, Behavioral, EasyCool BYOT, PTR pilot, BESS pilot, PFI, C&I NC Solutions, Large C&I DR and the EV Charging pilot. The portfolio has $2,839,355 in TRC net benefits and is cost-effective.

The details of each program evaluation are found in the sections below.

4 HOME PERFORMANCE WITH ENERGY STAR®

4.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend, by measure, where applicable.

TABLE 4-1 PY14 HPWES ENERGY SAVINGS (KWH)

Measure	*Ex Ante* Gross Energy Savings (kWh)	Realization Rate (kWh)	*Ex Post* Gross Energy Savings (kWh)	NTG	*Ex Post* Net Energy Savings (kWh)
Advanced Power Strip	418,104	79.0%	330,479	98.6%	325,929
Air Infiltration	1,051,709	92.8%	975,729	97.8%	953,990
Assessment	0	100.0%	0	100.0%	0
Ceiling Insulation	74,545	100.4%	74,825	97.8%	73,158
Custom	0	100.0%	0	100.0%	0
Duct Sealing	1,815,901	109.4%	1,986,872	97.8%	1,942,603
Faucet Aerator	13,318	80.1%	10,669	98.6%	10,522
LED 11W A-Type (Standard)	2,857	100.6%	2,873	98.6%	2,834
LED 11W BR30 (Specialty)	35,908	104.0%	37,327	98.6%	36,813
LED 15W A-Type (Outdoor) (Standard)	2,203	98.2%	2,162	98.6%	2,133
LED 15W PAR38 (Outdoor) (Specialty)	76,614	98.0%	75,098	98.6%	74,064
LED 5W Candelabra (Specialty)	46,126	98.3%	45,360	98.6%	44,735
LED 6W Globe (Specialty)	4,728	98.2%	4,642	98.6%	4,578
LED 8W BR30 (Specialty)	7,012	101.7%	7,134	98.6%	7,036
LED 9W A-Type (Outdoor) (Standard)	1,425	98.2%	1,399	98.6%	1,379
LED 9W A-Type (Standard)	45,798	98.3%	45,016	98.6%	44,396
Low-Flow Showerhead	60,420	89.2%	53,924	98.6%	53,182
Smart Thermostat	74,431	99.4%	73,994	97.8%	72,345
Water Heater Pipe Insulation	22,722	90.7%	20,617	98.6%	20,333
Total	**3,753,820**	**99.8%**	**3,748,121**	**97.9%**	**3,670,030**

Sums may differ due to rounding.

TABLE 4-2 PY14 HPWES DEMAND REDUCTIONS (KW)

Measure	*Ex Ante* Gross Demand Reductions (kW)	Realization Rate (kW)	*Ex Post* Gross Demand Reductions (kW)	NTG	*Ex Post* Net Demand Reductions (kW)
Advanced Power Strip	43.25	79.0%	34.19	98.6%	33.72
Air Infiltration	404.89	90.7%	367.27	97.8%	359.08
Assessment	0.00	N/A	N/A	N/A	N/A
Ceiling Insulation	133.63	99.7%	133.29	97.8%	130.32
Custom	0.00	N/A	N/A	N/A	N/A
Duct Sealing	610.24	113.9%	694.87	97.8%	679.39
Faucet Aerator	1.36	81.3%	1.11	98.6%	1.09
LED 11W A-Type (Standard)	0.51	100.5%	0.51	98.6%	0.50
LED 11W BR30 (Specialty)	6.18	103.9%	6.42	98.6%	6.34
LED 15W A-Type (Outdoor) (Standard)	0.00	N/A	0.00	N/A	0.00
LED 15W PAR38 (Outdoor) (Specialty)	0.00	N/A	0.00	N/A	0.00
LED 5W Candelabra (Specialty)	8.18	98.2%	8.03	98.6%	7.92
LED 6W Globe (Specialty)	0.82	98.2%	0.81	98.6%	0.80
LED 8W BR30 (Specialty)	1.23	101.8%	1.25	98.6%	1.23
LED 9W A-Type (Outdoor) (Standard)	0.00	N/A	0.00	N/A	0.00
LED 9W A-Type (Standard)	8.16	98.2%	8.01	98.6%	7.90
Low-Flow Showerhead	6.28	89.3%	5.61	98.6%	5.53
Smart Thermostat	0.00	N/A	0.00	N/A	0.00
Water Heater Pipe Insulation	2.57	90.8%	2.34	98.6%	2.30
Total	**1,227.32**	**103.0%**	**1,263.71**	**97.8%**	**1,236.13**

Sums may differ due to rounding.

TABLE 4-3 PY14 HPWE LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex Post* Gross Lifetime Energy Savings (kWh)	*Ex Post* Net Lifetime Energy Savings (kWh)
Advanced Power Strip	10	3,304,794	3,259,293
Air Infiltration	11	10,733,023	10,493,885
Assessment	1	N/A	N/A
Ceiling Insulation	20	1,496,503	1,463,160
Custom	1	N/A	N/A
Duct Sealing	18	35,763,696	34,966,859
Faucet Aerator	10	106,689	105,221
LED 11W A-Type (Standard)	2	4,310	4,250
LED 11W BR30 (Specialty)	2	55,991	55,220
LED 15W A-Type (Outdoor) (Standard)	2	3,244	3,199
LED 15W PAR38 (Outdoor) (Specialty)	2	112,647	111,096
LED 5W Candelabra (Specialty)	2	68,040	67,103
LED 6W Globe (Specialty)	2	6,963	6,867
LED 8W BR30 (Specialty)	2	10,701	10,554
LED 9W A-Type (Outdoor) (Standard)	2	2,098	2,069
LED 9W A-Type (Standard)	2	67,523	66,594
Low-Flow Showerhead	10	539,245	531,820
Smart Thermostat	11	813,932	795,797
Water Heater Pipe Insulation	13	268,018	264,328
Total	**14**	**53,357,417**	**52,207,314**

Sums may differ due to rounding.

TABLE 4-4 PY14 HPWES COUNT OF MEASURES AND INCENTIVE SPEND

Measure	Participation (Count of Measures)	Incentive Spend ($)
Advanced Power Strip	1387	$69,350
Air Infiltration	638	$318,439
Assessment	1190	$196,350
Ceiling Insulation	41	$21,406
Custom	1	$293
Duct Sealing	750	$297,350
Faucet Aerator	349	$2,221
LED 11W A-Type (Standard)	88	$704
LED 11W BR30 (Specialty)	862	$6,896
LED 15W A-Type (Outdoor) (Standard)	11	$143
LED 15W PAR38 (Outdoor) (Specialty)	351	$4,563
LED 5W Candelabra (Specialty)	1,663	$11,641
LED 6W Globe (Specialty)	172	$1,204
LED 8W BR30 (Specialty)	159	$1,272
LED 9W A-Type (Outdoor) (Standard)	9	$63
LED 9W A-Type (Standard)	1708	$10,248

Low-Flow Showerhead	265	$4,015
Smart Thermostat	217	$37,975
Water Heater Pipe Insulation	628	$1,256
Total	**10,489**	**$985,388**

Sums may differ due to rounding.

4.2 Program Description

The HPwES is designed to achieve long-term, significantly cost-effective electric savings through the use of local auditors and trade allies who 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 program is implemented by Franklin, who helps oversee HPwES as well as additional residential programs. HPwES offers three levels of home energy audits. The Level I Assessment includes a "walk-through" inspection and direct installation of low-cost measures, such as LED lamps and water conservation measures. To generate additional savings at the time of the audit, demand response-enabled smart thermostats were added as a direct install measure. The Level II and III Assessments are comprehensive home inspections with diagnostic testing, performed by a qualified trade ally, targeted to achieve deeper savings within the home.

To meet the needs of New Orleans' unique housing stock of double shot-gun homes and smaller multifamily configurations, the program also offers HPwES incentives to buildings with four or fewer units. These types of homes often function more like single-family homes, with owners occupying one of the units, thus minimizing the split-incentive barrier.

4.2.1 PROGRAM DELIVERY CHANNELS AND EXPECTED SAVINGS

A total of 1,408 distinct households participated in PY14. Participation included:

- 1,189 distinct homes receiving traditional assessments;
- 923 distinct homes receiving major measures;
- 1,133 distinct homes receiving direct install measures;

4.2.1.1 Direct Install and Major Measures

Below,

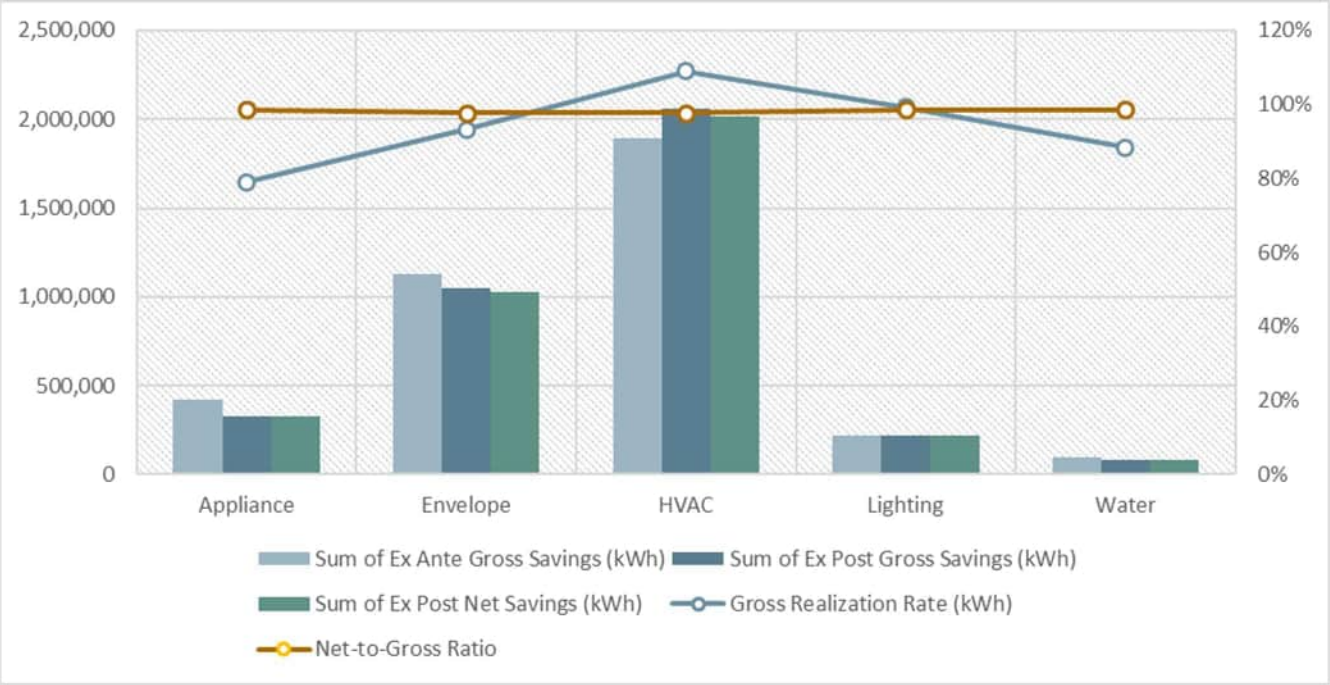


Figure 4-1 illustrates and compares the differences in energy savings (kWh) contributions by each measure.

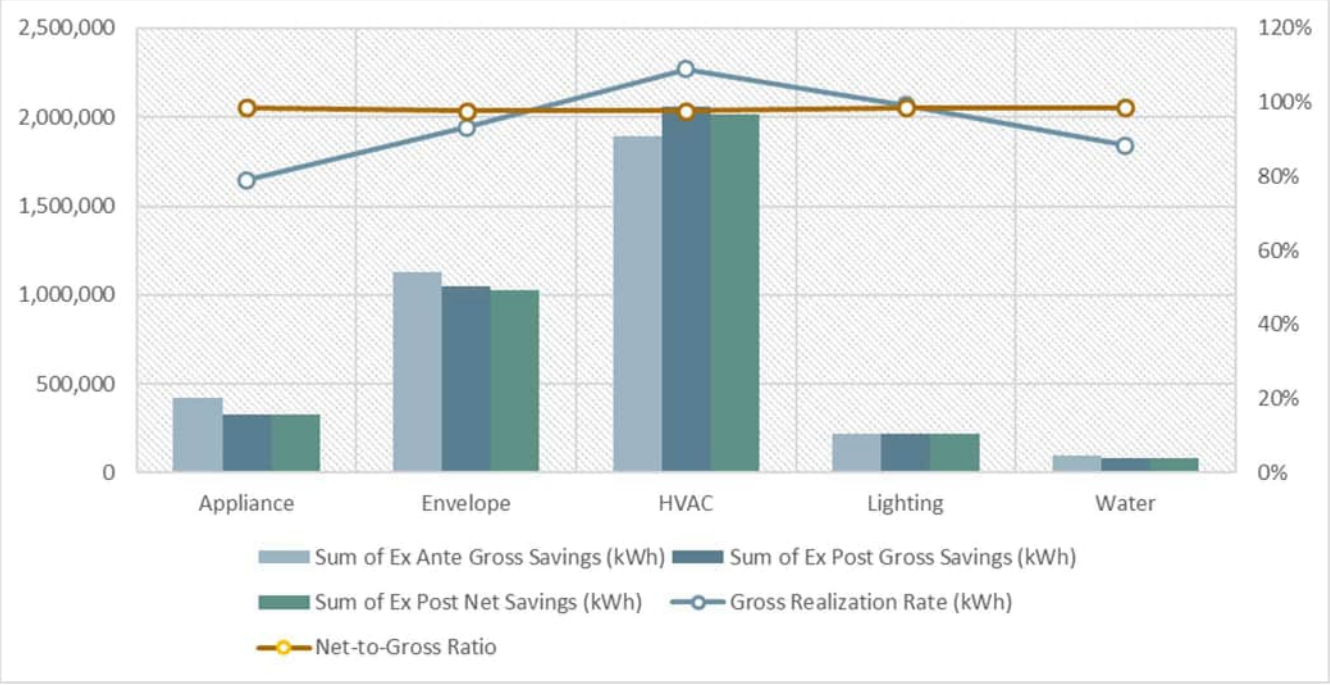
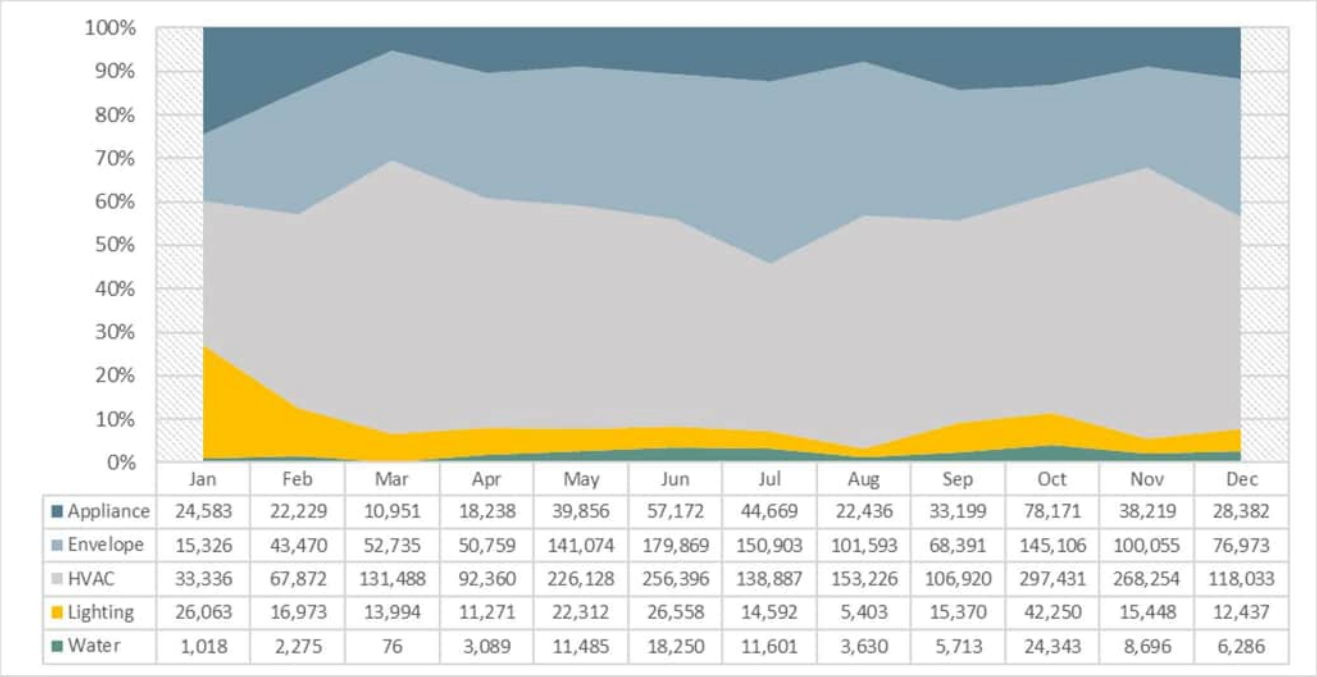


Figure 4-1 HPwES Contribution to Savings by End Use

In PY14, the HVAC measures (smart thermostat and duct sealing) contributed 50.3% of expected energy (kWh) savings (compared to 40.1% in PY13), the envelope measures (air infiltration and attic insulation) contributed 30.0% (compared to 20.7% in PY13) the lighting measures (LED lamp) contributed 5.9% (compared to 18.7% in PY13), the appliance measures (advanced power strip) contributed 11.1% (compared to 12.1% in PY13), and finally, the hot water measures (pipe wrap, aerator, showerhead) contributed 2.5% (compared to 8.3% of expected energy savings in PY13). The bulk of PY14 energy savings come from the duct sealing, air infiltration, and advanced power strips.

4.2.2 TIMING OF PROJECTS

The figure below shows *ex ante* energy savings (kWh) for HPwES by end use, by month.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Appliance	24,583	22,229	10,951	18,238	39,856	57,172	44,669	22,436	33,199	78,171	38,219	28,382
Envelope	15,326	43,470	52,735	50,759	141,074	179,869	150,903	101,593	68,391	145,106	100,055	76,973
HVAC	33,336	67,872	131,488	92,360	226,128	256,396	138,887	153,226	106,920	297,431	268,254	118,033
Lighting	26,063	16,973	13,994	11,271	22,312	26,558	14,592	5,403	15,370	42,250	15,448	12,437
Water	1,018	2,275	76	3,089	11,485	18,250	11,601	3,630	5,713	24,343	8,696	6,286

FIGURE 4-2 *EX ANTE* SAVINGS BY END USE BY MONTH

4.2.3 TRADE ALLIES

There are 15 trade allies in the HPwES program, one of which is the TPI, Franklin Energy (Franklin). Franklin is the sole installer of direct install measures and performs all assessments; the trade allies install air infiltration, attic insulation, and duct sealing. Franklin projects represent 21.6% of *ex ante* gross energy savings (kWh) and 35% of incentives paid.

The table below shows the distribution of savings across all trade allies and Franklin.

TABLE 4-5 HPWES TRADE ALLY ACTIVITY

Trade Ally	*Ex Ante* Gross Energy Savings (kWh)	% of kWh Savings
TA 1	1,558,232	41.5%
Franklin Energy	811,666	21.6%

TA 2	588,875	15.7%
TA 3	179,896	4.8%
TA 4	146,003	3.9%
TA 5	131,830	3.5%
TA 6	94,629	2.5%
TA 7	71,235	1.9%
TA 8	66,170	1.8%
TA 9	64,308	1.7%
TA 10	13,739	< 1%
TA 11	10,719	< 1%
TA 12	9,218	< 1%
TA 13	7,302	< 1%
TA 14	0	0.0%
Total	**3,753,820**	**100%**

4.2.4 GOAL ACHIEVEMENT

Total verified savings and percentage of goals for the HPwES are summarized in the tables below.

TABLE 4-6 PY14 HPWES PROGRAM VERIFIED SAVINGS

Ex Post Gross Energy Savings (kWh) Goal	% to kWh Goal	*Ex Post* Gross Savings (kW) Target	% to kW Target
3,404,313	110.1%	966.00	130.8%

4.3 EM&V Methodology

The HPwES program has received comprehensive impact and process evaluations in PY14. The evaluations performed site visits, trade ally interviews, and participant surveys which provided NTG and in-service rate estimates, feedback on program satisfaction and strategic recommendations for program improvement, and information on how trade ally experience program participation.

Verified savings were calculated using methods and inputs in the NO TRM V7.0 and incorporated results from literature reviews, participant surveys, property manager interviews and site visits to determine appropriate adjustment factors, such as in-service rates (ISR) for each measure.

4.3.1 SITE VISITS

The Evaluators performed fifty-four (54) site visits on projects in the program. The table below outlines the measures encountered and verified through the site visits.

TABLE 4-7 SITE VISIT SUMMARY

Measures	PY14 Measure Count	Expected Measure Count During PY14 Site Visits	Verified Measures Count During PY14 Site Visits
Advanced Power Strips	1,387	40	14
Air Infiltration	638	22	19
Duct Sealing	750	31	27
Faucet Aerators	349	15	3
LEDs	5,023	158	143
Low-Flow Showerheads	265	9	6

Smart Thermostats	217	6	6
Water Heater Pipe Insulation	628	22	19

Measure-specific findings of note are outlined in the bullets below:

- Air Infiltration: during the site visits conducted in PY14, the Evaluators' field staff conducted blower door testing in 19 homes to validate post-retrofit home leakage estimates indicated in program tracking data. The resulting average post-retrofit leakage estimate was calculated as 73.2% of expected leakage reductions. That is, of 19 homes the Evaluators found that the air infiltration $CFM50_{post}$ results were 26.8% lower than those reported in tracking data. The Evaluators opted to supplement the air infiltration site visit finding with literature review results, as well as blending the findings with ISRs from the NO TRM 6.1.
- Duct Sealing: during the site visits conducted in PY14, the Evaluators' field staff conducted duct system pressurization testing in 27 homes to validate post-retrofit duct leakage estimates indicated in program tracking data. The resulting average post-retrofit leakage estimate was calculated as 87.5% of expected leakage reductions. That is, of 27 homes the Evaluators found that duct sealing $CFM25_{post}$ results were 12.5% higher than those reported in tracking data. The Evaluators opted to supplement the air infiltration site visit finding with literature review results, as well as blending the findings with ISRs from the NO TRM 6.1.

Additional measure-specific impacts were derived from the PY14 participant survey, which is described further in Section 4.4.3.5 below.

4.3.2 DEEMED SAVINGS CALCULATIONS

4.3.2.1 Air Infiltration

Methods for deemed savings for air infiltration reduction came from the NO TRM V7.0, Section 1.4.7. Deemed savings multipliers were developed through EnergyGauge, a simulation software program. Multiple equipment configurations were simulated in developing savings values denominated in deemed savings per CFM50 of air leakage rate reduction. Table 4-8 summarizes the deemed savings values for New Orleans.

TABLE 4-8 DEEMED SAVINGS VALUES FOR AIR INFILTRATION REDUCTION

Equipment Type	kWh/CFM Savings	kW/CFM Savings
Electric AC with Gas Heat	0.4108	0.000331
Elec. Resistance w/ AC	1.0180	0.000332
Heat Pump	0.7210	0.000332

For example, consider a residence with electric AC and gas heat located. If the residence had a leakage rate of 7,200 CFM50 before air infiltration reduction and a leakage rate of 3,500 CFM50 after, then the residence would have an annual savings of:

$$Air\ Infiltration\ Savings = 0.4108 \frac{kWh\ Savings}{CFM_{50}} \times \left(7{,}200\ CFM_{50\ pre} - 3{,}500\ CFM_{50\ post}\right)$$

$$Air\ Infiltration\ Savings = 1{,}519.96\ kWh$$

4.3.2.2 Duct Sealing

Duct sealing savings were calculated using the following savings algorithms from the NO TRM V7.0, Section 1.3.8.

Energy (kWh) savings:

$$kWh_{savings\ (Cooling)} = \frac{(DL_{pre} - DL_{post}) \times EFLH_C \times (h_{out}\rho_{out} - h_{in}\rho_{in}) \times 60}{1{,}000 \times SEER}$$

$$kWh_{savings\ (Heating)} = \frac{\left(DL_{pre} - DL_{post}\right)/((CAP/12{,}000) \times 400) \times EFLH_h \times CAP \times TRFheat}{\eta\text{Heat} / 3{,}412}$$

Where:

DL_{pre} = Pre-improvement duct leakage at 25 Pa (ft3/min)
DL_{post} = Post-improvement duct leakage at 25 Pa (ft3/min)
ΔDSE = Assumed improvement in distribution system efficiency = 5% = 0.05
$EFLH_C$ = Equivalent Full Load Hours - cooling (1,637)
h_{out} = Outdoor design specific enthalpy (Btu/lb)
h_{in} = Indoor design specific enthalpy (Btu/lb.)
ρ_{out} = Density of outdoor air at 95°F = 0.0740 (lb/ft3)[5]
ρ_{in} = Density of conditioned air at 75°F = 0.0756 (lb./ft3)
$EFLH_H$ = Equivalent Full Load Hours - heating (600)
$12{,}000$ = Btu/ton conversion factor
$TRFheat$ = Thermal Regain Factor for heating = 1.0 Unconditioned; 0.4 Semi-conditioned space
ηHeat = Efficiency in COP of Heating equipment = Actual. If unavailable, use 1.0.
$3{,}412$ = Conversion of BTU/kWh.

Demand (kW) Reductions:

$$kW_{reductions} = \frac{kWh_{savings\ (Cooling)}}{EFLH_C} \times CF$$

$kWh_{savings\ (Cooling)}$ = Calculated kWh savings for cooling

$EFLH_C$ = Equivalent Full Load Hours - cooling (1,637)

CF = Coincidence factor = 0.77

[5] ASHRAE Fundamentals 2009, Chapter 1: Psychometrics, Equation 11, Equation 41, Table 2.

TABLE 4-9 DEEMED INPUT VALUES FOR DUCT SEALING CALCULATIONS

Parameter Input	Value
$EFLH_C$	1,637
$EFLH_H$	600
h_{out}	40
h_{in}	30
ρ_{in}	0.076
ρ_{out}	0.074
SEER	11.5
HSPF	7.30

4.3.2.3 LED Lamp

Methods for calculating deemed savings came from NO TRM V7.0. The methodology for ENERGY STAR directional, decorative, and omni-directional LED lamp is found in Sections 1.5.

$$kWh_{savings} = \left((W_{base} - W_{post})/1000\right) \times Hours \times ISR \times IEF_E$$

$$kW_{savings} = \left((W_{base} - W_{post})/1000\right) \times CF \times ISR \times IEF_D$$

Where:

W_{base} = Based on wattage equivalent of the lumen output of the installed
W_{post} = Actual wattage of LED lamp installed
$Hours$ = Average hours of use per year: 880.5 hours for indoor LED lamps, 4,319 hours for outdoor
IEF_E = Interactive Effects Factor to account for cooling energy savings and heating energy penalties
IEF_D = Interactive Effects Factor to account for cooling demand reductions and heating energy penalties
CF = Coincidence Factor, (11.12%)
ISR = In-Service Rate

TABLE 4-10 LED ENERGY AND DEMAND INTERACTIVE FACTORS

Parameter Input	IEF_E	IEF_D
Gas Heat with AC	1.10	1.29
Electric Resistance Heat with AC	0.83	1.29
Heat Pump	0.96	1.29
Heating/Cooling Unknown[6]	0.91	1.21

[6] Unknown factors are based on EnergyStar interactive effects, weighted by primary data collected on New Orleans typical HVAC arrangements.

The implementer, in accordance with the NO TRM V7.0, had trade allies collect the baseline bulb for each LED lamp direct installed in the program. The Evaluators counted those LED lamps and compared them to program counts.

4.3.2.4 Other Measures

For remaining measures, the Evaluators used the following NO TRM V7.0 sections and tables to verify savings.

TABLE 4-11 NO TRM V7.0 SECTIONS FOR OTHER MEASURES - HPWES

Measure	TRM Section	Calculated / Deemed	TRM Table(s)	Table Page(s)
Faucet Aerator	1.2.4	Deemed	Table 1-51	78
Attic Insulation	1.4.2	Deemed	Table 1-107, 1-108	136
Pipe Wrap	1.2.3	Calculated	N/A	N/A
Advanced Power Strip	1.1.7	Deemed	Table 1-17	37
Showerhead	1.2.5	Deemed	Table 1-59	86
Smart Thermostat	1.3.9	Deemed	Table 1-100	132

4.4 Evaluation Findings

Evaluation findings, by measure, can be reviewed in Section 4.1.

4.4.1 GROSS IMPACT FINDINGS

4.4.1.1 Advanced Power Strip (Tier 2)

Expected and verified savings for Tier 2 advanced power strips are summarized below. There were 1,387 units installed at 1,048 homes.

TABLE 4-12 PY13 HPWES EXPECTED AND VERIFIED ADVANCED POWER STRIP SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
418,104	330,479	79.0%	43.25	34.19	79.0%

4.4.1.2 Aerator (Bathroom & Kitchen)

Expected and verified savings for aerators are summarized below. There were 349 aerators installed in 247 homes.

TABLE 4-13 PY14 HPWES EXPECTED AND VERIFIED AERATORS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
13,318	10,669	80.1%	1.36	1.11	81.3%

4.4.1.3 Air Infiltration

The savings resulting from using NO TRM V7.0 algorithms and deemed savings parameters, plus the application of the measure ISR are summarized in Table 4-14. There were 638 installations.

TABLE 4-14 PY14 HPWES EXPECTED AND VERIFIED AIR INFILTRATION SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
1,051,709	975,729	92.8%	404.89	367.27	90.7%

4.4.1.4 Attic Insulation

Expected and verified savings for the attic insulation projects are summarized below. There were 41 installations of this measure.

TABLE 4-15 PY14 HPWES EXPECTED AND VERIFIED ATTIC INSULATION SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
74,545	74,825	100.4%	133.63	133.29	99.7%

4.4.1.5 Duct Sealing

The savings resulting from using NO TRM V7.0 algorithms and deemed savings parameters, plus the application of the measure ISR are summarized in Table 4-16. There were 750 installations of duct sealing.

TABLE 4-16 PY14 HPWES EXPECTED AND VERIFIED DUCT SEALING SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
1,815,901	1,986,872	109.4%	610.24	694.87	113.9%

4.4.1.6 LED Lamp (Direct Install)

Expected and verified savings LED lamps are summarized below. There were 3,207 specialty and 1,816 standard LED lamps; installed in both indoor and outdoor applications.

TABLE 4-17 PY13 HPWES EXPECTED AND VERIFIED LED SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
222,671	221,011	99.3%	25.08	25.04	99.8%

4.4.1.7 Water Heater Pipe Wrap

Expected and verified savings for the pipe wrap projects are summarized below. Pipe wrap was installed at 190 residences.

TABLE 4-18 PY13 HPWES EXPECTED AND VERIFIED PIPE WRAP SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
22,722	20,617	90.7%	2.57	2.34	90.8%

4.4.1.8 Low-Flow Showerhead

Expected and verified savings for showerheads are summarized below. There were 265 low-flow showerheads installed at 157 residences.

TABLE 4-19 PY14 HPWES EXPECTED AND VERIFIED SHOWERHEADS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
60,420	53,924	89.2%	6.28	5.61	89.3%

4.4.1.9 Smart Thermostat

Expected and verified savings for smart thermostats are summarized below. There were 217 smart thermostats installed at 186 residences.

TABLE 4-20 PY13 HPWES EXPECTED AND VERIFIED SMART THERMOSTAT SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
74,431	73,994	99.4%	0.00	0.00	N/A

4.4.1.10 Avoided Replacement Cost

The Evaluators have added the benefits of avoided replacement costs (ARC). The table below summarizes the ARC by measure in HPwES.

Information on methodology can be found in Section 3.4.1.3 Avoided Replacement Costs.

TABLE 4-21 SUMMARY OF ARC FOR HPWES

LED Lamp Type	*Ex Post* Gross ARCs ($)	*Ex Post* Net ARCs ($)	NPV ARCs ($)
LED 11W A-Type (Standard)	$160	$158	$158
LED 11W BR30 (Specialty)	$1,907	$1,880	$1,880
LED 15W A-Type (Outdoor) (Standard)	$20	$20	$20
LED 15W PAR38 (Outdoor) (Specialty)	$776	$766	$766
LED 5W Candelabra (Specialty)	$3,679	$3,628	$3,628
LED 6W Globe (Specialty)	$380	$375	$375
LED 8W BR30 (Specialty)	$352	$347	$347
LED 9W A-Type (Outdoor) (Standard)	$16	$16	$16
LED 9W A-Type (Standard)	$3,104	$3,062	$3,062
Total	**$10,395**	**$10,251**	**$10,251**

Sums may differ due to rounding.

4.4.2 NET IMPACT FINDINGS

The Evaluators conducted surveys and applied net-to-gross ratios based on their results. PY13 results were used in the absence of sufficient responses.

- The Participant survey responses were used to estimate the net energy impacts of the program. The program net savings are equal to gross savings, less savings associated with free-ridership, plus participant spillover savings.
- To estimate program-level free-ridership, the Evaluator calculated free-ridership scores for major and direct install measures, weighted by the participants' gross energy savings. The major and direct install measure free-ridership ratios were used to factor the program verified gross savings for the two measure types to estimate free-ridership.
- A spillover ratio was developed by dividing the total energy savings resulting from spillover measures by the total gross energy savings for the sample of survey respondents. The methodology is cited in Section 3.3.2.3.4. We did not find attributable spillover for kits; we found a spillover ratio of 0.5% for the program.

The tables below summarize the net impacts for the HPwES program.

TABLE 4-22 PY13 HPWES PROGRAM NET SAVINGS

Ex Post Gross Energy Savings (kWh)	*Ex Post* Net Energy Savings (kWh)	NTG kWh	*Ex Post* Gross Demand Reductions (kW)	*Ex Post* Net Demand Reductions (kW)	NTG kW
3,748,121	3,670,030	97.9%	1,263.71	1,236.13	97.8%

4.4.3 PROCESS FINDINGS

The Evaluators conducted a process evaluation in PY14 of the HPwES. Process activities included a database review, participant survey, and staff and implementer interviews.

The HPwES program aligns with the Department of Energy (DOE) requirements and uses a whole-house approach. This program may or may not include customer co-pay, dependent on the trade ally costs and if they exceed the incentive; all residential customers who live in a single-family home are eligible. The activities used to support this evaluation are summarized in Table 4-23.

TABLE 4-23 HPWES DATA COLLECTION ACTIVITIES

Evaluation Activity	Sample Size	Impact	Process
Staff & TPI Interviews	4		X
Database Reviews	Census	X	X
Participant Surveys	62	X	X
Desk Reviews	Census	X	
Site Visits	54	X	X

4.4.3.1 Staff and Implementer Interviews

The following section summarizes the key findings from in-depth interviews with two ENO program staff, one APTIM staff, and one Franklin staff; ENO staff participated in one interview and APTIM and Franklin staff participated in a second interview. These in-depth interviews aimed to learn more about HPwES program design and operations, and the successes and challenges experienced during PY14. Interviews lasted approximately 30 minutes and were conducted using the Microsoft Teams platform. The evaluators recorded all interviews with participant permission. The following narrative summarizes these interviews.

4.4.3.1.1 *Program Description*

HPwES is designed to achieve long-term, significant cost-effective electric savings through the use of local auditors and trade allies who 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.

HPwES offers three levels of home energy audits. The Level I Assessment will include a "walk-through" inspection and direct installation of low-cost measures, such as LEDs and water conservation measures. To generate additional savings at the time of the audit, demand response-enabled smart thermostats were added as a direct install measure. The Level II and III Assessments are comprehensive home inspections with diagnostic testing, performed by a qualified trade ally, targeted to achieve deeper savings within the home.

To meet the needs of New Orleans' unique housing stock of double shot-gun homes and smaller multifamily configurations, the offering now includes all buildings with four or fewer units in the HPwES offering. Structures of this size and construction type often behave and function more like single-family homes, with owners often occupying one of the units, thus minimizing the split-incentive barrier.

4.4.3.1.2 *Program Implementation*

Franklin's team conducts an assessment and installs direct install measures during one appointment and then uses the assessment report to determine what other measure upgrades the home requires. Once necessary upgrades are identified, the home is assigned to a trade ally who schedules an appointment with the customer, completes the installation, and submits the rebate application.

In PY14, the Energy Smart program had approximately 15-18 active trade allies across all the residential programs. Degrees of participation among the trade allies varies, and program staff try assign project leads based on capacity and performance.

The program did not experience any major measure changes in PY14. Due to EISA regulations LED savings are being reduced over the next two years, however assessors and trade allies can continue to replace incandescent bulbs with LEDs until 2025. Moving forward, ENO will not offer lighting kits; staff are still deciding whether non-lighting measures, such as faucet aerators and showerheads, will be offered in a kit. In the past, lighting kits were used as a lead generating source for other programs, with 10% of kit recipients converting into HPwES or Income Qualified program participants.

Staff noted that savings per home have continued to increase, as trade allies perform more comprehensive upgrades.

4.4.3.1.3 *Marketing*

Energy Smart program employs a variety of marketing strategies to increase interest and engagement in the HPwES program. Marketing strategies include outreach by Thrive and trade ally partners, one pagers, bill inserts, and website banners. Staff noted that trade ally recruitment is the leading driver of participation; if a trade ally refers to a customer, they will perform that customers work following the assessment.

Staff also noted that they improved their trade ally navigator tool in PY14, streamlining the application and participation process for both trade allies and customers.

4.4.3.2 Participant Survey Results

HPwES is designed to achieve long-term, significant cost-effective electric savings through the use of local auditors and trade allies 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.

HPwES will offer three levels of home energy audits. The Level I Assessment will include a "walk-through" inspection and direct installation of low-cost measures, such as LEDs and water conservation measures. To generate additional savings at the time of the audit, demand response-enabled smart thermostats were added as a direct install measure. Level II and III Assessments are comprehensive home inspections with diagnostic testing, performed by a qualified trade ally, targeted to achieve deeper savings within the home.

To meet the needs of New Orleans' unique housing stock of double shot-gun homes and smaller multifamily configurations, the offering now includes all buildings with four or fewer units in the HPwES offering. Structures of this size and construction type often behave and function more like single-family homes, with owners often occupying one of the units, thus minimizing the split-incentive barrier.

A total of 62 customers of Entergy New Orleans who participated in the Home Performance with Energy Star (HPwES) program completed the survey. Program participants received different services depending on qualifications and preferences. The table below shows the number of respondents who received each service.

TABLE 4-24 RESPONDENT PROGRAM PARTICIPATION (N=62)

RESPONDENTS	PY13 Count	PY14 Count
Total Completed Surveys	100	62
Received Major Measure Improvements	12	37
Received Direct Installment Measure Improvements	12	41
Received an Energy Saving Kit	75	--
Received LED bulbs in Energy Saving Kit (73) or through Direct Installment (11)	84	--

4.4.3.2.1 *Awareness and Motivations*

Nearly half heard about the HPwES program from an email they received from Entergy. The program's success is paying off in that word of mouth is driving interest almost as much as email invitations in 2024.

TABLE 4-25 PROGRAM AWARENESS AND INFLUENCE (N=62)

Source	2023 (n=100)	2024 (n=62)
Email from Entergy	65%	44%
Friend, family member, or colleague	15%	34%

Bill insert or utility mailer	11%	15%
Program website	7%	6%
A print advertisement	1%	6%
Program representative	2%	5%
Through an internet search or advertisement	4%	5%
Home energy consultant	2%	2%
A radio or television advertisement	2%	2%
Contractor	4%	0%
Social media post (e.g., Facebook, Twitter)	4%	0%
Other	1%	5%

Nine in ten respondents were motivated to join the program to save money on utility bills. The next most frequent factors were to conserve energy and improve the comfort of the home.

TABLE 4-26 MOTIVATIONS FOR PARTICIPATING (N=62)

Reason	2023 (n=100)	2024 (n=62)
Save money on energy bills	79%	92%
Conserve energy/Protect the environment	64%	68%
Improve the comfort of your home	33%	52%
Become as energy efficient as my friends or neighbors	21%	39%
Get the free equipment/discount/rebate	56%	35%
Find out if there were any structural problems with my home	2%	34%
Improve the value of the residence	19%	26%
Other	4%	0%

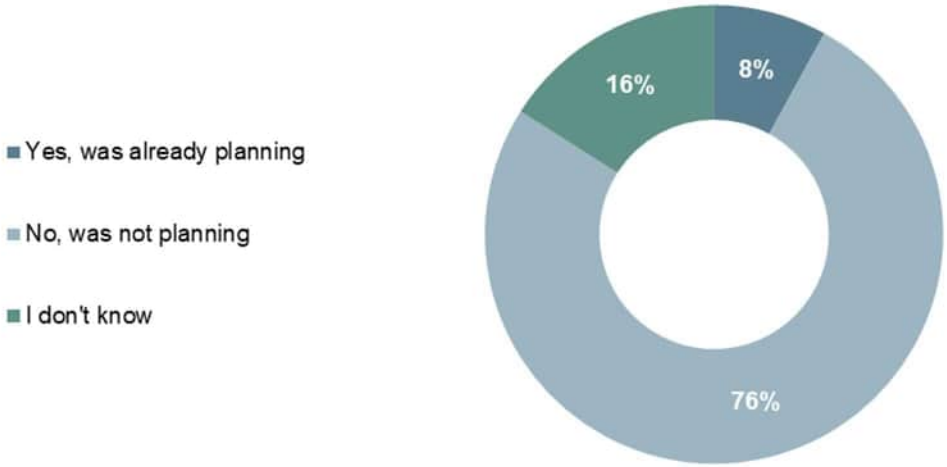
4.4.3.2.2 *Home Energy Assessments*

TABLE 4-27 NUMBER OF RESPONDENTS WHO RECEIVED A HOME ENERGY ASSESSMENT THROUGH THE PROGRAM

Assessment	Count
Received Assessment	50

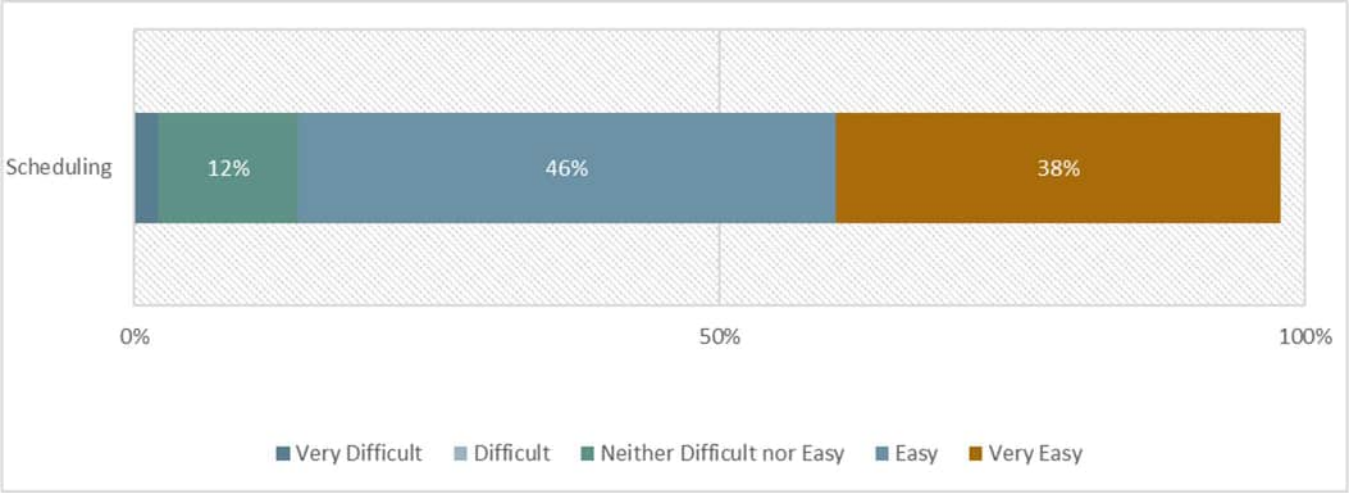
Most were not planning on having a home energy assessment for their home before learning about the program.

FIGURE 4-3 PLANNING TO HAVE ENERGY ASSESSMENT BEFORE HEARING ABOUT THE PROGRAM (N=50)



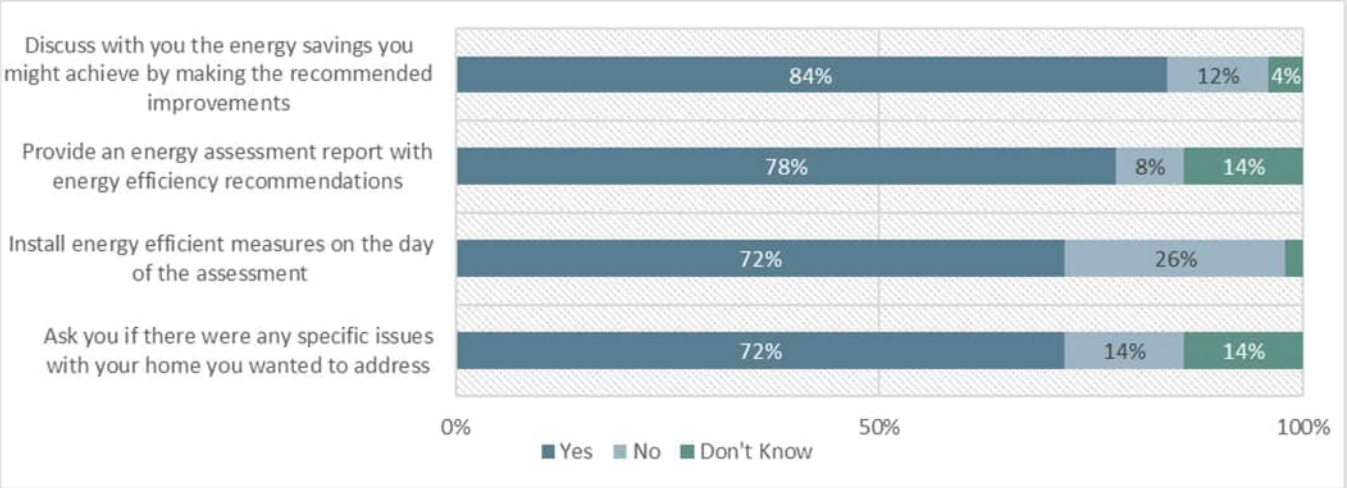
Most found that scheduling the assessment was easy. Four out of five respondents say that scheduling a home energy assessment is easy or very easy.

FIGURE 4-4 HOME ENERGY ASSESSMENT: SCHEDULING APPOINTMENTS (N=50)



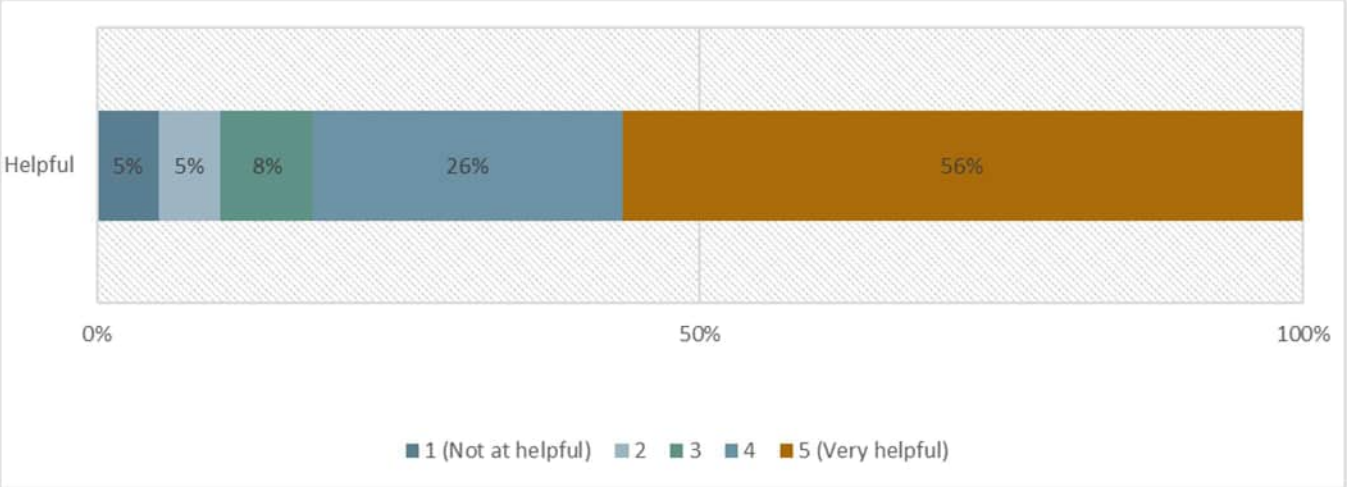
More than 8 in 10 respondents said the energy assessment included a discussion about the ways the recommended improvement might save energy. Just over 3 out of 4 reported that energy efficiency recommendations were provided. Additionally, 7 in 10 reported that energy efficiency measures were completed on that day. While a quarter did not have energy efficiency measures installed the day of the assessment. 7 in 10 of those who received an assessment said they were asked if they had any specific issues with their home they wanted addressed.

FIGURE 4-5 HOME ENERGY ASSESSMENT TASKS ACCOMPLISHED (N=50)



Most respondents who received a home energy report found the report helpful.

FIGURE 4-6 HOME ENERGY ASSESSMENT: HOW HELPFUL WAS THE REPORT? (N=39)



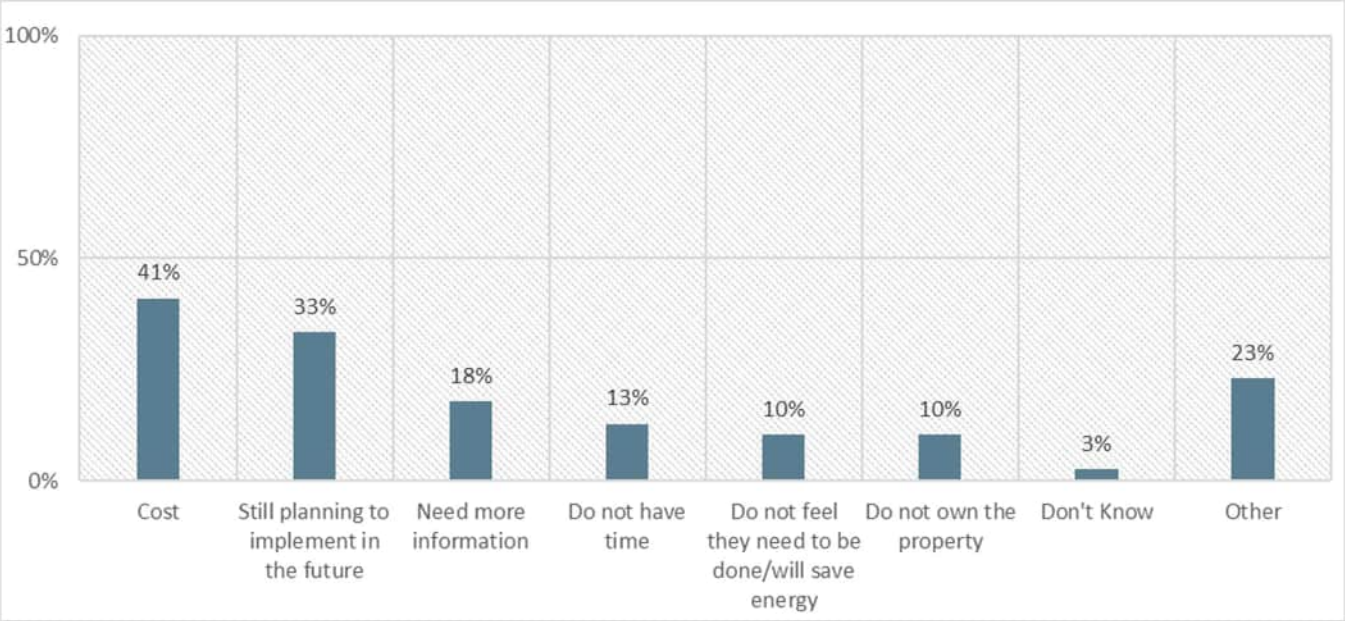
About 3 in 4 have made at least some of the recommended improvements. While few, 1 in 5, completed all of the recommended improvements.

TABLE 4-28 IMPROVEMENTS MADE BASED ON HOME ENERGY ASSESSMENT (N=50)

Made all	20%	76% Have made at least some
Made some but not all	56%	
Have not made any	22%	
Don't know	2%	

Cost was the most common reason for not having made the recommended improvements. And about one-third are still planning to make the recommended improvements.

FIGURE 4-7 REASONS FOR NOT MAKING ALL RECOMMENDED IMPROVEMENTS (N=39)



4.4.3.2.3 *Major Measure Improvements*

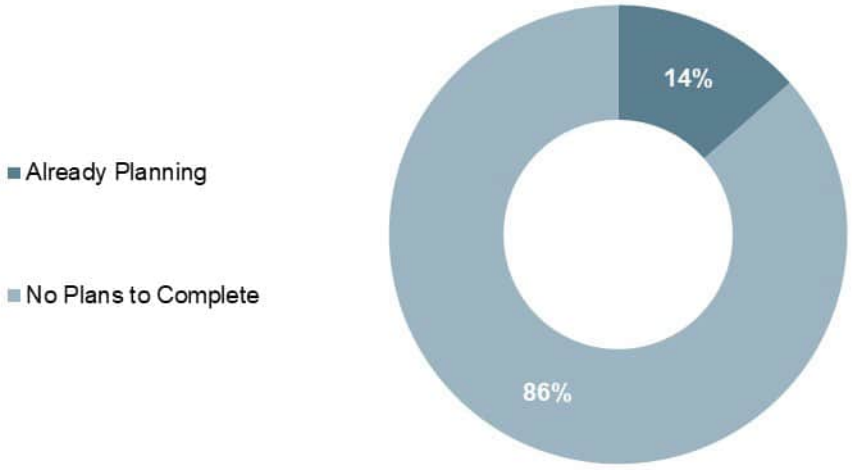
Of the 62 respondents who participated in the program, 37 received at least one of the major measure improvements.

TABLE 4-29 NUMBER OF RESPONDENTS WHO RECEIVED MAJOR MEASURE IMPROVEMENTS VIA HPWES PROGRAM (N=37)

Major Measure Improvements	# of Improvements completed
Air sealing / air filtration	28
Duct sealing	25
Smart thermostat	6
Attic / ceiling insulation	1
Total	**37**

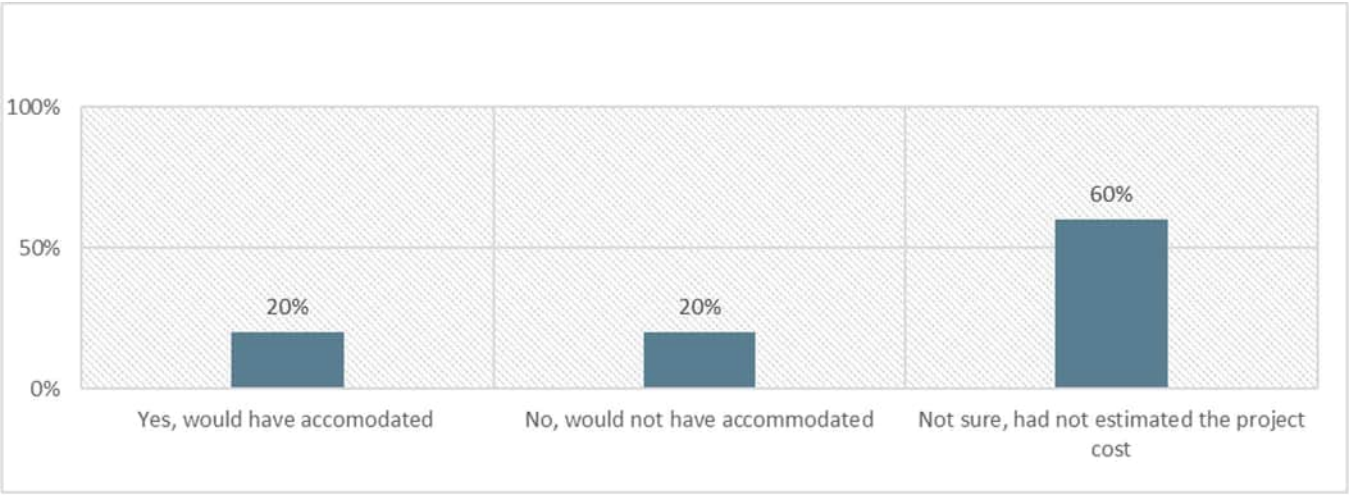
Of the 37 respondents who received a major measure improvement, 5 were already planning to make the improvement, although just one had the budget to do so.

FIGURE 4-8 RESPONDENTS PLANNING ON COMPLETING THE SAME PROJECT BEFORE LEARNING OF THE PROGRAM (N=37)



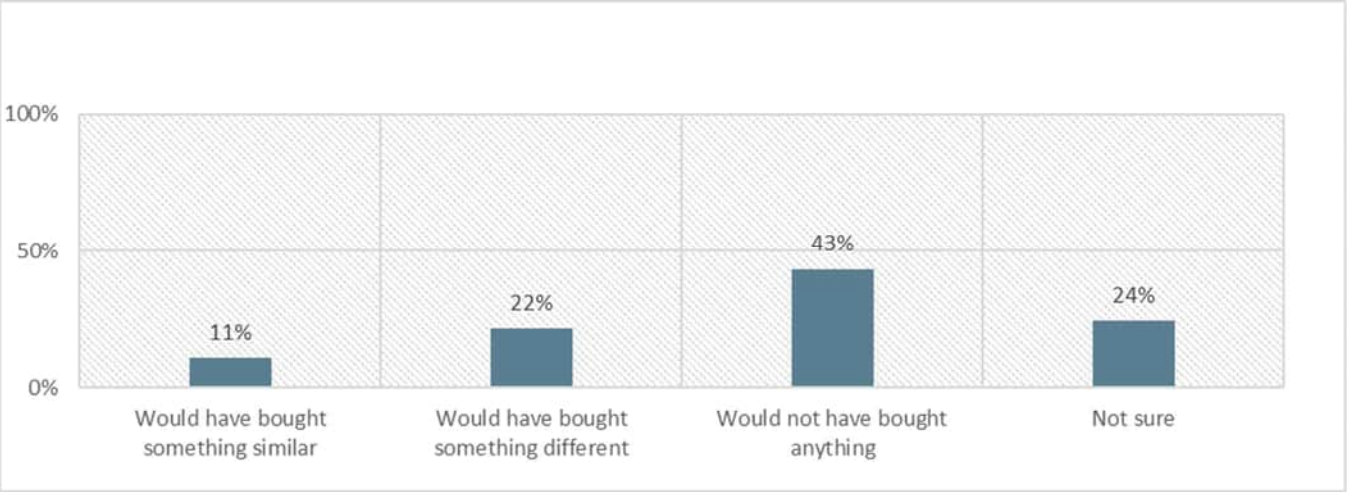
Only one respondent stated that their budget would have covered the project, whether completed through the program or not. The majority were unsure if their budget would have been sufficient.

FIGURE 4-9 IMPACT OF PROGRAM COMPLETION ON PROJECT BUDGET ACCOMMODATION (IF ALREADY PLANNING) (N=5)



Among those who installed a major measure, only 1 in 10 believe they would have purchased a similar one. Over 2 in 5 would not have purchased anything at all.

FIGURE 4-10 IMPACT OF PROGRAM INCENTIVES ON MEASURE PURCHASES AND ALTERNATIVE ACTIONS (N=37)



4.4.3.2.4 *Familiarity with Direct Install Measures*

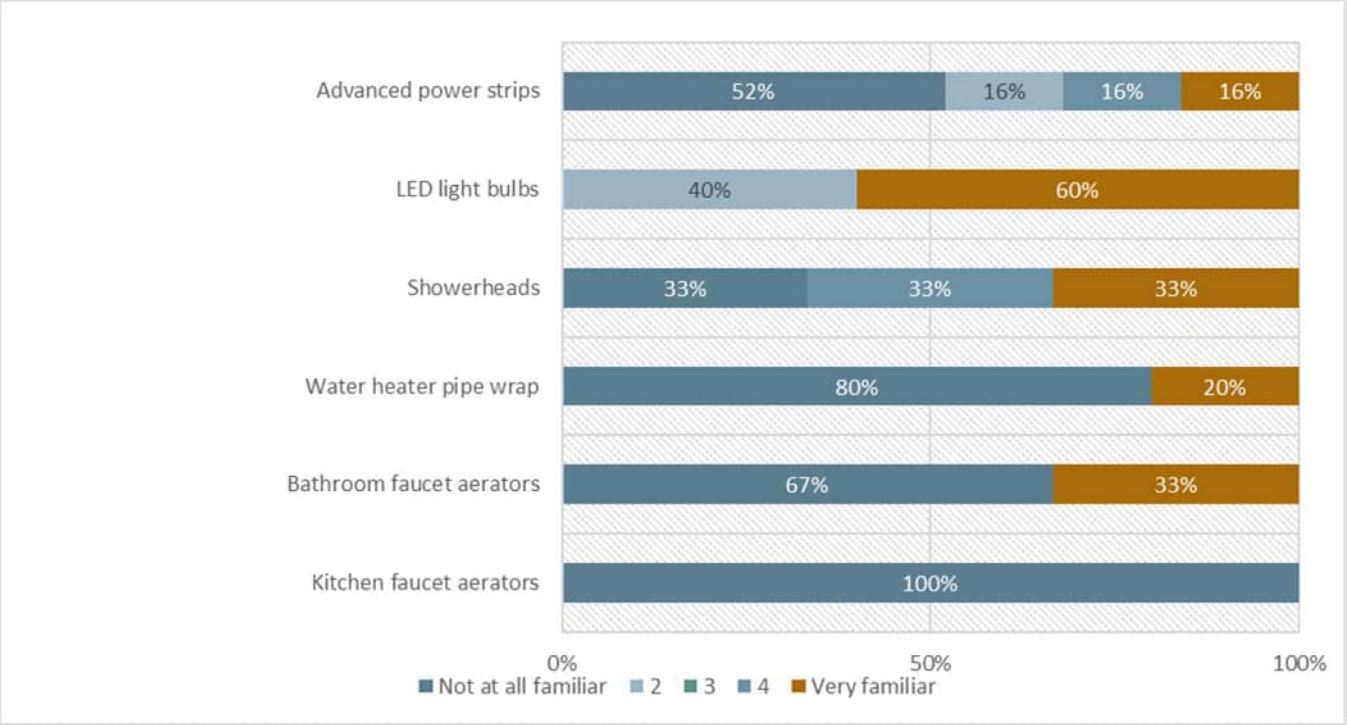
Survey responses show varying levels of familiarity with different energy-saving products, with some measures widely recognized and others relatively unknown. Notably, five out of the six measures had a majority of respondents indicating they were "Not at all familiar" with them.

Kitchen faucet aerators had the lowest awareness, with all respondents (100%) stating they were not at all familiar with this product. Similarly, water heater pipe wrap and bathroom faucet aerators also had low recognition, with 80% and 67% of respondents, respectively, indicating no familiarity. Advanced power strips followed closely, with just over half (52%) of respondents unfamiliar with them. Showerheads showed a more balanced awareness, with responses evenly distributed across different familiarity levels.

In contrast, LED light bulbs stood out as the most recognized measure, with 60% of respondents stating they were "Very familiar" with them.

The findings suggests that, while awareness of traditional energy-efficient lighting is high, there is still a significant gap in familiarity with other energy-saving measures, particularly those related to water conservation and power management.

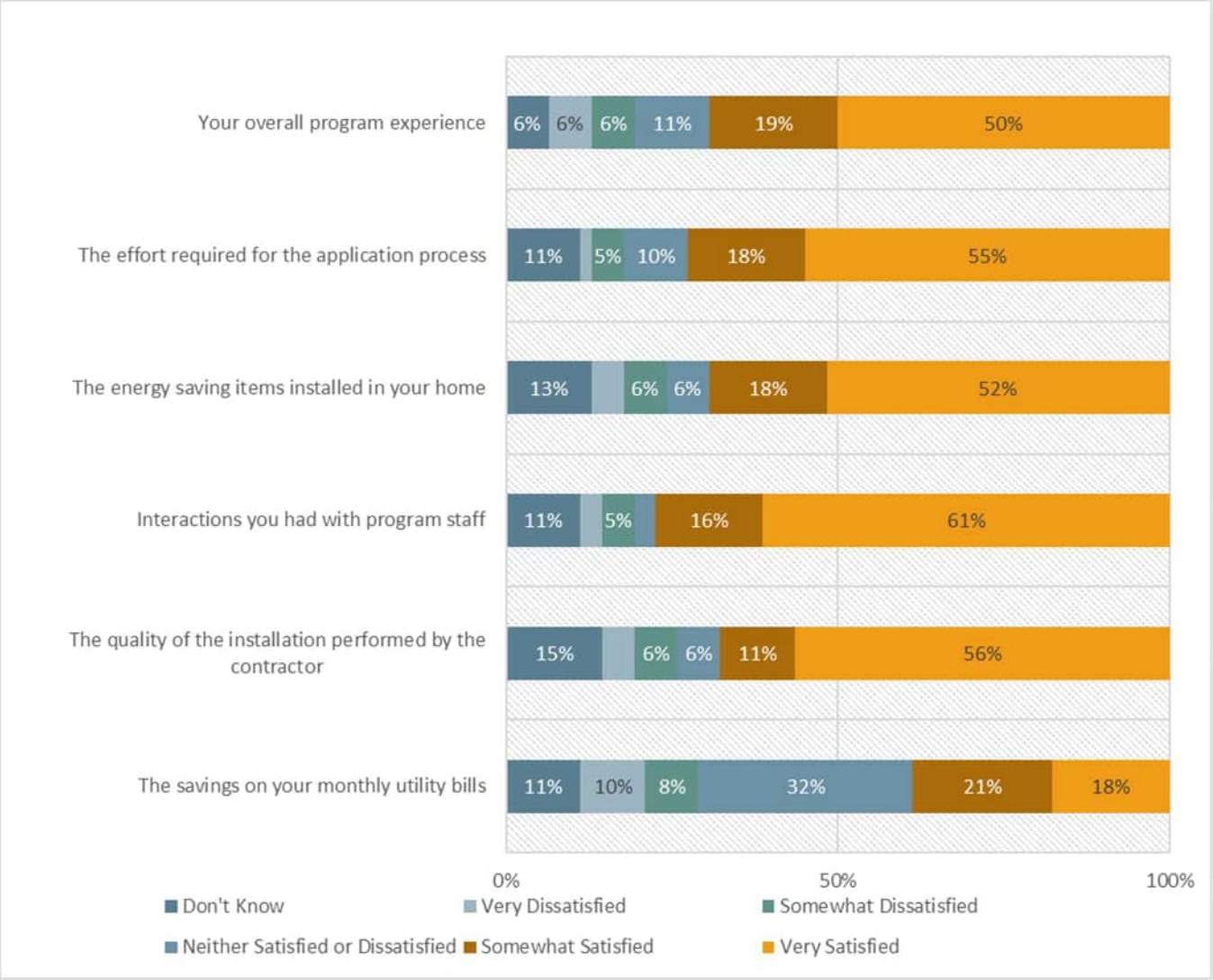
FIGURE 4-11 FAMILIARITY WITH ENERGY-SAVING MEASURES PRIOR TO PARTICIPATING IN THE PROGRAM



4.4.3.2.5 *Satisfaction*

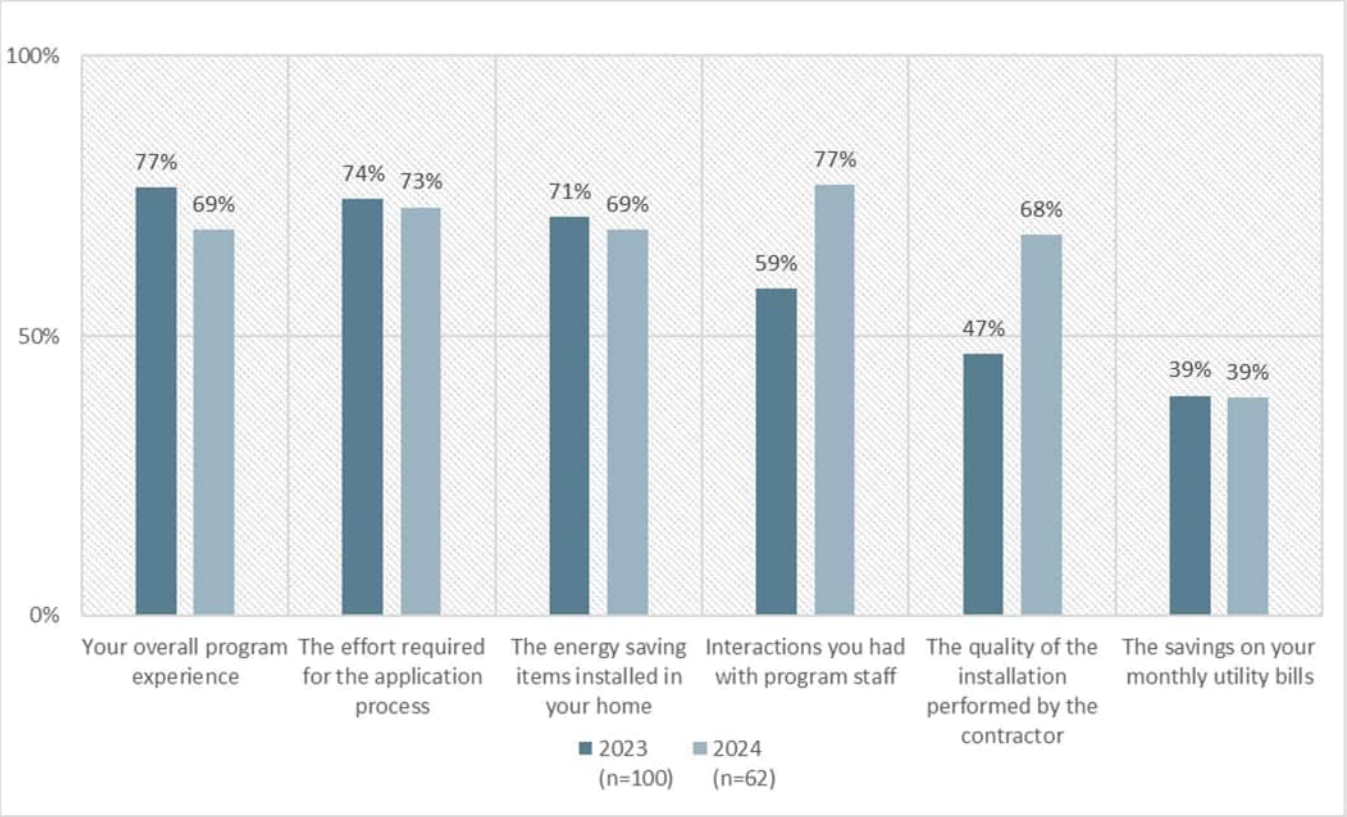
While respondents are generally satisfied with most aspects of the HPwES program, just 2 in 5 are at even somewhat satisfied with the savings on their monthly utility bills. Additionally, only half are satisfied with the quality of the installation performed by the contractor.

FIGURE 4-12 SATISFACTION WITH ASPECTS OF PROGRAM (N=62)



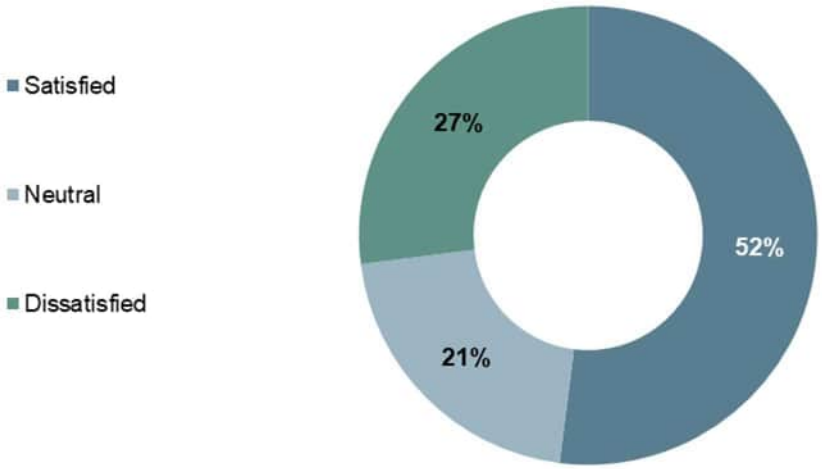
Notable improvements this year over last include improvements in interactions with staff members and the quality of the installation by the contractor.

FIGURE 4-13 SATISFACTION 2023 V. 2024 TOP 2 BOX (SOMEWHAT + VERY SATISFIED)



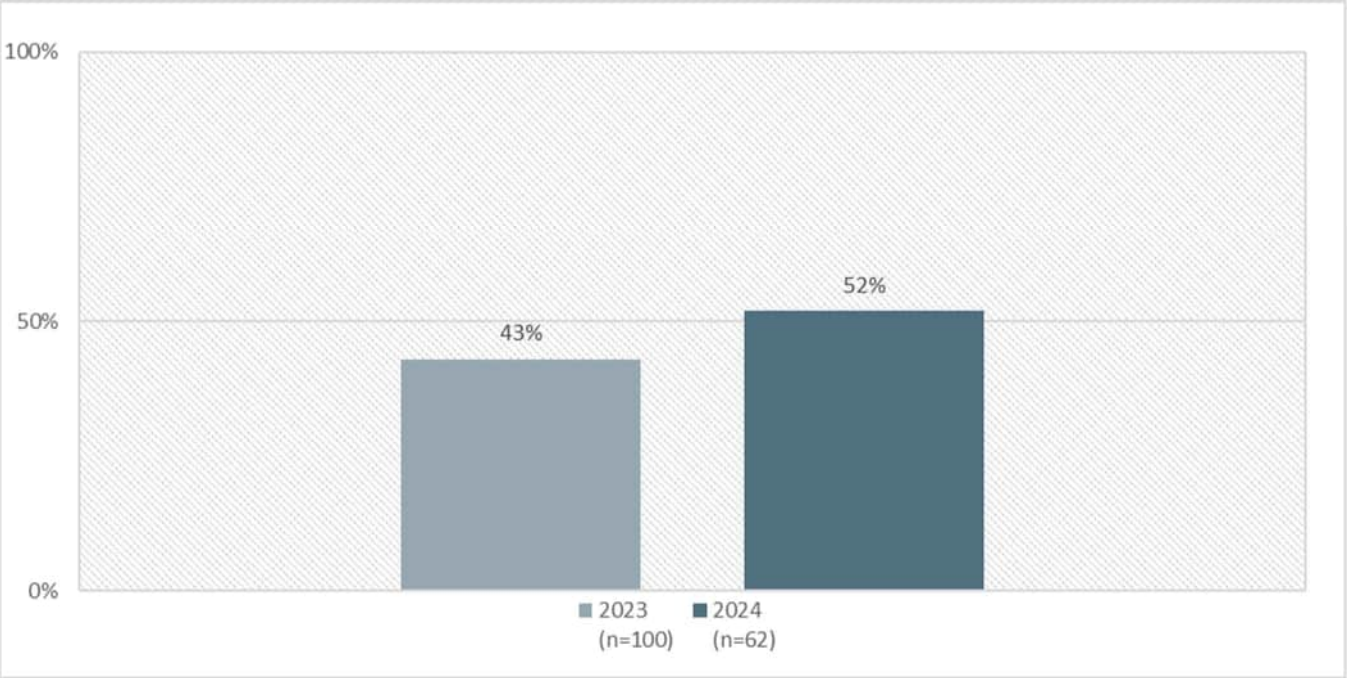
Over half of HPwES respondents report being satisfied with Entergy; and just one in five are dissatisfied with Entergy.

FIGURE 4-14 SATISFACTION WITH ENTERGY (N=62)



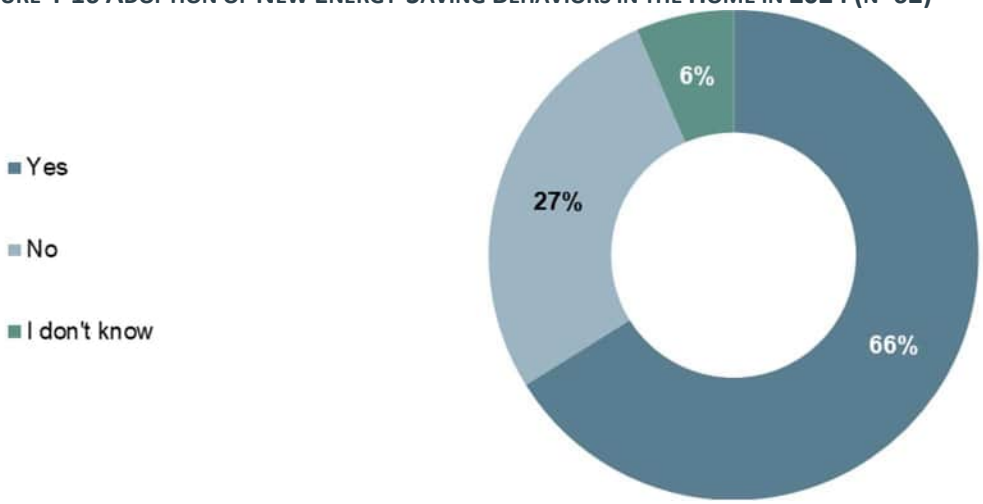
Satisfaction with Entergy has improved over the last year.

FIGURE 4-15 SATISFACTION WITH ENTERGY 2023 V. 2024 - % SATISFIED WITH ENTERGY (N=62)



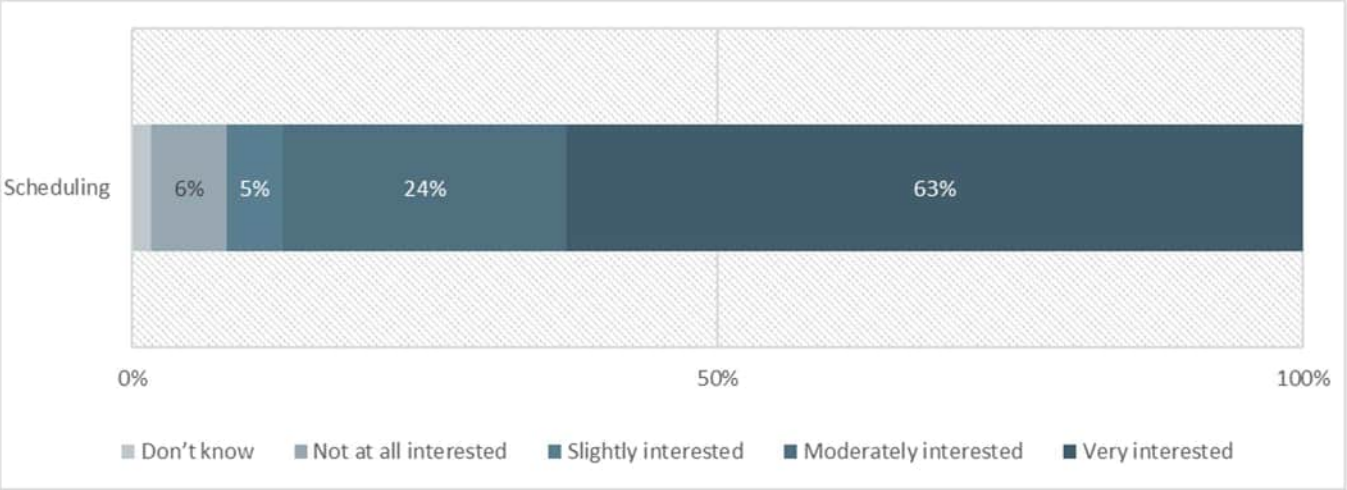
2 in 3 have adopted new energy saving behaviors this year.

FIGURE 4-16 ADOPTION OF NEW ENERGY-SAVING BEHAVIORS IN THE HOME IN 2024 (N=62)



Nearly 9 in 10 are interested in receiving additional information on energy-saving tips and rebate programs from Entergy.

FIGURE 4-17 INTEREST IN RECEIVING ADDITIONAL INFORMATION ON ENERGY-SAVING TIPS AND REBATE PROGRAMS FROM ENTERGY (N=62)



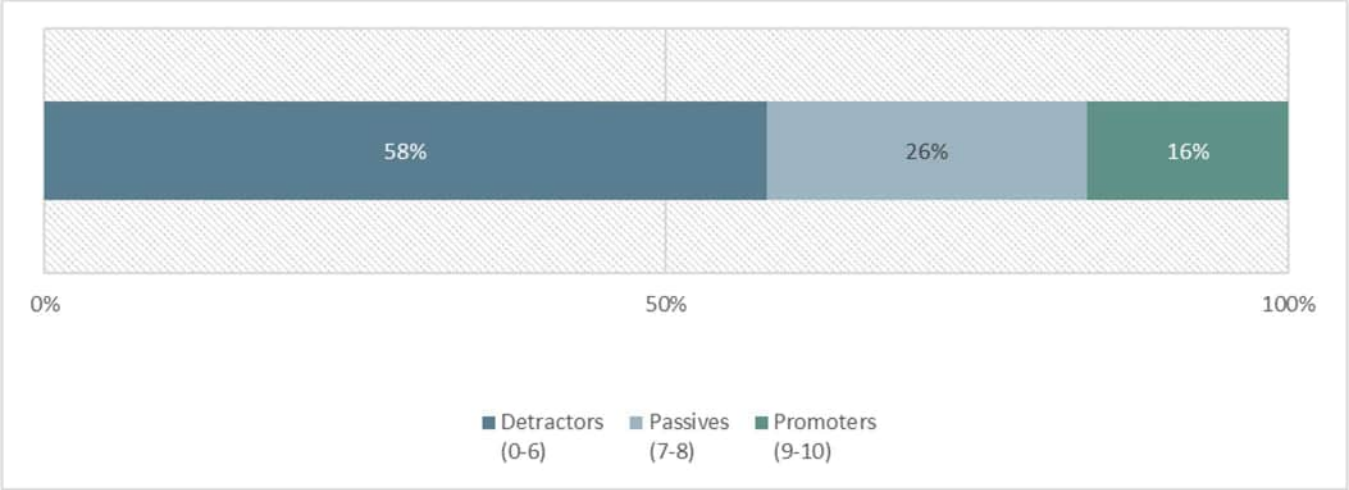
Email is the most preferred contact method to receive information on energy saving equipment and improvements.

TABLE 4-30 PREFERRED CONTACT METHOD (N=62)

Contact Method	(n = 62)
Email	50%
Bill inserts	15%
Text messages	13%
Home energy report	10%
Entergy's customer engagement portal	3%
Newsletter	3%
Entergy's Energy Smart website	2%
Telephone call	2%
Social media	2%
Don't know	2%

For most respondents, Entergy does not inspire them to the extent that they would recommend the utility provider to others. Just 16% say they would be likely to recommend the company to a friend or colleague. This result is not surprising for this type of business, yet it will be an interesting metric to follow for improvements or declines over time.

TABLE 4-31 LIKELIHOOD OF RECOMMENDING ENTERGY NEW ORLEANS TO A FRIEND OR COLLEAGUE, ASSUMING UTILITY PROVIDER OPTIONS (N=62)



4.5 Findings and Recommendations

Findings and Conclusions:

- Expanded Eligibility and Deeper Savings: The program now includes multifamily buildings with four or fewer units to better serve New Orleans' unique housing stock. Trade allies are performing more comprehensive upgrades, increasing per-home savings.
- Evolving Measure Offerings: Due to EISA regulations, LED savings will phase out by 2025. Staff are considering whether to continue offering non-lighting measures, such as faucet aerators and showerheads, in kits.
- Trade Ally-Driven Participation: The program relies heavily on trade allies for customer recruitment and project implementation. Staff enhanced the trade ally navigator tool in PY14 to streamline participation.
- Customer Awareness and Motivation: Nearly half of participants heard about the program through email, but word-of-mouth referrals have become an increasingly significant driver of participation. Most participants joined to save money on their utility bills, but only two in five were satisfied with their actual savings.
- Impact of Major Measure Improvements: Customers who received air sealing, duct sealing, and insulation upgrades reported energy efficiency improvements, with most stating they would not have completed these upgrades without the program. Cost remains a primary barrier to completing all recommended measures.

Recommendations:

- Strengthen Trade Ally Recruitment and Support: Given trade allies' central role, staff could expand recruitment efforts and provide additional training or incentives to encourage consistent participation and quality upgrades. The benchmarking research on utility trade ally programs provides information on different approaches utilities have used to engage and manage trade allies.

- Refine Measure Offerings for Lead Generation: Since past lighting kits helped convert participants into other programs, staff could explore alternative lead generation methods, such as targeted outreach to previous kit recipients or bundling efficiency measures with other residential offerings.
- Improve Customer Communication on Cost Savings: Since most participants are motivated by bill savings, but only a third are satisfied with realized savings, consider providing clearer expectations and guidance on long-term savings potential. Implement follow-up engagement, such as personalized energy reports or online tools to help customers track and understand their savings over time.
- Expand Outreach Strategies: With word-of-mouth becoming a significant driver of participation, staff could leverage referral incentives, testimonials, and community-based outreach efforts to attract new customers. Partnering with local organizations and neighborhood groups could further enhance program awareness.

5 INCOME QUALIFIED WEATHERIZATION

5.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend, by measure, where applicable.

TABLE 5-1 PY14 IQW ENERGY SAVINGS (KWH)

Measure	Ex Ante Gross Savings (kWh)	Realization Rate (kWh)	Ex Post Gross Savings (kWh)	NTG	Ex Post Net Savings (kWh)
Advanced Power Strip	288,529	80.5%	232,140	100.00%	232,140
Air Infiltration	835,224	93.6%	781,841	100.00%	781,841
Audit	0	N/A	N/A	N/A	N/A
Ceiling Insulation	883,937	100.3%	886,738	100.00%	886,738
Custom Repairs	0	N/A	N/A	N/A	N/A
Duct Sealing	1,270,408	111.0%	1,410,715	100.00%	1,410,715
Faucet Aerator	15,640	97.0%	15,174	100.00%	15,174
LED 11W A-Type (Standard)	1,553	98.6%	1,531	100.00%	1,531
LED 11W BR30 (Specialty)	19,982	101.9%	20,358	100.00%	20,358
LED 15W A-Type (Outdoor) (Standard)	4050.7	93.2%	3,777	100.00%	3,777
LED 15W PAR38 (Outdoor) (Specialty)	62,602	95.8%	59,994	100.00%	59,994
LED 5W Candelabra (Specialty)	35,986	96.2%	34,616	100.00%	34,616
LED 6W Globe (Specialty)	4,611	96.2%	4,437	100.00%	4,437
LED 8W BR30 (Specialty)	2,285	99.7%	2,278	100.00%	2,278
LED 9W A-Type (Outdoor) (Standard)	239	96.2%	230	100.00%	230
LED 9W A-Type (Standard)	31,676	96.0%	30,409	100.00%	30,409
Low-Flow Showerhead	54,948	88.6%	48,676	100.00%	48,676
Smart Thermostat	53,508	99.4%	53,194	100.00%	53,194
Water Heater Pipe Insulation	15,959	79.1%	12,616	100.00%	12,616
Total	**3,581,137**	**100.5%**	**3,598,721**	**100.00%**	**3,598,721**

Sums may differ due to rounding.

TABLE 5-2 PY14 IQW DEMAND REDUCTIONS (KW)

Measure	Ex Ante Gross Reductions (kW)	Realization Rate (kW)	Ex Post Gross Reductions (kW)	NTG	Ex Post Net Reductions (kW)
Advanced Power Strip	29.74	80.5%	23.92	100.0%	23.92
Air Infiltration	373.86	94.7%	354.23	100.0%	354.23
Audit	0.00	N/A	N/A	N/A	N/A
Ceiling Insulation	1678.18	98.2%	1648.76	100.0%	1648.76
Custom Repairs	0.00	N/A	N/A	N/A	N/A
Duct Sealing	444.10	113.8%	505.35	100.0%	505.35
Faucet Aerator	1.62	97.6%	1.58	100.0%	1.58
LED 11W A-Type (Standard)	0.27	98.6%	0.27	100.0%	0.27
LED 11W BR30 (Specialty)	3.30	101.9%	3.36	100.0%	3.36
LED 15W A-Type (Outdoor) (Standard)	0.00	N/A	0.00	N/A	0.00
LED 15W PAR38 (Outdoor) (Specialty)	0.00	N/A	0.00	N/A	0.00
LED 5W Candelabra (Specialty)	5.96	96.6%	5.76	100.0%	5.76
LED 6W Globe (Specialty)	0.83	96.2%	0.80	100.0%	0.80
LED 8W BR30 (Specialty)	0.35	99.7%	0.35	100.0%	0.35
LED 9W A-Type (Outdoor) (Standard)	0.00	N/A	0.00	N/A	0.00
LED 9W A-Type (Standard)	5.51	96.5%	5.31	100.0%	5.31
Low-Flow Showerhead	5.71	88.6%	5.06	100.0%	5.06
Smart Thermostat	0.00	N/A	0.00	N/A	0.00
Water Heater Pipe Insulation	1.81	79.1%	1.43	100.0%	1.43
Total	**2,551.22**	**100.2%**	**2,556.17**	**100.0%**	**2,556.17**

Sums may differ due to rounding.

TABLE 5-3 PY14 IQW LIFETIME SAVINGS SUMMARY

Measure	EUL	Ex Post Gross Lifetime Energy Savings (kWh)	Ex Post Net Lifetime Energy Savings (kWh)
Advanced Power Strip	10	2,321,399	2,321,399
Air Infiltration	11	8,600,247	8,600,247
Audit	1	N/A	N/A
Ceiling Insulation	20	17,734,751	17,734,751
Custom Repairs	1	N/A	N/A
Duct Sealing	18	25,392,861	25,392,861
Faucet Aerator	10	151,744	151,744
LED 11W A-Type (Standard)	1.5	2,297	2,297
LED 11W BR30 (Specialty)	1.5	30,537	30,537
LED 15W A-Type (Outdoor) (Standard)	1.5	5,665	5,665
LED 15W PAR38 (Outdoor) (Specialty)	1.5	89,991	89,991
LED 5W Candelabra (Specialty)	1.5	51,924	51,924
LED 6W Globe (Specialty)	1.5	6,655	6,655
LED 8W BR30 (Specialty)	1.5	3,417	3,417
LED 9W A-Type (Outdoor) (Standard)	1.5	345	345
LED 9W A-Type (Standard)	1.5	45,613	45,613
Low-Flow Showerhead	10	486,756	486,756
Smart Thermostat	11	585,131	585,131
Water Heater Pipe Insulation	13	164,004	164,004
Total	**15**	**55,673,337**	**55,673,337**

Sums may differ due to rounding.

TABLE 5-4 PY14 IQW PARTICIPATION AND INCENTIVE SUMMARY

Measure	Participation (Count of Measures)	Incentive Spend ($)
Advanced Power Strip	946	$47,300
Air Infiltration	656	$449,919
Audit	854	$140,870
Ceiling Insulation	478	$799,200
Custom Repairs	1	$6,500
Duct Sealing	599	$451,190
Faucet Aerator	413	$2,635
LED 11W A-Type (Standard)	47	$376
LED 11W BR30 (Specialty)	460	$3,680
LED 15W A-Type (Outdoor) (Standard)	17	$221
LED 15W PAR38 (Outdoor) (Specialty)	270	$3,510
LED 5W Candelabra (Specialty)	1216	$8,512
LED 6W Globe (Specialty)	173	$1,211
LED 8W BR30 (Specialty)	45	$360
LED 9W A-Type (Outdoor) (Standard)	2	$14
LED 9W A-Type (Standard)	1155	$6,930
Low-Flow Showerhead	243	$3,705
Smart Thermostat	156	$27,300
Water Heater Pipe Insulation	443	$886
Total	**8,174**	**$1,954,318**

Sums may differ due to rounding.

5.2 Program Description

The Income Qualified Weatherization (IQW) program, implemented by Frankin, offers comprehensive weatherization services to qualified low-income, single-family homes and low-rise, multi-family dwellings of four or fewer units. The program also provides comprehensive home assessments, direct install measures, as well as deeper energy efficiency upgrades when necessary. The Program's objective is to educate customers on their energy usage, identify opportunities for energy savings specific to their home, and prioritize a wide range of energy conservation measures that will allow customers to save energy.

Customers with household incomes of 200% the federal poverty level are eligible to participate in the IQW program and will receive a home energy assessment and necessary upgrades at no cost. Customers' income qualification is determined by online scheduling tool or the Energy Smart call center when scheduling home energy assessment.

5.2.1 PROGRAM DELIVERY CHANNELS AND EXPECTED SAVINGS

The evaluation approach for PY14 included the following activities: database review, desk reviews, site visits, and participant surveys.

A total of 1,151 (853 assessments, 7,320 measures installed) households participated in IQW. Below,

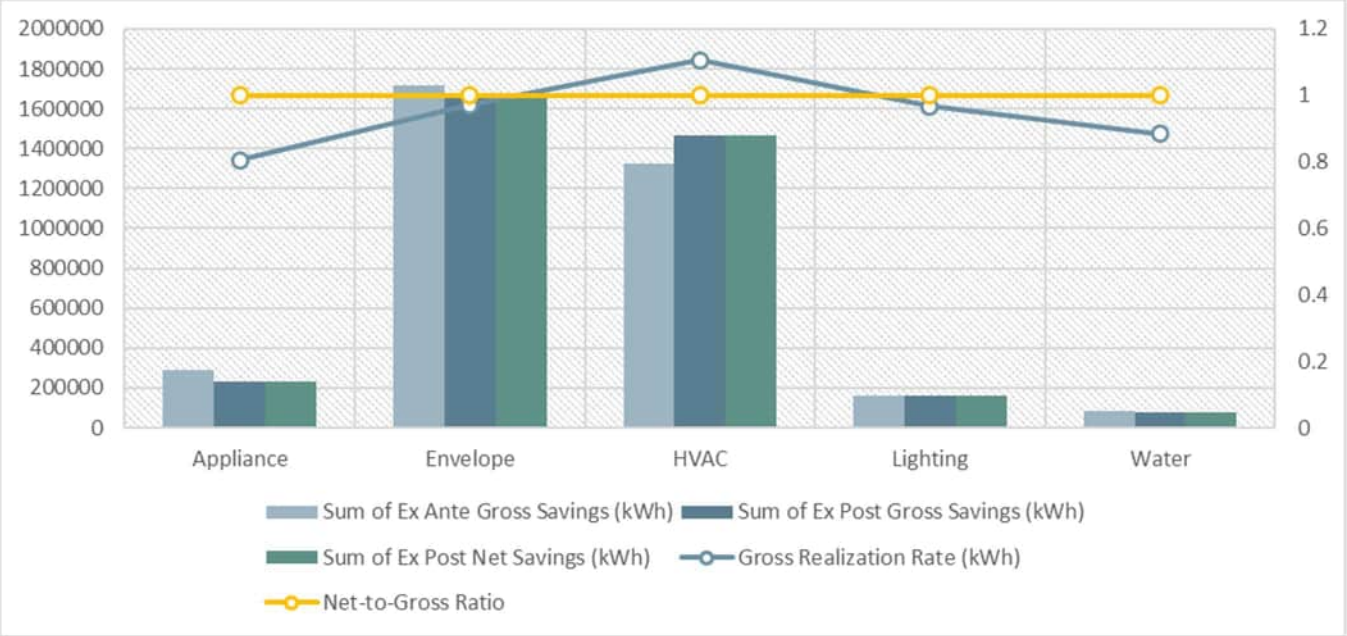


Figure 5-1 shows individual measure contribution as part of the overall offering expected savings.

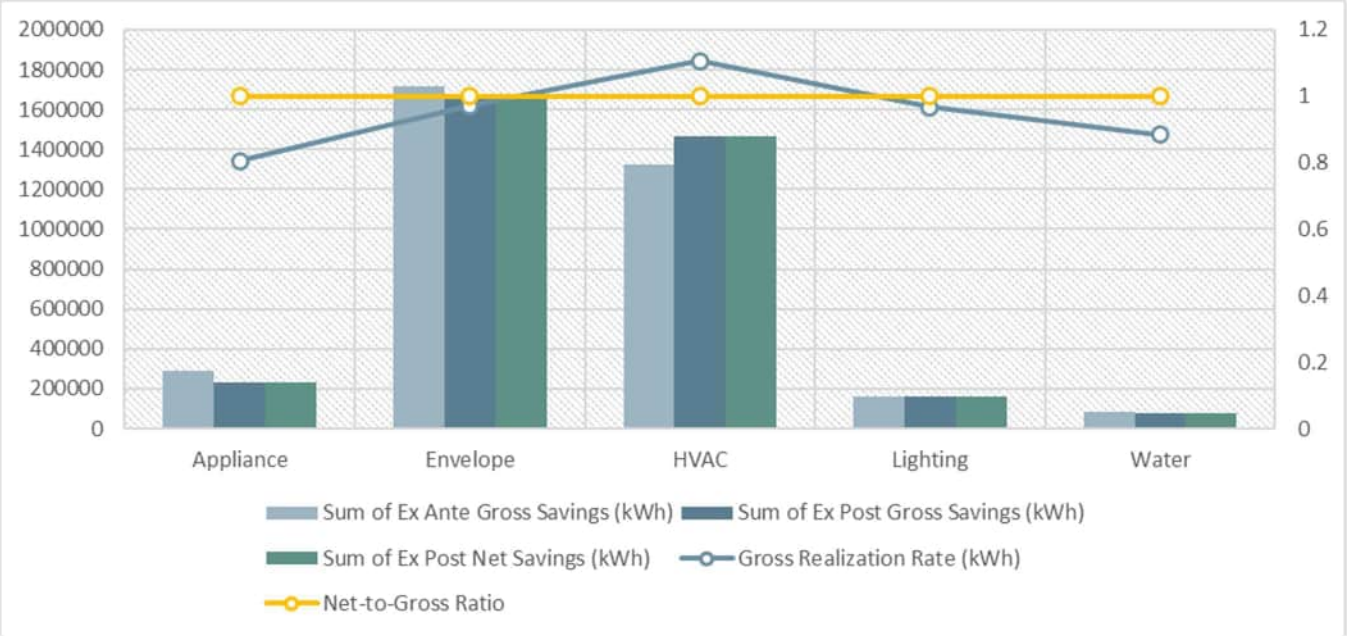


FIGURE 5-1 IQW SAVINGS CONTRIBUTION BY END USE

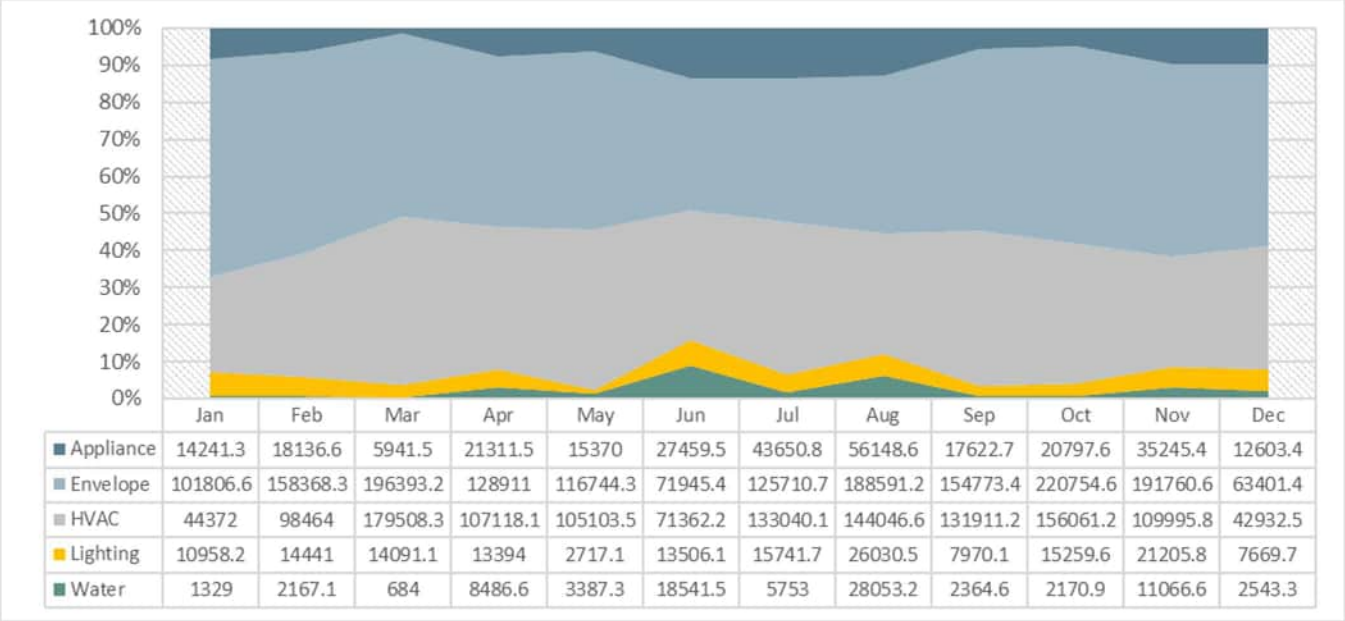
In PY14, the HVAC measures (smart thermostat and duct sealing) contributed 40.0% of expected energy (kWh) savings (compared to 48.5% in PY13), the envelope measures (air infiltration and attic insulation) contributed 48.0% (compared to 32.5% in PY13), the lighting measures (LED lamp) contributed 4.6% (compared to 8.0% in PY13), the appliance measures (advanced power strip) contributed 8.1% (compared to 5.8% PY13), and the hot water measures (pipe wrap, aerator, showerhead) contributed 2.4% (compared to 5.1% of expected savings in

PY13). The bulk of PY14 energy savings (kWh) come from the duct sealing, air infiltration, and attic insulation projects.

Finally, in PY14 there were a total of 1,151 distinct homes accounting for 3,581,137 kWh of expected savings. Compared to PY13, there were a total of 1,574 distinct homes accounting for 4,363,127 kWh of expected savings. This accounts for a 26.8% decrease in participation and a 17.9% decrease in expected savings in PY14.

5.2.2 TIMING OF PROJECTS

The figure below shows *ex ante* energy savings (kWh) for IQW by end use, by month.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Appliance	14241.3	18136.6	5941.5	21311.5	15370	27459.5	43650.8	56148.6	17622.7	20797.6	35245.4	12603.4
Envelope	101806.6	158368.3	196393.2	128911	116744.3	71945.4	125710.7	188591.2	154773.4	220754.6	191760.6	63401.4
HVAC	44372	98464	179508.3	107118.1	105103.5	71362.2	133040.1	144046.6	131911.2	156061.2	109995.8	42932.5
Lighting	10958.2	14441	14091.1	13394	2717.1	13506.1	15741.7	26030.5	7970.1	15259.6	21205.8	7669.7
Water	1329	2167.1	684	8486.6	3387.3	18541.5	5753	28053.2	2364.6	2170.9	11066.6	2543.3

FIGURE 5-2 *EX ANTE* SAVINGS BY END USE BY MONTH

5.2.3 TRADE ALLIES

The IQW program had 19 participating trade allies in PY14. Twelve of the reported trade allies perform weatherization work, including the following measures: duct sealing, attic insulation, air Infiltration.

Additionally, in place of trade allies, the implementer (Franklin) installs all direct install measures, including the following: advanced power strip, smart thermostat, water heater pipe wrap, aerator, low-flow showerhead, and all lighting. They performed all assessments, representing 17% of the claimed savings. The top performing TA, not Franklin, installs air infiltration, attic insulation, and duct sealing. The table below shows the distribution of savings across all trade allies and the implementer.

TABLE 5-5 IQW TRADE ALLY ACTIVITY

Trade Ally	Energy Savings (kWh)	% of Savings
TA 1	667,450	19%
Franklin Energy	591,569	17%
TA 2	575,434	16%
TA 3	294,093	8%
TA 4	269,874	8%

TA 5	239,209	7%
TA 6	229,696	6%
TA 7	148,486	4%
TA 8	128,669	4%
TA 9	115,407	3%
TA 10	95,900	3%
TA 11	82,441	2%
TA 12	56,691	2%
TA 13	34,666	< 1%
TA 14	26,871	< 1%
TA 15	17,718	< 1%
TA 16	5,940	< 1%
TA 17	1,026	< 1%
TA 18	0	< 1%

Sums may differ due to rounding.

5.2.4 GOAL ACHIEVEMENT

Total verified savings and percentage of goals for the IQW program are summarized in the table below.

TABLE 5-6 PY13 IQW PERFORMANCE TOWARDS GOALS AND TARGETS

Ex Post Gross Energy Savings (kWh) Goal	% to kWh Goal	Ex Post Gross Savings (kW) Target	% to kW Target
3,220,972	111.7%	66.00	3,873.0%

Sums may differ due to rounding.

5.3 EM&V Methodology

Impact savings were calculated using methods and inputs in the NO TRM V7.0 and incorporated results from historic on-site testing where appropriate.

5.3.1 SITE VISITS

The Evaluators performed 34 site visits on projects in the IQW program. The table below outlines the measures captured in site visits.

TABLE 5-7 SITE VISIT SUMMARY

Measures	PY14 Measure Count	Expected Measure Count During PY14 Site Visits	Verified Measures Count During cPY14 Site Visits
Advanced Power Strips	946	18	6
Air Infiltration	656	28	27
Ceiling Insulation	478	17	17
Duct Sealing	599	27	22
Faucet Aerators	413	6	6
LEDs	3,385	173	153
Low-Flow Showerheads	243	6	5
Smart Thermostats	156	6	6

Water Heater Pipe Insulation	443	12	8

Measure-specific findings of note are outlined in the bullets below:

- Air Infiltration: During the site visits conducted in PY14, the Evaluators' field staff conducted blower door testing in 27 homes to validate post-retrofit home leakage estimates indicated in program tracking data. The resulting average post-retrofit leakage estimate was calculated as 87.3% of expected leakage reductions. That is, of 27 homes the Evaluators found that air infiltration $CFM50_{post}$ results were 12.7% lower than those reported in tracking data. The Evaluators opted to supplement the air infiltration site visit finding with literature review results, as well as blending the findings with ISRs from the NO TRM 7.0.
- Duct Sealing: During the site visits conducted in PY14, the Evaluators' field staff conducted duct system pressurization testing in 22 homes to validate post-retrofit duct leakage estimates indicated in program tracking data. The resulting average post-retrofit leakage estimate was calculated as 99.6% of expected leakage reductions. That is, of 22 homes the Evaluators found that duct sealing $CFM25_{post}$ results were 0.4% lower than those reported in tracking data. The Evaluators opted to supplement the air infiltration site visit finding with literature review results, as well as blending the findings with ISRs from the NO TRM 7.0

Additional measure-specific impacts were derived from the PY14 participant survey.

ISR results are presented in the table below. LED lamps and duct sealing impacts are from site visits alone; the remaining result are from the PY14 participant survey or a blended approach. All results were benchmarked against similar programs in the region to ensure they are within industry standards.

The largest barrier to scaling site visits was effective participant contact information.

5.3.2 DEEMED SAVINGS CALCULATIONS

Impact methodologies for IQW are the same as described for HPwES, described in Section 4.3.2.

5.4 Evaluation Findings

5.4.1 GROSS IMPACT FINDINGS

The followings sections outline the results of the gross impact evaluation of the IQW program.

5.4.1.1 Aerator

Expected and verified savings for PY14 IQW aerators are summarized below. There were 413 aerators installed in 286 residences.

TABLE 5-8 PY14 IQW EXPECTED AND VERIFIED AERATORS SAVINGS

Ex post Gross Energy Savings (kWh) Goal	% to kWh Goal	*Ex post* Gross Savings (kW) Target	% to kW Target
3,220,972	111.7%	66.00	3873.0%

5.4.1.2 Advanced Power Strip (Tier 2)

Expected and verified savings for advanced power strips are summarized below. There were 946 advanced power strips installed at 729 residences. The slightly lower realization rate may be attributed to the measure ISR that was applied in PY14.

TABLE 5-9 PY14 IQW EXPECTED AND VERIFIED ADVANCED POWER STRIPS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
288,529	232,140	80.5%	29.74	23.92	80.5%

5.4.1.3 Air Infiltration

Expected and verified savings for the air infiltration projects are summarized below. There were 656 air infiltration projects at the same number of residences. The slightly lower realization rate may be attributed to the measure ISR that was applied in PY14.

TABLE 5-10 PY14 IQW EXPECTED AND VERIFIED AIR INFILTRATION SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
835,224	781,841	93.6%	373.86	354.23	94.7%

5.4.1.4 Attic Insulation

Expected and verified savings for the attic insulation projects are summarized below. Attic insulation was installed at 478 residences.

TABLE 5-11 PY14 IQW EXPECTED AND VERIFIED ATTIC INSULATION SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
883,937	886,738	100.3%	1678.18	1648.76	98.2%

5.4.1.5 Duct Sealing

Expected and verified savings for duct sealing projects are summarized below. Duct sealing was installed at 599 residences.

TABLE 5-12 PY14 IQW EXPECTED AND VERIFIED DUCT SEALING SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
1,270,408	1,410,715	111.0%	444.10	505.35	113.8%

5.4.1.6 LED Lamp (Direct Install)

Expected and verified savings for LED lamps are summarized below. There were 3,385 LED lamps installed in 544 residences.

TABLE 5-13 PY14 IQW EXPECTED AND VERIFIED LEDS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
162,985	157,629	96.7%	16.21	15.84	97.7%

5.4.1.7 Water Heater Pipe Wrap

Expected and verified savings for water heater pipe wrap projects are summarized below. Pipe wrap was installed in 134 residences. The slightly lower realization rate may be attributed to the measure ISR that was applied in PY14.

TABLE 5-14 PY14 IQW EXPECTED AND VERIFIED PIPE WRAP SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
15,959	12,616	79.1%	1.81	1.43	79.1%

5.4.1.8 Low-Flow Showerhead

Expected and verified savings for low-flow showerheads are summarized below. There were 243 low-flow showerheads installed in 149 residences.

TABLE 5-15 PY14 IQW EXPECTED AND VERIFIED SHOWERHEADS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
54,948	48,676	88.6%	5.71	5.06	88.6%

5.4.1.9 Smart Thermostat

Expected and verified savings for smart thermostats are summarized below. There were 156 smart thermostats installed at 149 residences.

TABLE 5-16 PY14 IQW EXPECTED AND VERIFIED SMART THERMOSTATS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
53,508	53,194	99.4%	0.00	0.00	N/A

5.4.1.10 Avoided Replacement Cost

The Evaluators have added the benefits of avoided replacement costs (ARC). The table below summarizes the ARC by measure in IQW.

Information on methodology can be found in Section 3.4.1.3 Avoided Replacement Costs.

TABLE 5-17 SUMMARY OF ARC

Measure	*Ex Post* Gross ARCs ($)	*Ex Post* Net ARCs ($)	*NPV of* ARCs ($)
LED 11W A-Type (Standard)	$84	$84	$84
LED 11W BR30 (Specialty)	$997	$997	$997
LED 15W A-Type (Outdoor) (Standard)	$30	$30	$30
LED 15W PAR38 (Outdoor) (Specialty)	$585	$585	$585
LED 5W Candelabra (Specialty)	$2,636	$2,636	$2,636
LED 6W Globe (Specialty)	$375	$375	$375
LED 8W BR30 (Specialty)	$98	$98	$98
LED 9W A-Type (Outdoor) (Standard)	$4	$4	$4
LED 9W A-Type (Standard)	$2,057	$2,057	$2,057
Total	**$6,866**	**$6,866**	**$6,866**

Sums may differ due to rounding.

5.4.2 NET IMPACT FINDINGS

The NTG ratio is assumed to be 100% in line with common practice for estimation of low-income offering net savings, thus *ex post* net values are equal to *ex post* gross values.

Table 5-18 summarizes the program net impacts of the IQW Program.

TABLE 5-18 IQW PROGRAM NET SAVINGS

Ex Post Gross Energy Savings (kWh)	*Ex Post* Net Energy Savings (kWh)	NTG kWh	*Ex Post* Gross Demand Reductions (kW)	*Ex Post* Net Demand Reductions (kW)	NTG kW
3,598,721	3,598,721	100%	2,556.17	2,556.17	100%

Sums may differ due to rounding.

Individual measure net savings are summarized in Section 5.1 of this chapter.

5.4.3 PROCESS FINDINGS

The Evaluators conducted a full process evaluation. Table 5-19 summarizes the process evaluation activities for the IQW program.

TABLE 5-19 IQW DATA COLLECTION ACTIVITIES

Evaluation Activity	Sample Size	Impact	Process
Staff & TPI Interviews	4		X
Database Reviews	Census	X	X
Participant Surveys	43	X	X
Site Visits	27	X	
Desk Reviews	Census	X	

The general approach to evaluating savings for the IQW mirrors that of the HPwES program in combining a deem-and-count approach stratified by space heating fuel.

5.4.3.1 Staff and Implementer Interviews

The following section summarizes the key findings from in-depth interviews with two ENO program staff, one APTIM staff, and one Franklin staff; ENO staff participated in one interview and APTIM and Franklin staff participated in a second interview. These in-depth interviews aimed to learn more about HPwES program design and operations, and the successes and challenges experienced during PY14. Interviews lasted approximately 30 minutes and were conducted using the Microsoft Teams platform. The evaluators recorded all interviews with participant permission. The following narrative summarizes findings specific to IQW.

5.4.3.1.1 *Program Description*

The Income-Qualified Weatherization (IQW) program offers comprehensive weatherization services to qualified low-income, single-family homes and low-rise, multi-family dwellings of four or fewer units. The IQW program offers comprehensive home assessments and the direct installation of measures through program staff, followed by deeper energy efficiency upgrades implemented through trade allies.

The Program's objective is to educate customers on how they are using energy, identify opportunities for energy savings specific to their home, and prioritize a wide range of energy conservation measures that will allow them to save energy immediately. The IQW offering provides customers with household incomes of 200.0% the federal poverty level with home energy upgrades at low or no cost. The offering includes a free home energy assessment performed by the implementation trade ally. Trade allies collect information to vet customers' income qualification through a series of questions.

5.4.3.1.2 *Marketing*

In addition to the marketing strategies mentioned in HPwES chapter, staff have also partnered with various community groups to help promote the program and encourage residents to participate. Partners have included Vietnamese Initiatives, AmeriHealth, Public Community Action, and Thrive.

5.4.3.2 Participant Survey Findings

The Income-Qualified Weatherization (IQW) program offers comprehensive weatherization services to qualified low-income, single-family homes and low-rise, multi-family dwellings of four or fewer units. The IQW program offers comprehensive home assessments and the direct installation of measures through program staff, followed by deeper energy efficiency upgrades implemented through trade allies.

The program's objective is to educate customers on how they are using energy, identify opportunities for energy savings specific to their home, and prioritize a wide range of energy conservation measures that will allow them to save energy immediately. The IQW offering provides customers with household incomes of 200% of the federal poverty level with home energy upgrades at low or no cost. The offering includes a free home energy assessment performed by the implementation trade ally. Trade allies collect information to vet customers' income qualification through a series of questions.

A total of 43 customers of Entergy New Orleans completed the Income-Qualified Weatherization survey (IQW). The survey was designed to understand the customer experience with the IQW program.

5.4.3.2.1 *Program Awareness*

The two main ways respondents heard about the IQW program were through word of mouth (28%) or an email from Entergy (23%).

TABLE 5-20 SOURCES OF AWARENESS FOR THE IQW PROGRAM

Source	2023 (n=72)	2024 (n=43)
Friend, family member, or colleague	29%	28%
Email from Entergy	29%	23%
Program website	13%	5%
Bill insert or utility mailer	7%	12%
Home energy consultant	6%	9%
Program representative	6%	0%
Through an internet search or advertisement	4%	2%
Contractor	1%	0%
Social media post	1%	0%
A radio or television advertisement	1%	0%
Other	14%	16%

Nearly all respondents said they participate in the program to save money on energy bills. Other major motivations include improving the comfort of the home, conserving energy and improving the value of the home.

TABLE 5-21 MOTIVATIONS FOR PARTICIPATING IN IQW PROGRAM

Reason	(n=43)
Save money on energy bills	86%
Improve the comfort of your home	63%
Conserve energy / Protect the environment	56%
Improve the value of the residence	51%
Become as energy efficient as my friends or neighbors	37%
Find out if there were any structural problems with my home	33%
Get the free equipment/discount/rebate	30%

5.4.3.2.2 *Major Measure Improvements*

The most common major measure improvements received are the air sealing / air filtration and duct sealing.

TABLE 5-22 NUMBER OF RESPONDENTS WHO RECEIVED MAJOR MEASURE IMPROVEMENTS VIA IQW PROGRAM

Major Measure Improvement Types	Count
Air sealing / air filtration	20
Duct sealing	17
Smart thermostat	4
Attic / ceiling insulation	17

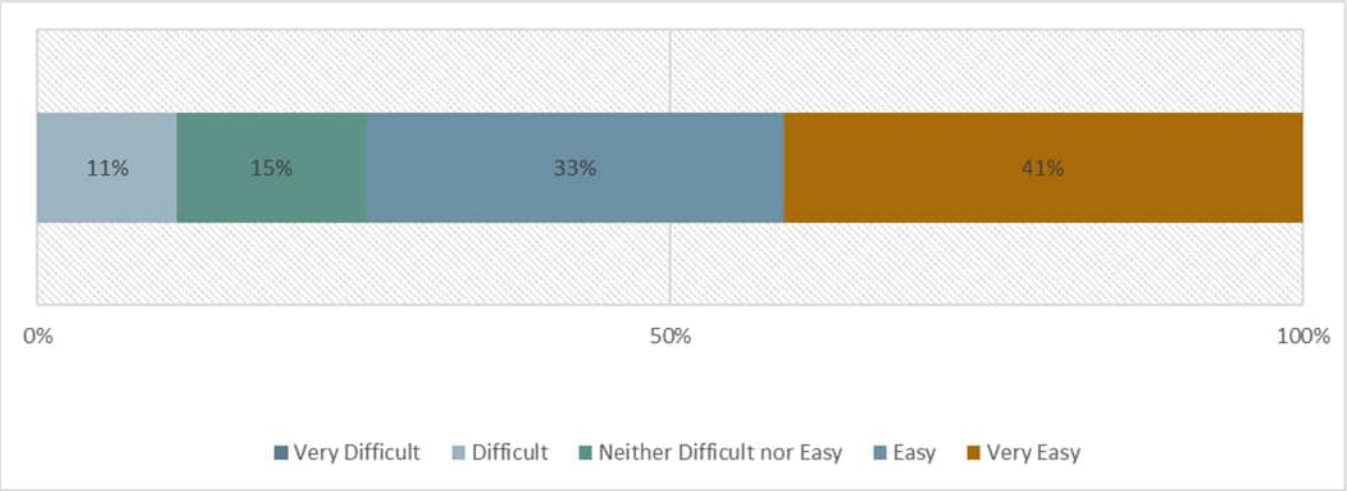
5.4.3.2.3 *Home Energy Assessments*

TABLE 5-23 NUMBER OF RESPONDENTS WHO RECEIVED A HOME ENERGY ASSESSMENT THROUGH THE PROGRAM

Assessment	Count
Received Assessment	27

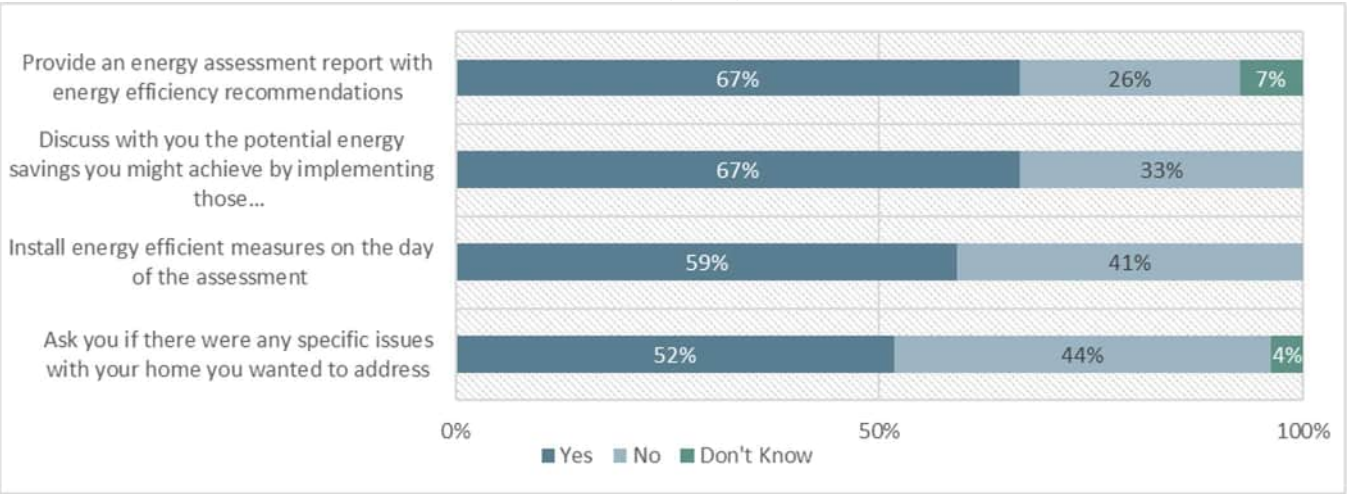
Three out of four respondents say that scheduling a home energy assessment is easy or very easy.

FIGURE 5-3 NUMBER OF RESPONDENTS WHO RECEIVED A HOME ENERGY ASSESSMENT THROUGH THE PROGRAM



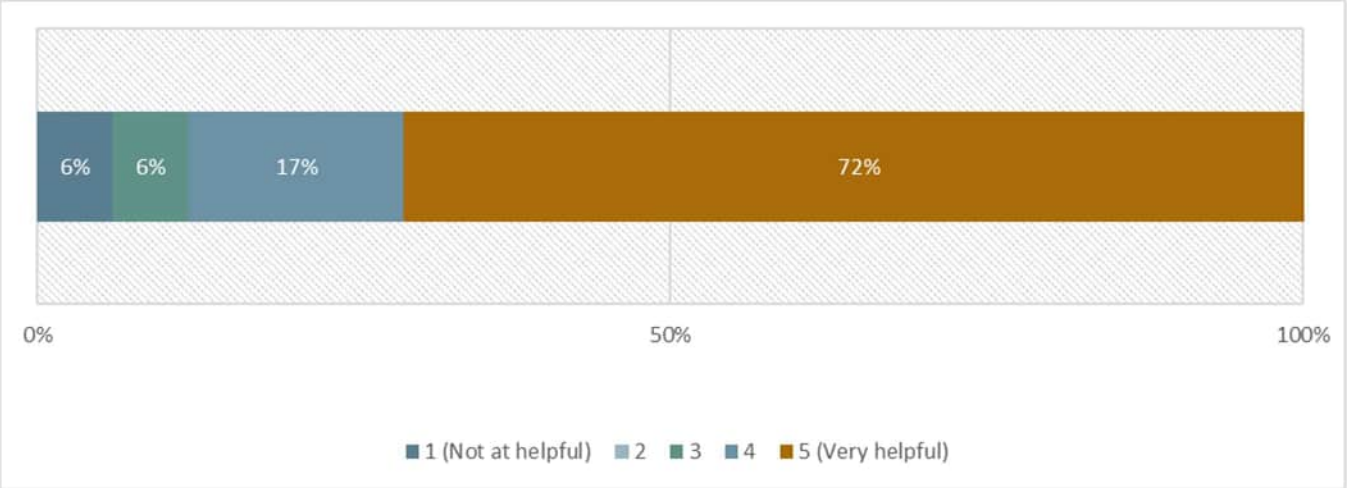
Two out of three respondents reported they were given an energy efficiency report with recommendations and an estimate of cost savings that could be expected. Additionally, 6 in 10 reported that energy efficiency measures were completed on that day. Approximately 4 in 10 of those who received an assessment were not asked if they had any specific issues with their home they wanted addressed by their assessor.

FIGURE 5-4 HOME ENERGY ASSESSMENT TASKS ACCOMPLISHED (N=27)



9 out of 10 respondents who received an energy assessment report found the report helpful.

FIGURE 5-5 HELPFULNESS OF THE ENERGY ASSESSMENT REPORT (N=18)



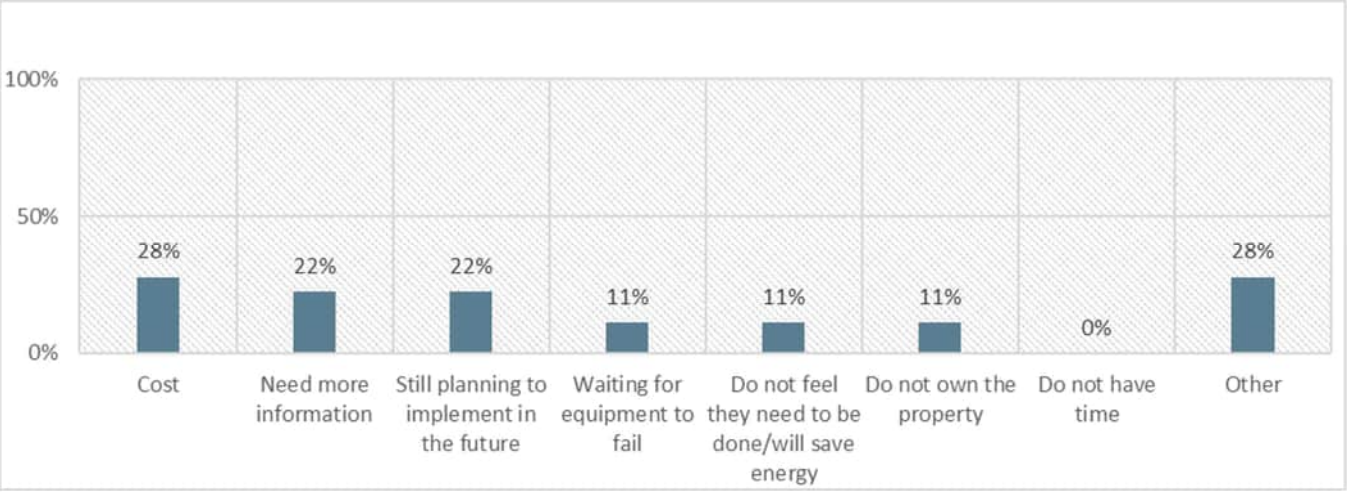
About 8 in 10 have made at least some of the recommended improvements.

TABLE 5-24 IMPROVEMENTS MADE BASED ON HOME ENERGY ASSESSMENT (N=27)

Reason	Received Assessment (n=27)	
Made all	30%	78% Have made at least some
Made some but not all	48%	
Have not made any	19%	
Don't know	4%	

Cost is the main reason for not having made the recommended improvements. 2 in 10 are still planning to implement the recommended improvements in the future. Another 2 in 10 said they need additional information before they can proceed with the improvements.

FIGURE 5-6 REASONS FOR NOT MAKING ALL RECOMMENDED IMPROVEMENTS (N=18)



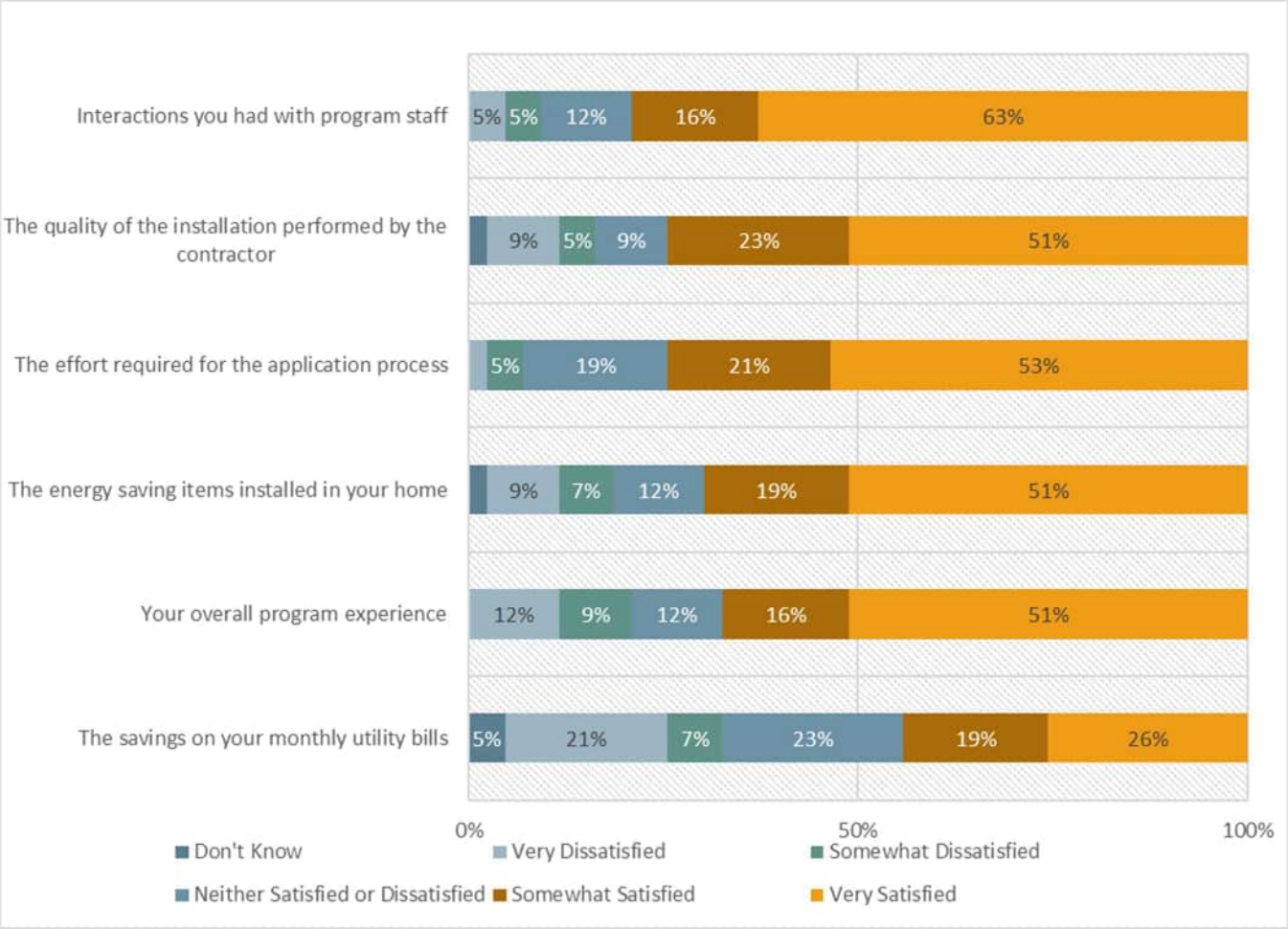
Other reasons included respondents waiting for additional follow-through from Entergy.

- "Because I had a partial assessment, and I was waiting for the company to finish the assessment."
- "Supposed to be done by Entergy and they never did it."
- "They said they will contact me for next steps."

5.4.3.2.4 *Satisfaction with the Program and Entergy*

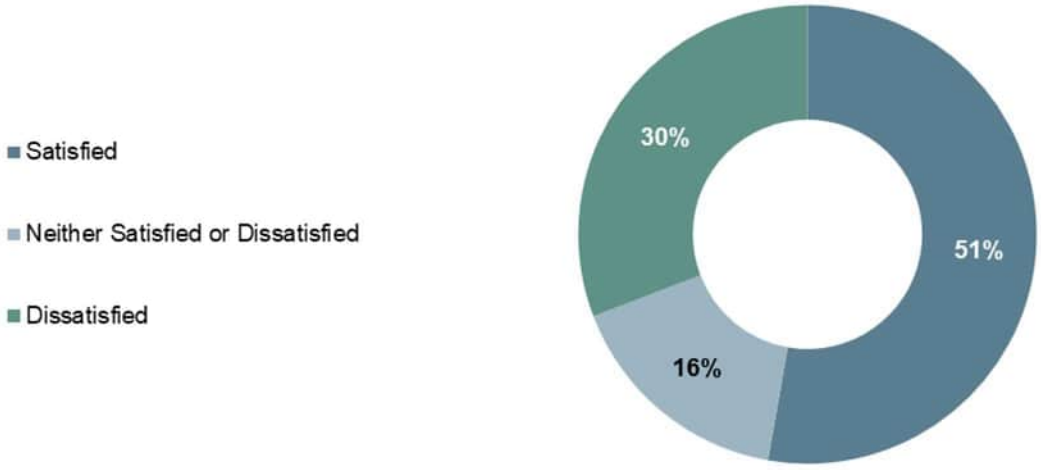
While respondents are at least somewhat satisfied with most aspects of the IQW program, there is opportunity to better communicate savings on monthly utility bills.

FIGURE 5-7 SATISFACTION WITH ASPECTS OF PROGRAM (N=43)



About half of IQW respondents are satisfied with Entergy. However, one third are dissatisfied with Entergy.

FIGURE 5-8 SATISFACTION WITH ENTERGY (N=43)



5.5 Findings and Recommendations

Findings and Conclusions:

- Comprehensive Energy Savings Approach: The IQW program provides home assessments and direct installation of energy efficiency measures, followed by deeper upgrades through trade allies. It aims to educate low-income customers on energy usage while offering upgrades at low or no cost.
- Community Partnerships for Outreach: To increase participation, staff have collaborated with community organizations such as Vietnamese Initiatives, AmeriHealth, Public Community Action, and Thrive to promote the program and connect with eligible residents. Word-of-mouth has proven to be a strong recruitment tool, with many participants learning about the program from friends and family members.
- Customer Satisfaction and Savings Expectations: Nearly all participants joined to reduce their utility bills, yet fewer than half expressed satisfaction with the actual savings realized.
- Effectiveness of Home Energy Assessments: Most participants found scheduling an assessment easy and useful for identifying potential energy savings.

Recommendations:

- Expand Community-Based Outreach: If participation growth is a priority, staff could explore additional partnerships with trusted local organizations, including faith-based groups, housing authorities, and neighborhood associations, to further increase program visibility.
- Optimize Trade Ally Coordination: To enhance program effectiveness, staff could consider streamlining communication between assessment teams and trade allies, ensuring seamless follow-through on deeper energy efficiency upgrades. Providing clearer handoffs and tracking mechanisms may improve project completion rates.
- Improve Clarity on Cost Savings Expectations: Given that cost savings are a primary motivation but satisfaction with actual savings is lower, staff should set clearer expectations in customer

communications. Providing data-driven estimates or post-installation follow-ups could help manage customer expectations and reinforce long-term energy-saving behaviors.

6 RETAIL LIGHTING AND APPLIANCE

6.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend, by measure, where applicable.

TABLE 6-1 PY14 RLA ENERGY SAVINGS (KWH)

Measure	Ex Ante Gross Savings (kWh)	Realization Rate (kWh)	Ex Post Gross Savings (kWh)	NTG	Ex Post Net Savings (kWh)
Advanced Power Strip	15,202	95.3%	14,484	72.0%	10,429
Air Purifier	1,615,004	97.3%	1,570,875	84.5%	1,327,389
Air Purifier Filter	0	N/A	N/A	N/A	N/A
Custom (Incentive Adjustment)	0	N/A	N/A	N/A	N/A
Dehumidifier	2,724	97.6%	2,657	79.7%	2,117
Faucet Aerator	2,351	91.2%	2,145	92.0%	1,973
Freezer	190	100.0%	190	59.8%	114
Generic Marketplace DR	0	N/A	N/A	N/A	N/A
LED Lamp (Marketplace)	0	N/A	15,678	74.0%	11,602
LED Lamp (Upstream)	127,416	132.5%	168,848	58.0%	97,932
Low-Flow Showerhead	17,100	97.3%	16,635	94.0%	15,637
Pool Pump	14,882	89.0%	13,238	100.0%	13,238
Refrigerator	9,384	98.2%	9,218	53.5%	4,928
Showerhead TRV	70	90.3%	63	94.0%	59
Smart Thermostat	393,767	86.9%	342,097	88.5%	302,756
Smart Thermostat C-Wire Adapter	0	N/A	N/A	N/A	N/A
Smart Thermostat Power Connector	0	N/A	N/A	N/A	N/A
Smart Thermostat Sensor	0	N/A	N/A	N/A	N/A
Smart Thermostat Trim Kit	0	N/A	N/A	N/A	N/A
Smart Thermostat Wall Plate	0	N/A	N/A	N/A	N/A
Water Cooler	734	67.8%	498	53.0%	264
Water Heater	9,786	65.9%	6,446	74.3%	4,790
Water Heater Pipe Insulation	1,214	91.0%	1,105	88.0%	973
Window AC	5,581	236.4%	13,196	73.0%	9,633
Total	**2,215,406**	**98.3%**	**2,177,373**	**82.8%**	**1,803,832**

Sums may differ due to rounding.

TABLE 6-2 PY14 RLA DEMAND REDUCTIONS (KW)

Measure	Ex Ante Gross Reductions (kW)	Realization Rate (kW)	Ex Post Gross Reductions (kW)	NTG	Ex Post Net Reductions (kW)
Advanced Power Strip	1.6	62.6%	1.0	72.0%	0.73
Air Purifier	183.4	97.3%	178.4	84.5%	150.71
Air Purifier Filter	0.0	N/A	N/A	N/A	N/A
Custom (Incentive Adjustment)	0.0	N/A	N/A	N/A	N/A
Dehumidifier	0.6	97.6%	0.6	79.7%	0.48
Faucet Aerator	0.2	91.7%	0.2	92.0%	0.21
Freezer	0.0	99.6%	0.0	59.8%	0.02
Generic Marketplace DR	0.0	N/A	N/A	N/A	N/A
LED Lamp (Marketplace)	0.0	N/A	2.6	74.0%	1.91
LED Lamp (Upstream)	21.7	139.3%	30.2	58.0%	17.52
Low-Flow Showerhead	1.8	97.3%	1.7	94.0%	1.63
Pool Pump	3.0	86.1%	2.6	100.0%	2.58
Refrigerator	1.4	98.9%	1.3	53.5%	0.72
Showerhead TRV	0.0	90.3%	0.0	94.0%	0.01
Smart Thermostat	0.0	N/A	0.0	N/A	0.00
Smart Thermostat C-Wire Adapter	0.0	N/A	N/A	N/A	N/A
Smart Thermostat Power Connector	0.0	N/A	N/A	N/A	N/A
Smart Thermostat Sensor	0.0	N/A	N/A	N/A	N/A
Smart Thermostat Trim Kit	0.0	N/A	N/A	N/A	N/A
Smart Thermostat Wall Plate	0.0	N/A	N/A	N/A	N/A
Water Cooler	0.1	68.1%	0.1	53.0%	0.03
Water Heater	0.9	65.9%	0.6	74.3%	0.42
Water Heater Pipe Insulation	0.1	90.9%	0.1	88.0%	0.11
Window AC	3.3	378.3%	12.7	73.0%	9.25
Total	**218.15**	**106.4%**	**232.10**	**80.3%**	**186.32**

Sums may differ due to rounding.

TABLE 6-3 PY14 RLA LIFETIME SAVINGS SUMMARY

Measure	EUL	Ex Post Gross Lifetime Energy Savings (kWh)	Ex Post Net Lifetime Energy Savings (kWh)
Advanced Power Strip	10	144,844	104,288
Air Purifier	9	14,137,875	11,946,505
Air Purifier Filter	1	N/A	N/A
Custom (Incentive Adjustment)	1	N/A	N/A
Dehumidifier	11	29,232	23,283
Faucet Aerator	10	21,447	19,731
Freezer	22	4,181	2,500
Generic Marketplace DR	1	N/A	N/A
LED Lamp (Marketplace)	2	23,517	17,403
LED Lamp (Upstream)	2	253,272	146,898
Low-Flow Showerhead	10	166,348	156,367
Pool Pump	10	132,376	132,376
Refrigerator	17	156,705	83,775
Showerhead TRV	10	632	594
Smart Thermostat	11	3,763,067	3,330,314
Smart Thermostat C-Wire Adapter	1	N/A	N/A
Smart Thermostat Power Connector	1	N/A	N/A
Smart Thermostat Sensor	1	N/A	N/A
Smart Thermostat Trim Kit	1	N/A	N/A
Smart Thermostat Wall Plate	1	N/A	N/A
Water Cooler	10	4,975	2,637
Water Heater	10	64,515	47,935
Water Heater Pipe Insulation	13	14,369	12,645
Window AC	11	138,554	101,145
Total	**9**	**19,055,909**	**16,128,394**

Sums may differ due to rounding.

TABLE 6-4 PY14 RLA COUNT OF MEASURES AND INCENTIVE SPEND

Measure	Participation (Count of Measures)	Incentive Spend ($)
Advanced Power Strip	147	$3,058
Air Purifier	7,046	$762,449
Air Purifier Filter	204	$700
Custom (Incentive Adjustment)	23	($322)
Dehumidifier	29	$725
Faucet Aerator	65	$96
Freezer	5	$125
Generic Marketplace DR	481	$23,150
LED Lamp (Marketplace)	61	$0
LED Lamp (Upstream)	15,430	$27,443
Low-Flow Showerhead	76	$1,075
Pool Pump	5	$1,800
Refrigerator	161	$8,200
Showerhead TRV	2	$10
Smart Thermostat	1,121	$102,086
Smart Thermostat C-Wire Adapter	8	$0
Smart Thermostat Power Connector	4	$0
Smart Thermostat Sensor	3	$0
Smart Thermostat Trim Kit	19	$0
Smart Thermostat Wall Plate	17	$0
Water Cooler	1	$50
Water Heater	9	$4,000
Water Heater Pipe Insulation	48	192
Window AC	64	3400
Total	**25,029**	**$938,236**

Sums may differ due to rounding.

6.2 Program Description

The Retail Lighting & Appliances Program (RLA) provides retail markdown incentives for efficiency lighting as well as end-user incentives for window air conditioners, high efficiency refrigerators, and other appliances.

The RLA is managed by Franklin. The RLA offering provides Point-of-Purchase (PoP) discounts for LED lamp), as well as mail-in rebates (downstream rebates) for air purifiers, dehumidifiers, refrigerator, freezer, window AC, pool pump, smart thermostat, water coolers, and heat pump water heater. These are available through an online marketplace and through participating retailers. A complete list of eligible items is listed below:

- Giveaway LED Lamp (9W A19)
- Indoor LED Lamp (Specialty)
- Indoor LED Lamp (Standard)
- Outdoor LED Lamp (Specialty)
- ENERGY STAR Air Purifier
- ENERGY STAR Dehumidifier
- ENERGY STAR Smart Thermostat
- ENERGY STAR Pool Pump
- ENERGY STAR Dehumidifier
- ENERGY STAR Water Cooler
- ENERGY STAR Window AC
- ENERGY STAR Heat Pump Water Heater
- ENERGY STAR Freezer
- Refrigerator Replacement
- Online Marketplace (OLM) measures:
    - Advanced Power Strip (Tier 1)
    - Aerator (1.0 GPM)
    - Aerator (1.5 GPM)
    - Pipe Insulation
    - Showerhead (1.5 GPM)
    - Smart Thermostat
    - Smart Thermostat Accessories

6.2.1 PROGRAM DELIVERY CHANNELS AND EXPECTED SAVINGS

The evaluation approach for PY14 included the following activities: database review, desk reviews, participant surveys, and staff interviews.

A total of 7,801 distinct households (9,925 measures) participated in RLA. Below, Figure 6-1 shows end use contribution as part of the overall expected savings.

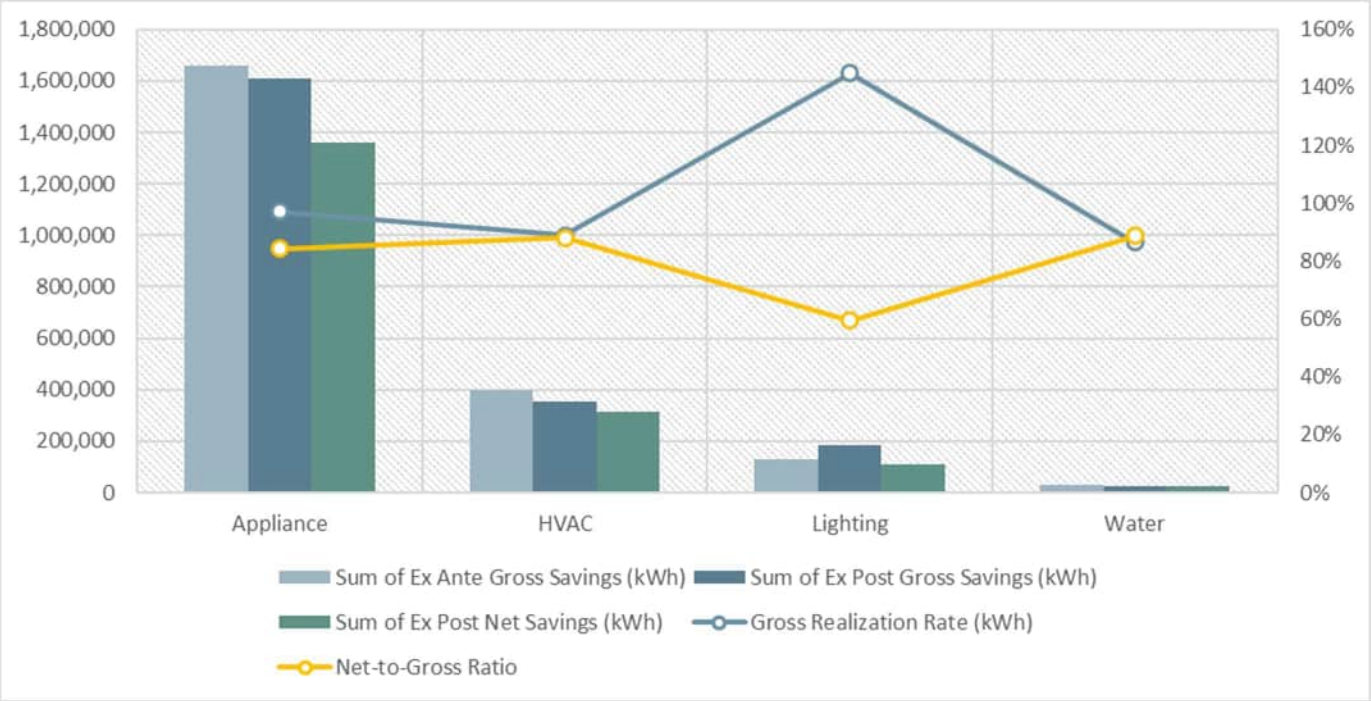


FIGURE 6-1 RLA SAVINGS CONTRIBUTION BY END USE

In PY14, the lighting measures (LED lamp) contributed 5.8% of expected energy (kWh) savings (compared to 88.8% in PY13), the HVAC measures (smart thermostat and window AC) contributed 18.0% (compared to 10.1% in PY13), the appliance measures (advanced power strip, water cooler, air purifier, dehumidifier, refrigerator, freezer, pool pumps) contributed 74.8% (compared to 0.6% in PY13), and the hot water measures (water heater, pipe wrap, aerator, showerhead, showerhead TRV) contributed 1.4% (compared to 0.5% of expected energy savings in PY13). Most savings were from air purifier and smart thermostat measures (90.7%).

6.2.2 TIMING OF PROJECTS

The figure below shows *ex ante* energy savings (kWh) for RLA by end use, by month.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Appliance	2,716	3,254	1,878	2,179	2,785	25,804	203,183	716,904	6,170	13,957	419,378	259,913
HVAC	38,751	16,612	10,928	22,034	30,129	39,803	56,113	49,175	19,357	30,620	47,335	38,491
Lighting	0	0	0	0	0	0	1,466	13,105	31,583	29,173	22,916	29,173
Water	-95	2,280	5,815	1,854	545	4,022	2,527	4,446	1,360	2,983	3,239	1,545

FIGURE 6-2 *EX ANTE* SAVINGS BY END USE BY MONTH

Project data indicates that most energy savings happened in the first half of the year, January to May 2024, primary driven by HVAC savings. After May, a sharp decline in HVAC saving occrs, with lightning taking over as the major contributor in the fall months, September to November 2024. Appliance savings had a noticeable increase in July and November, suggesting seasonal variations in application usage. Lightning shows negligible saving until late Summer, September to early November.

6.2.3 TRADE ALLIES

There are no trade allies in the program. Measures are distributed through an online marketplace (OLM), participating retailer mark-downs, and mail-in-rebates.

6.2.4 GOAL ACHIEVEMENT

Total verified savings and percentage of goals are summarized in the table below.

TABLE 6-5 PY14 RLA SUMMARY OF GOAL ACHIEVEMENT

Ex Post Gross Energy Savings (kWh) Goal	% to kWh Goal	Ex Post Gross Savings (kW) Target	% to kW Target
1,558,999	139.7%	16.00	1450.6%

6.3 EM&V Methodology

RLA has received impact and process evaluations in PY14. The evaluations provided free-ridership estimates, discussions of program satisfaction and strategic recommendations for program improvement, and most/all

measures offered by the program have deemed TRM savings. In the initial review of the PY14 program, the Evaluators concluded that RLA did not warrant more than a brief overview of program activity.

Impact methodologies for most RLA measures are the same as described for HPwES, described in Section 4.3.1. The following section discusses savings calculation methods for measures not covered in the HPwES chapter.

TABLE 6-6 RLA DATA COLLECTION ACTIVITIES

Evaluation Activity	Sample Size	Impact	Process
Staff & TPI Interviews	4		X
Database Review	Census	X	X
Desk Reviews	Census	X	
Literature Reviews		X	
Appliance Rebate Survey	30	X	X

6.3.1 SITE VISITS

The nature of upstream programs limits the potential for site visits. Customers who participated in other Energy Smart programs during PY14 were crossed-referenced with RLA participants. When performing site visits to conduct evaluation activities for other programs, such as duct blasting or air sealing, verification of any RLA items was also conducted. To estimate installation rates for each measure, the Evaluators performed participant surveys, literature reviews, and the NO TRM V7.0. Dehumidifiers, LED lamps, pool pumps, smart thermostats, water coolers, and window AC impacts were derived from the participant survey; the remaining results were a blended approach.

The Evaluators performed 7 site visits on projects in the RLA program. The table below outlines the measures captured in site visits.

TABLE 6-7 SITE VISIT SUMMARY

Measures	PY14 Measure Count	Expected Measure Count During PY14 Site Visits	Verified Measures Count During cPY14 Site Visits
Advanced Power Strips	147	1	1
ENERGY STAR Air Purifiers	7,046	1	1
Refrigerator Replacement	161	2	2
Smart Thermostats	1,121	4	3
Water Heater Pipe Insulation	48	1	1

6.3.2 DEEMED SAVINGS CALCULATION

6.3.2.1 ENERGY STAR Air Purifiers

Savings for ENERGY STAR air purifier were calculated using the deemed savings methodology from the NO TRM V7.0, Section 1.1.5.

TABLE 6-8 ENERGY STAR AIR PURIFIERS DEEMED SAVINGS

Clean Air Delivery Rate (CADR)	Energy Savings (kWh)	Demand Reduction (kW)
30 ≤ Smoke CADR < 100	133	0.015
100 ≤ Smoke CADR < 150	229	0.026
150 ≤ Smoke CADR < 200	302	0.034
200 ≤ Smoke CADR	570	0.065

6.3.2.2 Window AC Replacement

Savings for window air conditioners were calculated using the savings methodology from the NO TRM V7.0, Section 1.3.2.4.

$$kWh_{Savings} = CAP_c \times \frac{1\,\text{kW}}{1{,}000\,\text{W}} \times \left(\frac{1}{CEER_{base}} - \frac{1}{CEER_{Eff}}\right) \times EFLH_C \times RAF$$

$$kW_{Reductions} = CAP_c \times \frac{1}{1{,}000} {}^{W}/_{kW} \times \left(\frac{1}{CEER_{base}} - \frac{1}{CEER_{Eff}}\right) \times \%CF$$

Where:

CAP_c = Cooling capacity in BTU

$CEER_{base}$ = Combined energy-efficiency ratio of baseline equipment

$CEER_{Eff}$ = Combined energy-efficiency ratio of efficient equipment

$EFLH_C$ = Equivalent Full Load Hours – cooling (1,637)

RAF = Room AC adjustment factor = 0.49

CF = Peak coincidence factor = 0.77

6.3.2.3 Deemed Savings for Other RLA Measures

For remaining measures, the Evaluators used the following NO TRM V7.0 sections and tables to verify savings. The sections are outline in Table 6-9 below.

TABLE 6-9 NO TRM V7.0 SECTIONS FOR OTHER MEASURES

Measure	TRM Section	Calculated / Deemed	TRM Table(s)	Table Page(s)
Dehumidifiers	1.1.8	Deemed	Table 1-21, 1-22	42
Pool Pumps	1.1.8.7*	Deemed	Table 1-24, 1-25	44
Refrigerators	1.1.9	Deemed	Table 1-28	49
Water Coolers	1.1.4	Deemed	Table 1-9	29

* The NO TRM V7.0 lists Pool Pumps in Section 1.1.8.7.

Section 6.1 Summary presents the results of the evaluation for the RLA program by measure.

6.3.3 GROSS IMPACT FINDINGS

6.3.3.1 Aerator (Bathroom and Kitchen)

Expected and verified savings for aerators are summarized below. 65 aerators were installed in 67 homes.

TABLE 6-10 PY14 RLA EXPECTED AND VERIFIED AERATORS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
2,351	2,145	91.2%	0.24	0.22	91.7%

6.3.3.2 Advanced Power Strip

Expected and verified savings for APS are summarized below. There were 147 APS Tier 1 advanced power strips installed in 145 homes. The slightly lower realization rate may be attributed to the measure ISR applied in PY14.

TABLE 6-11 PY14 RLA EXPECTED AND VERIFIED ADVANCED POWER STRIPS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
15,202	14,484	95.3%	1.63	1.02	62.6%

6.3.3.3 Dehumidifier

Expected and verified savings for dehumidifiers are summarized below. There were 29 dehumidifiers that were installed in 29 homes.

TABLE 6-12 PY14 RLA EXPECTED AND VERIFIED DEHUMIDIFIER SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
2,724	2,657	97.6%	0.62	0.61	97.6%

6.3.3.4 Freezer (Replacement)

ENERGY STAR Freezer savings were calculated using the deemed savings from the NO TRM V7.0 Section 1.1.10.1. After verifying model configurations and features, deemed savings were assigned to each unit using TRM. There were a total of five (5) replacements.

TABLE 6-13 PY14 RLA EXPECTED AND VERIFIED FREEZER REPLACEMENT SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
190	190	100.0%	0.03	0.03	99.6%

6.3.3.5 LED Lamp (OLM and Upstream)

Expected and verified savings for LED lamps are summarized below. There were 61 online marketplace lamps installed in 55 homes, while there were 15,430 upstream lamps sold.

TABLE 6-14 PY14 RLA EXPECTED AND VERIFIED LED SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
127,416	168,848	132.5%	21.69	30.20	139.3%

6.3.3.6 Water Heater Pipe Wrap

Expected and verified savings for pipe wrap projects are summarized below. Pipe wrap was installed at 52 residences.

TABLE 6-15 PY14 RLA EXPECTED AND VERIFIED PIPE WRAP SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
1,214	1,105	91.0%	0.14	0.13	90.9%

6.3.3.7 Pool Pump

Expected and verified savings for pool pumps are summarized below. There were 5 pool pumps incentivized.

TABLE 6-16 PY14 RLA EXPECTED AND VERIFIED POOL PUMPS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
14,882	13,238	89.0%	3.00	2.58	86.1%

6.3.3.8 Refrigerator (Replacement)

ENERGY STAR Refrigerator savings were calculated using the deemed savings from the NO TRM V7.0 Section 1.1.9 After verifying model configurations and features, deemed savings were assigned to each unit using TRM. Expected and verified savings for refrigerators are summarized below. There were 161 replacements.

TABLE 6-17 PY14 RLA EXPECTED AND VERIFIED REFRIGERATORS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
9,384	9,218	98.2%	1.36	1.34	98.9%

6.3.3.9 Low-Flow Showerhead

Expected and verified savings for low-flow showerheads are summarized below. There were 76 showerheads installed in 67 residences.

TABLE 6-18 PY14 RLA EXPECTED AND VERIFIED SHOWERHEAD SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
17,100	16,635	97.3%	1.78	1.73	97.3%

6.3.3.10 Smart Thermostat

Savings for smart thermostats were calculated using the savings methodology from the NO TRM V7.0, Section 1.3.9. Expected and verified savings for smart thermostats are summarized below. There were 1,121 smart thermostats incentivized through the OLM, 1,143 incentivized through a mail-in-rebate

TABLE 6-19 PY14 RLA EXPECTED AND VERIFIED SMART THERMOSTATS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
393,767	342,097	86.9%	0.00	0.00	N/A

6.3.3.11 Air Purifier

Savings for air purifiers were calculated using the savings methodology from the NO TRM V7.0, Section C.1.5. Expected and verified savings for water coolers are summarized below. There were 7,046 purifiers purchased during PY14.

TABLE 6-20 PY14 RLA EXPECTED AND VERIFIED AIR PURIFIER SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
1,615,004	1,570,875	97.3%	183.36	178.35	97.3%

6.3.3.12 Window Air Conditioner

Savings for window air conditioners were calculated using the savings methodology from the NO TRM V7.0, Section 1.3.2. Expected and verified savings for window air conditioners are summarized below. There were 64 units installed in 64 residences.

TABLE 6-21 PY14 RLA EXPECTED AND VERIFIED WINDOW AC SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
5,581	13,196	236.4%	3.35	12.67	378.3%

6.3.3.13 Showerhead TRV

Expected and verified savings for showerhead thermostatic restrictor values are summarized below. There were 64 units installed in 64 residences.

TABLE 6-20 PY14 RLA EXPECTED AND VERIFIED SHOWERHEAD TRV SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
70	63	90.3%	0.01	0.01	90.3%

6.3.3.14 Water Cooler

Expected and verified savings for water coolers are summarized below. There was 1 unit installed in 1 residence.

TABLE 6-21 PY14 RLA EXPECTED AND VERIFIED WATER COOLER SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
734	498	67.8%	0.08	0.06	68.1%

6.3.3.15 Water Heater

Expected and verified savings for water heaters are summarized below. There were 9 units installed in 9 residences.

TABLE 6-22 PY14 RLA EXPECTED AND VERIFIED WATER HEATER SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
9,786	6,446	65.9%	0.86	0.57	65.9%

6.3.3.16 Avoided Replacement Cost

The Evaluators have added the benefits of avoided replacement costs (ARC). The table below summarizes the ARC by measure in RLA. Information on methodology can be found in Section 3.4.1.3 Avoided Replacement Costs.

TABLE 6-23 PY14 RLA SUMMARY OF AVOIDED REPLACEMENT COST

Measure	Ex Post Gross ARC ($)	Ex Post Net ARC ($)	NPV ARC ($)
Advanced Power Strip	N/A	N/A	
Air Purifier	N/A	N/A	
Air Purifier Filter	N/A	N/A	
Custom (Incentive Adjustment)	N/A	N/A	
Dehumidifier	N/A	N/A	
Faucet Aerator	N/A	N/A	
Freezer	N/A	N/A	
Generic Marketplace DR	N/A	N/A	
LED Lamp (Marketplace)	$0	$0	
LED Lamp (Upstream)	$0	$0	
Low-Flow Showerhead	N/A	N/A	
Pool Pump	N/A	N/A	
Refrigerator	N/A	N/A	
Showerhead TRV	N/A	N/A	
Smart Thermostat	N/A	N/A	
Smart Thermostat C-Wire Adapter	N/A	N/A	
Smart Thermostat Power Connector	N/A	N/A	

Smart Thermostat Sensor	N/A	N/A	
Smart Thermostat Trim Kit	N/A	N/A	
Smart Thermostat Wall Plate	N/A	N/A	
Water Cooler	N/A	N/A	
Water Heater	N/A	N/A	
Water Heater Pipe Insulation	N/A	N/A	
Window AC	N/A	N/A	
Total	**$0**	**$0**	

Sums may differ due to rounding.

6.3.4 NET IMPACT FINDINGS

The table summarizes NTG results by measure and the source of the impact. The source is primarily the participant survey, and where there is low or no response rates, the Evaluators performed literature reviews. The literature review-based net-to-gross values include spillover savings if it occurred in the referenced studies.

TABLE 6-24 RLA NET IMPACTS

Measure	NTG	Source of Net-to-Gross
Advanced Power Strip	72.0%	Literature Review
Air Purifier	84.5%	Literature Review
Dehumidifier	79.7%	PY12 and PY14 Participant Surveys
Faucet Aerator	92.0%	Literature Review
Freezer	59.8%	Literature Review
LED Lamp (Marketplace)	74.0%	Literature Review
LED Lamp (Upstream)	58.0%	Literature Review
Low-Flow Showerhead	94.0%	Literature Review
Pool Pump	100.0%	PY12 Participant Survey
Refrigerator	53.5%	PY12 and PY13 Participant Surveys
Showerhead TRV	94.0%	Literature Review
Smart Thermostat	88.5%	PY12 and PY13 Participant Surveys
Water Cooler	53.0%	Literature Review
Water Heater	74.3%	Literature Review
Water Heater Pipe Insulation	88.0%	Literature Review
Window AC	73.0%	PY12 Participant Survey

6.3.5 PROCESS FINDINGS

The Evaluators conducted a full process evaluation. **Error! Reference source not found.** summarizes the process evaluation activities for the RLA program.

TABLE 6-22 RLA DATA COLLECTION ACTIVITIES

Evaluation Activity	Sample Size	Impact	Process
Staff & TPI Interviews	4		X

Database Reviews	Census	X	X
Participant Surveys	266	X	X
Site Visits		X	
Desk Reviews	Census	X	

6.3.5.1 Staff and Implementer Interviews

The following section summarizes the key findings from in-depth interviews with two ENO program staff, one APTIM staff, and one Franklin staff; ENO staff participated in one interview and APTIM and Franklin staff participated in a second interview. These in-depth interviews aimed to learn more about the Retail Lighting and Appliance program design and operations, and the successes and challenges experienced during PY14. Interviews lasted approximately 30 minutes and were conducted using the Microsoft Teams platform.

6.3.5.1.1 *Program Description*

The Retail Lighting and Appliances (RLA) offering provides Point-of- Purchase discounts for various energy efficient appliances like air purifiers, refrigerators, window ACs, pool pumps, smart thermostats, and heat pump water heaters. In years past the program relied heavily on savings garnered from lighting measures sold at participating big-box retailers as well as online retailers. Due to new EISA regulations, the utility cannot rely on lighting measures for program success. In response, in PY14, program staff shifted program focus to air purifiers and smart thermostats. Staff hope that by promoting lower cost and lower commitment measures like air purifiers and smart thermostats they can get customers interested in the program and future energy efficient equipment upgrades.

Additionally, the online marketplace underwent a website refresh end of PY13 beginning of PY14 that has allowed for enhanced functionality and better integration with marketing campaigns. For example, when folks purchase a thermostat, they are prompted to enroll in the BYOT program for an extra incentive.

Program staff still market and promote lighting measures in low-income neighborhoods and retailers like dollar stores and restores, as lighting savings are still valid for low-income customers.

6.3.5.2 Participant Surveys

6.3.5.2.1 *Program Description*

The Retail Lighting and Appliances (RLA) offering provides Point-of- Purchase discounts for light emitting diodes (LEDs) through participating retailers, as well as mail-in rebates (downstream rebates) for refrigerators, window ACs, pool pumps, smart thermostats, and heat pump water heaters. A complete list of eligible items is listed below:

- Aerators
- Showerheads
- Advanced Power Strips
- Light Emitting Diode (LED) Lamps
- ENERGY STAR Air Purifiers
- ENERGY STAR Pool Pumps
- ENERGY STAR Smart Thermostats
- ENERGY STAR Dehumidifiers

- ENERGY STAR Water Coolers
- ENERGY STAR Refrigerators
- ENERGY STAR Window Air Conditioner (AC)
- ENERGY STAR Heat Pump Water Heaters (HPWH)

6.3.5.2.2 *Awareness and Motivations for Use*

More than 3 in 5 participants were aware of the rebate program before purchasing the qualifying product, while a little over a quarter learned about it at the time of purchase.

TABLE 6-23 ENERGY SMART REBATE PROGRAM AWARENESS

Learned about rebate	2023 n=30	2024 n=266
Before I made the purchase(s)	67%	62%
About the same time I made the purchase(s)	17%	26%
After I made the purchase(s)	10%	4%
I don't know	7%	8%

There are several ways consumers learn about the Energy Smart Rebate program. In 2024, most participants learn about the rebate program directly through a friend or family member. The second largest source of awareness is through an email from Entergy. Compared to last year, more have heard about it from friends and family and fewer through email.

TABLE 6-24 ENERGY SMART REBATE PROGRAM INFLUENCE

Source	2023 n=30	2024 n=266
Friend, family member, or colleague	13%	42%
Email from Entergy New Orleans	47%	27%
Entergy's website or the Energy Smart Rebate website	40%	18%
Social media (e.g., Nextdoor, Facebook, Reddit)	--	14%
Internet search (e.g., Google search)	3%	4%
Retailer – brick and mortar location	3%	0%
Signage at the store or sticker on appliance	3%	0%
Other	10%	3%
I don't know	3%	2%

Motivations for participating in the program include saving money on energy bills, improving the comfort of the home, getting free or discounted equipment, and conserving energy and/or protecting the environment. The product purchased most frequently was an air purifier. The top reason for purchasing the air purifier was to improve the comfort of the home. Customers did not view this as a way to save money on energy bills.

TABLE 6-25 MOTIVATIONS FOR PARTICIPATING IN ENERGY SMART REBATE PROGRAM

Reason for Purchase	Air Purifier (n=225)	Smart Thermostats (n=24)	Refrige-rator (n=6)	De-humidifier (n=3)	Pool Pump (n=2)	Window AC (n=1)	Water Heater Pipe Insulation (n=1)
Improve the comfort of your home	48%	21%	17%	67%	--	--	--
Get the free discounted equipment or service	25%	--	--	--	--	--	--
Recommendation from a friend, relative, neighbor, or colleague	6%	8%	--	--	--	--	--
Conserve energy and/or protect the environment	4%	13%	17%	--	--	--	100%
Recommendation from Entergy New Orleans	4%	4%	--	--	--	--	--
Save money on energy bills	3%	42%	50%	--	100%	100%	--
Improve the value of the residence	1%	--	--	33%	--	--	--
Become as energy efficient as my friends or neighbors	1%	--	--	--	--	--	--
Other	7%	13%	17%	--	--	--	--

The factor most affecting model selection for most of the products was the rebate they would receive. Other motivations for model selection include the product's price fit within a budget and the and the product having an ENERGY STAR label.

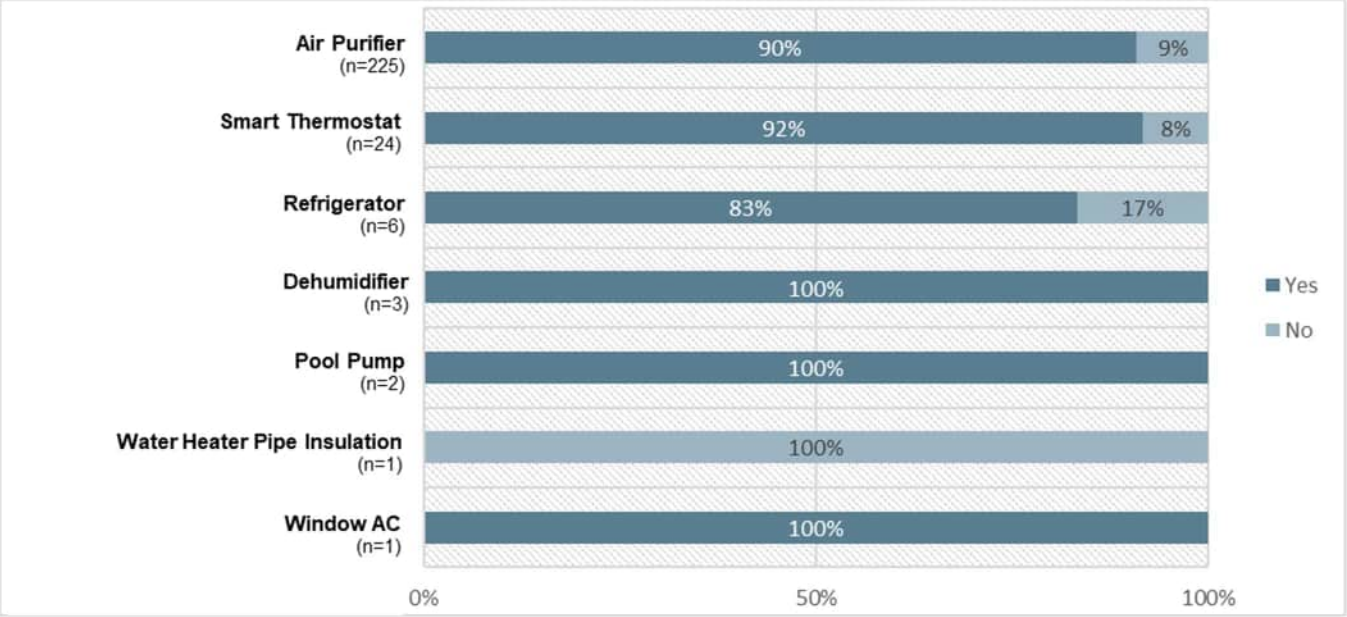
TABLE 6-26 MOTIVATIONS FOR SELECTING PRODUCT MODEL

Reason for Purchase	Air Purifier (n=225)	Smart Thermostats (n=24)	Refrige-rator (n=6)	De-humidifier (n=3)	Pool Pump (n=2)	Window AC (n=1)	Water Heater Pipe Insulation (n=1)
There was a rebate for it	52%	63%	67%	67%	50%	100%	--
It was all that was available/only choice	34%	8%	--	--	--	--	--
It was a good price, fit within my budget	24%	29%	83%	100%	--	100%	--

It's good for the environment	20%	8%	33%	33%	--	--	--
It had an ENERGY STAR label	20%	25%	67%	33%	100%	--	--
It had features I wanted	12%	54%	83%	67%	50%	100%	--
It was the right size, color	12%	4%	83%	67%	--	--	--
It costs less to operate it	7%	13%	33%	33%	50%	100%	100%
The contractor/retailer recommended it	4%	8%	--	--	--	--	--
Wanted the brand	2%	25%	33%	--	50%	100%	--
Other	4%	17%	--	--	--	--	--
I don't know	1%	--	--	--	--	--	--

Nearly all products received through the program have been installed.

FIGURE 6-3 PRODUCT INSTALLATION STATUS (N=226)



One of the most common reasons for not installing relates to delays in installation. Additionally, issues such as forgetting or missing an item also contributed to delays, especially for air purifiers.

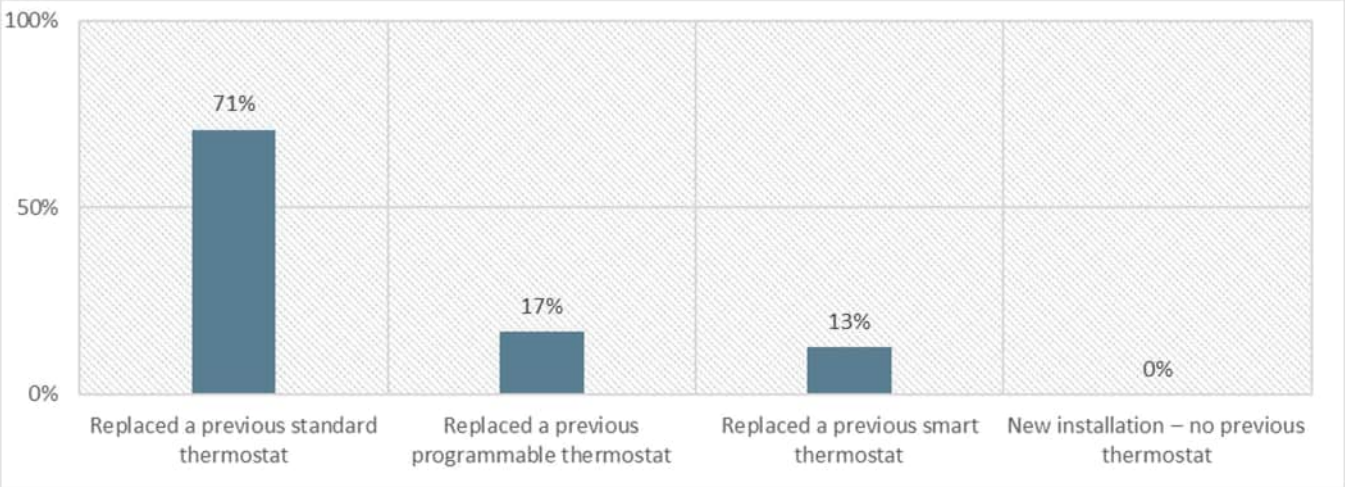
TABLE 6-27 REASONS FOR NOT INSTALLING

Reason for Not Installing	Air Purifier (n=19)	Smart Thermostats (n=2)	Refrigerator (n=1)	Water Heater Pipe Insulation (n=1)
I plan to install the soon myself, but have not had the time to install it yet	32%	--	--	--
I have installed one appliance but not the other	5%	50%	--	100%
I have someone coming to install the water heater pipe insulation soon	5%	50%	--	--
There was trouble with the installation	--	--	--	--
Other: Deciding where to put it	11%	--	--	--
Other: Forgetting	11%	--	--	--
Other: Missing an item	11%	--	--	--
Other: Renovation not finished	5%	--	100%	--
I don't know	21%	--	--	--

6.3.5.2.3 *Energy Star Wi-Fi Thermostat*

The majority of participants installed a new Smart Thermostat to replace an existing standard one.

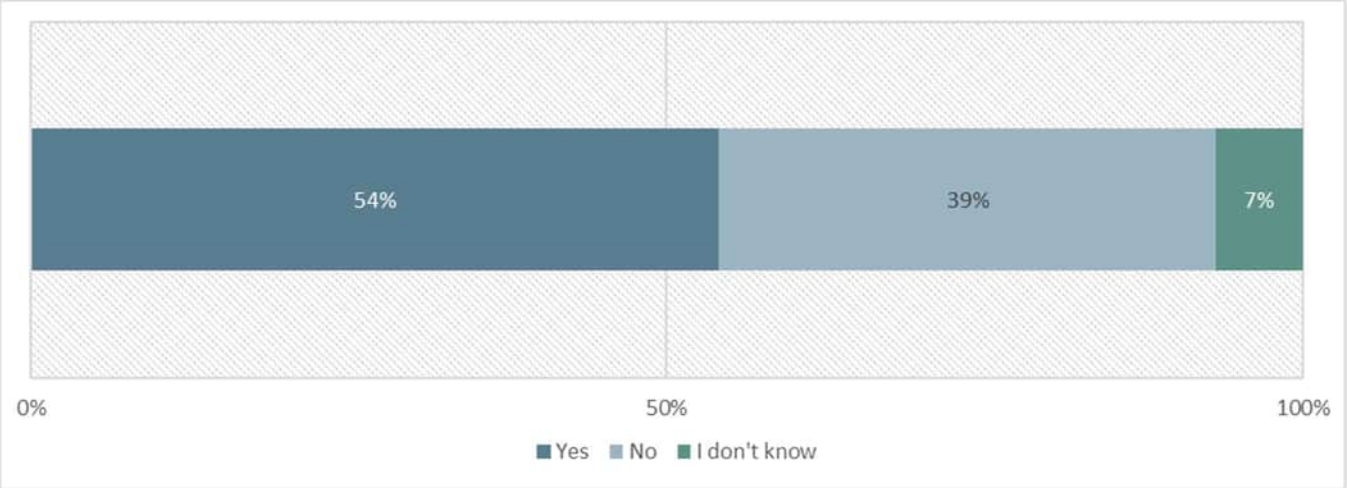
FIGURE 6-4 NEW OR REPLACEMENT THERMOSTAT (N=24)



6.3.5.2.4 *Energy Efficiency Knowledge, Attitudes, & Intentions*

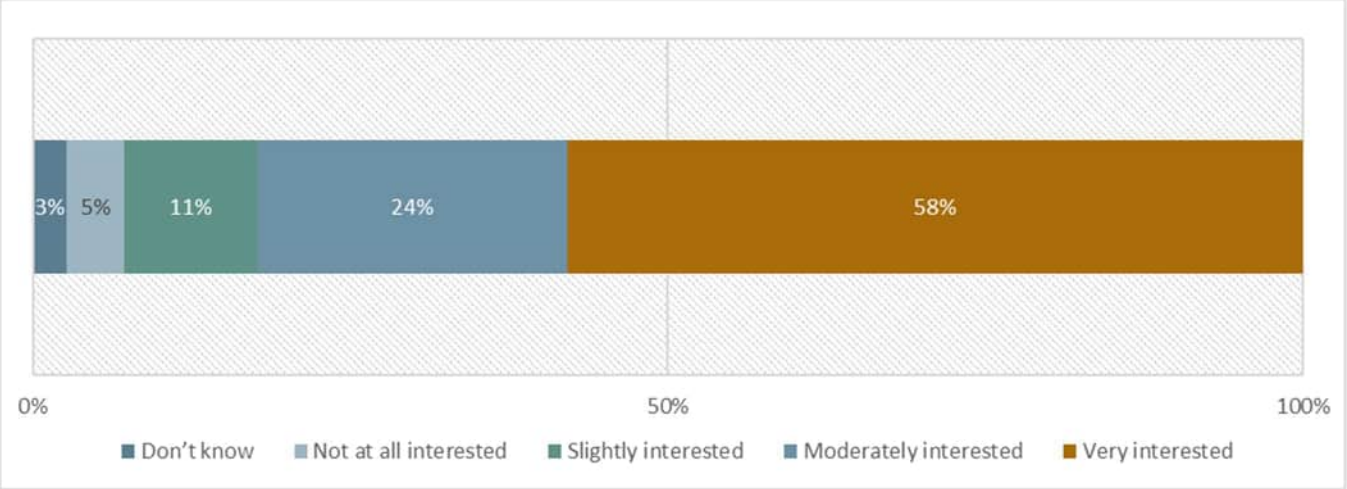
Half of participants have adopted new energy saving behaviors in their home in 2024.

FIGURE 6-5 ADOPTION OF ENERGY SAVING BEHAVIOR (N=266)



Nearly 6 in 10 participants are very interested in receiving additional information on energy saving tips and rebate programs offered by Entergy.

FIGURE 6-6 INTEREST IN RECEIVING ENERGY SAVING TIPS AND PROGRAM OFFERINGS (N=266)



Email is the most preferred contact method to receive information on energy saving equipment and improvements.

TABLE 6-28 PREFERRED CONTACT METHOD (N=266)

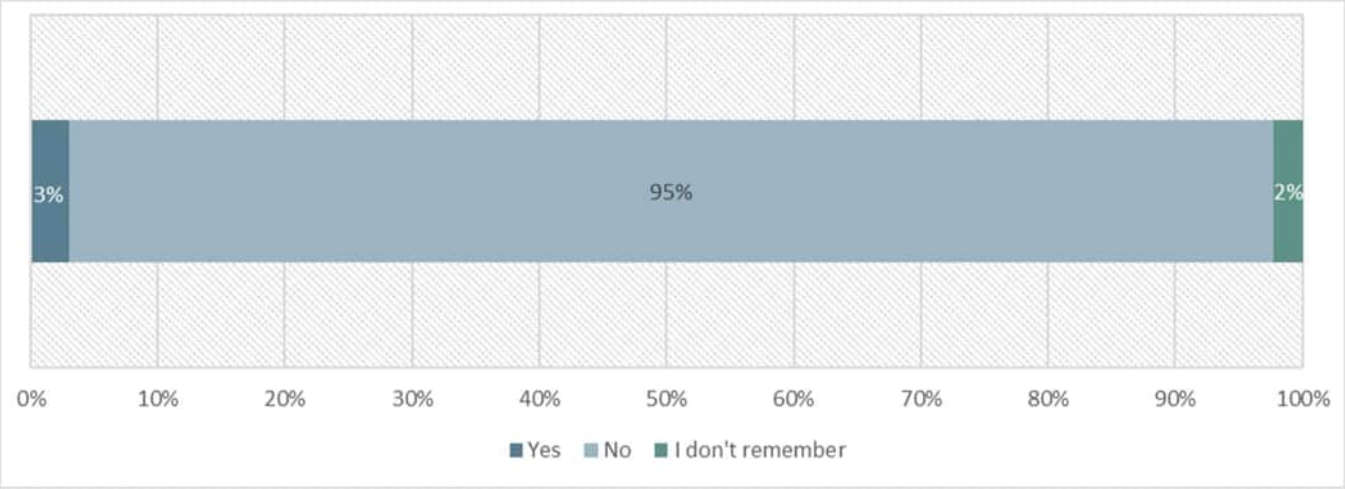
Contact Method	(n = 266)
Email	66%
Text messages	9%
Social media	7%
Bill inserts	6%
Home energy report	4%

Entergy's Energy Smart website	3%
Entergy's customer engagement portal	2%
Newsletter	2%

6.3.5.2.5 *Satisfaction with the Program and Entergy*

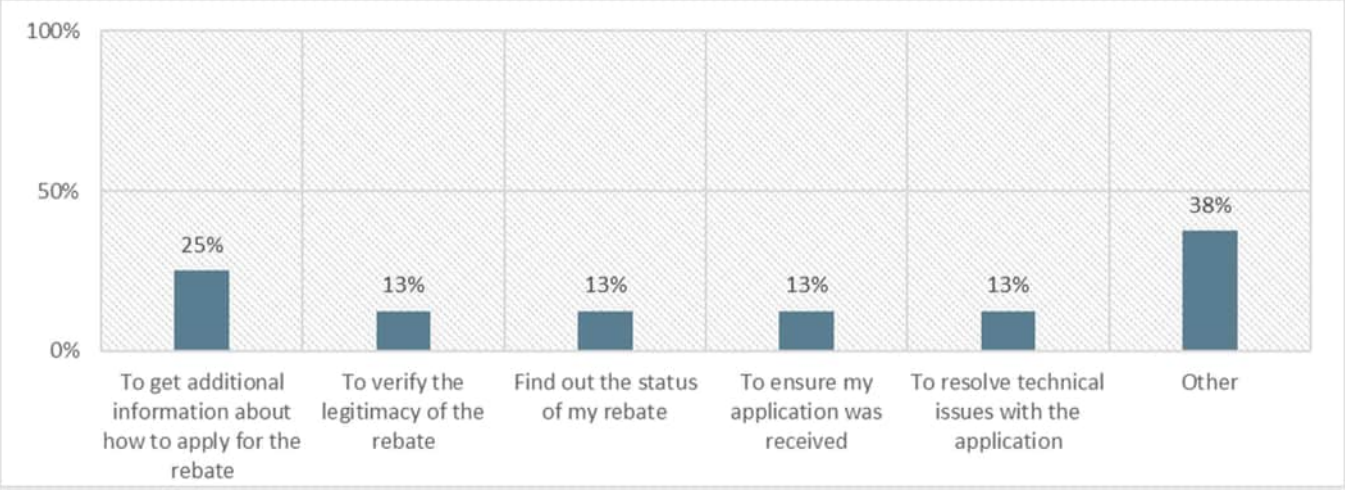
Just 3% of participants contacted Entergy with questions about their rebate application.

FIGURE 6-7 ENTERGY CONTACT RATE (N=266)



One in four participants who contacted Entergy regarding their rebate application did so to get additional information about how to apply for the rebate. Other responses include needing to place a new order due to shipping or product issues.

FIGURE 6-8 REASONS FOR CONTACTING ENTERGY (N=8)



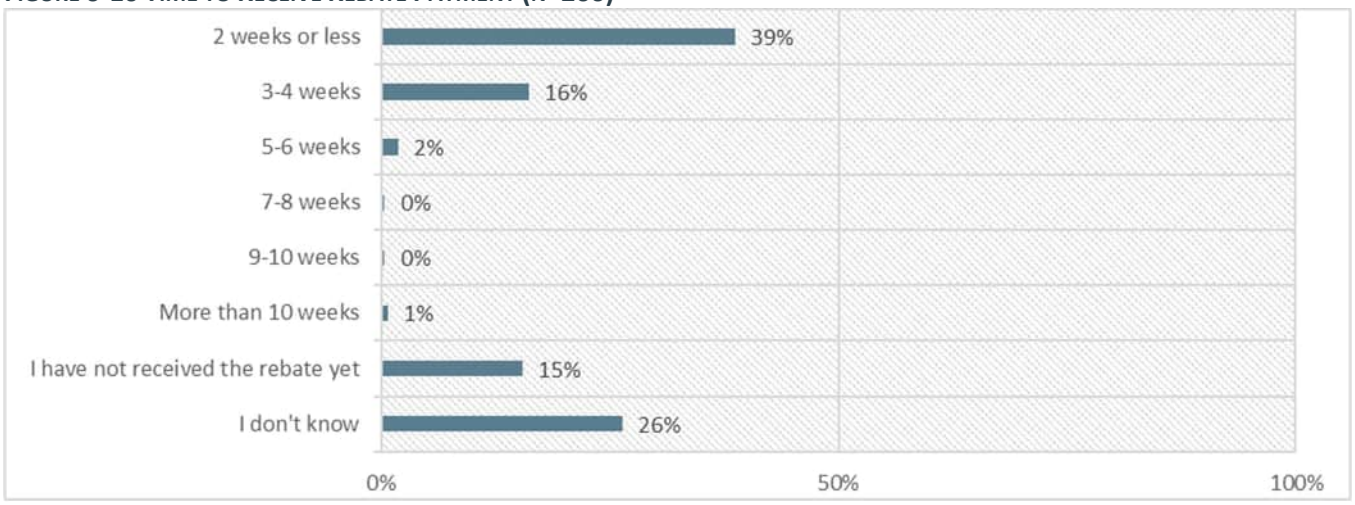
f those who did contact Entergy regarding their rebate application, all were satisfied with the thoroughness and timeliness of the support provided by Entergy staff.

FIGURE 6-9 SATISFACTION WITH ENTERGY CUSTOMER SERVICE (N=8)



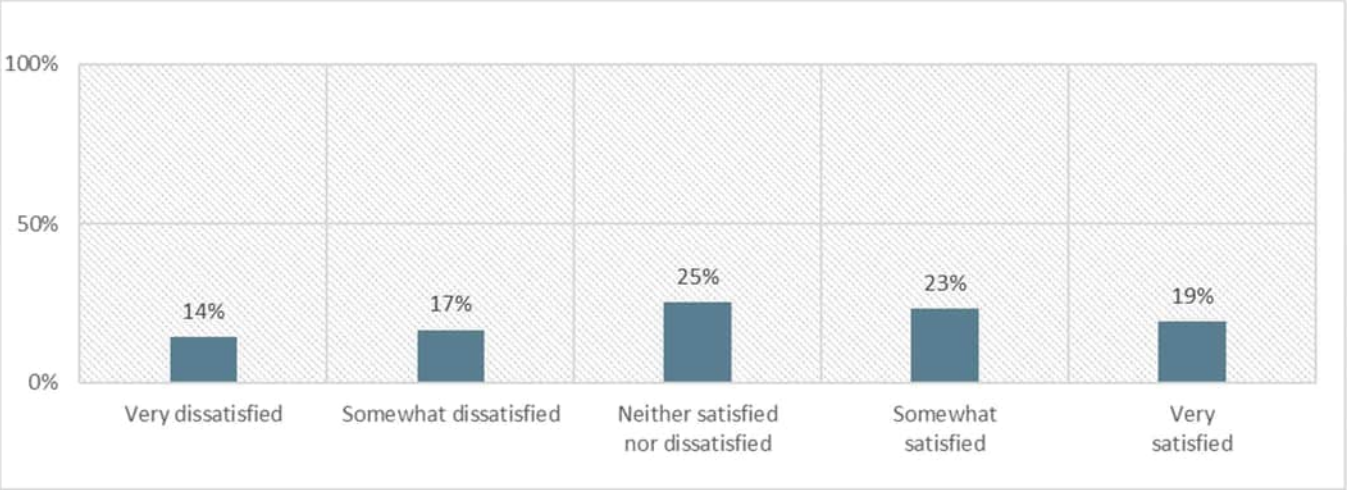
More than half of participants received their rebate checks within 4 weeks of submitting their application.

FIGURE 6-10 TIME TO RECEIVE REBATE PAYMENT (N=266)



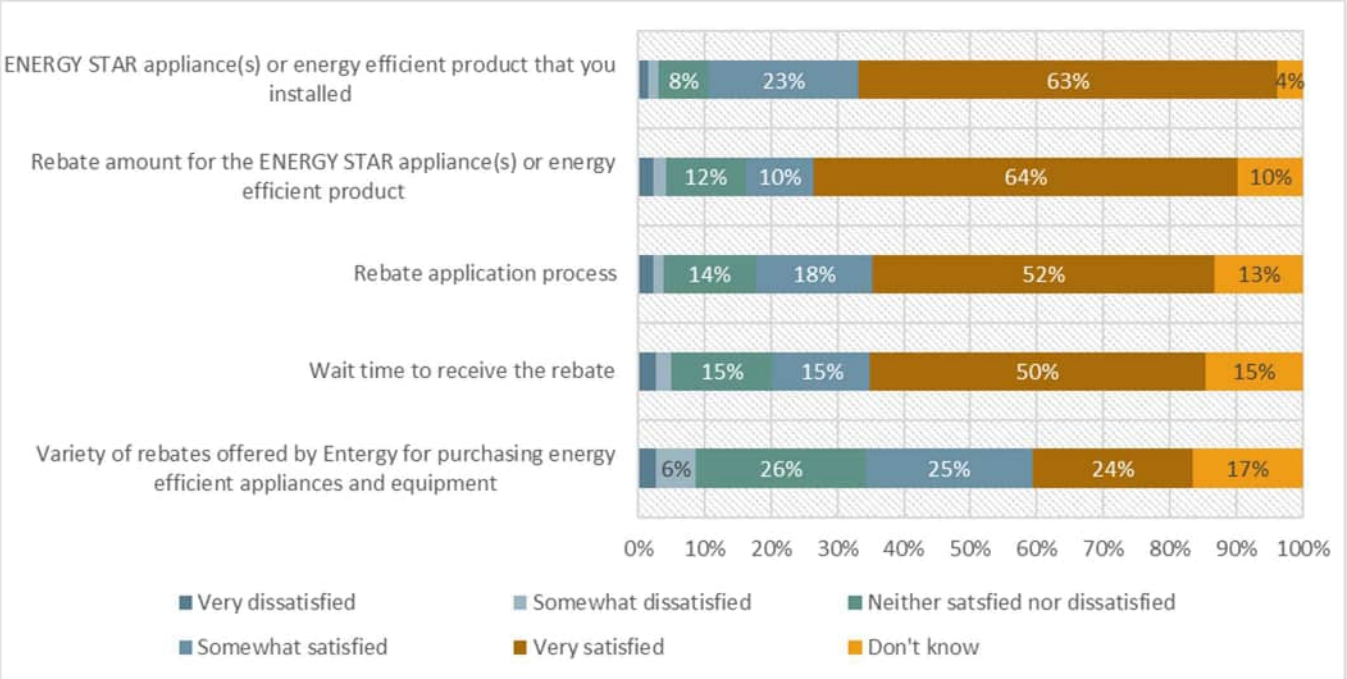
1in 5 program participants are somewhat or very satisfied with Entergy New Orleans as their electricity service provider.

FIGURE 6-11 SATISFACTION WITH ENTERGY (N=266)



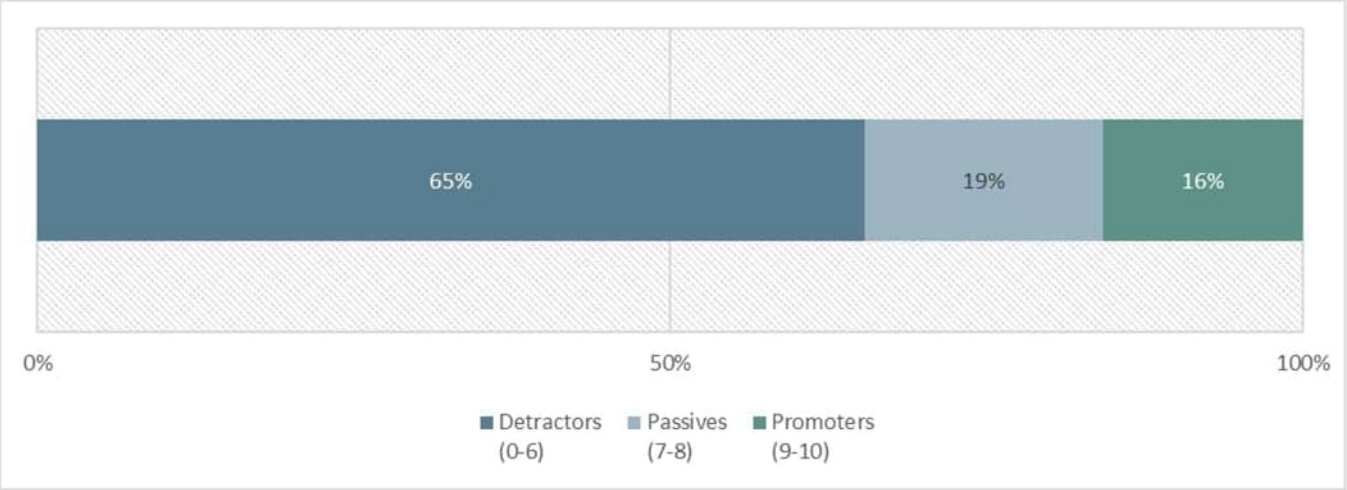
Nine in ten program participants are somewhat or very satisfied with the ENERGY STAR energy efficient products they installed. Participants are least satisfied with the lack of variety of rebates offered by Entergy for purchasing energy efficient appliances and equipment.

FIGURE 6-12 SATISFACTION WITH ASPECTS OF ENTERGY SERVICE (N=266)



The majority of participants say they are not very likely to recommend Entergy to friends and colleagues. While this is not surprising given the type of service being provided, it will be useful for tracking sentiment regarding Entergy over time, particularly if the option to select a utility provider becomes available in the New Orleans market.

FIGURE 6-13 LIKELIHOOD OF RECOMMENDING ENTERGY NEW ORLEANS TO A FRIEND OR COLLEAGUE, ASSUMING UTILITY PROVIDER OPTIONS (N=266)



6.3.6 FINDINGS AND CONCLUSIONS

Key Findings:

- Program Shift Due to Regulatory Changes: With new EISA regulations limiting reliance on lighting measures, staff pivoted program focus in PY14 to emphasize air purifiers and smart thermostats as lower-cost, lower-commitment entry points to broader energy efficiency upgrades.
- Enhanced Online Marketplace: A website refresh at the end of PY13 improved functionality and integration with marketing efforts, including prompts for smart thermostat buyers to enroll in the BYOT program.
- Targeted Lighting Promotions: While general lighting incentives have been reduced, staff continue to promote them in low-income neighborhoods and specific retailers, such as dollar stores and restores, where savings are still applicable.

Recommendations:

- Strengthen Customer Engagement for New Measures: If increasing participation in air purifiers and smart thermostats is a priority, staff could explore targeted outreach strategies, such as personalized email campaigns to past program participants or bundling incentives with other efficiency offerings.
- Leverage Online Marketplace Improvements: To maximize the impact of the website refresh, staff could assess user behavior and refine promotional strategies, such as highlighting product comparisons or customer testimonials to encourage purchases and program participation.
- Refine Incentive Strategies: Given the varying influence of rebates on different products, staff could focus higher rebates on items like dehumidifiers and pool pumps, where rebates strongly impact purchase decisions. For less rebate-sensitive items like smart thermostats, additional engagement strategies, such as annual energy savings incentives, could maintain interest and participation.

7 MULTIFAMILY SOLUTIONS

7.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend, by measure, where applicable.

TABLE 7-1 PY14 MULTIFAMILY SOLUTIONS ENERGY SAVINGS (KWH)

Measure	Ex Ante Gross Savings (kWh)	Realization Rate (kWh)	Ex Post Gross Savings (kWh)	NTG	Ex Post Net Savings (kWh)
Advanced Power Strip	46,417	82.5%	38,297	90.2%	34,530
Air Infiltration	816,228	87.5%	714,368	90.2%	644,100
Duct Sealing	1,586,495	96.1%	1,524,279	90.2%	1,374,343
Faucet Aerator	49,458	94.2%	46,596	90.2%	42,012
LED 11W A-Type (Standard)	145	98.2%	142	90.2%	128
LED 15W A-Type (Standard)	40	95.7%	39	90.2%	35
LED 5W Candelabra (Specialty)	38,464	95.4%	36,708	90.2%	33,097
LED 6W Globe (Specialty)	29,128	95.8%	27,909	90.2%	25,164
LED 8W BR30 (Specialty)	195	99.4%	193	90.2%	174
LED 9W A-Type (Standard)	33,818	95.1%	32,153	90.2%	28,990
Low-Flow Showerhead	193,116	93.2%	179,980	90.2%	162,277
MF Direct Install	0	N/A	N/A	N/A	N/A
Smart Thermostat	13,377	90.4%	12,088	90.2%	10,899
Water Heater Pipe Insulation	40,984	91.5%	37,508	90.2%	33,819
Total	**2,847,865**	**93.1%**	**2,650,261**	**90.2%**	**2,389,569**

Sums may differ due to rounding.

TABLE 7-2 PY14 MULTIFAMILY SOLUTIONS DEMAND REDUCTIONS (KW)

Measure	Ex Ante Gross Reductions (kW)	Realization Rate (kW)	Ex Post Gross Reductions (kW)	NTG	Ex Post Net Reductions (kW)
Advanced Power Strip	4.77	82.5%	3.94	90.2%	3.55
Air Infiltration	266.20	87.5%	232.98	90.2%	210.06
Duct Sealing	447.82	115.6%	517.54	90.2%	466.63
Faucet Aerator	5.12	94.7%	4.85	90.2%	4.37
LED 11W A-Type (Standard)	0.03	97.5%	0.03	90.2%	0.03
LED 15W A-Type (Standard)	0.01	96.0%	0.01	90.2%	0.01
LED 5W Candelabra (Specialty)	7.61	95.8%	7.29	90.2%	6.57
LED 6W Globe (Specialty)	5.78	95.9%	5.54	90.2%	5.00
LED 8W BR30 (Specialty)	0.04	99.4%	0.04	90.2%	0.03
LED 9W A-Type (Standard)	6.67	95.7%	6.38	90.2%	5.76
Low-Flow Showerhead	20.07	93.2%	18.72	90.2%	16.88
MF Direct Install	0.00	N/A	N/A	N/A	N/A
Smart Thermostat	0.00	N/A	0.00	N/A	0.00
Water Heater Pipe Insulation	4.69	91.6%	4.30	90.2%	3.87
Total	**768.80**	**104.3%**	**801.60**	**90.2%**	**722.75**

Sums may differ due to rounding.

TABLE 7-3 PY14 MULTIFAMILY SOLUTIONS LIFETIME SAVINGS SUMMARY

Measure	EUL	Ex Post Gross Lifetime Energy Savings (kWh)	Ex Post Net Lifetime Energy Savings (kWh)
Advanced Power Strip	10	382,974	345,303
Air Infiltration	11	7,858,051	7,085,097
Duct Sealing	18	27,437,015	24,738,183
Faucet Aerator	10	465,958	420,124
LED 11W A-Type (Standard)	2	214	193
LED 15W A-Type (Standard)	2	58	52
LED 5W Candelabra (Specialty)	2	55,061	49,645
LED 6W Globe (Specialty)	2	41,863	37,745
LED 8W BR30 (Specialty)	2	290	261
LED 9W A-Type (Standard)	2	48,229	43,485
Low-Flow Showerhead	10	1,799,804	1,622,767
MF Direct Install	1	N/A	N/A
Smart Thermostat	11	132,973	119,893
Water Heater Pipe Insulation	13	487,608	439,645
Total	**15**	**38,710,100**	**34,902,395**

Sums may differ due to rounding.

TABLE 7-4 PY14 MULTIFAMILY SOLUTIONS PARTICIPATION AND INCENTIVE SUMMARY

Measure	Participation (Count of Measures)	Incentive Spend ($)
Advanced Power Strip	151	$7,550
Air Infiltration	1,037	$240,539
Duct Sealing	1,017	$272,981
Faucet Aerator	1,375	$8,920
LED 11W A-Type (Standard)	5	$40
LED 15W A-Type (Standard)	1	$13
LED 5W Candelabra (Specialty)	1,546	$10,787
LED 6W Globe (Specialty)	1,210	$8,470
LED 8W BR30 (Specialty)	5	$40
LED 9W A-Type (Standard)	1,394	$8,364
Low-Flow Showerhead	847	$12,675
MF Direct Install	1,261	$32,045
Smart Thermostat	39	$6,825
Water Heater Pipe Insulation	1,615	$3,284
Total	**11,503**	**$612,533**

Sums may differ due to rounding.

7.2 Program Description

The offering is designed to promote energy efficiency in the multifamily (MF) sector by offering home energy walkthrough assessments and deeper energy assessments to multifamily customers. Franklin implements the Multifamily Solutions (MF Solutions) offering. Incentives are provided to trade allies for installation of pre-approved measures. The program is a direct install and weatherization program similar to HPwES, but targets homes with five or more attached dwelling units. Properties with four or more meters can qualify.

This channel was developed to work towards overcoming the “split incentive” barrier to program participation; dwelling units have historically been underserved as owners are often unwilling to make significant investments in energy efficiency when the utility bill is paid by tenants. Participation in the multi-family program is free to all, regardless of income.

7.2.1 PROGRAM DELIVERY CHANNELS AND EXPECTED SAVINGS

The evaluation approach for PY14 included the following activities: project data review, desk reviews, staff interviews, multifamily property manager interviews and site visits. Records indicated a total of 7,067 projects that were completed in fourteen (14) large apartment complexes, within 2,389 distinct apartment units.

The following figures show the contribution to savings by measure in the program.

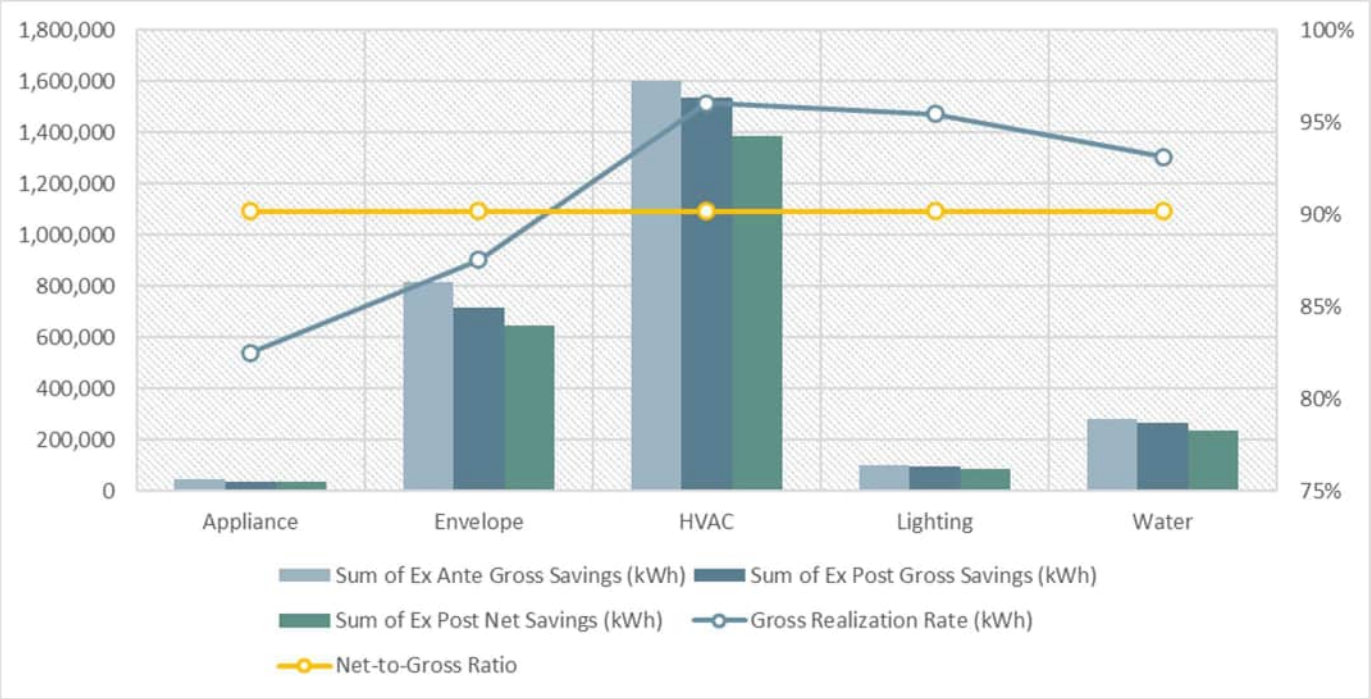
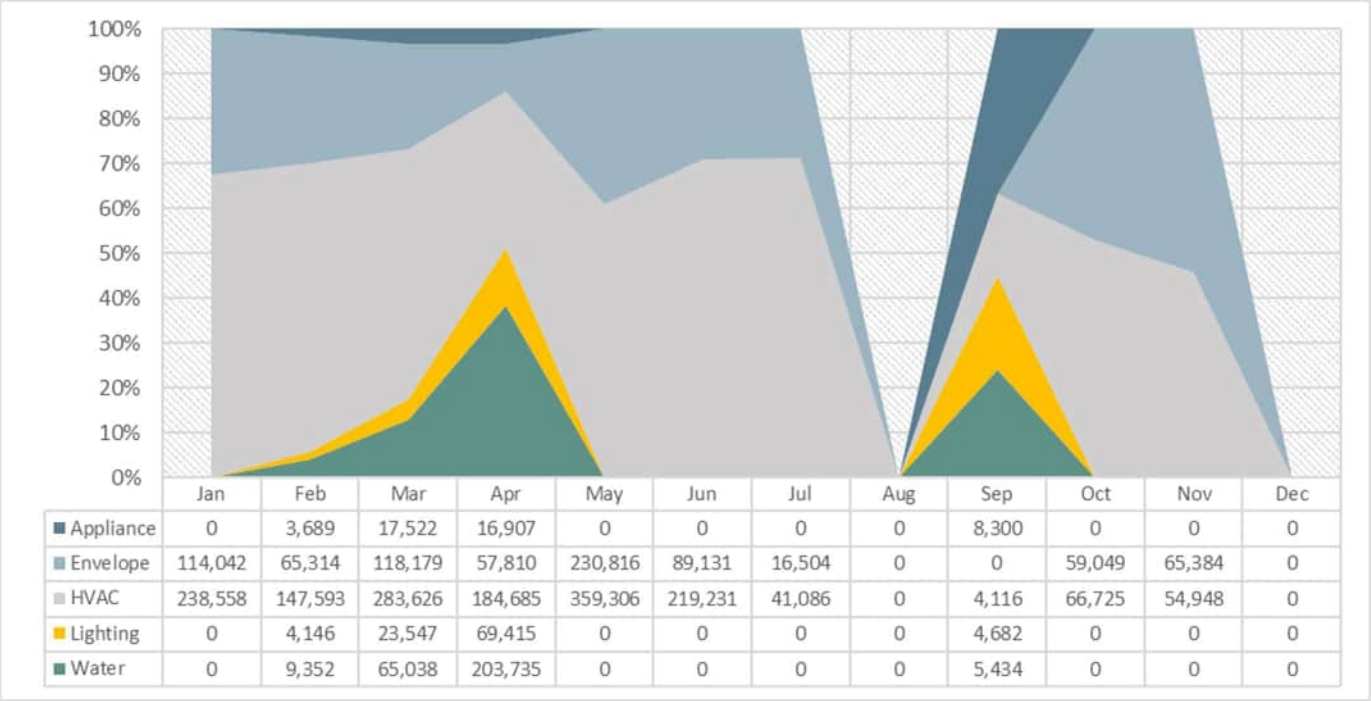


FIGURE 7-1 MULTIFAMILY SOLUTIONS ENERGY SAVINGS SUMMARY (KWH)

In PY14, the HVAC measures (smart thermostats and duct sealing) accounted for 56.2% of expected energy (kWh) savings, the envelope measure (air infiltration) contributed 28.7% of expected savings, the water measures (aerators, showerheads, water heater pipe wrap) contributed 10.0%, the lighting measures (LED lamps) contributed 3.6%, and the appliance measures (advanced power strips) contributed 1.6% of expected energy savings. Compared to PY13, PY14 saw a 12.9% increase in expected energy savings as the program claimed 2,847,865 kWh in PY14.

7.2.2 TIMING OF PROJECTS

The figure below shows *ex ante* energy savings (kWh) for the program by end use, by month. The tracking data indicated that there was a lull in project completion for the months of August and December.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Appliance	0	3,689	17,522	16,907	0	0	0	0	8,300	0	0	0
Envelope	114,042	65,314	118,179	57,810	230,816	89,131	16,504	0	0	59,049	65,384	0
HVAC	238,558	147,593	283,626	184,685	359,306	219,231	41,086	0	4,116	66,725	54,948	0
Lighting	0	4,146	23,547	69,415	0	0	0	0	4,682	0	0	0
Water	0	9,352	65,038	203,735	0	0	0	0	5,434	0	0	0

FIGURE 7-2 *EX ANTE* SAVINGS BY END USE BY MONTH

7.2.3 TRADE ALLIES

The program had ten participating trade allies in PY14. Five of the reported trade allies perform weatherization work, including the following measures: duct sealing and air infiltration.

The TPI, Franklin, installs all other measures, including the following: advanced power strip, aerator, LED lamp, water heater pipe wrap, showerhead, and smart thermostat. Franklin also received an incentive for performing the assessment.

The table below shows the distribution of savings across all trade allies.

TABLE 7-5 MULTIFAMILY SOLUTIONS TRADE ALLY ACTIVITY

Trade Ally	Gross Energy Savings (kWh)	% of Savings
TA 1	965,253	34%
TA 2	552,868	19%
Franklin Energy	445,142	16%
TA 3	342,411	12%
TA 4	157,255	6%
TA 5	111,865	4%
TA 6	104,622	4%
TA 7	70,520	2%
TA 8	50,987	2%
TA 9	46,943	2%

Sums may differ due to rounding.

7.2.4 GOAL ACHIEVEMENT

Total verified savings and percentage of goals for the program are summarized in the table below.

TABLE 7-6 PY14 MULTIFAMILY SUMMARY OF GOAL ACHIEVEMENT

Ex Post Gross Energy Savings (kWh) Goal	% to kWh Goal	Ex Post Gross Savings (kW) Target	% to kW Target
2,526,471	105%	145.00	553%

7.3 EM&V Methodology

The evaluations provided free-ridership estimates, discussions of program satisfaction and strategic recommendations for program improvement, and most/all measures offered by the program have deemed TRM savings. There were staff interviews, a full review of project data, a census of desk reviews, property manager interviews and site visits to confirm installations.

TABLE 7-7-ENERGY SMART FOR MULTIFAMILY DATA COLLECTION ACTIVITIES

Evaluation Activity	Sample Size	Impact	Process
Staff & TPI Interviews	4		X
Database Reviews	Census	X	X
Desk Reviews	Census	X	
Property Manger Interviews	1	X	X
Site Visits	Complexes	X	

7.3.1 SITE VISITS

The Evaluators performed two site visits on projects in the program. The table below outlines the measures captured in the site visits.

TABLE 7-8 SITE VISIT SUMMARY

Measures	PY14 Measure Count	Expected Measure Count During PY14 Site Visits	Verified Measures Count During cPY14 Site Visits
Air Infiltration	1,037	19	19
Duct Sealing	1,017	19	18

The largest barrier to scaling was effective multifamily property manager contact information, for both site visits and interview responses. An incentive of $50 was offered and multiple attempts were made. Tenant contact information was not available.

7.3.2 DEEMED SAVINGS CALCULATIONS

Impact methodologies for MF Solutions are the same as described for HPwES, described in Section 4.3.2.

7.4 Evaluation Findings

Evaluation results for the program can be found in Section 7.1 Summary.

7.4.1 GROSS IMPACT FINDINGS

7.4.1.1 Faucet Aerator (Bathroom & Kitchen)

Expected and verified savings for aerators are summarized below. There were 1,375 faucet aerators installed at 1,251 distinct residences.

TABLE 7-9 PY14 MULTIFAMILY EXPECTED AND VERIFIED AERATORS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
49,458	46,596	94.2%	5.12	4.85	94.7%

7.4.1.2 Air Infiltration

Expected and verified savings for the air infiltration projects are summarized below. There were 1,037 air infiltration projects. The low realization rate may be attributed to the measure ISR that was applied in PY14.

TABLE 7-10 PY14 MULTIFAMILY EXPECTED AND VERIFIED AIR INFILTRATION SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
816,228	714,368	87.5%	266.20	232.98	87.5%

7.4.1.3 Duct Sealing

Expected and verified savings for the duct sealing projects are summarized below. There were 1,017 duct sealing projects.

TABLE 7-11 PY14 MULTIFAMILY EXPECTED AND VERIFIED DUCT SEALING SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
1,586,495	1,524,279	96.1%	447.82	517.54	115.6%

7.4.1.4 LED Lamp

Expected and verified savings for LED lamps are summarized below. There were 4,161 LED lamps installed at 1,104 residences.

TABLE 7-12 PY14 MULTIFAMILY EXPECTED AND VERIFIED LED SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
101,790	97,144	95.4%	20.13	19.29	95.8%

7.4.1.5 Water Heater Pipe Wrap

Expected and verified savings for the pipe wrap projects are summarized below. Pipe wrap was installed in 1,615 residences.

TABLE 7-13 PY14 MULTIFAMILY EXPECTED AND VERIFIED PIPE WRAP SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
40,984	37,508	91.5%	4.69	4.30	91.6%

7.4.1.6 Low-Flow Showerhead

Expected and verified savings for showerheads are summarized below. There were 847 low-flow showerheads installed at 711 residences.

TABLE 7-14 PY14 MULTIFAMILY EXPECTED AND VERIFIED SHOWERHEADS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
193,116	179,980	93.2%	20.07	18.72	93.2%

7.4.1.7 Smart Thermostat

Expected and verified savings for smart thermostats are summarized below. There were 39 smart thermostats installed at 39 residences.

TABLE 7-15 PY14 MULTIFAMILY EXPECTED AND VERIFIED THERMOSTATS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
13,377	12,088	90.4%	0.00	0.00	N/A

7.4.1.8 Advanced Power Strips

Expected and verified savings for advanced power strips are summarized below. There were 151 smart thermostats installed at 138 residences. The low realization rate may be attributed to the measure ISR that was applied in PY14.

TABLE 7-16 PY14 MULTIFAMILY EXPECTED AND VERIFIED ADVANCED POWER STRIPS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
46,417	38,297	82.5%	4.77	3.94	82.5%

7.4.1.9 Avoided Replacement Cost

The Evaluators have added the benefits of ARC. The table below summarizes the ARC by measure in MF Solutions. Information on methodology can be found in Section 3.4.1.3 Avoided Replacement Costs.

TABLE 7-17 SUMMARY OF ARC FOR MF SOLUTIONS

Measure	*Ex Post* Gross ARCs ($)	*Ex Post* Net ARCs ($)	NPV ARCs ($)
Advanced Power Strip	N/A	N/A	N/A
Air Infiltration	N/A	N/A	N/A
Duct Sealing	N/A	N/A	N/A
Faucet Aerator	N/A	N/A	N/A

LED 11W A-Type (Standard)	$9	$8	$8
LED 15W A-Type (Standard)	$2	$2	$2
LED 5W Candelabra (Specialty)	$3,337	$3,009	$3,009
LED 6W Globe (Specialty)	$2,612	$2,355	$2,355
LED 8W BR30 (Specialty)	$11	$10	$10
LED 9W A-Type (Standard)	$2,473	$2,229	$2,229
Low-Flow Showerhead	N/A	N/A	N/A
MF Direct Install	N/A	N/A	N/A
Smart Thermostat	N/A	N/A	N/A
Water Heater Pipe Insulation	N/A	N/A	N/A
Total	**$8,443**	**$7,613**	**$7,613**

Sums may differ due to rounding.

7.4.2 NET IMPACT FINDINGS

The net savings for the multifamily program were based on results of interviews with property managers completed in PY12 and PY13. Based on these results, a net-to-gross ratio of 90.2% was applied to the program.

7.4.3 PROCESS FINDINGS

7.4.3.1 Staff and Implementer Interview

The following section summarizes the key findings from in-depth interviews with two ENO program staff, one APTIM staff, and one Franklin staff; ENO staff participated in one interview and APTIM and Franklin staff participated in a second interview. These in-depth interviews aimed to learn more about HPwES program design and operations, and the successes and challenges experienced during PY14. Interviews lasted approximately 30 minutes and were conducted using the Microsoft Teams platform. The evaluators recorded all interviews with participant permission. The following narrative summarizes findings specific to Multi-Family Solutions.

7.4.3.1.1 *Program Description*

The Multifamily Solutions program is structured the same as HPwES, but with a focus on multi-family apartment buildings rather than single-family homes or four-unit or smaller buildings.

7.4.3.1.2 *Program Implementation*

Staff focus recruitment efforts in the earlier half of the year, as property managers are harder to engage during the fourth quarter. Staff focus on a variety of building sizes and types to ensure all eligible customers are served. In general, when a building participates in the program, the building receives an assessment, and all units receive the necessary direct install measure upgrades. Typically, the building representative – most often the property manager – can speak to the similarities across the different units in the building, and assessments are only completed in varying units rather than every unit in the building. Once trade ally related work is determined, the trade ally completes all necessary upgrades in the building before moving on to a new project.

7.4.3.1.3 *Marketing*

Staff rely on a pipeline developed from direct outreach. When choosing eligible buildings, staff balance budget constraints with serving maximum number of clients and needs. Program staff also attended “Landlord Day” and other community outreach events to promote the program among property managers.

Staff explained that in PY14, they had developed a healthy pipeline of multifamily building participants through various direct outreach efforts. They also mentioned that they had met their goal by the time of the interview in Fall 2024. Staff highlighted aggressive outreach in the beginning half of the year as one of the main reasons the program reached its goal so early.

7.4.3.2 Property Manager Interviews

The Entergy Smart tracking data for the Multifamily Solutions program included nine unique program contacts, seven of whom had valid contact information. Property managers were contacted via phone and email up to three times and invited to participate in an interview. Of these, six declined, resulting in one completed interview and a response rate of 14%. Given the small sample size, the findings in this section should not be considered representative of the larger group. Table 7-16 provides details on the research sample recruitment process.

The interviewed property manager participated in the program primarily to help residents lower their energy costs. They expressed high satisfaction with the program, which included installing smart thermostats, new aerators, and LED lighting. The installation process was smooth, taking two weeks to complete, with no major challenges or frustrations reported.

For program improvements, the property manager suggested providing instructional pamphlets for smart thermostats. Their broader sustainability efforts focus on operational efficiency, fostering strong resident relationships, and gradually replacing outdated appliances with energy-efficient models.

TABLE 7-16 RESEARCH SAMPLE RECRUITMENT DETAILS

Contact Details		
Total Points of Contact on Respondent List	9	
Contacts with Email Addresses	9	*Minimum 2 emails per contact*
Contacts with Phone Numbers	8	*Minimum of 2 phones calls and 1 text per contact number*
Non-contactable Entries on List	2	*Includes bad numbers, issues with voicemail, etc.*
Response Details		
Successful Interviews	1	*Replied positively, scheduled, and completed interview*
Declined or Not Qualified	6	*Declined invitation / Did not meet qualifying criteria*
Interested but Unresponsive	0	*Indicated interest via email or text but did not respond to repeated calls for further screening*
Missed Rescheduling Opportunity	0	*Did not respond to calls to reschedule missed interview appointment*

7.5 Findings and Recommendations

Key Findings:

- High Satisfaction: The interviewed property manager reported a smooth installation process, clear communication, and noticeable energy savings for residents.
- Minimal Challenges: No major issues were identified, though some older residents struggled with using smart thermostats.

Recommendations:

- Improve Smart Thermostat Support: If resident usability remains a concern, staff could provide instructional pamphlets or brief training sessions to help residents better understand and operate their smart thermostats.
- Address Resident Needs: To ensure all residents fully benefit from energy-efficient upgrades, staff may consider periodic follow-ups or optional educational materials tailored for different resident groups.

8 A/C SOLUTIONS

8.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend, by measure, where applicable.

TABLE 8-1 PY14 AC SOLUTIONS ENERGY SAVINGS (KWH)

Measure	Ex Ante Gross Savings (kWh)	Realization Rate (kWh)	Ex Post Gross Savings (kWh)	NTG	Ex Post Net Savings (kWh)
Central AC Replacement	3,305	74.2%	2,453	102.8%	2,521
Central AC Tune-up	2,511,151	99.2%	2,491,089	90.3%	2,248,331
Duct Sealing	1,502,932	113.9%	1,711,203	102.8%	1,759,116
Ductless Heat Pump	5,382	100.0%	5,382	102.8%	5,533
Smart Thermostat	686	98.5%	676	102.8%	695
Total	**4,023,456**	**104.7%**	**4,210,803**	**95.4%**	**4,016,197**

Sums may differ due to rounding.

TABLE 8-2 PY14 AC SOLUTIONS DEMAND REDUCTIONS (KW)

Measure	Ex Ante Gross Reductions (kW)	Realization Rate (kW)	Ex Post Gross Reductions (kW)	NTG	Ex Post Net Reductions (kW)
Central AC Replacement	0.76	191.7%	1.46	102.8%	1.50
Central AC Tune-up	1,180.82	99.2%	1,171.37	90.3%	1,057.22
Duct Sealing	587.41	117.1%	687.79	102.8%	707.05
Ductless Heat Pump	0.58	100.0%	0.58	102.8%	0.59
Smart Thermostat	0.00	N/A	0.00	N/A	0.00
Total	**1,769.56**	**105.2%**	**1,861.19**	**94.9%**	**1,766.36**

Sums may differ due to rounding.

TABLE 8-3 PY14 AC SOLUTIONS LIFETIME SAVINGS SUMMARY

Measure	EUL	Ex Post Gross Lifetime Energy Savings (kWh)	Ex Post Net Lifetime Energy Savings (kWh)
Central AC Replacement	19	46,603	47,907
Central AC Tune-up	3	7,798,975	7,038,961
Duct Sealing	18	30,801,647	31,664,093
Ductless Heat Pump	18	96,876	99,589
Smart Thermostat	11	7,436	7,644
Total	**9.2**	**38,751,537**	**38,858,193**

Sums may differ due to rounding.

TABLE 8-4 PY14 AC SOLUTIONS COUNT OF MEASURES AND INCENTIVE SPEND

Measure	Participation (Count of Measures)	Incentive Spend ($)
Central AC Replacement	3	$550
Central AC Tune-up	3,120	$436,700
Duct Sealing	733	$233,631
Ductless Heat Pump	9	$2,250
Smart Thermostat	2	$300
Total	**3,867**	**$673,431**

Sums may differ due to rounding.

8.2 Program Description

A/C Solutions provides financial incentives to encourage residential customers to improve the efficiency of their HVAC systems; Franklin implements this program. Incentives are provided for ductless heat pumps, HVAC tune-up, HVAC replacements, duct sealing and smart thermostats.

Incentives for air conditioner replacements range from $50 to $150, depending on the size and SEER of the new unit. Incentives for ducted heat pumps range from $150 to $250, depending on the size and SEER of the new unit. Ductless heat pumps may receive incentives ranging from $250 to $500 depending on the size of the unit.

Tune-ups are provided by a qualified trade ally and involve assessing the performance of the unit before and after measures are implemented. Typical measures implemented as part of the tune-up procedure include air flow correction; cleaning of the indoor blower, evaporator coils, condenser coils; and correction of refrigerant charge (if necessary).

Duct sealing is performed by applying mastic sealant or metal tape to the distribution system of air conditioning systems. Duct sealing performance is tested by taking the pre-measurement and post-measurement cubic feet per minute (CFM) leakage rate.

8.2.1 PROGRAM DELIVERY CHANNELS AND EXPECTED SAVINGS

Below, individual measure contribution to the overall program expected savings.

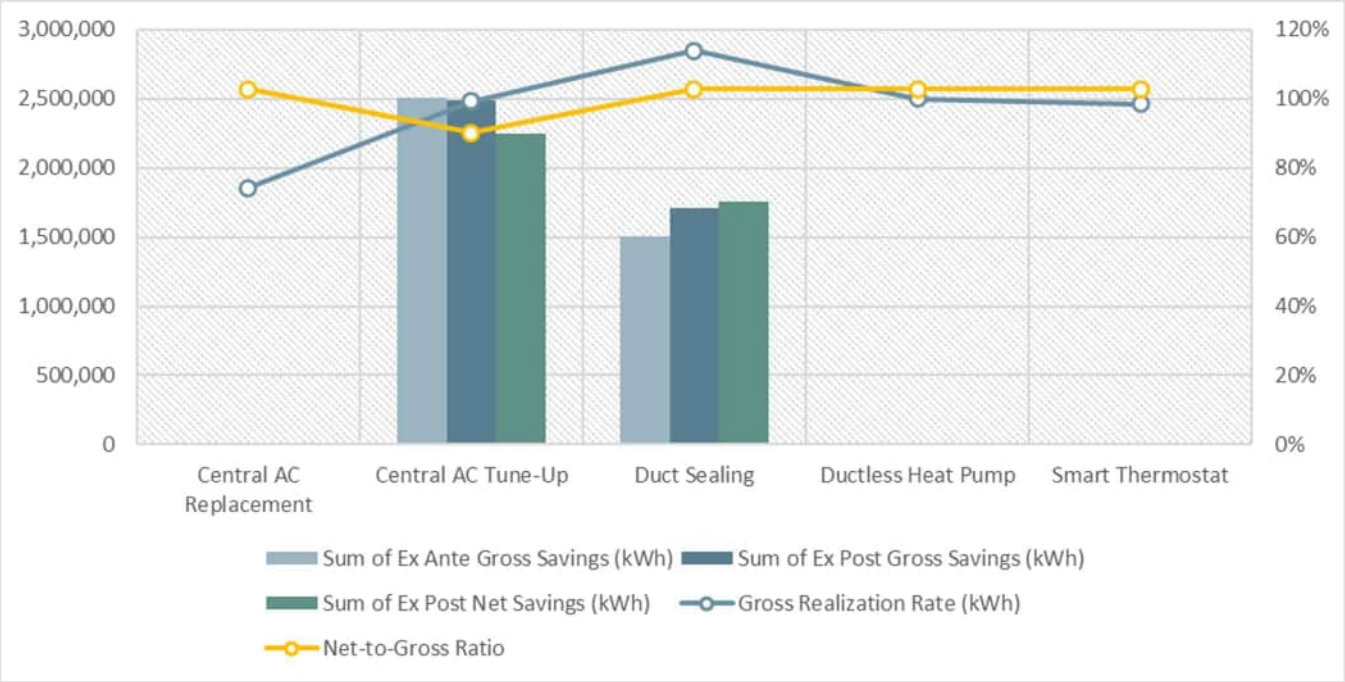
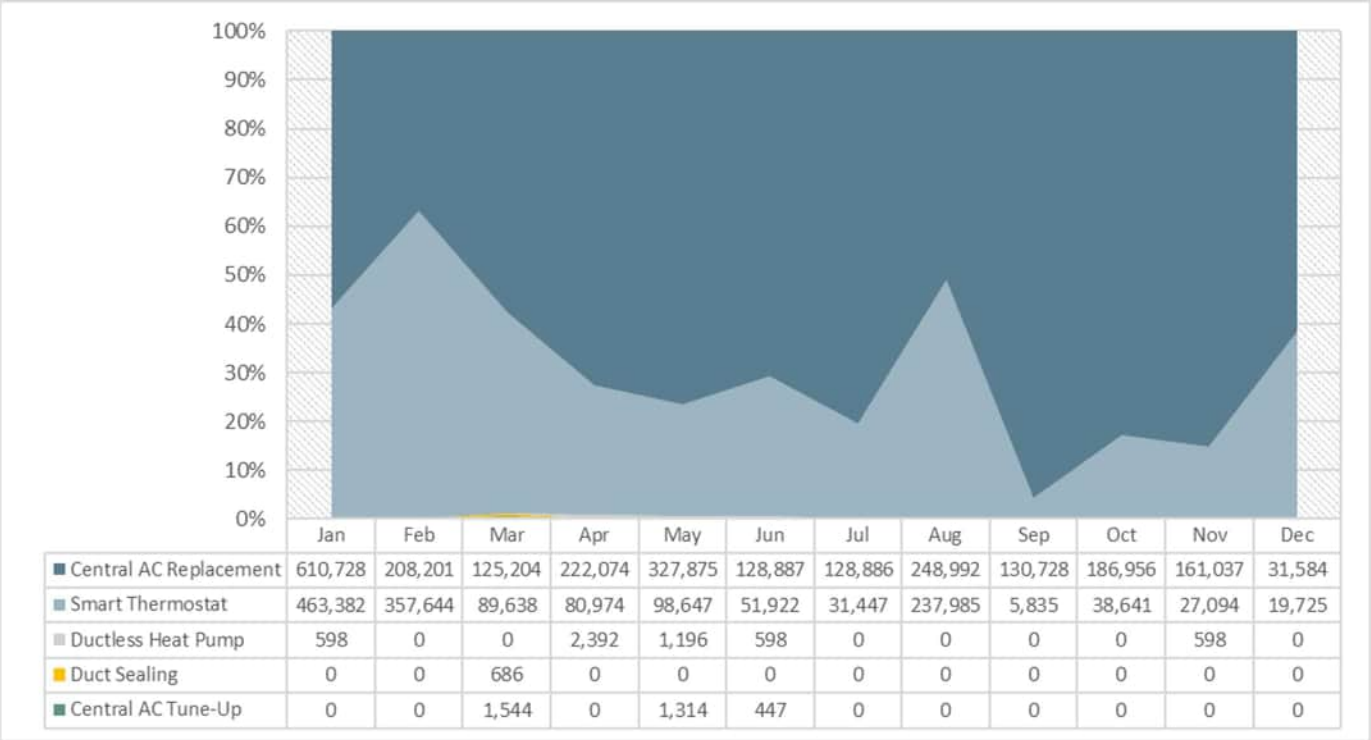


FIGURE 8-1 AC SOLUTIONS COMBINED SAVINGS CONTRIBUTION BY MEASURE

AC tune-ups (62.4%), duct sealing (37.4%) and central AC replacements/ductless heat pumps (both 0.1%) were the high impact measures in the AC Solutions program. In PY13 there were 1,582 total distinct homes accounting for 4,023,456 kWh of expected energy savings, compared to 3,373,191 kWh of expected savings in PY13.

8.2.2 TIMING OF PROJECTS

The figure below shows *ex ante* energy savings (kWh) for the program by end use, by month.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Central AC Replacement	610,728	208,201	125,204	222,074	327,875	128,887	128,886	248,992	130,728	186,956	161,037	31,584
Smart Thermostat	463,382	357,644	89,638	80,974	98,647	51,922	31,447	237,985	5,835	38,641	27,094	19,725
Ductless Heat Pump	598	0	0	2,392	1,196	598	0	0	0	0	598	0
Duct Sealing	0	0	686	0	0	0	0	0	0	0	0	0
Central AC Tune-Up	0	0	1,544	0	1,314	447	0	0	0	0	0	0

FIGURE 8-2 *EX ANTE* BY END USE BY MONTH

8.2.3 TRADE ALLIES

The program had eight (8) participating trade allies identified in project data; there were also one unknown trade ally that installed an AC unit. Seven of the reported trade allies installed some combination of smart thermostats, duct sealing and performed AC tune-ups, including the two top performing trade allies. Two additional trade allies only performed AC tune-ups. The remaining trade allies installed ductless heat pumps.

The table below shows the distribution of savings across all trade allies.

TABLE 8-5 AC SOLUTIONS TRADE ALLY ACTIVITY

Trade Ally	*Ex Ante* Gross Energy Savings (kWh)	% of Savings
TA 1	2,778,058	69%
TA 2	566,391	14%
TA 3	341,478	8%
TA 4	198,703	5%
TA 5	115,410	3%
TA 6	6,798	< 1%
Unknown TA	6,515	< 1%
TA 7	4,957	< 1%
TA 8	1,841	< 1%

Sums may differ due to rounding.

8.2.4 GOAL ACHIEVEMENT

Total verified savings and percentage of goals for the program are summarized below.

TABLE 8-6 PY14 AC SOLUTIONS SUMMARY OF GOAL ACHIEVEMENT

Ex Post Gross Energy Savings (kWh) Goal	% to kWh Goal	Ex Post Gross Savings (kW) Target	% to kW Target
3,322,555	127%	1,453.00	122%

8.3 EM&V Methodology

The evaluation approach for PY13 included the following activities: project data review, desk reviews, and site visits. Impact methodologies for the Program are the same as described for HPwES in Section 4.3.1, measures not covered are described below.

TABLE 8-7 A/C SOLUTIONS DATA COLLECTION ACTIVITIES

Evaluation Activity	Sample Size	Impact	Process
Staff & TPI Interviews	4		X
Database Reviews	Census	X	X
Participant Surveys	55	X	X
Site Visits		X	
Desk Reviews	Census	X	

In PY14, savings for these measures are fully deemed based on the NO TRM V7.0.

8.3.1 SITE VISITS

The Evaluators performed 55 site visits on projects in the program. The table below outlines the measures captured in the site visits.

TABLE 8-8 SITE VISIT SUMMARY

Measure	PY14 Participant Count	Found in PY14 Site Visit
Central AC Tune-Up	3,120	31
Duct Sealing	733	24

The results of site visits were blended with the participant survey responses to estimate in-service rates. Results are presented in the table below.

TABLE 8-9 MEASURE-SPECIFIC GROSS IMPACTS FOR AC SOLUTIONS

Measure	In-Service Rate
Central AC Replacement	100%
Central AC Tune-Up	99%
Duct Sealing	97%
Ductless Heat Pump	100%
Smart Thermostat	99%

8.3.2 DEEMED SAVINGS CALCLULATIONS

8.3.2.1 AC Replacement

AC replacement savings were calculated using the savings methodology from the NO TRM V7.0, Section 1.3.1. The following equations outline the methodology that the Evaluators adhered to.

$$kWh_{Savings} = CAP_c \times \frac{1\,\text{kW}}{1{,}000\,\text{W}} \times \left(\frac{1}{SEER2_{pre}} - \frac{1}{SEER2_{post}}\right) \times EFLH_C$$

$$kW_{Reductions} = CAP_c \times \frac{1\,\text{kW}}{1{,}000\,\text{W}} \times \left(\frac{1}{EER2_{pre}} - \frac{1}{EER2_{post}}\right) \times \%\text{CF}$$

Where:

CAP_C = Cooling capacity (in BTU)
$SEER2_{pre}$ = Measured efficiency of the heating equipment before tune-up
$SEER2_{post}$ = Measured efficiency of the heating equipment after tune
$EER2_{pre}$ = Full-load efficiency of baseline equipment
$EER2_{post}$ = Full-load efficiency of efficient equipment
$EFLH_C$ = Equivalent Full Load Hours - cooling (1,637)
$\%CF$ = Peak coincidence factor

TABLE 8-10 CENTRAL AC REPLACEMENT SCENARIO BASELINES

Replacement Scenario	SEER2	EER2
New Construction / Replace-on-Burnout Split Systems < 45,000 btu/h	14.3	11.7
New Construction / Replace-on-Burnout Split Systems ≥ 45,000 btu/h	13.8	11.2 9.8 if efficient SEER2 ≥ 15.2
Early Retirement	12.3	10.6

8.3.2.2 Ductless Heat Pump Replacement

Ductless HP replacement savings were calculated using the savings methodology from the NO TRM V7.0, Section 1.3.4.5. The following equations outline the methodology that the Evaluators adhered to.

$$kWh_{Savings\,(Cooling)} = CAP_C \times \frac{1\,\text{kW}}{1{,}000\,\text{W}} \times \left(\frac{1}{SEER_{pre}} - \frac{1}{SEER_{post}}\right) \times EFLH_C$$

$$kWh_{Savings\,(Heating)} = CAP_H \times \frac{1\,\text{kW}}{1{,}000\,\text{W}} \times \left(\frac{1}{HSPF_{pre}} - \frac{1}{HSPF_{post}}\right) \times EFLH_H$$

$$kW_{Reductions} = CAP_C \times \frac{1\text{ kW}}{1{,}000\text{ W}} \times \left(\frac{1}{EER_{pre}} - \frac{1}{EER_{post}}\right) \times \%\text{CF}$$

Where:

CAP_H = Heating capacity of HP (in BTU)

$HSPF_{pre}$ = Heating Season Performance Factor of baseline equipment

$HSPF_{post}$ = Heating Season Performance Factor of efficient equipment

8.3.2.3 Other Measures

For remaining measures, the Evaluators used the following NO TRM V7.0. The sections are in Table 8-11.

TABLE 8-11 NO TRM V7.0 SECTIONS FOR OTHER MEASURES

Measure	TRM Section	Calculated	TRM Table(s)	Table Page(s)
Ductless Heat Pump	1.3.7	Deemed	Table 1-87	115

8.4 Evaluation Findings

The findings of the evaluation are found in Section 8.4 Summary.

8.4.1 GROSS IMPACT FINDINGS

8.4.1.1 Central Air Conditioning Replacement

In PY14, the AC Solutions offering incentivized three central AC replacement. Expected and verified savings for Central AC replacement project are summarized below. The low realization rate may be attributed to differences in baseline and efficiency values assumed in calculations. The Evaluators verified the unit make / model through the AHRI database and utilized a SEER II compliant baseline.

TABLE 8-12 PY14 AC SOLUTIONS EXPECTED AND VERIFIED CENTRAL AC REPLACEMENT SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
3,305	2,453	74.2%	0.76	1.46	191.7%

8.4.1.2 Central Air Conditioning Tune-up

There were 3,120 central AC tune-up projects in PY14. Expected and verified savings are summarized below.

TABLE 8-13 PY14 AC SOLUTIONS EXPECTED AND VERIFIED CENTRAL AC TUNE-UPS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
2,511,151	2,491,089	99.2%	1,180.82	1,171.37	99.2%

8.4.1.3 Ductless Heat Pump Replacement

The program rebated 9 ductless heat pumps. The Evaluators calculated savings by applying deemed savings by claimed tonnage. Methods for calculating the deemed savings values came from the NO TRM V7.0, section 1.3.7. Deemed per-unit kWh and kW reductions were applied. The higher realization rate may be attributed to deemed savings values being applied to the units assuming tonnages of 1.0, whereas the Evaluators utilized the actual unit tonnages.

TABLE 8-14 DUCTLESS HEAT PUMP DEEMED SAVINGS PER TONNAGE

Replacement Scenario	kWh per Ton	kW per Ton	Average Tons	kWh per Unit	kW per Unit
New Construction	598	0.064	3.01	1,801	0.19
Replace-on-Burnout	598	0.064	3.01	1,801	0.19
Early Retirement	745	0.1026	3.01	2,239	0.31

TABLE 8-15 PY14 AC SOLUTIONS EXPECTED AND VERIFIED DUCTLESS HP SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
5,382	5,382	100.0%	0.58	0.58	100.0%

8.4.1.4 Duct Sealing

There were 733 duct sealing projects. Expected and verified savings for duct sealing projects are summarized below. The higher realization rate may be due to improper SEER values being utilized in the ex ante estimations, as well as assuming 35% of total fan flow in CFM25 pre-retrofit value adjustments in ex ante estimations.

TABLE 8-16 PY14 AC SOLUTIONS EXPECTED AND VERIFIED DUCT SEALING SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
1,502,932	1,711,203	113.9%	587.41	687.79	117.1%

8.4.1.5 Smart Thermostat

The offering incentivized 2 smart thermostats. Expected and verified savings for smart thermostats are summarized below.

TABLE 8-17 PY13 MULTIFAMILY EXPECTED AND VERIFIED SMART THERMOSTATS SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
686	676	98.5%	0.00	0.00	N/A

8.4.1.6 Avoided Replacement Cost

There are no ARC in the program.

8.4.2 NET IMPACT FINDINGS

The program administrator provides trade ally recruitment, training, qualification, data acquisition tools and guidelines, and quality assurance and oversight. Under this program, qualified trade allies will perform services such as refrigerant charge adjustment, airflow optimization, coil cleaning, and air filter replacement. Incentives for HVAC system upgrades are available in addition to these services. HVAC savings have been well-established in the NO TRM V7.0 via metering and billing analysis studies.

The table below presents each NTG value and source. Free ridership was assessed using a participant survey. A literature review was performed to estimate spillover for central AC replacements due to a lack of survey responses for that measure. Spillover was assessed using the methodology described in section 3.3.2.3.4. The spillover ratio was 2.8%.

TABLE 8-18 AC SOLUTIONS NET IMPACTS

Measure	Net-to-Gross Ratio	Source of NTG
Central AC Replacement	102.8%	Literature Review; small sample
Central AC Tune-up	90.3%	Participant Survey
Duct Sealing	90.3%	Participant Survey
Ductless Heat Pump	102.8%	Participant Survey
Smart Thermostats	102.8%	Participant Survey

Results for overall verified net savings are shown below in Table 8-19.

TABLE 8-19 PY13 AC SOLUTIONS PROGRAM NET SAVINGS

Ex Post Gross Energy Savings (kWh)	*Ex Post* Net Energy Savings (kWh)	kWh NTG	*Ex Post* Gross Demand Reductions (kW)	*Ex Post* Net Demand Reductions (kW)	kW NTG
4,210,803	4,016,197	95.4%	1,861.19	1,766.36	94.9%

8.4.3 PROCESS FINDINGS

The Evaluators conducted a full process evaluation. Section 8.4.3 summarizes the process evaluation activities for the A/C Solutions program.

8.4.3.1 Staff and Implementer Interviews

The following section summarizes the key findings from in-depth interviews with two ENO program staff, one APTIM staff, and one Franklin staff; ENO staff participated in one interview and APTIM and Franklin staff participated in a second interview. These in-depth interviews aimed to learn more about AC Solutions program design and operations, and the successes and challenges experienced during PY14. Interviews lasted approximately 30 minutes and were conducted using the Microsoft Teams platform. The evaluators recorded all interviews with participant permission. The following narrative summarizes these interviews.

8.4.3.1.1 *Program Description*

A/C Solutions provides financial incentives to encourage residential customers to improve the efficiency of their HVAC systems; Franklin implements this program. Incentives are provided for ductless heat pumps, HVAC tune-up, HVAC replacements, duct sealing and smart thermostats.

Tune-ups are provided by a qualified trade ally and involve assessing the performance of the unit before and after measures are implemented. Typical measures implemented as part of the tune-up procedure include air flow correction; cleaning of the indoor blower, evaporator coils, condenser coils; and correction of refrigerant charge (if necessary).

Duct sealing is performed by applying mastic sealant or metal tape to the distribution system of air conditioning systems. Duct sealing performance is tested by taking the pre-measurement and post-measurement cubic feet per minute (CFM) leakage rate.

8.4.3.1.2 *Program Implementation*

Unlike the other residential programs, AC Solutions is completely trade ally driven. The extent of program staff's involvement in implementation is connecting HPwES customers with a list of AC Solutions trade allies if their home assessment indicates they need AC Solutions related equipment upgrades.

Entergy lists trade allies on the Energy Smart website and interested customers are able to reach out to these trade allies directly to schedule work. In PY13, there were five active trade allies engaged in the program. Staff are looking to increase trade ally engagement with the program to increase overall participation. Although some of the HPwES trade allies also work with the AC Solutions program, both programs require different credentials and specialties.

Typically, trade allies deduct the incentive from the customer's bill, meaning the trade ally receives the incentive instead of the customer.

8.4.3.1.3 *Marketing*

In PY14, staff focused on streamlining and simplifying the application process for trade allies. They continue to utilize direct-to-customer marketing strategies, including bill inserts, emails, postcards, and social media advertisements.

8.4.3.2 Participant Survey

The AC Solutions (AC) offering provides residential customers with a more comprehensive set of options to lower energy consumption and costs associated with keeping their homes cool and comfortable in the summer. Customers with functioning ACs can improve the efficiency of their units with the help of a comprehensive AC tune-up or replacement. The offering also includes DR-enabled smart thermostats. The program will build capacity within the territory's HVAC contractor network to provide value-added services to their customers. These services are eligible to be incentivized because they go above and beyond the standard industry practices and offerings in the marketplace.

8.4.3.2.1 *Awareness and Motivation for Participation*

There are multiple ways consumers learned about Entergy's Energy Efficiency program. In 2024, most learned about the rebate program directly through a friend or family member or from Entergy via email or bill insert.

TABLE 8-20 SOURCES OF AWARENESS OF THE ENTERGY ENERGY EFFICIENCY PROGRAM (N=55)

Source	(n = 55)
Word-of-mouth (family, friend, colleague, etc.)	42%

Email from Entergy	24%
Entergy bill insert or mailer	18%
Completion of an Entergy online energy assessment	11%
Entergy website	9%
Entergy program staff	7%
Newspaper or magazine article/ad	2%
Contractor	2%
Social media (Facebook, Twitter, Instagram, etc.)	2%
Other	13%
Don't remember	5%

Almost two out of three participants said the main motivation for participating in the program is saving money on energy bills. While over half of participants indicated that conserving energy and improving the comfort of the home were reasons for participating in the program, they were far less likely to be selected as the "main" reason.

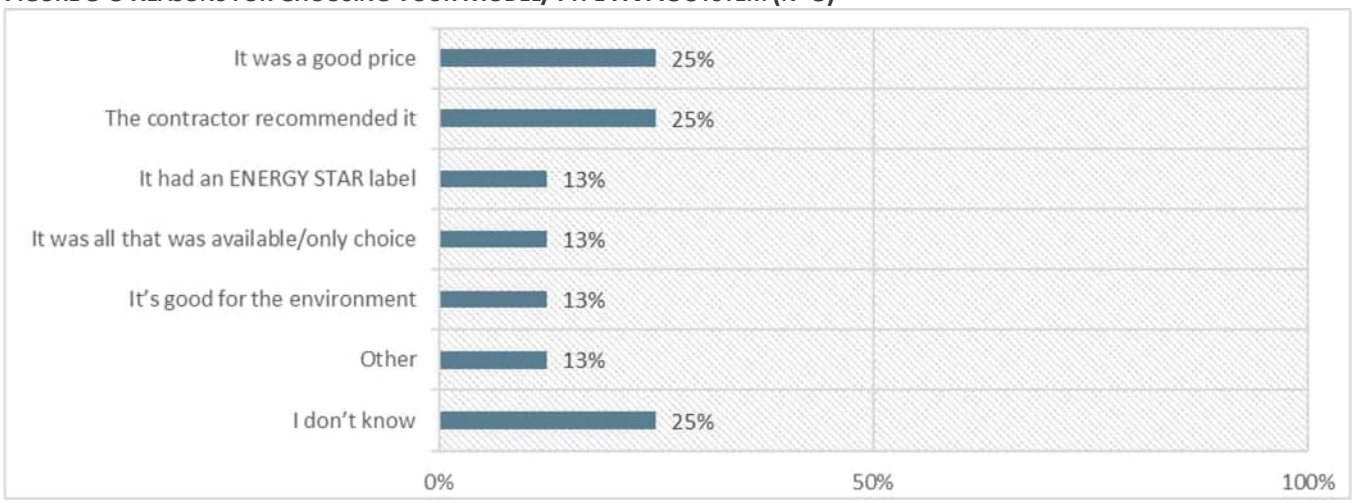
TABLE 8-21 MOTIVATIONS FOR PARTICIPATING IN THE ENERGY EFFICIENCY PROGRAM (N=55)

	"All" Reasons for Participating	"Main" Reason for Participating
Save money on energy bills	80%	64%
Conserve energy	62%	15%
Improve the comfort of your home	53%	7%
Become as energy efficient as my friends or neighbors	29%	0%
Get the free equipment/discount/rebate	25%	2%
Recommendation from a friend, relative, neighbor, or colleague	25%	2%
Protect the environment	24%	0%
Recommendation from Entergy	15%	5%
Recommendation from contractor	2%	0%
Other	2%	2%
Don't know	4%	4%

8.4.3.2.1.1 HVAC System Purchase Decisions

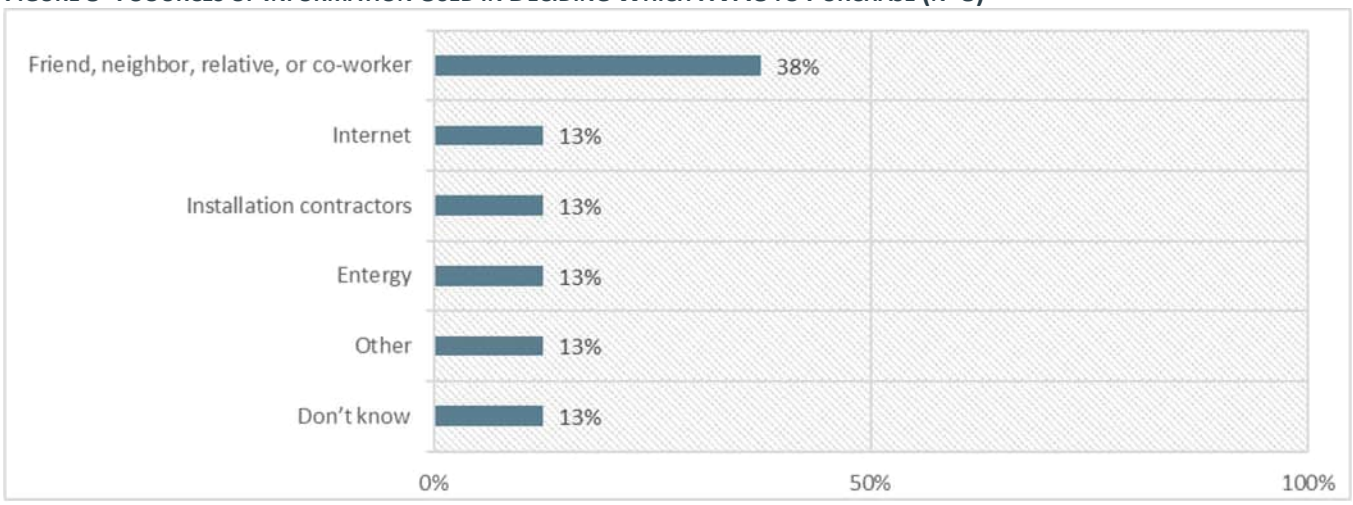
The purchase of a particular model or type of HVAC system was most influenced by price and/or the recommendation of a contractor. Other influences include the presence of an ENERGY STAR label, availability and being environmentally friendly.

FIGURE 8-3 REASONS FOR CHOOSING YOUR MODEL/TYPE HVAC SYSTEM (N=8)



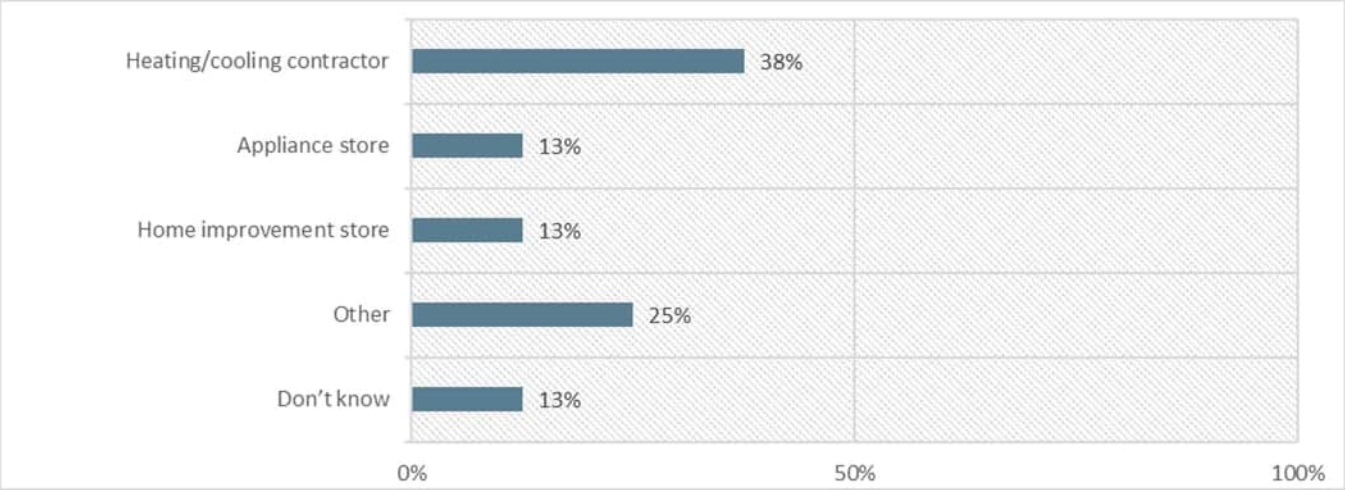
The most frequent source of information used in deciding which HVAC system to purchase came from family, friends, neighbors, and co-workers.

FIGURE 8-4 SOURCES OF INFORMATION USED IN DECIDING WHICH HVAC TO PURCHASE (N=8)



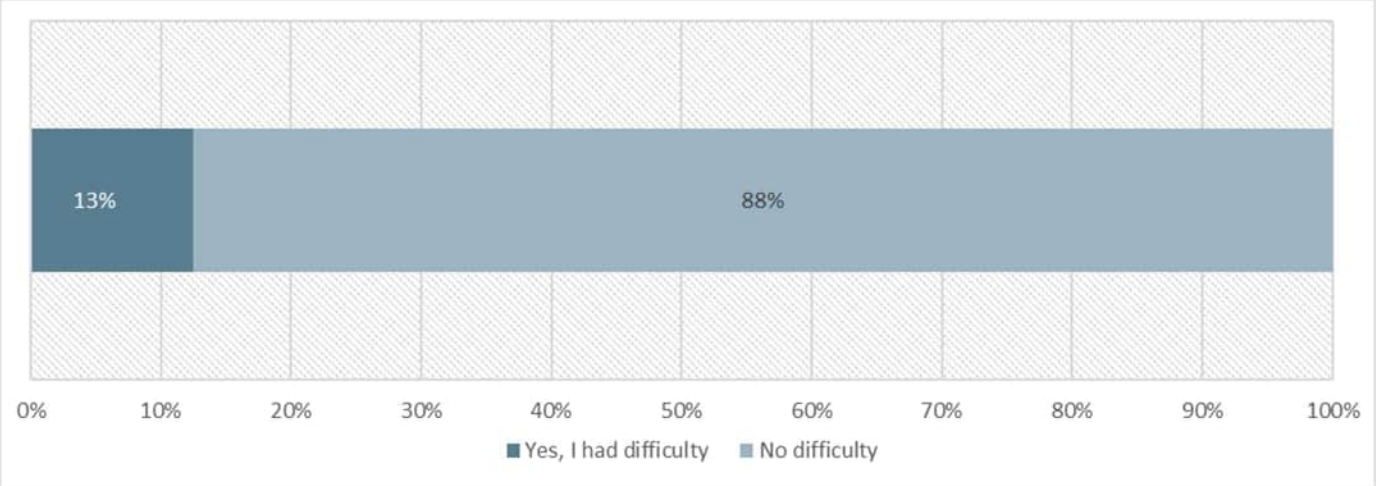
Over one in three purchased their HVAC system from a heating and cooling contractor. A smaller number purchased from an appliance store or a home improvement store.

FIGURE 8-5 TYPE OF STORE OR CONTRACTOR FROM WHICH HVAC WAS PURCHASED (N=8)



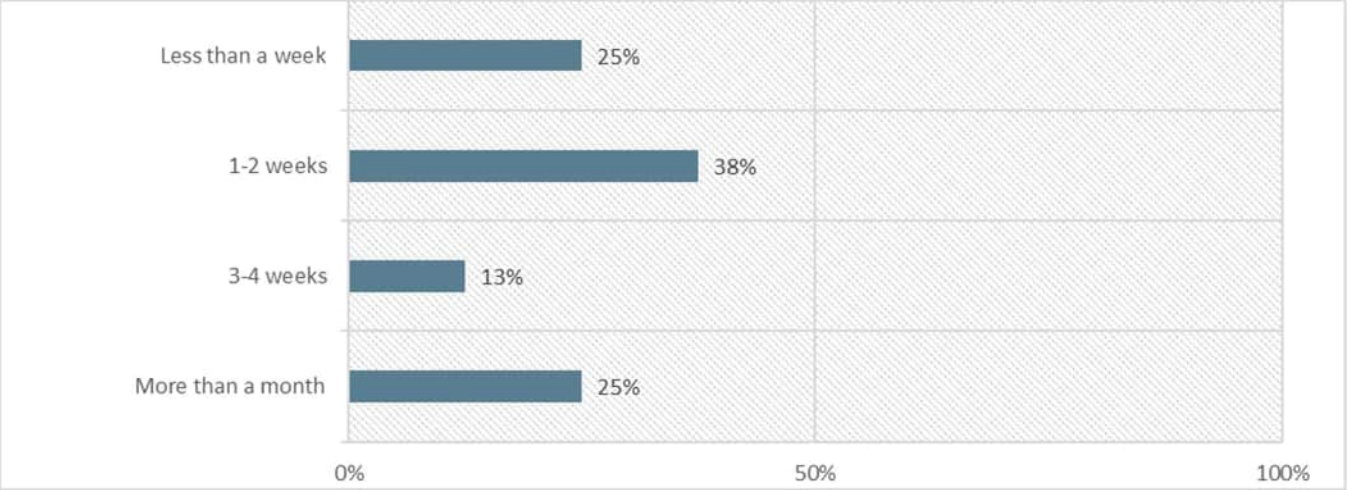
Nine in ten participants had no difficulty purchasing an efficient HVAC eligible for a rebate.

FIGURE 8-6 EXPERIENCED DIFFICULTY ACQUIRING AN EFFICIENT HVAC ELIGIBLE FOR A REBATE (N=8)



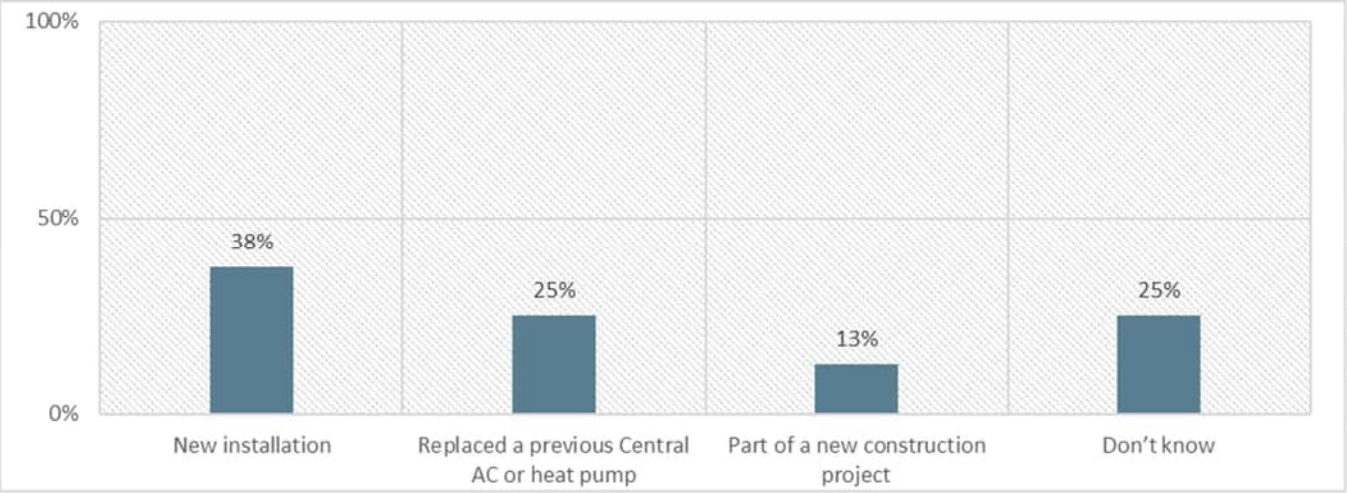
Nearly two-thirds of participants received the new HVAC within 2 weeks.

FIGURE 8-7 WAIT TIME FOR RECEIVING THE HVAC (N=8)



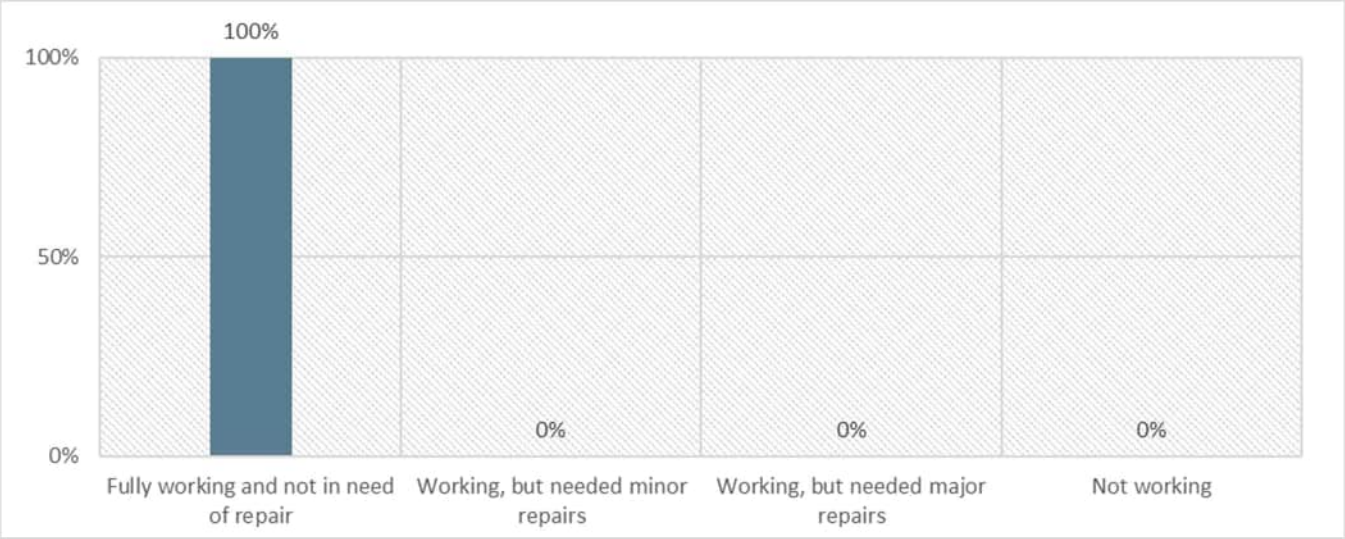
Through the HVAC rebate program, just over one-third of participants installed new equipment while one-quarter replaced a previous Central AC or heat pump.

FIGURE 8-8 HVAC REBATE: NEW INSTALLATION OR REPLACEMENT OF EXISTING EQUIPMENT (N=8)



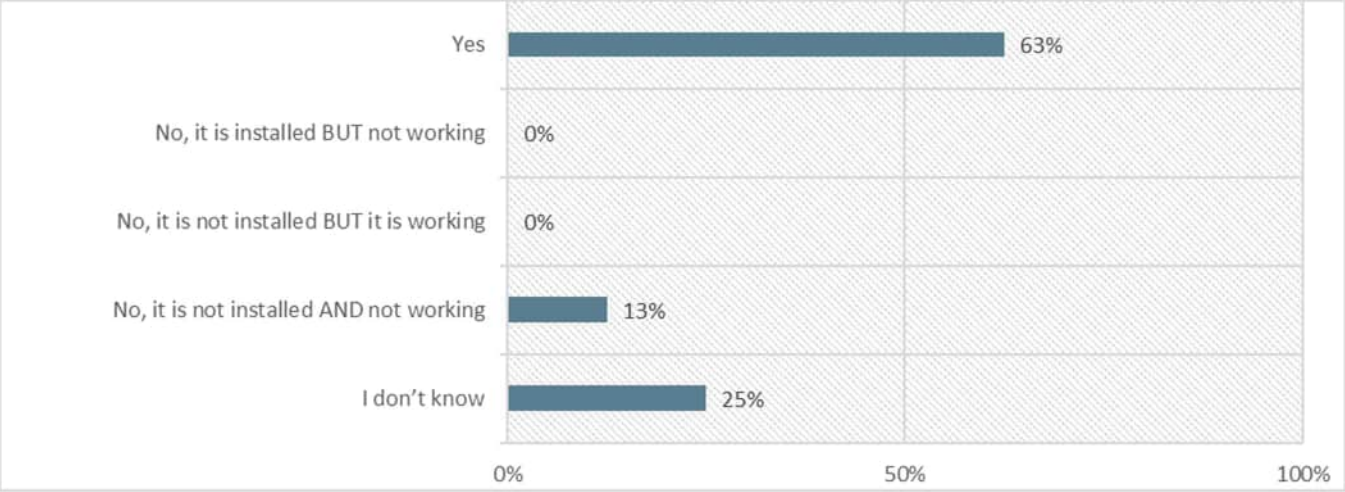
Participants who used a rebate to replace a Central AC or Heat Pump claimed the one they replaced was fully working and not in need of repair.

FIGURE 8-9 CONDITION OF THE REPLACED CENTRAL AC OR HEAT PUMP (N=2)



About two-thirds of participants who purchased a new HVAC system using a rebate say their new system has been installed.

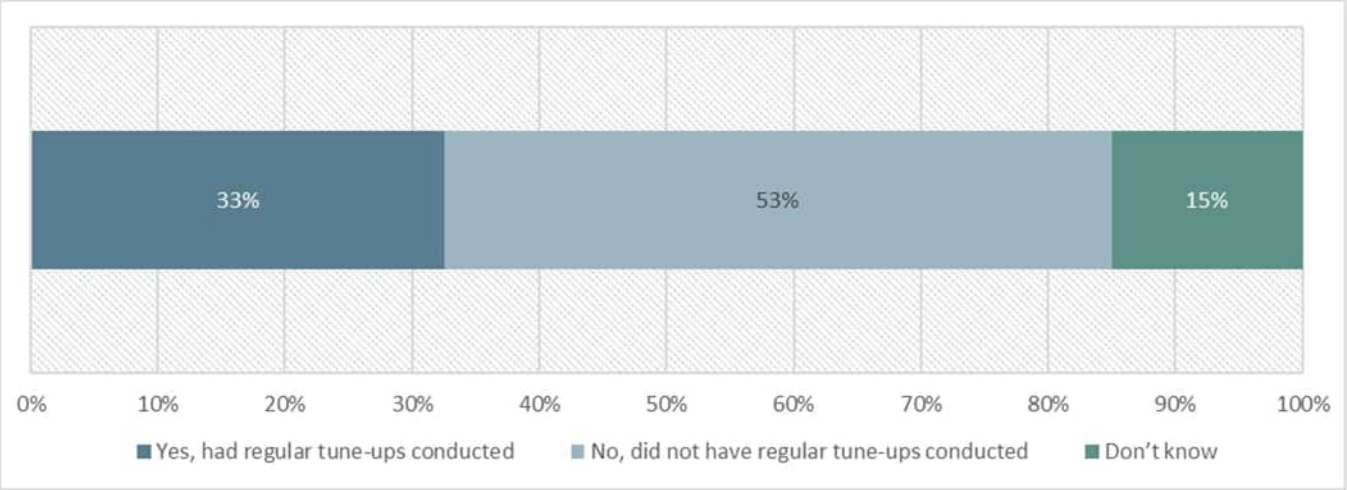
FIGURE 8-10 INSTALLATION STATUS OF REBATE-ELIGIBLE HVAC (N=8)



8.4.3.2.1.2 HVAC Tune-Up and Maintenance Behaviors

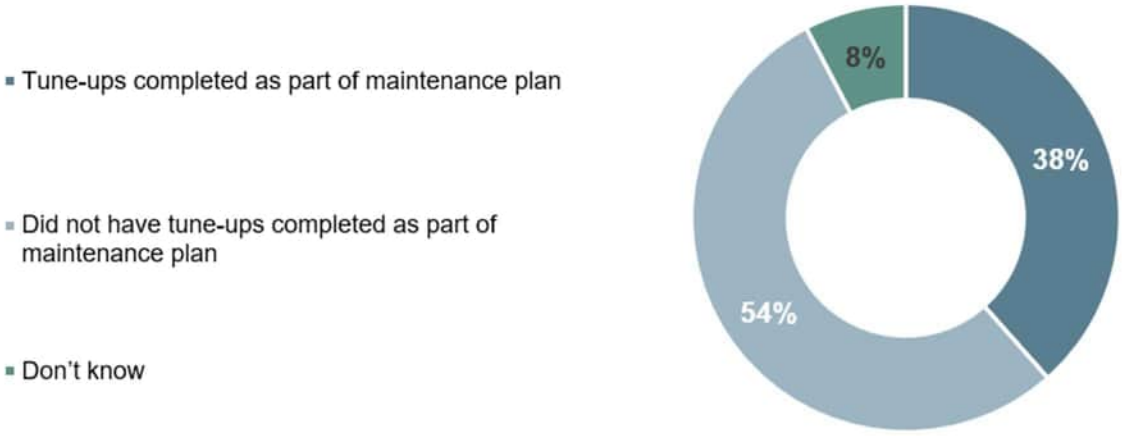
One-third of participants received regular HVAC tune-ups before participating in the Home Energy Efficiency program.

FIGURE 8-11 REGULAR TUNE-UPS BY A CONTRACTOR BEFORE PROGRAM PARTICIPATION (N=40)



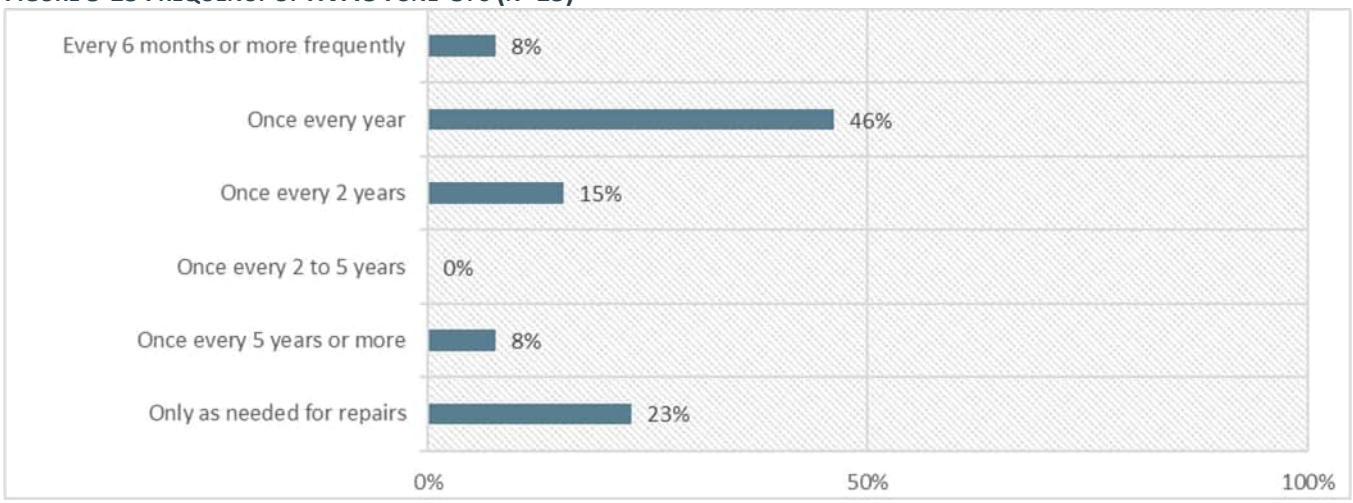
Just over one in three participants had HVAC tune-ups done as part of a maintenance plan.

FIGURE 8-12 COMPLETION OF TUNE-UPS AS PART OF A MAINTENANCE AGREEMENT OR PLAN (N=13)



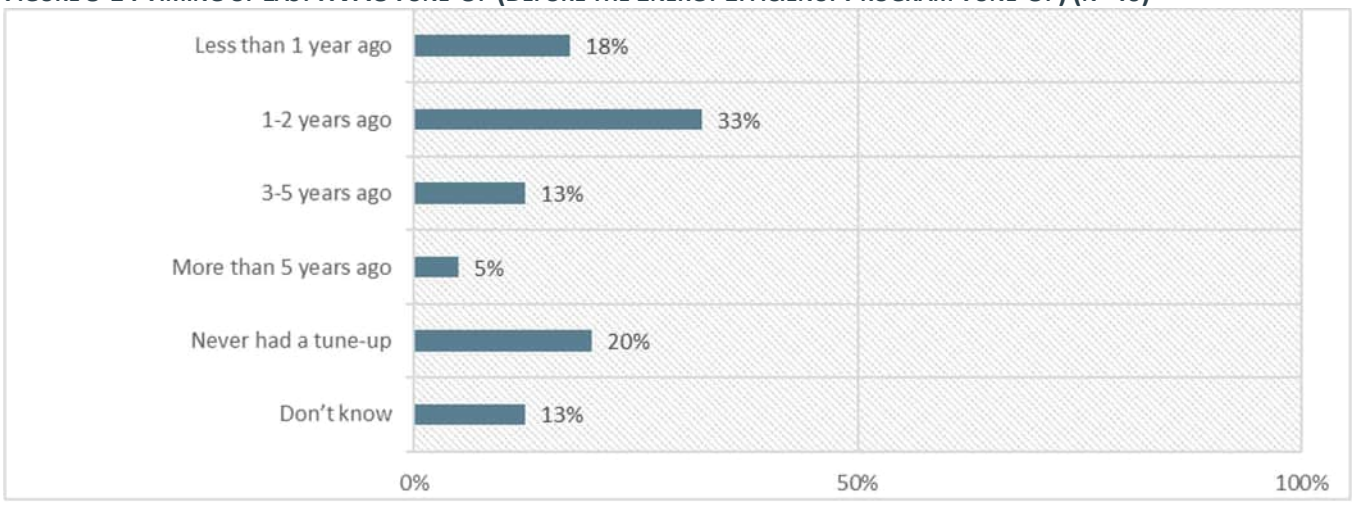
More than half of participants had an HVAC tune-up at least once every year. Another quarter waited until there was a problem before getting a tune-up.

FIGURE 8-13 FREQUENCY OF HVAC TUNE-UPS (N=13)



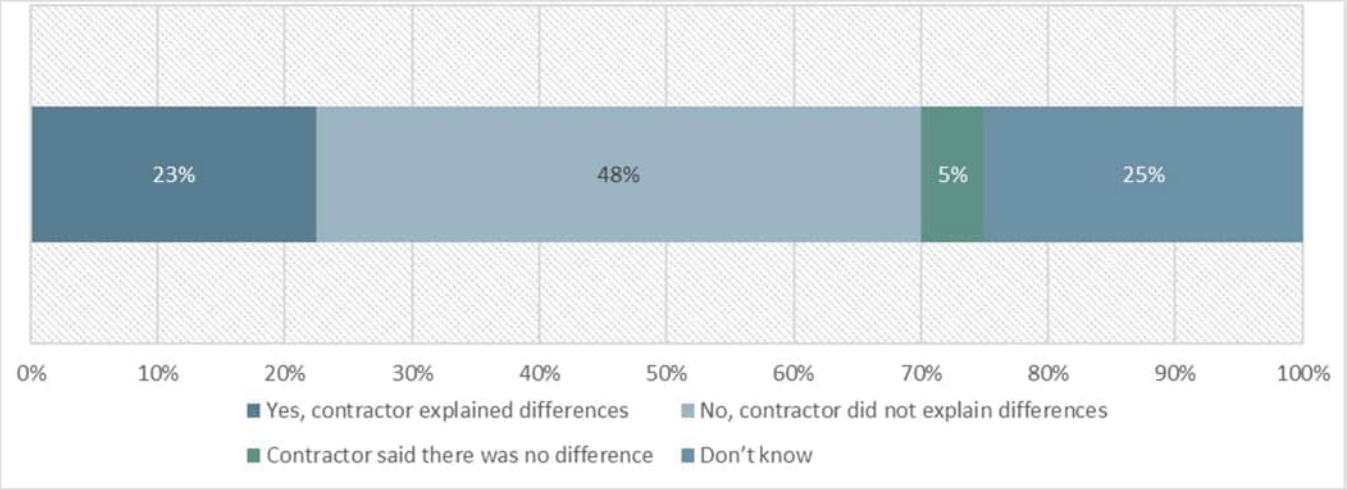
About half of participants have had an HVAC tune-up in the past 2 years. One in three either do not know or have never had an HVAC tune-up.

FIGURE 8-14 TIMING OF LAST HVAC TUNE-UP (BEFORE THE ENERGY EFFICIENCY PROGRAM TUNE-UP) (N=40)



Only one in four participants received an explanation regarding the difference between an Entergy AC tune-up and a standard tune-up from their contractor. Half said the contractor did not explain the difference.

FIGURE 8-15 EXPLANATION OF DIFFERENCES BETWEEN ENTERGY A/C TUNE-UP AND STANDARD TUNE-UP BY CONTRACTOR (N=40)



Nearly half of respondents indicate that the main differences between the Entergy A/C Tune-up and a standard tune-up, as highlighted by contractors, are evaporator coil cleaning and verifying airflow.

Just 1 in 3 state the contractor pointed out the energy efficiency difference between the types of tune up.

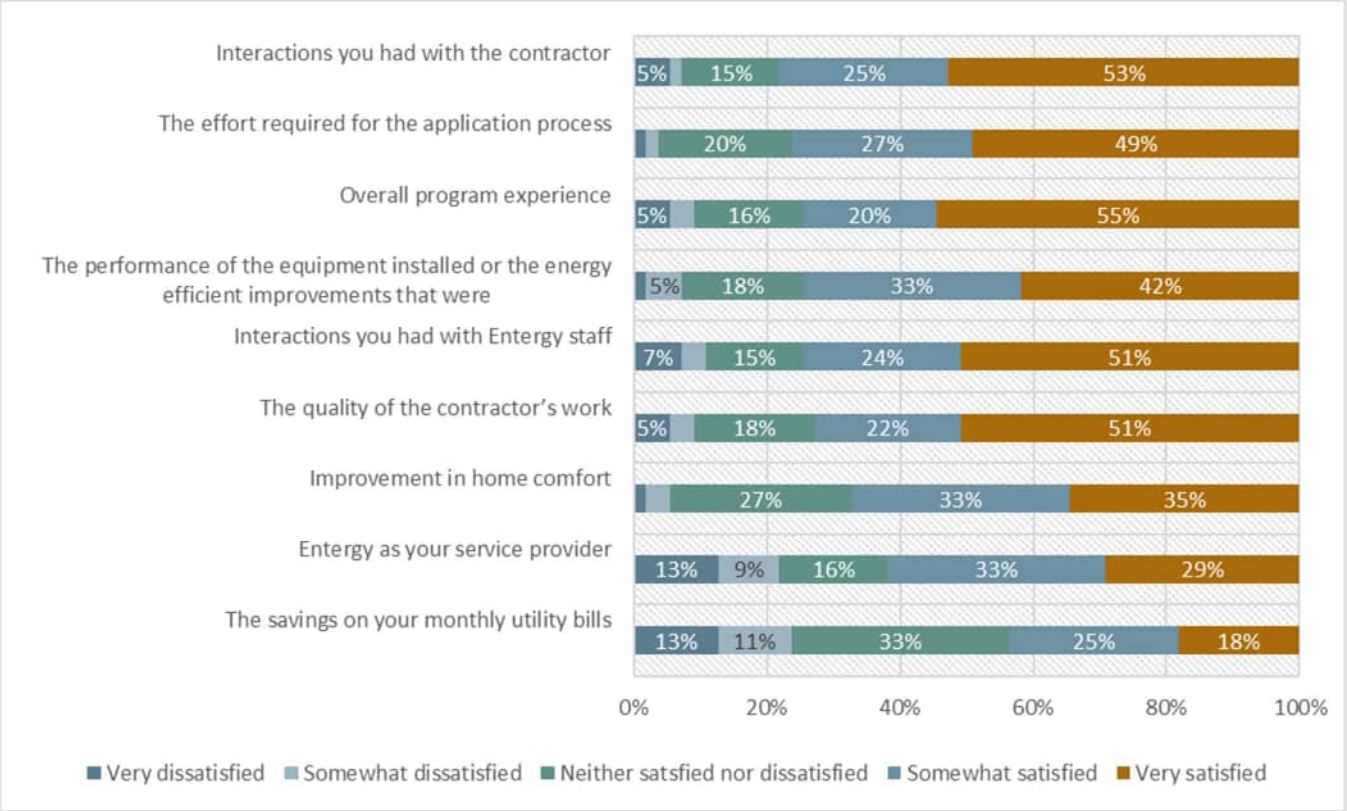
TABLE 8-22 KEY DIFFERENCES BETWEEN THE ENTERGY A/C TUNE-UP AND A STANDARD TUNE-UP (N=9)

Differences	(n =9)
Evaporator coil cleaning	56%
Verify airflow	56%
Condenser coil cleaning	44%
More energy efficient	33%
Cleaned blower	22%
More accurate refrigerant recharge	22%
Don't know	22%

8.4.3.2.2 *Satisfaction With the Program and Entergy*

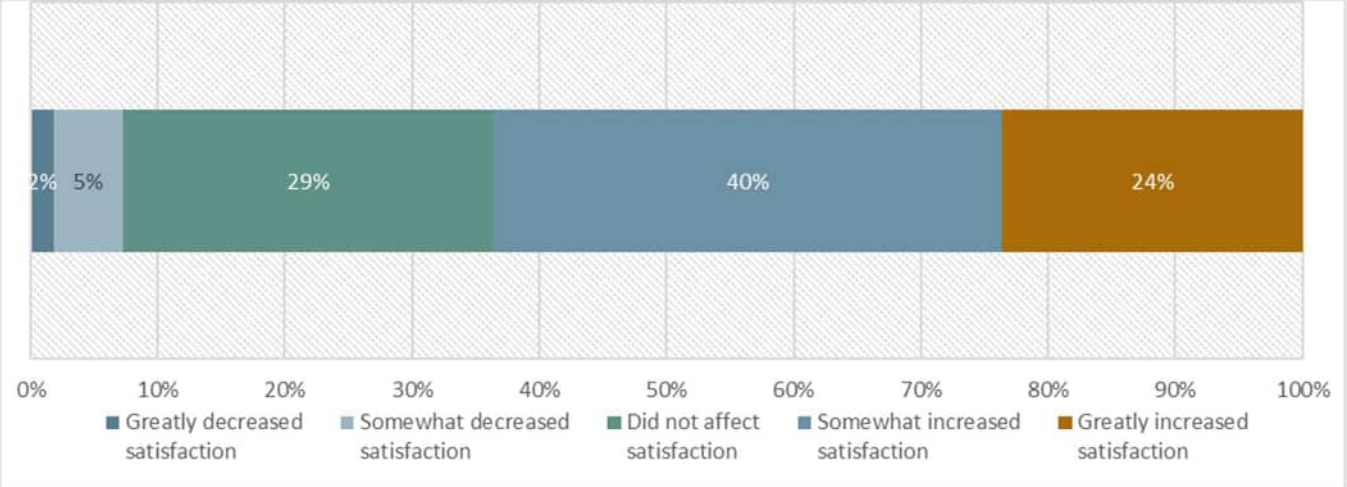
Participants were most satisfied with their interactions with the contractor and the application process, and less satisfied with the savings on their monthly utility bills.

FIGURE 8-16 SATISFACTION WITH ASPECTS OF THE ENTERGY ENERGY EFFICIENCY PROGRAM (N=55)



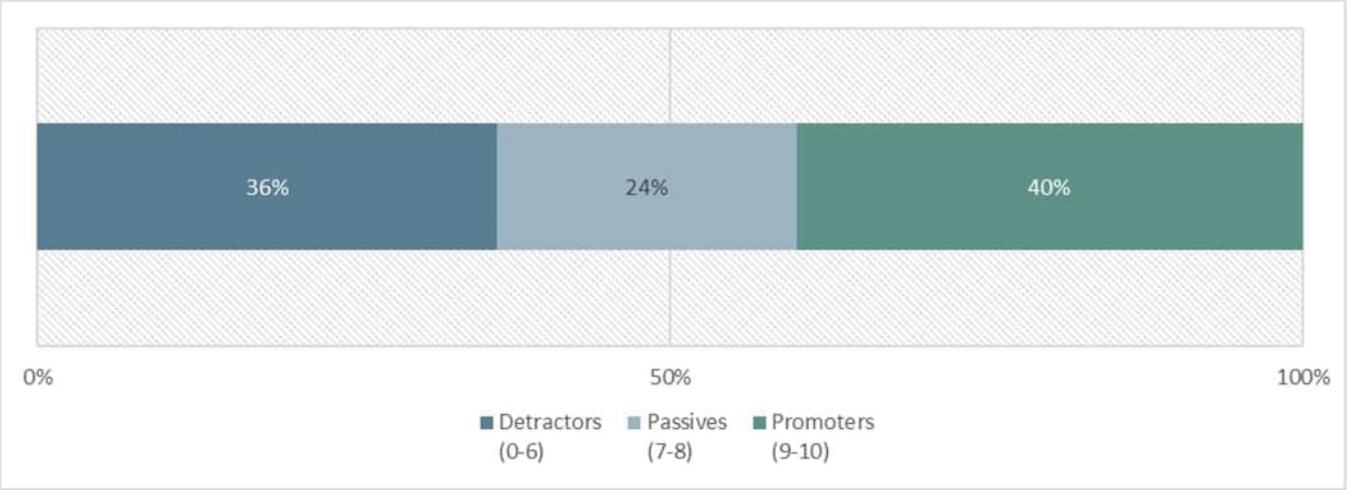
Two-thirds of participants said their participation in the program contributed to improved satisfaction with Entergy

FIGURE 8-17 IMPACT OF PROGRAM PARTICIPATION ON SATISFACTION WITH ENTERGY (N=55)



Four in ten participants are "promoters" of Entergy which means they would recommend the brand to a friend or colleague. "Detractors," those less likely to recommend the brand, make up a slightly smaller percentage of participants.

FIGURE 8-18 LIKELIHOOD OF RECOMMENDING ENTERGY NEW ORLEANS TO A FRIEND OR COLLEAGUE, ASSUMING UTILITY PROVIDER OPTIONS (N=55)



8.5 Findings and Conclusions

Key Findings:

- Trade Ally-Driven Model: Staff emphasized that AC Solutions operates entirely through trade allies, with program staff primarily facilitating connections between Home Performance with ENERGY STAR (HPwES) customers and qualified HVAC contractors. Unlike other residential programs, trade allies handle customer outreach and deduct incentives directly from customer invoices.
- Program Enhancements: In PY14, staff streamlined the trade ally application process, aiming to make participation easier. Direct-to-customer marketing, including bill inserts, emails, postcards, and social media advertisements, remained part of the outreach strategy.
- Increased Consumer Awareness: Word-of-mouth referrals and direct email campaigns remain the top sources of program awareness. Many participants reported that they learned about AC Solutions through Entergy communications or recommendations from friends and family.

Recommendations:

- Expand Trade Ally Engagement: If increasing participation is a priority, staff could explore additional trade ally recruitment strategies, such as targeted outreach to HVAC contractors not currently in the program or offering periodic program refresher sessions to ensure engagement remains high.
- Enhance Customer Outreach & Education: If increasing customer participation remains a priority, staff could further integrate AC Solutions within HPwES assessments by ensuring HVAC efficiency recommendations are clearly highlighted in assessment reports. Additional outreach, such as targeted email campaigns to past HPwES participants with aging HVAC systems, could help drive engagement.
- Improve Customer Communication on Cost Savings: Providing clearer expectations on expected savings and offering post-installation check-ins could enhance customer satisfaction. Case studies and testimonials from satisfied participants could further bolster trust in the program.

9 SCHOOL KITS AND EDUCATION

9.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend, by kit.

TABLE 9-1 PY14 SK&E ENERGY SAVINGS (KWH)

Measure	*Ex Ante* Gross Savings (kWh)	Realization Rate (kWh)	*Ex Post* Gross Savings (kWh)	NTG	*Ex Post* Net Savings (kWh)
School Kit - 1.0 Bathroom Aerator	45,431	149.0%	67,677	100.0%	67,677
School Kit - 1.5 Kitchen Aerator	27,579	143.2%	39,483	100.0%	39,483
School Kit - 1.5 Showerhead	106,622	85.3%	90,897	100.0%	90,897
School Kit - LED 14W A-Type	123,120	87.0%	107,163	100.0%	107,163
School Kit - LED 9W A-Type	321,836	112.8%	363,140	100.0%	363,140
School Kit - 17ft Weatherstripping	39,522	99.3%	39,241	100.0%	39,241
Total	**664,109**	**106.5%**	**707,601**	**100.0%**	**707,601**

Sums may differ due to rounding.

TABLE 9-2 PY14 SK&E DEMAND REDUCTIONS (KW)

Measure	*Ex Ante* Gross Demand (kW)	Realization Rate (kW)	*Ex Post* Gross Demand (kW)	NTG	*Ex Post* Net Demand (kW)
School Kit - 1.0 Bathroom Aerator	4.10	171.5%	7.04	100.0%	7.04
School Kit - 1.5 Kitchen Aerator	4.10	100.1%	4.11	100.0%	4.11
School Kit - 1.5 Showerhead	16.42	94.1%	15.44	100.0%	15.44
School Kit - LED 14W A-Type	20.52	88.7%	18.20	100.0%	18.20
School Kit - LED 9W A-Type	32.83	115.0%	37.77	100.0%	37.77
School Kit - 17ft Weatherstripping	4.10	104.5%	4.29	100.0%	4.29
Total	**82.08**	**105.8%**	**86.84**	**100.0%**	**86.84**

Sums may differ due to rounding.

TABLE 9-3 PY14 SK&E LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex Post* Gross Lifetime Energy Savings (kWh)	*Ex Post* Net Lifetime Energy Savings (kWh)
School Kit - 1.0 Bathroom Aerator	10	676,768	676,768
School Kit - 1.5 Kitchen Aerator	10	394,827	394,827
School Kit - 1.5 Showerhead	2	136,346	136,346
School Kit - LED 14W A-Type	2	160,745	160,745
School Kit - LED 9W A-Type	10	3,631,397	3,631,397
School Kit - 17ft Weatherstripping	11	431,652	431,652

Total	**8**	**5,431,735**	**5,431,735**

Sums may differ due to rounding.

TABLE 9-4 PY14 SK&E PARTICIPATION AND INCENTIVE SUMMARY

Measure	Participation (Count of Measures)	Incentive Spend ($)
School Kit - 1.0 Bathroom Aerator	4,102	$5,738
School Kit - 1.5 Kitchen Aerator	4,102	$3,483
School Kit - 1.5 Showerhead	8,204	$13,467
School Kit - LED 14W A-Type	16,408	$15,551
School Kit - LED 9W A-Type	4,102	$40,649
School Kit - 17ft Weatherstripping	4,102	$4,992
Total	**41,020**	**$83,880**

Sums may differ due to rounding.

9.1.1 PROGRAM DESCRIPTION

The School Kits and Education (SK&E) program provides classroom education on energy use and saving energy, as well as energy efficiency kits to students. SK&E staff also perform outreach activities to promote energy efficiency.

Beginning in PY13, the program began utilizing a new implementer: National Children's Theater. National Children's Theater works with seven utilities across the country to implement an educational program in schools that employs the theater to teach students about energy efficiency, energy usage, and sustainability. The plays last approximately 25-minutes and is presented to the entire student body.

Following the theatrical production, 2nd and 5th grade students receive energy saving kits to bring home. Kits include weatherstripping, a low flow showerhead, a kitchen faucet aerator, a bathroom faucet aerator, and LEDs. Kits also have a QR code that helps families access a resource guide and enables them to indicate which equipment they do and do not install. Classroom teachers also receive a digital toolkit they can use to teach students about energy efficiency and sustainability; tool kit resources include graphic novels, games, and quizzes.

The Evaluator interviewed the School Wise Kits, Education, and Community Outreach Manager. Unlike the other residential programs, the school kit program operates on the standard school calendar year, rather than annual calendar year.

9.1.1.1 Program Delivery Channels and Expected Savings

The program received a limited impact and process evaluations. The evaluations provided free-ridership estimates, discussions of program satisfaction and strategic recommendations for program improvement.

Below, individual measure contribution to the overall program expected savings are summarized.

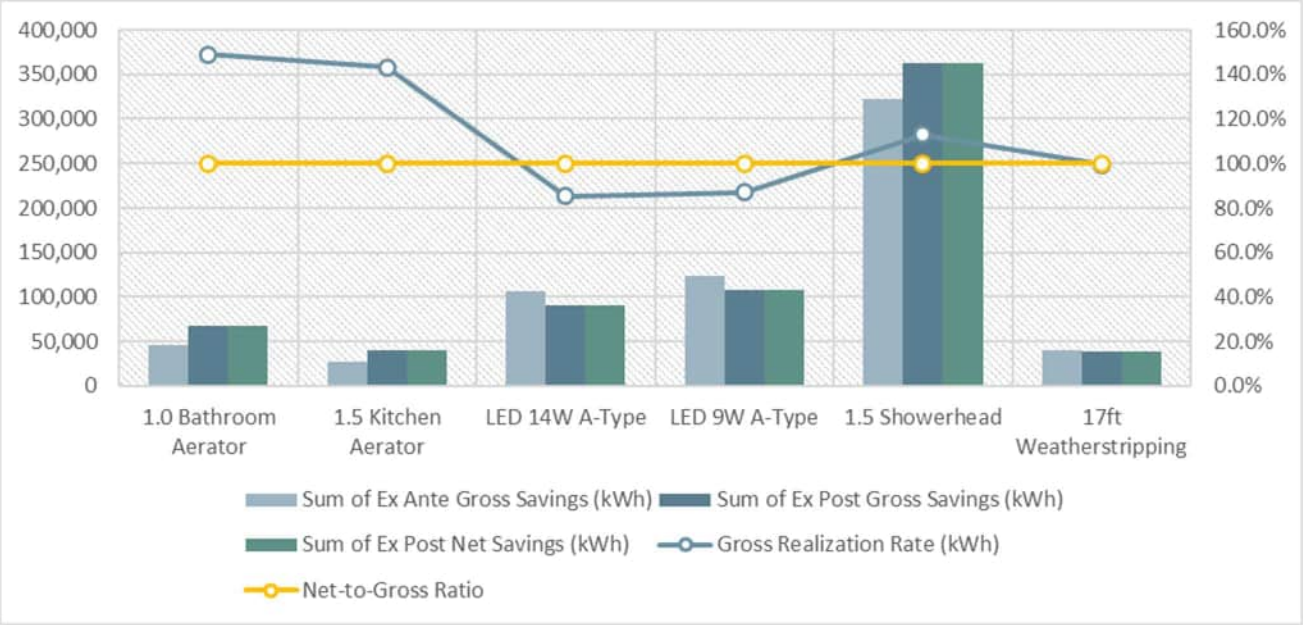


FIGURE 9-1: SK&E ENERGY SAVINGS (KWH) SUMMARY

In PY14, the 1.5 GPM low-flow showerhead accounted for 48.5% of expected energy (kWh) savings, the 9W A-Type LED lamp accounted for 18.5%, the 14W A-Type LED lamp accounted for 16.5%, the 1.0 GPM bathroom aerator accounted for 6.8%, the 17 ft weatherstripping accounted for 6.0%, and the 1.5 GPM kitchen aerator accounted for 4.2% of total expected energy savings.

Overall, the program claimed 664,109 kWh expected savings in PY14.

9.1.1.2 Timing of Projects

All school kits were shipped, and all *ex ante* energy savings (kWh) for the program were realized during the month of February.

9.1.1.3 Trade Allies

There are no trade allies in the program.

9.1.1.4 Goal Achievement

Total verified savings and percentage of goals for the program are summarized in the table below.

TABLE 9-5 PY14 SK&E SUMMARY OF GOAL ACHIEVEMENT

Ex Post Gross Energy Savings (kWh) Goal	% to kWh Goal	Ex Post Gross Savings (kW) Target	% to kW Target
797,089	88.8%	107.00	81.2%

9.2 EM&V Methodology

Electricity savings and peak demand reductions were estimated using inputs from the NO TRM V7.0. Measure-specific savings are provided below.

9.2.1 SITE VISITS

There are no site visits in the SK&E. School kits were distributed along with a survey form to be filled out by students and parents, then returned. The forms included questions regarding which measures had been installed in the home as well as home characteristics. This information was used to determine ISR estimates for each measure, and the prevalence of electric water heating in homes as a whole. These ISRs were applied.

TABLE 9-6 ISR SUMMARY FOR SK&E

Kit Item	In-Service Rate	Source of ISR
School Kit - 1.0 Bathroom Aerator	54.48%	PY14 Student Survey and literature review
School Kit - 1.5 Kitchen Aerator	52.97%	
School Kit - 1.5 Showerhead	57.23%	
School Kit - LED 14W A-Type	60.72%	
School Kit - LED 9W A-Type	61.06%	
School Kit - 17ft Weatherstripping	58.29%	
School Kit - 1.0 Bathroom Aerator	54.48%	

9.2.2 DEEMED SAVINGS CALCULATIONS

Calculation inputs for LED lamps are outlined below. These savings serve as the foundation on which expected savings are built upon.

TABLE 9-7 ENERGY STAR OMNIDIRECTIONAL LEDS – DEEMED SAVINGS PER LAMP

Minimum Lumens	Maximum Lumens	LED Wattage	Incandescent Equivalent 1st Tier EISA 2007 (W_{base})
310	749	7	29
750	1,049	9	43
1,050	1,489	12	53
1,490	2,600	15	72

$$kWh_{savings} = \left((W_{base} - W_{post})/1000\right) \times Hours \times ISR^{7} \times IEF_{E}{}^{8}$$

$$9W\ LED\ kWh_{savings} = 4 \times \left(\frac{(43-9)}{1000}\right) \times 819.43 \times 1 \times 0.91 = 101.41\ kWh$$

$$15W\ LED\ kWh_{savings} = 2 \times \left(\frac{(72-15)}{1000}\right) \times 819.43 \times 1 \times 0.91 = 85.01\ kWh$$

Deemed savings for faucet aerators are outlined below.

[7] 100% in this calculation. Measure-specific ISR applied after.

[8] Unknown heating type: 0.91

TABLE 9-8 FAUCET AERATORS – DEEMED SAVINGS

Efficient GPM Rating	Deemed kWh Savings	Deemed kW Reductions
1.5 GPM	26.80	0.0028
1.0 GPM	44.66	0.0046

Deemed savings for low-flow showerheads are outlined below.

TABLE 9-9 FAUCET AERATORS – DEEMED SAVINGS

1.50 GPM Showerhead Deemed Savings		
Water gal. saved /year/showerhead @ 1.5 GPM	2,860	
$T_{_Supply}$	74.8°F	
$T_{_Mixed}$	106.8°F	
Water heater EF (excluding standby losses)	0.98 (Electric Resistance) / 2.2 (Heat Pump)	
Energy Savings	Electric: 26.8 kWh	Heat Pump: 11.94 kWh
Demand Savings	Electric: 0.0028 kW	Heat Pump: 0.0012 kW

9.3 Evaluation Findings

Evaluation findings are reported in Section 9.1 Summary.

9.3.1 GROSS IMPACT FINDINGS

Ex post gross savings are 707,601 kWh and 86.84 kW. Savings are summarized in Table 9-10 below.

TABLE 9-10 PY14 SK&E EXPECTED AND VERIFIED SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
664,109	707,601	106.5%	82.08	86.84	105.8%

9.3.1.1 Avoided Replacement Cost

The Evaluators have added the benefits of avoided replacement costs (ARC). The table below summarizes the ARC by measure in SK&E. Information on methodology can be found in Section 3.4.1.3 Avoided Replacement Costs.

TABLE 9-11 SUMMARY OF ARC FOR SK&E

Ex Post Gross ARCs ($)	*Ex Post* Net ARCs ($)	NPV ARCs ($)
$4,417	$4,417	$4,417

Sums may differ due to rounding.

9.3.2 NET IMPACT FINDINGS

For SK&E, NTG is deemed at 1.0, which is industry standard for a school kits program.

TABLE 9-12 PY14 SK&E PROGRAM NET SAVINGS

Verified Gross kWh Savings	Verified Net kWh Savings	kWh NTG	Verified Gross kW Reductions	Verified Net kW Reductions	kW NTG
707,601	707,601	100.0%	86.84	86.84	100.0%

Individual measures of net savings are summarized in Section 9.1 Summary.

9.3.3 PROCESS FINDINGS

9.3.3.1 Staff and Implementer Interview

The following section summarizes the key findings from in-depth interviews with two ENO program staff and one National Children's Theater staff; ENO staff participated in one interview and National Children's Theater staff participated in a second interview. These in-depth interviews aimed to gather insights into the School Kits program's design, operations, and the successes and challenges encountered during PY14. Interviews lasted approximately 30 minutes and were conducted using the Microsoft Teams platform. The evaluators recorded all interviews with participant permission. The following narrative summarizes these interviews.

9.3.3.1.1 *Program Design and Implementation*

PY14 was the second year the school kits program was implemented by the National Children's Theater. National Children's Theater works with seven utilities across the country to implement an educational program in schools that employs the theater to teach students about energy efficiency, energy usage, and sustainability. The play lasts approximately 25-minutes and is presented to the entire student body.

Following the theatrical production, 2nd, 5th, and 8th grade students receive energy saving kits to bring home. Kits include weatherstripping, a low flow showerhead, a kitchen faucet aerator, a bathroom faucet aerator, and six LEDs. Kits also have a QR code that helps families access a resource guide and enables them to indicate which equipment they do and do not install. Classroom teachers also receive a digital toolkit they can use to teach students about energy efficiency and sustainability; tool kit resources include graphic novels, games, and quizzes.

Performances occurred in the winter and spring of the 2023-2024 school year, after the Mardis Gras holiday. 4,100 kits were distributed across 21 participating schools. All 21 schools were either public schools or charter schools in the Entergy New Orleans' service territory. Schools change each year to maximize students reached over the triennial period.

Unlike last year, when surveys were included in the kits, surveys were distributed to students separate from the kits in PY14, resulting in a higher response rate. Additionally, teachers were incentivized to encourage survey completion among their students, as they received a $50 gift card if half of their students completed the survey. Surveys demonstrated that the weatherstripping and LEDs were more popular items than the other measures in the kits.

9.3.3.1.2 *Challenges and Successes*

Staff explained that school outreach is the key to their success; they recruit schools through direct outreach to principals and administrators. Program staff also noted that students and staff enjoy the show, and the program provides community building and classroom enrichment opportunities for the schools.

The program faces challenges, including the inability to claim savings from LED bulb installations due to new EISA regulations. Additionally, fewer measures qualify for savings since the program relies on self-reported installations rather than direct installations by program staff. Moving forward, program staff and Entergy New Orleans are exploring strategies to ensure the program remains cost-effective despite LEDs no longer contributing to savings

9.3.3.2 Participant Survey

National Children Theater staff implement a survey of teachers whose students received kits through the School Kits Program, and a survey of students. Tracking data demonstrate that 4,104 school kits were distributed across 21 schools. Among these 21 schools, 5,277 students attended productions.

In general, respondent teachers were satisfied with the School Kits program, ranking its educational value at an average of 6.3 out of 7. All respondents said they would like to participate again, and that they would recommend the program to their colleagues. They reported that students enjoyed the interactive presentation.

Teachers also sent students home with kits and surveys. In general, students reported satisfaction across measures. On a scale of 1 to 5, participants reported an average satisfaction score of 4.4. Lightbulbs were more favored than other measures (4.1). Weatherstripping was the least popular (3.7)

9.4 Findings and Conclusions and Recommendations

There were no findings for the SK&E program.

Recommendations:

- Consider adding Advanced Power Strips to kit offering. It may be worthwhile to include APS units in the kit offering to either supplement the current kit or to replace the LED lamps as EISA policy impacts are further realized after the July 1st, 2023 enforcement. The Evaluators have seen successful measure implementation in similar programs.

10 APPLIANCE RECYCLING AND REPLACEMENT

10.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend, by measure, where applicable.

TABLE 10-1 PY14 AR&R ENERGY SAVINGS (KWH)

Measure	*Ex Ante* Gross Savings (kWh)	Realization Rate (kWh)	*Ex Post* Gross Savings (kWh)	NTG	*Ex Post* Net Savings (kWh)
Freezer Recycling	10,400	100%	10,400	57%	5,876
Refrigerator	12,636	31%	3,861	81%	3,140
Refrigerator Recycling	173,808	100%	173,808	51%	88,642
Total	**196,844**	**96%**	**188,069**	**52%**	**97,658**

Sums may differ due to rounding.

TABLE 10-2 PY14 AR&R DEMAND REDUCTIONS (KW)

Measure	*Ex Ante* Gross Demand (kW)	Realization Rate (kW)	*Ex Post* Gross Demand (kW)	NTG	*Ex Post* Net Demand (kW)
Freezer Recycling	1.26	100%	1.26	57%	0.71
Refrigerator	0.21	272%	0.56	81%	0.46
Refrigerator Recycling	21.42	100%	21.47	51%	10.95
Total	**22.89**	**102%**	**23.29**	**52%**	**12.12**

Sums may differ due to rounding.

TABLE 10-3 PY14 AR&R LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex Post* Gross Lifetime Energy Savings (kWh)	*Ex Post* Net Lifetime Energy Savings (kWh)
Freezer Recycling	9	92,560	52,296
Refrigerator	17	65,631	53,380
Refrigerator Recycling	11	1,890,986	964,403
Total	**11**	**2,049,177**	**1,070,079**

Sums may differ due to rounding.

TABLE 10-4 PY14 AR&R COUNT OF MEASURES AND INCENTIVE SPEND

Measure	Participation (Count of Measures)	Incentive Spend ($)
Freezer Recycling	16	$800
Refrigerator	102	$80,000
Refrigerator Recycling	153	$7,650
Total	**271**	**$88,450**

Sums may differ due to rounding.

10.1.1 PROGRAM DESCRIPTION

The Appliance Recycling and Replacement (AR&R) program offering encourages early recycling of qualifying low efficiency appliances, such as refrigerators and freezers, for residential customers. The program also offers refrigerator replacement options for income-qualified residential customers. This new offering goes beyond federal recycling requirements using environmentally friendly best practices for recycling all components of each appliance.

The program is designed to help ENO residential customers recycle inefficient appliances to receive a new efficient refrigerator appliance replacement. The program adheres to the following guidelines:

- Only residential customers that receive their electric service from ENOs can participate in this program;
- Standard size refrigerators and freezers are eligible (10-30 cubic feet); mini fridges are not eligible;
- Only refrigerators or freezers that are in operating condition qualify for recycling or replacement. If the unit is not functional, as determined by the Implementer staff onsite, the unit will not be collected, and the customer will not receive an incentive;
- Customers are required to be onsite at the time of appliance testing and collection;
- The Implementer will recycle and replace a maximum of one appliance per year, per customer account; and

Customers are eligible to receive an incentive of $50 per appliance recycled and may receive an energy efficient replacement refrigerator, if qualified and supplies are available.

Below, individual measure contribution to the overall program expected savings are summarized.

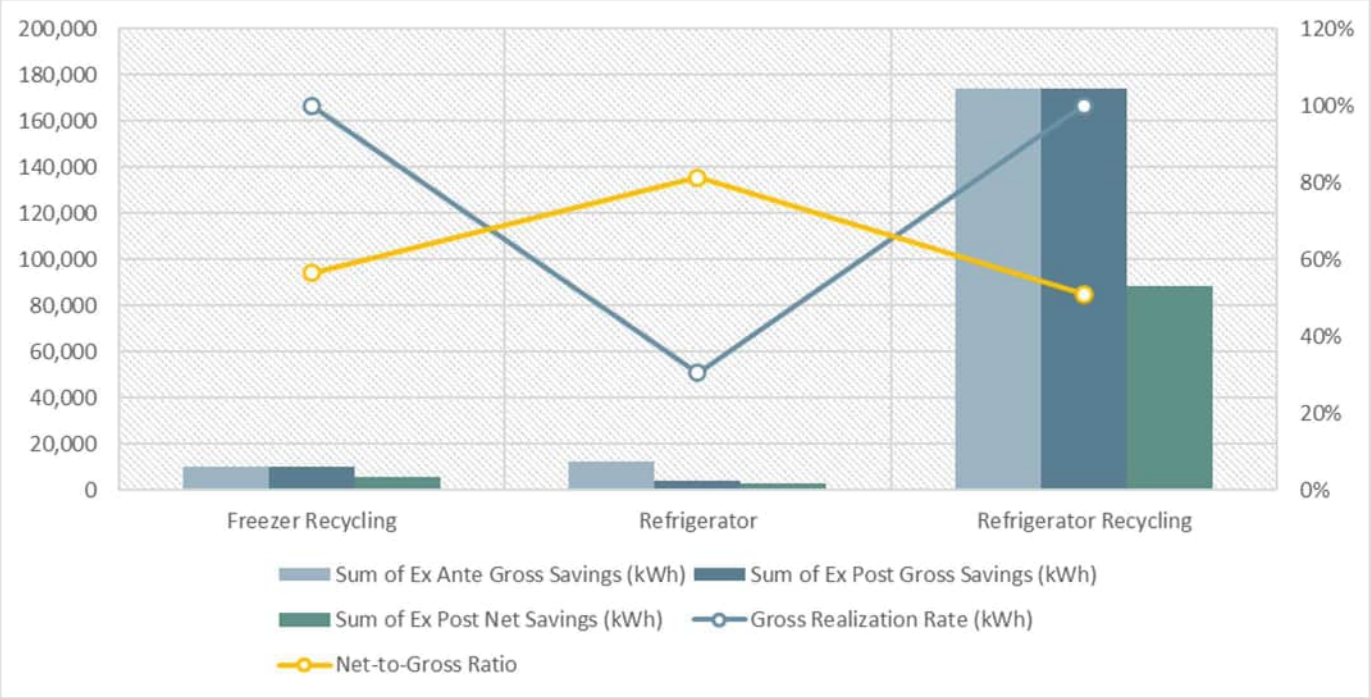


FIGURE 10-1: AR&R SAVINGS SUMMARY

10.1.1.1 Goal Achievement

Total verified savings and percentage of goals for the program are summarized in the table below.

TABLE 10-5 PY14 AR&R SUMMARY OF GOAL ACHIEVEMENT

Ex Post Gross Energy Savings (kWh) Goal	% to kWh Goal	Ex Post Gross Savings (kW) Target	% to kW Target
1,785,774	10.5%	26.00	89.6%

10.2 EM&V Methodology

Impact savings were calculated using methods and inputs in the NO TRM V7.0. Impact methodologies for the refrigerator replacement projects are the same as described for RLA, described in Section 6.3.3.

The following section discusses savings calculation methods for measures not covered.

10.2.1 SITE VISITS

There were no site visits in PY14. However, the Evaluators completed three (3) ride-along with the implementation staff in order to gather insights into the program.

Additionally, a participant survey was performed. All 17 responses confirmed participation in the program. All installation rates are 100%.

10.2.2 DEEMED SAVINGS CALCULATIONS

10.2.2.1 Freezer Recycling

Freezer recycling savings were calculated using the savings methodology from the NO TRM V7.0, section 1.1.11.4.2. The following table outlines the methodology that the Evaluators adhered to.

TABLE 10-6 COEFFICIENTS FOR FREEZER RECYCLING SAVINGS

Independent Variable	Estimated Coefficient	Default Input	kWh Impact
Intercept	- 0.296	1	- 108.04
Age (years)	0.039	17.10	243.42
Pre-1990	0.486	0.081	14.37
Size (cubic feet)	0.104	15.9	603.56
Freezer Chest	0.122	0.119	5.30
Side-by-Side	0.957	0.323	112.83
Unconditioned x CDD	- 0.002	0.741 * 3,470	- 5.14
Unconditioned x HDD	0.024	0.741 * 1,058	18.82
Total Unit Energy Consumption			772
Part-Use Adjustment			85.5%
Default kWh Savings			660

$$Savings_{kWh} = \begin{bmatrix} -0.296 + (Age \times 0.039) + (Pre_{1990} \times 0.486) + (Size \times 0.104) \\ +(Freezer\ Chest \times 0.122) + (Unconditioned_{CDD} \times -0.002) \\ +(Unconditioned_{HDD} \times 0.024) \end{bmatrix} \times 365.25 \times 0.855$$

Where:

Age = Age of retired unit

Pre_{1990} = Pre-1990 dummy (= 1 if manufactured pre-1990, else 0)

$Size$ = Capacity (cubic feet) of retired unit

$Freezer\ Chest$ = Freezer chest dummy (= 1 if unit has freezer chest, else 0)

0.855 = Part-use, accounting for units that are not running all year = 85.5%

$$Reductions_{kW} = \frac{Savings_{kWh}}{8{,}760} \times CF$$

Where: CF = Coincidence factor = 1.065 for freezers

10.2.2.2 Refrigerator Recycling

Refrigerator recycling savings were calculated using the savings methodology from the NO TRM V7.0, section 1.1.11.4.1. The following table outlines the methodology that the Evaluators adhered to.

TABLE 10-7 COEFFICIENTS FOR REFRIGERATOR RECYCLING SAVINGS

Independent Variable	Estimated Coefficient	Default Input	kWh Impact
Intercept	0.750	1	273.75
Age (years)	0.032	17.10	199.73
Pre-1990	1.140	0.081	33.70
Size (cubic feet)	0.067	19.00	464.65
Single Door	- 1.085	0.039	- 15.44
Side-by-Side	0.957	0.323	112.83
Primary Usage	0.477	0.696	121.18
Unconditioned x CDD	0.007	0.259 * 3,470	6.29
Unconditioned x HDD	- 0.016	0.259 * 1,058	- 4.38
Total Unit Energy Consumption			1,192
Part-Use Adjustment			93.2%
Default kWh Savings			1,111

$$Savings_{kWh} = \begin{bmatrix} 0.75 + (Age \times 0.032) + (Pre_{1990} \times 1.140) + (Size \times 0.067) \\ +(Single\ Door \times -1.085) + (\text{Side} - \text{by} - \text{Side} \times 0.957) \\ +(Primary\ Usage \times 0.477) + (Unconditioned_{CDD} \times 0.007) \\ +(Unconditioned_{HDD} \times -0.016) \end{bmatrix} \times 365.25 \times 0.932$$

Where:

Age = Age of retired unit

Pre_{1990} = Pre-1990 dummy (= 1 if manufactured pre-1990, else 0)

$Size$ = Capacity (cubic feet) of retired unit

$Single\ Door$ = Single door dummy (= 1 if one door, else 0)

$Side - by - side$ = Side-by-side dummy (= 1 if side-by-side, else 0)

$Primary\ Usage$ = Primary usage type dummy (= 1 if Primary, else 0)

$Unconditioned_{CDD}$ = Weather interaction effect, New Orleans CDD base 65 °F = 3,470

$Unconditioned_{HDD}$= Weather interaction effect, New Orleans CDD base 65 °F = 1,058

0.932 = Part-use, accounting for units that are not running all year = 93.2%

$$Reductions_{kW} = \frac{Savings_{kWh}}{8{,}760} \times CF$$

Where: CF = Coincidence factor = 1.082 for refrigerators

10.3 Evaluation Findings

10.3.1 GROSS IMPACT FINDINGS

10.3.1.1 Freezer Recycling

Expected and verified savings for the PY14 AR&R recycled freezers are summarized below. Sixteen (16) freezers were recycled.

TABLE 10-8 PY14 AR&R PROGRAM EXPECTED AND VERIFIED RECYCLED FREEZER SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
10,400	10,400	100.0%	1.26	1.26	100.0%

10.3.1.2 Refrigerator Recycling

Expected and verified savings for the PY14 AR&R recycled refrigerators are summarized below. One hundred fifty-three (153) refrigerators were recycled.

TABLE 10-9 AR&R PROGRAM EXPECTED AND VERIFIED RECYCLED REFRIGERATOR SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
173,808	173,808	100.0%	21.42	21.47	100.2%

10.3.1.3 Refrigerator Replacement

ENERGY STAR Refrigerator savings were calculated using the deemed savings from the NO TRM V7.0, section 1.1.4.1. Expected savings were based on deemed TRM estimates. Verified savings were calculated after verifying

model configurations and features and using TRM algorithms. Expected and verified savings for refrigerators are summarized below. There were 102 replacements in PY14.

TABLE 10-10 PY14 AR&R PROGRAM EXPECTED AND VERIFIED REPLACED REFRIGERATOR SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
12,636	3,861	30.6%	0.21	0.56	272.0%

10.3.2 NET IMPACT FINDINGS

The Evaluators applied net-to-gross ratios estimated using PY13 findings. The net-to-gross ratios were:

- Freeze Recycling – 56.5%
- Refrigerator – 81.3%
- Refrigerator Recycling – 51.0%

Results for overall verified net savings are shown by measure in Section 10.1 Summary.

10.3.3 PROCESS FINDINGS

The Evaluators conducted a limited process evaluation of the Appliance Recycling and Replacement program in PY14 of the program.

10.3.3.1 Staff and Implementer Interviews

The following section summarizes the key findings from in-depth interviews with three Legacy program staff involved in the Appliance Recycling Program: the program manager, the marketing outreach lead, and the marketing specialist. These in-depth interviews aimed to learn more about Appliance Recycling program design and operations, and the successes and challenges experienced during PY14. Interviews lasted approximately 30 minutes and were conducted using the Microsoft Teams platform. The evaluators recorded all interviews with participant permission. The following narrative summarizes these interviews.

10.3.3.1.1 *Program Design and Implementation*

The Appliance Recycling Program serves income-qualified participants by assessing and replacing eligible equipment at no cost during a home assessment. To qualify, standard units must be operational at the time of replacement. Eligible equipment includes standard refrigerators, freezers, and combination units for recycling. Customers receive a $50 rebate for each unit recycled. While all customers qualify for the recycling component, only those meeting specific income requirements are eligible for the replacement program.

In PY14, the program aimed to replace 100 units and recycle 150 units. At the time of the interview in the Fall, the program was performing well. Interest in the recycling aspect of the program had expanded and both pathways were on track to meet their goals.

In previous years, the program was managed by a different implementer. Due to organizational turnover, implementation responsibilities were transferred to Legacy in PY14. Aptim staff reported that the program has

improved under the new implementer, citing a more knowledgeable and responsive call center and better customer understanding of qualification criteria.

Despite these improvements, the program continues to face two main challenges: customers attempting to replace broken units—which must be fully operational to qualify—and appliances being left outside, leading to their disappearance before pickup. Staff have considered expanding the program to include other appliances, such as window air conditioning units, but determined that doing so would not be cost-effective.

10.3.3.1.2 *Marketing*

In PY14, program staff significantly expanded marketing efforts, contributing to the program's success. Previously, the implementer relied primarily on email and social media campaigns. However, in PY14, the new implementation team enhanced email outreach by targeting high-energy users and participants in other energy efficiency programs. They also launched a Google search campaign that improved the program's website visibility, ensuring it appeared at the top of search results for relevant terms.

This marketing campaign primarily focused on the recycling component, which had struggled in the past. In contrast, most participants in the replacement component learned about it through low-income program home energy assessments.

10.4 Findings and Recommendations

Key Findings:

- Program Success & Improvements: Staff reported that the transition to Legacy in PY14 improved program operations, particularly in customer support and qualification clarity. They noted that these changes contributed to the program successfully meeting its recycling and replacement goals.
- Marketing Impact: Expanded outreach, including targeted emails and a Google search campaign, successfully increased participation, particularly in the recycling component.
- Ongoing Challenges: Customers continue attempting to replace non-functional units, and some appliances are taken by others before collection teams arrive. Expanding eligibility to additional appliances, such as window air conditioning units, was considered but found to be cost-prohibitive.

Recommendations:

- Reduce Premature Appliance Removal: If appliances are being taken before scheduled pickup, staff could consider strategies such as instructing participants to store items indoors or in a secure location until collection time. Providing stickers or signage that clearly indicate "Scheduled for Recycling—Do Not Remove" could also help deter unauthorized removal.
- Sustain Outreach Efforts: To maintain engagement, staff could continue targeted marketing efforts, leveraging data from past participation trends to refine messaging and reach potential new participants effectively. If desired, additional outreach strategies, such as community-based promotions or utility bill inserts, could further expand program awareness.

11 BEHAVIORAL

11.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), and participation, by cohort, where applicable.

TABLE 11-1 PY14 BEHAVIORAL ENERGY SAVINGS (KWH)

Measure	*Ex Ante* Gross Energy Savings (kWh)	Realization Rate (kWh)	*Ex Post* Gross Energy Savings (kWh)	NTG	*Ex Post* Net Energy Savings (kWh)
PY14 Combined Cohort	16,783,105	98%	16,390,198	1	16,390,198
Total	**16,783,105**	**98%**	**16,390,198**	**1**	**16,390,198**

Sums may differ due to rounding.

TABLE 11-2 PY14 BEHAVIORAL DEMAND REDUCTIONS (KW)

Measure	*Ex Ante* Gross Demand Reductions (kW)	Realization Rate (kW)	*Ex Post* Gross Demand Reductions (kW)	NTG	*Ex Post* Net Demand Reductions (kW)
PY14 Combined Cohort	2,831	NA	2,765	1	NA
Total	**2,831**	**NA**	**2,765**	**1**	**NA**

Sums may differ due to rounding.

TABLE 11-3 PY14 BEHAVIORAL LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex Post* Gross Lifetime Energy Savings (kWh)	*Ex Post* Net Lifetime Energy Savings (kWh)
PY14 Combined Cohort	1	16,390,198	16,390,198
Total	**1**	**16,390,198**	**16,390,198**

Sums may differ due to rounding.

TABLE 11-4 PY14 BEHAVIORAL PARTICIPATION BY COHORT

Measure	Weighted Treatment Customers	Weighted Control Customers
PY14 Combined Cohort	115,267	27,312
Total	**115,267**	**27,312**

Sums may differ due to rounding.

11.2 Program Description

The Energy Smart Behavioral program (“Behavioral”) is intended to use social norming to leverage energy savings; this is a long-known behavioral science tenet that individuals desire to be at a similar or better level

than their peers, and thus, the report drives high users to reduce their energy consumption. The offering was implemented by Franklin Energy Services ("Franklin") and administered by APTIM.

The program provides tailored reports to residential customers that include:

- Comparisons of customers' current energy use to their past use;
- Comparison of energy use to similar homes in the area; and
- Tips on how customers can reduce their energy use as well as information on other Energy Smart offerings.

11.3 EM&V Methodology

The impact evaluation approach for this program is as follows:

- The control group was tested for validity as a statistical match for the treatment households in the baseline year;
- If the monthly pre-period usage for the treatment and control groups did not match for at least 9 of the 12 pre-period months, an ad-hoc control group would then be created via propensity score matching;
- Energy savings were estimated via regression modeling;
- Double counted savings were removed; and
- Demand (kW) savings were estimated from the validated energy savings.

For PY14, Franklin implemented a single, new cohort. The following table summarizes the cohort implemented during PY14.

TABLE 11-5 FRANKLIN COHORTS

Cohort	Treatment	Control	Intervention Date
PY14 Combined Cohort	131,430	29,707	December 1, 2023
Total	**131,430**	**29,707**	**N/A**

This led to a total of 131,430 treatment customers for the Behavioral Program. The Evaluators estimated savings for this cohort, which contained the full 12 months of post-period data to include in the analysis.

11.3.1 DATA PROVIDED

ENO provided the following data to support the analysis:

- Pre-treatment hourly AMI data for all customers in the Entergy service territory, aggregated on a monthly timestep. The data started on December 1, 2022 and ended on November 30, 2023.
- Post-treatment hourly AMI data for all customers in the Entergy service territory, aggregated on a monthly timestep. The data started on January 1, 2024, and ended on December 31, 2024;
- Participants that received reports through the 2024 program year;
- Participant and nonparticipant account active and account inactive dates; and,
- Program tracking data for participants, including date of installation and verified kWh savings for each measure installed.

The above data was sufficient for the Evaluators to conduct the evaluation activities summarized in the following sections.

11.3.2 DATA PREPARATION AND CLEANING

Prior to cohort validation and regression analysis, the Evaluators prepared monthly billing data through a series of cleaning steps. First, an average daily usage value was calculated by dividing the monthly usage by the number of billed days in a month. Additionally, data was filtered using the following criteria:

- Months that were present after a customer's move out date were also excluded from analysis.
- Customer months in which average monthly usage exceeded 20,000 kWh were excluded from analysis.
- Pre-treatment data was limited to December 1, 2022 – November 30, 2023
- Excluded December 2023 data which overlapped with the intervention date

The data provided to ADM were monthly aggregates of hourly AMI data. For the remainder of the report, therefore, the Evaluators will reference the billing data as having monthly intervals.

The Evaluators identified high outliers at the threshold of average monthly kWh usage over 20,000 kWh per month. This level of consumption is unrealistic for residential households and can reasonably be categorized as the result of a reading error rather than a valid reading from a high user. The Evaluators aimed to remove error readings rather than remove high and low users, as these subgroups contribute real behaviors to the average savings estimate.

11.3.3 VALIDITY TESTING

Control group validity was tested for statistically significant differences in usage between the treatment and control groups for each of the 12 pre-period months. Validity testing was completed to determine if propensity score matching would be required to create an ad-hoc, quasi-experimental control group.

The table below displays the results of the control group validation:

TABLE 11-6 PY14 VALIDITY TESTING RESULTS

Cohort	Valid Control Group	PSM
PY14 Combined Cohort	✓	

11.3.4 PROPENSITY SCORE MATCHING

Regression model analyses are unable to be run on cohorts in which a statistically comparable control group is not defined. Therefore, in order to analyze cohorts that have non-equivalent counterfactual groups, a post-hoc control group is required to be created. The Evaluators create a statistically similar control group using propensity score matching (PSM), a method that allows the Evaluators to find the most similar household based on the customers' billed consumption trends in the pre-period and verified with statistical difference testing. The PY14 combined cohort was created from an RCT in November, 2023. The Evaluators determined that the RCT's monthly usage was statistically valid for the 12 pre-period months, and propensity score matching was not required.

A propensity score is a metric that summarizes several dimensions of household characteristics into a single metric that can be used to group similar households. To create a post-hoc control group, the Evaluators compile billing data of all control participants from all waves to compare against treatment households via quasi-experimental methods. This allows the Evaluators to select from a large group of similar households that have not received home energy reports. With this information, the Evaluators can then match the treatment group to

a similar control group via seasonal pre-period usage. After matching, a t-test is conducted for each month in the pre-period to help determine the success of PSM.

After creating a PSM control group, the cohort undergoes the same regression modeling as the remaining statistically valid cohorts. The regression specifications and details are summarized in the next section.

11.3.5 LINEAR REGRESSION MODELING

After validating control groups were a sufficient match for each cohort, the Evaluators employed a difference-in-difference (D-in-D) regression model to evaluate verified savings for the impact evaluation for each cohort.

11.3.5.1 Difference-in-Difference (D-in-D) Regression Model

The D-in-D regression model controls for individual differences by including fixed terms that are equal to each treatment customer's average monthly energy use across the pre- and post-treatment period. The specific model used by the Evaluators also utilizes fixed effects for each time period (e.g., year and month) and interacts these time period fixed effects with the pre‐program, or post-program energy use variable respectively without considering the treatment effect. These terms are included to account for monthly differences in energy usage that are independent of the Home Energy Reports. The time period fixed effects are also interacted with the treatment indicator variable to estimate the impact of treatment in each time period. The model specification is as follows:

EQUATION 11-1 DIFFERENCE-IN-DIFFERENCE MODEL SPECIFICATION

$$y_{it} = \sum_{\mathrm{j}=1}^{12} \beta_j * \mathrm{Tr}_i * d_{\mathrm{jt}} * + \sum_{\mathrm{j}=1}^{12} \mathrm{Tr}_i * d_{\mathrm{jt}-1} + \sum_{\mathrm{j}=1}^{12} \theta_j * d_{\mathrm{jt}-1} \sum_{\mathrm{j}=1}^{12} \theta_j * d_{\mathrm{jt}-1} + \varepsilon_{it}$$

Where,

i = the ith household

j = the first, second, third, etc. month of the period t

y_{it} = Average daily usage for the period t and customer i

β_{j} = The average daily savings for customer i, period t, and month j

Tr_{i} = The treatment indicator. Equals 1 for the treatment group and 0 otherwise

d_{jt} = Dummy variable for each month j, in the post-period t. Equals 1 if j = t and 0 otherwise

d_{jt-1} = Dummy variable for each month j, in the pre-period t-1. Equals 1 if j = t-1 and 0 otherwise

θ_j = The average effect on consumption specific to the post-period t or pre-period t-1

ε_{it} = Customer-level random error

The treatment coefficient β_{j} represents the average change in consumption between the pre-period and post-period for the treatment group in each month.

In this specification, savings are calculated by:

EQUATION 11-2 MONTHLY SAVINGS ESTIMATE

$$Savings = \sum Treatment\ Coeff \times Number\ of\ recipients\ in\ month\ j \times Number\ of\ days\ in\ month\ j$$

11.3.6REMOVE DOUBLE COUNTED SAVINGS

Participants in both the treatment and control groups participate in other Energy Smart residential energy efficiency programs. The Behavioral Program reports may also increase the customer's propensity to participate in other programs. This additional participation is known as uplift. The reports sent to customers include information about other Energy Smart incentives and programs, which may lead to customers adopting more energy efficient upgrades for their home.

When a household participates in an efficiency program because of this encouragement, the utility might count their savings twice: once in the regression-based estimate of behavioral program savings and again in the estimate of savings for the other energy efficiency program. Although uplift rarely displays a statistically significant difference between the treatment and control groups, the UMP recommends removing uplift from each group at the household level.

The double counted savings, whether positive or negative, are subtracted from the wave's savings estimates from the regression analysis to get total verified savings. The approach for removal of double counted savings will differ based on whether the other program is a downstream program. The following sections detail our proposed methodology for downstream programs.

Downstream programs traditionally track installed measures at the customer level. Entergy delivered customer-level tracking data for other programs offered to residential customers. The Evaluators evaluated these programs and used the verified savings from each program to use towards downstream double counting for the Behavioral Program. The residential Energy Smart programs included in the double counting analysis are the Heating, Cooling, and Home Comfort Program, the Income-Eligible Multi-Family Program, and the Smart Thermostats Program.

The Evaluators corrected for cross-program participation that occurred after treatment began to the extent that the treatment group participated at a higher rate than the control group. The Evaluators estimated and subtracted savings from program uplift from the total program portfolio savings for each program year. The double count savings were calculated on a per-household level for each treatment group in each cohort as follows.

EQUATION 11-3 DOUBLE COUNT SPECIFICATION

$$Double\ Counting = \left(\frac{OP\ kWh}{Household_{Treatment}} - \frac{OP\ kWh}{Household_{Control}}\right) \times \#\ Accounts_{Treatment}$$

Where,

$\frac{OP\ kWh}{Household_{Treatment}}$ = Other program kWh per household in the treatment group

$\frac{OP\ kWh}{Household_{Control}}$ = Other program kWh per household in the control group

$\#\ Accounts_{Treatment}$ = Total accounts in the treatment group

To estimate double counted program savings from downstream program uplift, the Evaluators:

1. Matched the Behavioral Program treatment and control group customers to the utility energy efficiency program tracking data by customer ID or address;
2. Calculated the savings per treatment group subject from efficiency uplift as the difference between treatment and control groups in average efficiency program savings per subject; and
3. Multiplied that difference by the number of subjects who are in the treatment group.

The Evaluators summarized and removed program uplift for each wave and treatment status for each of the other residential program offerings.

11.4 Evaluation Findings

11.4.1IMPACT FINDINGS

This section details the level of program activity for 2024, the reported and verified gross savings that resulted from that activity.

The monthly-level savings are calculated by multiplying the average monthly household impact estimate by the weighted days in the month and number of active program participants in the treatment group for that month. These estimates are then added together and, after removing double counted savings, the resulting sum is the program-level savings estimate.

The Evaluators calculated the percent savings per home dividing the average annual energy savings estimated in the treatment group by the average annual energy consumption from the control group. This methodology is presented in the UMP Chapter 17 Residential Behavior Protocol[9].

11.4.1.1 Data Preparation and Cleaning

The Evaluators prepared and cleaned the aggregated AMI data provided by Entergy. The Evaluators employed the following cleaning steps for each cohort:

- Filter for customers currently treated in 2024
- Remove bills after the customer's move-out date
- Remove negative bills
- Remove bills with usage that was over 20,000 kWh/month
- Filter for post-period after January 1, 2024 and pre-period for 1 year prior to the intervention date of December 1, 2023.

[9] https://energy.gov/sites/prod/files/2015/02/f19/UMPChapter17-residential-behavior.pdf

- Remove December 2023 bills because they overlap with the intervention date

After conducting the above cleaning steps, the Evaluators conducted validity testing. The results of validity testing are displayed below.

11.4.1.2 Validity Testing

The treatment and control group energy usage was tested for each of the 12 pre-period months in each wave. The validity testing found no significant differences between the treatment and control group's pre-period energy usage for any of the 12 months. The results of the testing are displayed below:

TABLE 11-7 PY14–VALIDITY TESTING RESULTS

Pre-Period Month	Treatment Group Average Daily Usage (kWh/day)	Control Group Average Daily Usage (kWh/day)	Average Daily Usage Difference (kWh/day)	P-value	Statistically Significant Difference
Dec 2022	33.89	34.20	-0.31	0.110	-
Jan 2023	27.46	27.76	-0.29	0.057	-
Feb 2023	28.36	28.60	-0.24	0.108	-
Mar 2023	27.20	27.45	-0.24	0.080	-
Apr 2023	24.78	24.90	-0.12	0.349	-
May 2023	35.61	35.64	-0.03	0.876	-
Jun 2023	49.55	49.39	0.16	0.488	-
Jul 2023	52.70	52.52	0.18	0.460	-
Aug 2023	58.58	58.33	0.25	0.351	-
Sep 2023	43.62	43.38	0.23	0.241	-
Oct 2023	26.82	26.76	0.06	0.641	-
Nov 2023	23.68	23.73	-0.04	0.717	-

The Evaluators continued with linear regression modeling to evaluate average household savings across the cohorts. The results of the linear regression modeling are summarized in the section below.

11.4.1.3 Linear Regression Modeling Results

This section details the regression results.

As discussed in the evaluation approach section, savings are determined through the equation summarized in Equation 11-2.

. The Evaluators summarize the model results in the table below.

TABLE 11-8 PY14 REGRESSION MODEL RESULTS

Year/Month	Average Monthly Savings per Customer (kWh)	Monthly Estimate P-Value	Statistically Significant Savings	Number of Treatment Customers	Ex Post Gross Energy Savings (kWh)
Jan 2024	2.766	0.52	No	126,108	348,825
Feb 2024	5.167	0.19	No	123,765	639,461
Mar 2024	8.489	0.05	No	122,066	1,036,214
Apr 2024	8.089	0.05	No	120,139	971,801
May 2024	10.775	0.01	Yes	118,249	1,274,131
Jun 2024	18.702	0.00	Yes	116,084	2,170,978
Jul 2024	17.589	0.00	Yes	113,597	1,998,042
Aug 2024	17.507	0.00	Yes	111,613	1,953,966
Sep 2024	15.563	0.00	Yes	110,130	1,713,910
Oct 2024	14.555	0.00	Yes	108,547	1,579,911
Nov 2024	12.307	0.00	Yes	107,207	1,319,399
Dec 2024	13.027	0.00	Yes	106,210	1,383,560

The regression output displays statistically significant savings if the p-value for the treatment coefficient is less than 0.05.

The full model summary, including confidence intervals, is displayed below.

TABLE 11-9 – ADM DIFFERENCE-IN-DIFFERENCE MODEL ESTIMATES

Variable	Coefficient	90% CI Lower	90% CI Upper	t-statistic	P-value
pre_mo_year12_2022	-2.479	-2492.493	2487.536	-0.002	0.999
pre_mo_year1_2023	-8.841	-2498.855	2481.174	-0.006	0.995
pre_mo_year2_2023	-7.872	-2497.886	2482.143	-0.005	0.996
pre_mo_year3_2023	-8.905	-2498.919	2481.110	-0.006	0.995
pre_mo_year4_2023	-11.243	-2501.258	2478.772	-0.007	0.994
pre_mo_year5_2023	-0.294	-2490.308	2489.721	0.000	1.000
pre_mo_year6_2023	13.814	-2476.200	2503.829	0.009	0.993
pre_mo_year7_2023	17.137	-2472.877	2507.152	0.011	0.991
pre_mo_year8_2023	23.213	-2466.802	2513.228	0.015	0.988
pre_mo_year9_2023	8.339	-2481.676	2498.353	0.006	0.996
pre_mo_year10_2023	-8.445	-2498.460	2481.569	-0.006	0.996
pre_mo_year11_2023	-11.609	-2501.624	2478.405	-0.008	0.994
post_mo_year1_2024	2.472	-2487.543	2492.486	0.002	0.999
post_mo_year2_2024	-9.097	-2499.112	2480.918	-0.006	0.995
post_mo_year3_2024	-13.905	-2503.919	2476.110	-0.009	0.993
post_mo_year4_2024	-10.431	-2500.446	2479.583	-0.007	0.995
post_mo_year5_2024	3.271	-2486.744	2493.285	0.002	0.998
post_mo_year6_2024	10.942	-2479.073	2500.957	0.007	0.994
post_mo_year7_2024	12.102	-2477.913	2502.116	0.008	0.994
post_mo_year8_2024	17.685	-2472.329	2507.700	0.012	0.991
post_mo_year9_2024	3.436	-2486.579	2493.450	0.002	0.998
post_mo_year10_2024	-6.837	-2496.852	2483.177	-0.005	0.996
post_mo_year11_2024	-8.941	-2498.956	2481.073	-0.006	0.995
post_mo_year12_2024	-7.554	-2497.568	2482.461	-0.005	0.996
pre_mo_year_trmt12_2022	-0.036	-0.271	0.199	-0.253	0.800
pre_mo_year_trmt1_2023	-0.056	-0.291	0.178	-0.393	0.694
pre_mo_year_trmt2_2023	-0.123	-0.357	0.111	-0.865	0.387
pre_mo_year_trmt3_2023	-0.138	-0.371	0.095	-0.976	0.329
pre_mo_year_trmt4_2023	-0.230	-0.462	0.001	-1.635	0.102
pre_mo_year_trmt5_2023	-0.279	-0.509	-0.048	-1.987	0.047
pre_mo_year_trmt6_2023	-0.409	-0.638	-0.180	-2.936	0.003
pre_mo_year_trmt7_2023	-0.409	-0.637	-0.181	-2.951	0.003
pre_mo_year_trmt8_2023	-0.431	-0.658	-0.205	-3.130	0.002
pre_mo_year_trmt9_2023	-0.320	-0.545	-0.094	-2.332	0.020
pre_mo_year_trmt10_2023	-0.116	-0.341	0.109	-0.847	0.397
post_mo_year_trmt1_2024	-0.089	-0.315	0.137	-0.649	0.516
post_mo_year_trmt2_2024	-0.183	-0.410	0.044	-1.325	0.185
post_mo_year_trmt3_2024	-0.274	-0.501	-0.046	-1.979	0.048
post_mo_year_trmt4_2024	-0.270	-0.498	-0.041	-1.944	0.052
post_mo_year_trmt5_2024	-0.348	-0.576	-0.119	-2.498	0.013
post_mo_year_trmt6_2024	-0.623	-0.853	-0.394	-4.465	0.000
post_mo_year_trmt7_2024	-0.567	-0.798	-0.337	-4.048	0.000
post_mo_year_trmt8_2024	-0.565	-0.796	-0.333	-4.016	0.000
post_mo_year_trmt9_2024	-0.519	-0.751	-0.287	-3.681	0.000

post_mo_year_trmt10_2024	-0.470	-0.702	-0.237	-3.322	0.001
post_mo_year_trmt11_2024	-0.410	-0.643	-0.177	-2.896	0.004
post_mo_year_trmt12_2024	-0.420	-0.654	-0.187	-2.961	0.003
Adjusted R-Squared	**0.75**				

The following table summarizes the average annual household savings and percent of annual household savings.

TABLE 11-10 PY14 HOUSEHOLD-LEVEL SAVINGS BY COHORT

Cohort	Unadjusted Household Savings (kWh)	Average Annual Household Usage (kWh), Control Group	Percent Annual Household Unadjusted Savings
PY14 Combined Cohort	145	12,989	1.11%

The monthly post-period savings estimates were extrapolated to the number of customers treated in PY14 across each of the post-period months. The following table summarizes the program-level savings resulting from regression model analysis, prior to double counting adjustments.

TABLE 11-11 PY14 PROGRAM-LEVEL UNADJUSTED SAVINGS BY COHORT

Cohort	Unadjusted Annual Household Savings (kWh)	Model Fit (Adj. R^2)	Unadjusted PY14 kWh Savings
PY14 Combined Cohort	145	0.75	16,390,198
Total	**145**	**-**	**16,390,198**

The program displays a total of 16,390,198kWh verified savings in PY14.

11.4.1.4 Double Counted Savings Results

Participants in both the treatment and control groups participate in other energy efficiency programs. The double counted savings, defined in the methodology, whether positive or negative, are subtracted from the cohort's gross savings estimates from the regression analysis to get total verified savings. This section summarizes the results of the double counting analysis for downstream programs.

ENO delivered tracking data for the following programs:

- IQW Program
- A/C Solutions
- HPwES Program
- RLA Program
- MF Solutions Program

The Evaluators identified and summarized the average treatment customer, average control customer, and average incremental savings attributed to the above residential programs for each cohort. The table below summarizes the double counting savings to be subtracted from each cohort's annual program savings. The double counted savings are not applicable for cohorts in which no verified savings could be estimated.

TABLE 11-1211-13 PY14 DOUBLE COUNTED SAVINGS BY COHORT

Cohort	Treatment Savings per Household (kWh per Household)	Control Savings per Household (kWh per Household)	Double Counted Savings per Household (kWh per Household)	Total Double Counted Savings (kWh)
PY14 Combined Cohort	800.82	775.42	25.40	2,927,436
Total	**800.82**	**775.42**	**25.40**	**2,927,436**

The results are separated by cohort. PY14 displays a total of 2,927,436 kWh in double counted savings. The double counted savings represented in the table above are removed from each cohort's regression model savings estimate. The adjusted household-level savings for each cohort are summarized in the tables below.

TABLE 11-1411-15 PY14 HOUSEHOLD-LEVEL ADJUSTED SAVINGS BY COHORT

Cohort	Unadjusted Household Savings (kWh)	Household Double Counted Savings (kWh)	Adjusted Household Savings (kWh)	% Change to Savings
PY14 Combined Cohort	144.53	25.40	119.14	17.57%

After conducting double counting adjustments, the Evaluators extrapolated household-level adjusted savings to estimate total annual energy savings for PY14 for each cohort. The total verified and adjusted program-level savings are displayed in the table below.

TABLE 11-1611-17 PY14 PROGRAM-LEVEL ADJUSTED SAVINGS BY COHORT

Cohort	Adjusted Household Savings (kWh per Household)	Average Annual Household Usage (kWh per year)	Percent Annual Household Adjusted Savings	Weighted Number of Customers in PY14
PY14 Combined Cohort	119.14	12,989	0.92%	115,267
Total	**119.14**	**12,989**	**0.92%**	**115,267**

11.4.1.5 Demand Reduction Results

The relationship between annual usage savings and peak demand savings has not been defined for HURs. In previous evaluations, the Evaluators estimated demand reduction by dividing the annual energy savings by integrating hourly load factors with monthly estimated energy savings for each group for the annual program year, resulting in a ratio of 0.0001687, which was used to estimate the relationship between annual usage savings and peak demand savings.

TABLE 11-18 PY13 PROGRAM-LEVEL DEMAND REDUCTIONS BY COHORT

Cohort	Undjusted PY14 kW Savings
PY14 Combined Cohort	2,765
Total	**2,765**

The Behavioral Program displayed 2,765 kW kW reductions in PY14 resulting from energy savings.

11.4.1.6 Verified Savings

The table below summarizes the verified gross and net energy savings. The Behavioral Program NTG ratio is 100% due to the nature of the program. Overall verified gross and net savings were 16,390,198 kWh and 2,765 kW between January 1, 2024 and December 31, 2024.

TABLE 11-19 PY14 BEHAVIORAL VERIFIED ENERGY AND DEMAND REDUCTIONS BY COHORT

Cohort	Verified PY14 kWh Savings	Verified PY14 kW Savings	Percent Annual Household Savings
PY14 Combined Cohort	16,390,198	2,765	1.11%
Total	**16,390,198**	**2,765**	**1.11%**

11.4.2 PROCESS EVALUATION FINDINGS

The Evaluators conducted a limited process evaluation of the Behavioral program in PY14 of the program.

11.4.2.1 Staff and Implementer Interviews

The following section summarizes the key findings from in-depth interviews with two ENO program staff and two APTIM staff; ENO staff participated in one interview and APTIM and Franklin staff participated in a second interview. These in-depth interviews aimed to learn more about the behavioral program design and operations, and the successes and challenges experienced during PY14. Interviews lasted approximately 30 minutes and were conducted using the Microsoft Teams platform. The evaluators recorded all interviews with participant permission. The following narrative summarizes these interviews.

11.4.2.1.1 *Program Description*

In PY14, the Behavioral Program underwent a major shift, consolidating all previous cohorts into a single, unified group. Instead of each cohort receiving different materials and being assigned unique comparison groups, all participants are now part of the same cohort, with non-participating neighbors serving as the comparison group.

Previously, the program incorporated gamification and reward platforms, but the new approach is streamlined, focusing solely on informational emails and mailings that encourage behavior changes. Additionally, the program now utilizes AMI data instead of billing data, enabling more targeted insights and personalized tips for energy efficiency improvements.

11.5 Findings & Recommendations

Key Findings:

- Program Consolidation: Staff reported that in PY14, the Behavioral Program transitioned to a single cohort model, simplifying implementation by using non-participating neighbors as the comparison group.
- Shift in Engagement Approach: The program removed gamification and rewards, instead relying on informational emails and mailings. Staff also noted that switching from billing data to AMI data improved the ability to deliver targeted insights and personalized energy-saving recommendations

12 EASYCOOL BRING YOUR OWN THERMOSTAT

12.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, incentive spend, and *ex post* net NEBs, by measure, where applicable.

TABLE 12-1 PY14 EASYCOOL BYOT ENERGY SAVINGS (KWH)

Measure	*Ex ante* Gross Savings (kWh)	Realization Rate (kWh)	*Ex post* Gross Savings (kWh)	NTG	*Ex post* Net Savings (kWh)
DR Participation: BYOT-only	0	N/A	0	N/A	0
DR Participation: PTR-BYOT	0	N/A	0	N/A	0
Total	**0**	**N/A**	**0**	**N/A**	**0**

Sums may differ due to rounding.

TABLE 12-2 PY14 EASYCOOL BYOT DEMAND REDUCTIONS (KW)

Measure	*Ex ante* Gross Demand (kW)	Realization Rate (kW)	*Ex post* Gross Demand (kW)	NTG	*Ex post* Net Demand Reductions (kW)
DR Participation: BYOT-only	N/A	N/A	5,354.80	100%	5,354.80
DR Participation: PTR-BYOT	N/A	N/A	896.32	100%	896.32
Total	**N/A**	**N/A**	**6,251.12**	**100%**	**6,251.12**

Sums may differ due to rounding.

TABLE 12-3 PY14 EASYCOOL BYOT LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex post* Gross Lifetime Energy Savings (kWh)	*Ex post* Net Lifetime Energy Savings (kWh)
DR Participation: BYOT-only	1	0	0
DR Participation: PTR-BYOT	1	0	0
Total	**1**	**0**	**0**

Sums may differ due to rounding.

TABLE 12-4 PY14 EASYCOOL BYOT PARTICIPATION AND INCENTIVE SUMMARY

Measure	Participation (Count of Measures)	Incentive Spend ($)
DR Participation: BYOT-only	4,207	$190,117
DR Participation: PTR-BYOT	879	$39,708
Total	**5,085**	**$229,825**

Sums may differ due to rounding.

TABLE 12-5 PY13 EASYCOOL BYOT NEB SUMMARY

Measure	*Ex post* Net ARCs ($)	*Ex post* Net Water Savings (gallons)	*Ex post* Net Avoided Arrearages
DR Participation: BYOT-only	$0	0	$0
DR Participation: PTR-BYOT	$0	0	$0
Total	**$0**	**0**	**$0**

Sums may differ due to rounding.

12.2 Program Description

The EasyCool Bring Your Own Thermostat (EasyCool BYOT) offering uses a Distributed Energy Resource Management System (DERMS) to enroll, monitor, and to schedule load control events to reduce electricity consumption during periods of high demand. The DERMS system increases the temperature setting by a small amount on customer thermostats. These events may occur between June 1st and September 30th and are limited to a maximum of 15 adjustments per year. The events involve thermostats being adjusted an extra three degrees. These events typically last no more than four hours and occur between noon and 8 p.m. To manage customer comfort, the system will pre-cool the home in advance of the event.

Program participants receive pre-event notifications about half an hour before the scheduled event via the thermostat itself or the thermostat application. Information is also posted on the Energy Smart website. Customers do not need to do anything to participate in an event, rather smart thermostats are adjusted remotely. Customers can opt out of events through a system override. Typically events last two to four hours and result. All events are preceded by a half-hour precool event.

The EasyCool Residential "bring your own thermostat" (BYOT) program targets residential customers interested in participating demand respond events via their smart thermostat. Although the program had originally included small business customers as well, there was low participation among this sector, so staff refocused efforts on residential customers.

The offering works with a wide range of thermostats including those manufactured by ecobee, Honeywell, Nest, Alarm.com, and Emerson. A complete list of qualifying thermostats is published on the program website.

Customers enroll in the offering by visiting a web-based portal. To qualify, customers must be a residential ENO customer, have an internet connected thermostat that controls central air conditioning, and agree to the terms and conditions.

Customers enroll in the program via their smart thermostat app or the EasyCool website. They receive a $50 enrollment incentive per device. Customers who remain enrolled year after year receive a $25 continued enrollment incentive. Customers may unenroll by sending an email communication or they may opt-out of events using the web portal.

The program was first introduced in PY10.

12.2.1 PROGRAM CHANGES

There were no changes to the program in PY14.

12.2.2 TIMING OF PROJECTS

All projects occurred from May to September.

12.2.3 TRADE ALLIES

There were no reported trade allies in this program.

12.2.4 GOAL ACHIEVEMENT

The table below summarizes the programs' performance against goal.

TABLE 12-6 EASYCOOL BYOT PERFORMANCE TOWARDS GOAL

Ex Post Gross Energy Savings (kWh) Goal	% to kWh Goal	Ex Post Gross Savings (kW) Target	% to kW Target
NA	NA	9,600.00	65%

12.3 EM&V Methodology

The Evaluators employed the following approach to complete impact evaluation activities for the program. The Evaluator followed the Calculated Baseline approach outlined in the Midcontinent Independent System Operator, Inc. (MISO) Business Practices Manual (BPM)[10]. The following impact evaluation steps were taken to determine the suitability of the MISO Calculated Baseline approach:

- Developed an Unadjusted Consumption (UC) Baseline, a Symmetric Multiplicative Adjustment (SMA) Baseline, and a Weather Sensitive Adjustment (WSA) Baseline for each program participant. Loads were calculated utilizing 1-hour AMI data.
- Determined days that will serve as proxy days for testing the suitability of the baseline approach. Proxy days represent days like demand response event days in terms of load shape and temperature profiles.
- Estimated bias (uncertainty) and error on proxy days for each model to assess baseline performance. Bias is assessed by examining the average percent error of the baseline predictions relative to the actual usage on proxy days. In a similar manner, error is assessed through various metrics such as Root Mean Squared Error (RRMSE) using baseline predictions and actual usage on proxy days.
- Selected the baseline model with the lowest absolute bias.

12.3.1 GROSS IMPACT METHODOLOGIES

In the evaluation of demand response programs, energy savings are estimated by comparing a participant's load shape during a demand response event with a baseline load shape. This baseline load is assumed to be a good estimate of the counterfactual load—that is, the load that would have manifested had there not been an event called that day.

[10] *Ibid.*

12.3.1.1 Data Sources

Data used for this evaluation include program tracking data that identifies which customers participated in the program and contains data fields such as hourly usage, hourly interval meter data (AMI) for each customer participating in the program, and a full schedule of DR program events, including the time of the event.

12.3.1.2 MISO Calculated Baseline Approach (Customer Baselines)

The following details the general requirements for the MISO Calculated Baseline Approach. The Evaluators developed Customer Baselines (CBLs) in accordance with this approach. For a demand resource, the Consumption Baseline is a profile of hourly demand based on an averaged sample of historical data which may be adjusted for factors that reflect specific, on-the-day conditions, such as temperature.

The default consumption baseline is designed as follows:

- Separate hourly demand profiles for non-holiday weekdays and for weekends/holidays
- The "weekday" hourly profile is based on the average of the ten (10), but not less than five (5), most recent weekdays that are not holidays or other non-standard "event" days
- The "weekend/holiday" hourly profile is based on the average of the four (4), but not less than two (2), most recent weekend days or holidays that are not "event" days
- An "event" day is one during which there was, for the resource in question, a real- time energy or ancillary services dispatch, or a scheduled outage
- The maximum look-back window is limited to 45 days
- If the 45-day window contains insufficient days to meet the minimum number of days described above, the profiles are constructed based on the available days within the 45-day window that qualify, supplemented by the largest (MW) matching "event" day(s) values for that resource within that same window as necessary to obtain the minimum number of values.

Adjustment mechanisms to the default Consumption Baseline include:

- Symmetric Multiplicative Adjustment (SMA)
    - Adjusts each baseline hourly value (MW) during the event up or down by the ratio of
    - (a) the sum of hourly demands for the three hours beginning four hours prior to the event and (b) the sum of those same three hourly baseline demands
    - The adjustment is limited to a change in any individual baseline hour of plus or minus 20 percent.
    - If multiple events occur during the same day, the SMA is calculated only for the first event, but applied to all events that day.
- Weather Sensitive Adjustment (WSA)
    - Adjusts each baseline hourly value (MW) up or down by a Weather Adjustment Factor
    - The Weather Adjustment Factor is determined by a mathematical relationship derived through a regression analysis that considers the DRR load and historical hourly temperature data.

12.3.1.3 Evaluators MISO Models

The following CBL models were developed for each customer in accordance with MISO protocols.

For a 5-of-10 (or 5-of-5) unadjusted baseline, the Evaluators examine the load data from the most recent ten (or five) non-event, non-holiday weekdays relative to the event day and calculate the mean demand usage values of the five highest load days. This baseline is then adjusted for the SMA and WSA models utilizing the method described in Section 12.3.1.2.

TABLE 12-7 EVALUATORS' MISO CBL MODELS

Model Type	Baseline Days	SMA	WSA
Unadjusted	5-of-10	No	No
SMA-Adjusted	5-of-10	Yes	No
WSA-Adjusted	5-of-10	No	Yes
Unadjusted	5-of-5	No	No
SMA-Adjusted	5-of-5	Yes	No
WSA-Adjusted	5-of-5	No	Yes

12.3.1.4 Baseline and Proxy Day Development

The Evaluators defined proxy days as the top eight non-event, non-holiday, non-weekend days with the highest loads across all summer months. In addition, proxy days must display a maximum temperature of greater than or equal to the minimum temperature observed during normal curtailment hours during the events. The Evaluators used these defined proxy days to determine the ability of CBL models to predict actual usage for each customer.

12.3.1.5 Cross Program Participation Adjustments

Customers who participate in multiple demand response programs will have double counted savings if the savings estimates are not adjusted in each program where cross participation occurs. For some DR programs, the source of curtailment for the respective DR programs is independent, such as for the Battery Energy Storage System (BESS) Pilot program and the BYOT program (battery storage versus smart thermostat). When the curtailment source is independent between two DR programs, cross participants for the two programs are removed during the impact estimation. The per unit or per account savings reductions are then extrapolated to the full population. For example, removing customers with dual enrollment in BYOT and BESS ensures that the BYOT-only savings estimates does not include impacts from the BESS program. In PY14, BESS events were called after all the BYOT events, therefore, adjusting for cross participation with BESS was not needed.

For other DR programs, the curtailment source driving the demand response impact overlaps, such as for BYOT and PTR, where both programs may both involve curtailment of cooling loads. In this case, a savings estimate was developed for participants with and without cross participation. The savings for those with cross participation were adjusted using the savings for those without cross participation in the respective programs, according to the following equation:

$$Cross\ Participant\ kW\ Reduction\ for\ BYOT\ Program\ (PTR - BYOT\ Cohort) = Average\ kW\ Reduction\ (PTR - BYOT) * ((Average\ kW\ Reduction\ (BYOT - only))/ (Average\ kW\ Reduction(BYOT - only) + Average\ kW\ Reduction\ (PTR - only))$$

Where:

$Average\ kW\ Reduction\ (PTR - BYOT)$ = Average estimated kW reduction for participants in both PTR and BYOT.

$Average\ kW\ Reduction\ (BYOT - only))$ = Average estimated kW reduction for participants in BYOT only.

$Average\ kW\ Reduction\ (PTR - only))$ = Average estimated kW reduction for participants in PTR only.

The adjustment for the PTR-BYOT cross participant savings estimate reflects the percentage share of the BYOT-only savings estimate out of the total savings for BYOT-only and PTR-only combined. A separate adjustment following similar logic occurs in the PTR program to remove overlapping savings between BYOT and PTR cross participants.

12.3.1.6 Cohort Creation

The Evaluators created the following measure cohorts for the BYOT program in PY14. Participants without AMI data during DR events (approximately 15% of participants) were considered to have inactive accounts and were excluded from the extrapolation of estimated savings.

TABLE 12-8 BYOT MEASURES

Measure (Cohort)	Total Number of Accounts in Participant Data	Number of Accounts with AMI Data
DR Participation: BYOT-only	4,838	4,207
DR Participation: PTR-BYOT	1,010	878.6
Total	**5,848**	**5,085**

12.3.1.7 Savings Calculations and Extrapolation

The Evaluators estimated the Average kW Savings per Event per Participant using participants with complete AMI data during all events. The estimate is extrapolated and weighted based on the number of participants with AMI data on each demand response event date.

The Average kW Savings per Event per Participant is the average kW reduction for each participant across all demand response events in the season, as shown in the equations below.$Average\ kW\ Savings\ per\ Event\ per\ Participant = (\sum_{i=1}^{n} Average\ kW\ Reduction\ per\ Event_i)\ /n$

$$Average\ kW\ Reduction\ per\ Event_i = (\sum_{h=1}^{hours} (Baseline\ kW_{ih} - Actual\ kW_{ih}))/hours$$

Where,

i = an indicator for participant *i*;

h = indicator for event hour *h;*

n = Total number of participants;

hours = total number of event hours;

$Baseline\ kW_{ih}$ = Baseline kW for participant *i* during event hour *h*.

$Actual\ kW_{ih}$ = Actual kW for participant *i* during event hour *h*.

The Evaluators also calculated the Average kW Savings per Event per Device as shown in the following equation:

$$Average\ kW\ Savings\ per\ Event\ per\ Device = Average\ kW\ Savings\ per\ Event\ per\ Participant * (\frac{Number\ of\ Devices}{Number\ of\ Participants})$$

12.3.2 NET IMPACT METHODOLOGIES

In demand response programs, it is typically assumed that there are neither spillover nor free-ridership effects (customers are not expected to curtail without participating). Furthermore, participants are compensated only if they reduce their load during the peak demand window, the primary program goal. As such, the net-to-gross ratio for this program is assumed to be 100%.

12.4 Evaluation Findings

The Evaluators determined that 17% of BYOT participants were also enrolled in the Peak Time Rebate (PTR) Pilot program; therefore, savings were adjusted for cross participation. Savings for cross participants were adjusted to avoid double counting impacts across the two DR programs. The method of adjusting savings for cross participation is detailed in the Gross Impact Methodologies section.

The Evaluators defined two measure types for the BYOT program: 1) BYOT-only, representing participants that are only enrolled in the BYOT program, and 2) PTR-BYOT, representing BYOT participants that are dual enrolled in the PTR program.

One small DR Pilots ran concurrently with BYOT in PY14, the Electric Vehicle (EV) Charging Pilot, and it showed some cross participation with BYOT. However, for the EV Charging Pilot, there are no demand response events for the program and the Evaluators estimated peak demand impacts for the EV Charging Pilot utilizing days when no demand response events were called. In addition, for BYOT and EV Pilot cross participants, the BYOT baselines incorporate any impacts from the EV Pilot so there is no need to adjust either program for cross participation.

TABLE 12-9 EVENT DATES AND TIMES

Event Dates	Event Times (CDT)
7/2/2024	4:00-6:00
8/1/2024	5:00-7:00
8/7/2024	4:00-6:00
8/9/2024	4:00-6:00
8/14/2024	5:00-7:00

12.4.1 LOAD SHAPES AND MODEL PERFORMANCE

The figures below are average load shapes for each subgroup on proxy and event days and depict actual kW and baseline kW for the selected baseline model. The figures show that baseline kW is a good match for actual kW during the hours of curtailment on most proxy days.

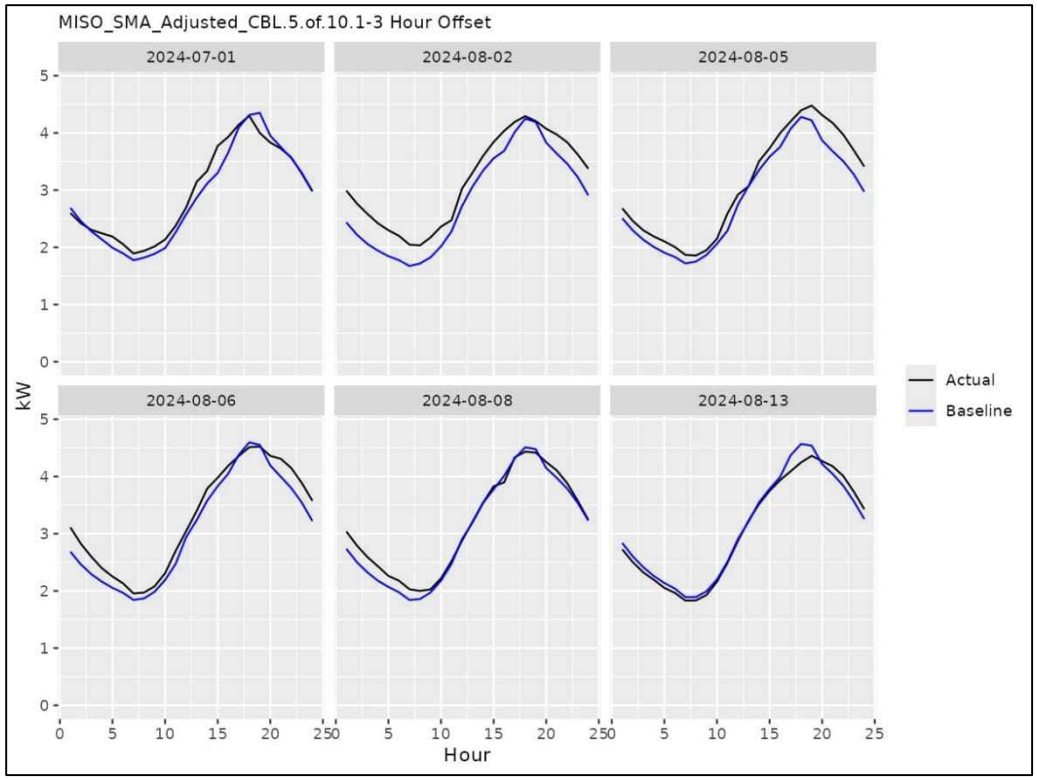


FIGURE 12-1 EASYCOOL BYOT PROXY DAY LOAD SHAPES, BYOT-ONLY

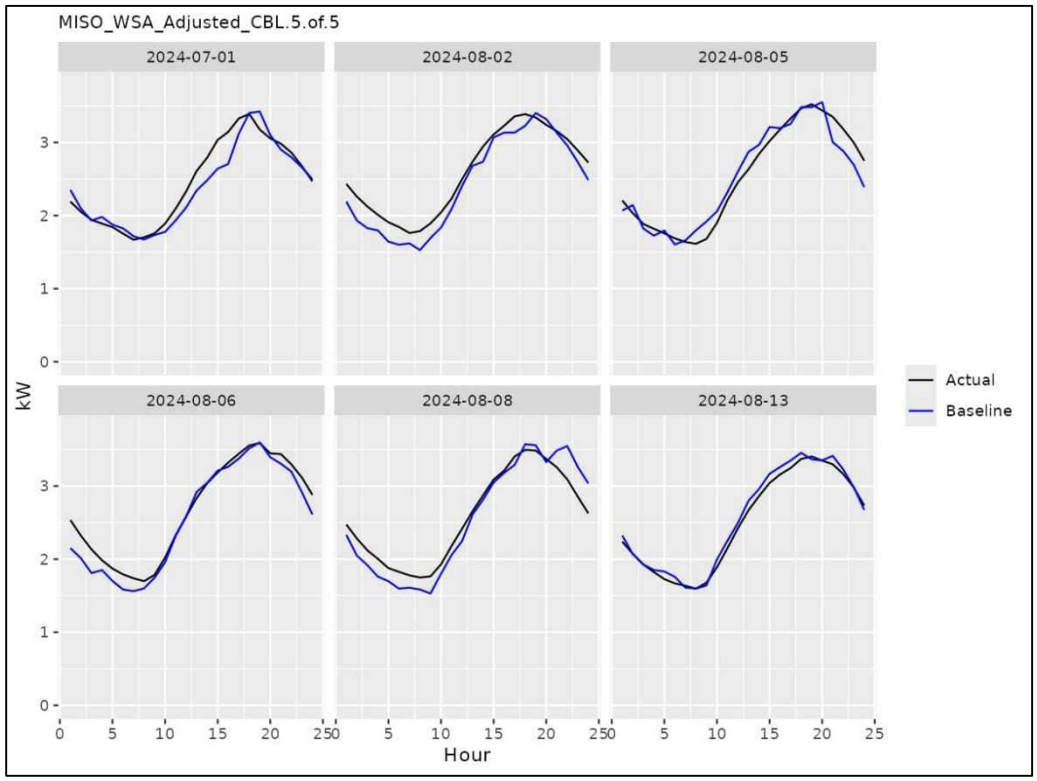


FIGURE 12-2 EASYCOOL BYOT PROXY DAY LOAD SHAPES, PTR-BYOT CROSS PARTICIPANTS

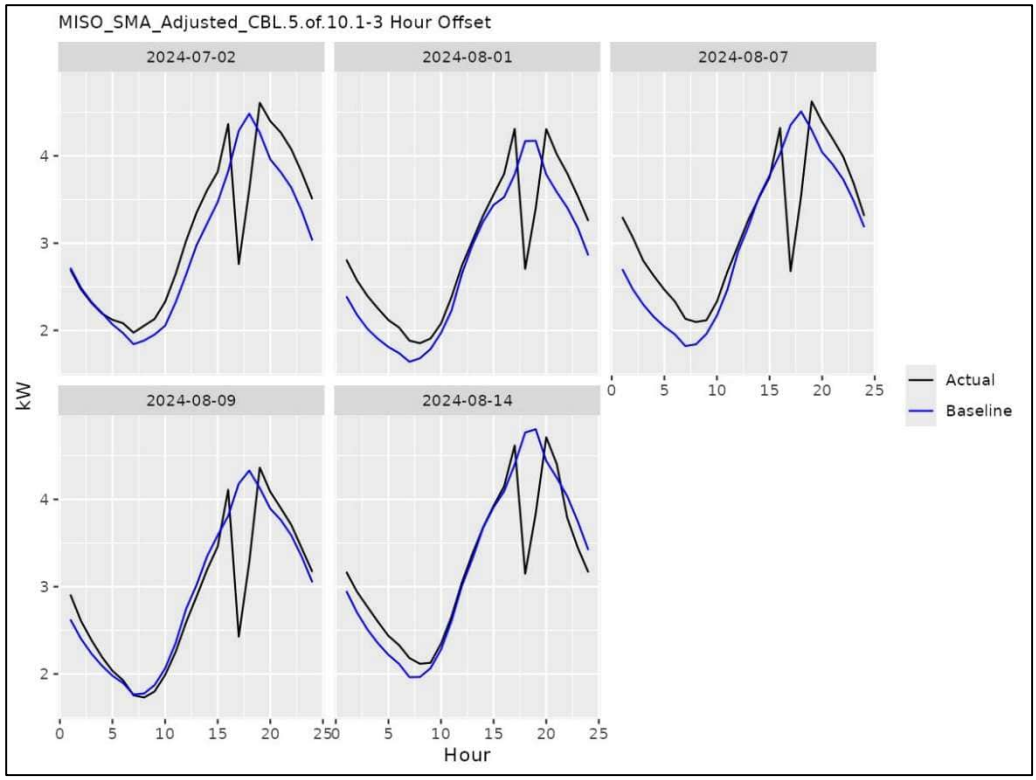


FIGURE 12-3 EASYCOOL BYOT EVENT DAY LOAD SHAPES, BYOT-ONLY

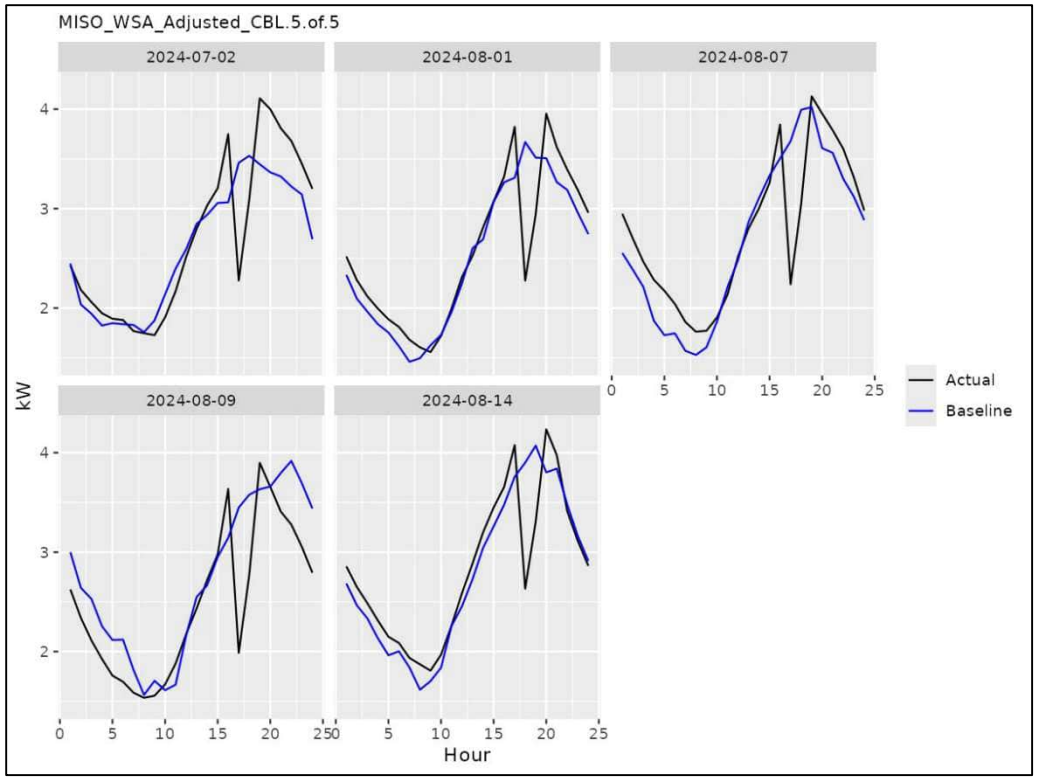


FIGURE 12-4 EASYCOOL BYOT EVENT DAY LOAD SHAPES, PTR-BYOT CROSS PARTICIPANTS

The Evaluators estimated bias and error for the Evaluators MISO models across all sites and when applied on a site-specific basis and selected for the model with the lowest bias.

TABLE 12-10 MODEL FIT AND BIAS

Measure (Cohort)	Model	Follow MISO Protocols	RRMSE	Bias	Selected Model
DR Participation: BYOT-only	MISO_SMA_Adjusted_CBL.5.of.10	X	0.038	0.78%	X
DR Participation: BYOT-only	MISO_WSA_Adjusted_CBL.5.of.5	X	0.038	-0.92%	
DR Participation: BYOT-only	MISO_Unadjusted_CBL.5.of.10	X	0.062	-2.37%	
DR Participation: BYOT-only	MISO_SMA_Adjusted_CBL.5.of.5	X	0.087	-7.15%	
DR Participation: BYOT-only	MISO_WSA_Adjusted_CBL.5.of.10	X	0.096	8.50%	
DR Participation: BYOT-only	MISO_Unadjusted_CBL.5.of.5	X	0.127	-10.57%	
DR Participation: PTR-BYOT	MISO_WSA_Adjusted_CBL.5.of.5	X	0.034	-0.45%	X
DR Participation: PTR-BYOT	MISO_Unadjusted_CBL.5.of.10	X	0.058	-1.16%	
DR Participation: PTR-BYOT	MISO_SMA_Adjusted_CBL.5.of.10	X	0.040	1.50%	
DR Participation: PTR-BYOT	MISO_SMA_Adjusted_CBL.5.of.5	X	0.081	-6.63%	
DR Participation: PTR-BYOT	MISO_WSA_Adjusted_CBL.5.of.10	X	0.102	9.40%	
DR Participation: PTR-BYOT	MISO_Unadjusted_CBL.5.of.5	X	0.119	-9.75%	

12.4.2 GROSS IMPACT FINDINGS

Using results from the CBLs, the Evaluators calculated the PY14 kW reduction. Results are shown below in the table below.

TABLE 12-11 TOTAL GROSS EASYCOOL BYOT DEMAND REDUCTIONS

Measure	Average Savings per Event per Unit (kW)	Average Savings per Event per Participant (kW)	Number of Units	Number of Participants	Total Program kW Reduction
DR Participation: BYOT-only	0.97290	1.27295	5,504	4,207	5,354.80
DR Participation: PTR-BYOT	0.77970	1.02017	1,150	879	896.32
Total	**0.93952**	**1.22928**	**6,654**	**5,085**	**6,251.12**

The overall verified kW reduction is 6,251.12 kW.

The average savings for the PTR-BYOT cohort shown in the table above were adjusted for cross participation with the PTR program, as detailed in section 12.3.1.5. PTR participants without cross participation (i.e., PTR-only) showed average savings per event per participant of 0.27138 kW.

12.4.3 NET IMPACT FINDINGS

For demand response programs, net savings equals gross savings.

TABLE 12-12 TOTAL EASYCOOL BYOT NET DEMAND REDUCTION RESULTS

Gross kW Reduction	Net-to-Gross Ratio	Net Demand Reduction
6,251.12	100%	6,251.12

Program results can be found in tables in Section 12.1.

12.4.4 NON ENERGY BENEFITS FINDINGS

There were no NEBs identified in this program.

12.4.5 PROCESS FINDINGS

The Evaluators conducted a limited process evaluation of the EasyCool program in PY14 of the program.

12.4.5.1 Staff and Implementer Interviews

The following section summarizes the key findings from in-depth interviews with two ENO program staff, one Aptim staff, and one EnergyHub staff; ENO staff participated in one interview and Aptim and EnergyHub staff participated in a second interview. These in-depth interviews aimed to learn more about EasyCool Residential BYOT program design and operations, and the successes and challenges experienced during PY14. Interviews lasted approximately 30 minutes and were conducted using the Microsoft Teams platform. The evaluators recorded all interviews with participant permission. The following narrative summarizes these interviews.

12.4.5.1.1 *Program Design and Implementation*

The EasyCool Residential 'Bring Your Own Thermostat' (BYOT) program targets residential customers who want to participate in demand response events using their smart thermostat. Initially, the program also included small business customers, but due to low participation in this sector, staff shifted their focus exclusively to residential customers.

Customers enroll in the program via their smart thermostat app or the EasyCool website. They receive a $50 enrollment incentive and $25 for each event they participate in. Customers who remain enrolled year after year receive a $25 continued enrollment incentive.

Customers do not need to take any action to participate in demand response events, as smart thermostats are adjusted remotely. However, they have the option to opt out through a system override. Events typically last two to four hours and involve thermostat adjustments of approximately three degrees. Each event is preceded by a 30-minute precooling period.

The program limits events to a maximum of 15 per season, though, on average, five to eight events occur annually. Participants receive pre-event notifications about 30 minutes before the scheduled event via their thermostat or thermostat application. Additional information is available on the EnergySmart website.

All participants receive an annual $25 bonus regardless of the number of events they participate in, with a minimum requirement of one event per year.

In addition to marketing conducted by the smart thermostat brands themselves, Entergy New Orleans promotes the program to customers who purchase smart thermostats through the online marketplace, making it easy for these customers to enroll in the program when they purchase the thermostat. In general, most customers enroll in the program through their smart thermostat brand, rather than through Entergy New Orleans marketing.

12.4.5.1.2 *Program Goals*

The program operates on a rolling enrollment basis, with a goal of enrolling 2,000 new customers. As of Fall 2024, 1,386 new customers enrolled according to staff, falling short of the target. In addition, ADM's review of program tracking data found 334 new accounts in PY14 compared to PY13 tracking data. Staff noted that enrollment has slowed over the three-year period, but this trend is typical for programs of this nature.

The program's energy savings goal is flexible, as potential savings depend on the number of events held each year. Staff also explained that energy savings tend to be highest at the beginning of an event but gradually decline as some customers choose to opt out over time.

12.5 Data Tracking Review

The Evaluators were able to perform the analysis as planned once advanced metering infrastructure (AMI) data was provided. The Evaluators found that roughly 85% of participants had AMI data during the evaluation period. ENO found that this occurred due to participants with inactive accounts. All participants in the participant data that were not present in the AMI data were removed from the analysis when extrapolating kW reduction impacts.

12.6 Key Findings and Recommendations

Key findings:

- Shift to Residential Focus: Staff noted that the program initially included small businesses but was refocused on residential customers due to low participation in the business sector. Most enrollments occur through smart thermostat brands rather than Entergy New Orleans marketing.
- Enrollment and Energy Savings Trends: Staff reported that while the program aims for 2,000 new customers, enrollment has slowed over time, a trend typical for similar programs. Energy savings vary by event frequency, with higher savings at the start of events, gradually declining as some participants opt out.

Recommendations:

- Sustain Enrollment Efforts: If increasing participation remains a priority, staff could explore ways to enhance direct outreach beyond smart thermostat brand marketing. This could include targeted emails to eligible customers, incentives for referring new participants, or integrating enrollment prompts into other Entergy New Orleans customer interactions, such as bill inserts or online account dashboards.
- Optimize Event Engagement: If reducing opt-outs is a concern, staff could explore refining pre-cooling strategies, such as increasing the pre-cool period for homes with higher cooling demands. Additionally, offering a tiered incentive structure—where customers who participate in a higher percentage of events receive an additional bonus—may encourage more consistent engagement.

The following summarizes the key findings from the PY13 evaluation.

- Attainment of Demand Reduction Target: The program achieved 53.9% of its *ex post* gross demand reduction target, indicating significant progress towards its overarching goal of reducing demand on the grid. This achievement underscores the effectiveness of the program's strategies and initiatives in incentivizing energy conservation and efficiency among participants.
- Increase in Program Participation: The addition of 334 new participants in PY14 reflects a slight 7% increase in program participation compared to previous years. This increase in participation demonstrates continued awareness and interest among consumers in engaging with energy efficiency programs, highlighting the program's success in expanding its reach and impact.
- AMI Data and Participant Tracking: Approximately 15% of BYOT participants were identified as lacking Advanced Metering Infrastructure (AMI) data, indicating potential discrepancies in participant tracking and data management. The evaluation highlights the importance of ensuring comprehensive data collection and tracking mechanisms to accurately assess program performance and participant engagement.
- Cross Participation and Savings Adjustments: A notable proportion (17%) of BYOT participants exhibited cross participation with the Peak Time Rebate (PTR) program, necessitating adjustments in savings calculations to account for overlapping participation and avoid double-counting of energy savings. This finding underscores the importance of refining evaluation methodologies to accurately quantify program impacts in the presence of participant overlap.

The Evaluators have the following recommendations after completing the PY14 evaluation.

All the recommendations from PY13 were adopted by ENO in PY14 and greatly improved the accuracy of savings estimates for the program. The Evaluators continue to offer the same recommendations provided in PY13 to ensure continuity in future program years.

- Alignment of Demand Response Event Times: It is recommended to synchronize the start and end times of demand response events for customers with cross participation in multiple programs. This alignment ensures consistency in measuring savings impacts across programs and minimizes distortions in baseline models caused by overlapping event schedules. DR event times were aligned in PY14, and the Evaluator is repeating this recommendation to highlight its importance in future program years.
- Commencement of Events on the Hour: When hourly interval Advanced Metering Infrastructure (AMI) data is available, demand response events should commence and conclude on the hour. This practice ensures precise measurement of energy reductions by aligning event durations with the hourly intervals captured in the data, facilitating accurate assessment of program effectiveness. DR events commenced on the hour in PY14, and the Evaluator is repeating this recommendation to highlight its importance in future program years.
- Aggregation of Interval AMI Data: Interval AMI data should be aggregated to the hourly level based on the hour-ending datetime. By adhering to this aggregation method, program administrators can maintain accuracy in usage measurement, avoiding inconsistencies or errors associated with aggregating data across multiple hours. Interval AMI data was aggregated per the recommendations, and the Evaluator is repeating this recommendation to highlight its importance in future program years.
- Monitoring of Event Frequency: Implementers of demand response programs with cross participants should monitor the frequency of events called across all programs within a sector, particularly residential programs. This monitoring helps preserve the availability of proxy days used for testing baseline models, ensuring robust evaluation methodologies and accurate assessment of program impacts. The Evaluator is repeating this recommendation to highlight its importance in future program years.
- Consideration of Event Scheduling: To mitigate potential reductions in available proxy days due to excessive event scheduling, it is advisable to consider calling events for residential demand response programs on the same dates. By aligning event schedules, program administrators can optimize the use of proxy days and maintain the integrity of baseline models, facilitating comprehensive program evaluation and analysis. The Evaluator is repeating this recommendation to highlight its importance in future program years.

13 PEAK TIME REBATE PILOT

13.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, incentive spend, and *ex post* net NEBs, by measure, where applicable.

TABLE 13-1 PY14 PTR ENERGY SAVINGS (KWH)

Measure	*Ex ante* Gross Savings (kWh)	Realization Rate (kWh)	*Ex post* Gross Savings (kWh)	NTG	*Ex post* Net Savings (kWh)
DR Participation: PTR-only	0	N/A	10,887	N/A	10,887
DR Participation: PTR-BYOT	0	N/A	1,910	N/A	1,910
Total	**0**	**N/A**	**12,796**	**N/A**	**12,796**

Sums may differ due to rounding.

TABLE 13-2 PY14 PTR DEMAND REDUCTIONS (KW)

Measure	*Ex ante* Gross Demand (kW)	Realization Rate (kW)	*Ex post* Gross Demand (kW)	NTG	*Ex post* Net Demand Reductions (kW)
DR Participation: PTR-only	0.00	N/A	1,091.42	100%	1,091.42
DR Participation: PTR-BYOT	0.00	N/A	191.08	100%	191.08
Total	**0.00**	**N/A**	**1,282.51**	**100%**	**1,282.51**

Sums may differ due to rounding.

TABLE 13-3 PY14 PTR LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex post* Gross Lifetime Energy Savings (kWh)	*Ex post* Net Lifetime Energy Savings (kWh)
DR Participation: PTR-only	1	10,886.58	10,886.58
DR Participation: PTR-BYOT	1	1,909.58	1,909.58
Total	**1**	**12,796.16**	**12,796.16**

Sums may differ due to rounding.

TABLE 13-4 PY14 PTR PARTICIPATION AND INCENTIVE SUMMARY

Measure	Participation (Count of Measures)	Incentive Spend ($)
DR Participation: PTR-only	4,022	$67,380
DR Participation: PTR-BYOT	879	$14,720
Total	**4,900**	**$82,100**

Sums may differ due to rounding.

TABLE 13-5 PY14 PTR NEB SUMMARY

Measure	*Ex post* Net ARCs ($)	*Ex post* Net Water Savings (gallons)	*Ex post* Net Avoided Arrearages
DR Participation: PTR-only	$0	0	$0
DR Participation: PTR-BYOT	$0	0	$0
Total	**$0**	**0**	**$0**

Sums may differ due to rounding.

13.2 Program Description

The Peak Time Rebate (PTR) offering provides incentives to residential customers for reducing their energy usage during short periods of high electricity usage. The offer was made available on a limited basis to the first customers to sign up during the Pilot phase.

Customers enrolled in the PTR pilot receive an email notification to reduce energy usage during short periods of high electricity usage, also known as peak demand events. The email shares tips on how to electric usage during peak demand events. A maximum of 15 demand response events are called in a year.

- Enrolled customers receive the following:
- An email at least 24 hours in advance of a scheduled peak demand event with the date and time of the event.
- An email at the start of the event with specific recommendations on how to reduce electricity usage.
- An email at the end of the event, letting them know the event has ended.
- An email after peak season, totaling energy saved across the peak demand events and the amount of the earned cash incentive.
- A check in the mail for the total incentive earned.
    - Standard savers: $20
    - High savers: $50

The pilot was fully subscribed in PY14.

13.2.1 PROGRAM CHANGES

PY13 was the first year for the PTR offering. In PY13, the incentive savers categories were Low ($10), Medium ($20), and High ($50), while in PY14, the incentive savers categories were Standard ($20) and High ($50).

13.2.2 TIMING OF PROJECTS

Enrollment in the program occurred primarily between May and August in PY14, as shown in the table below.

TABLE 13-6 NUMBER OF NEW ENROLLMENTS BY MONTH

Enrollment Month	Number of Enrollments
May, 2024	837
June, 2024	1507
July, 2024	258
Aug, 2024	125
Sept, 2024	3
Total	**2,730**

13.2.3 TRADE ALLIES

There were no reported trade allies in this program.

13.2.4 GOAL ACHIEVEMENT

The table below summarizes the programs' performance against goal.

TABLE 13-7 PTR PERFORMANCE TOWARDS GOAL

Ex post Gross Energy Savings (kWh) Goal	% to kWh Goal	*Ex post* Gross Energy Savings (kWh)	*Ex post* Gross Savings (kW) Target	% to kW Target	*Ex post* Gross Savings (kW)
0	N/A	0	998.00	128%	1,282.51

13.3 EM&V Methodology

The Evaluators employed the following approach to complete impact evaluation activities for the program. The Evaluator followed the Calculated Baseline approach outlined in the Midcontinent Independent System Operator, Inc. (MISO) Business Practices Manual (BPM)[11]. The following impact evaluation steps were taken to determine the suitability of the MISO Calculated Baseline approach:

[11] *Ibid.*

- Developed an Unadjusted Consumption (UC) Baseline, a Symmetric Multiplicative Adjustment (SMA) Baseline, and a Weather Sensitive Adjustment (WSA) Baseline for each program participant. Loads were calculated utilizing 1-hour AMI data.
- Determined days that will serve as proxy days for testing the suitability of the baseline approach. Proxy days represent days like demand response event days in terms of load shape and temperature profiles.
- Estimated bias (uncertainty) and error on proxy days for each model to assess baseline performance. Bias is assessed by examining the average percent error of the baseline predictions relative to the actual usage on proxy days. In a similar manner, error is assessed through various metrics such as Root Mean Squared Error (RRMSE) using baseline predictions and actual usage on proxy days.
- Selected the baseline model with the lowest absolute bias.

13.3.1GROSS IMPACT METHODOLOGIES

In the evaluation of demand response programs, energy savings are estimated by comparing a participant's load shape during a demand response event with a baseline load shape. This baseline load is assumed to be a good estimate of the counterfactual load—that is, the load that would have manifested had there not been an event called that day.

13.3.1.1 Data Sources

Data used for this evaluation include program tracking data that identifies which customers participated in the program and contains data fields such as hourly usage, hourly interval meter data (AMI) for each customer participating in the program, and a full schedule of DR program events, including the time of the event.

13.3.1.2 MISO Calculated Baseline Approach (Customer Baselines)

The following details the general requirements for the MISO Calculated Baseline Approach. The Evaluators developed Customer Baselines (CBLs) in accordance with this approach. For a demand resource, the Consumption Baseline is a profile of hourly demand based on an averaged sample of historical data which may be adjusted for factors that reflect specific, on-the-day conditions, such as temperature.

The default consumption baseline is designed as follows:

- Separate hourly demand profiles for non-holiday weekdays and for weekends/holidays
- The "weekday" hourly profile is based on the average of the ten (10), but not less than five (5), most recent weekdays that are not holidays or other non-standard "event" days
- The "weekend/holiday" hourly profile is based on the average of the four (4), but not less than two (2), most recent weekend days or holidays that are not "event" days
- An "event" day is one during which there was, for the resource in question, a real- time energy or ancillary services dispatch, or a scheduled outage
- The maximum look-back window is limited to 45 days
- If the 45-day window contains insufficient days to meet the minimum number of days described above, the profiles are constructed based on the available days within the 45-day window that qualify, supplemented by the largest (MW) matching "event" day(s) values for that resource within that same window as necessary to obtain the minimum number of values.

Adjustment mechanisms to the default Consumption Baseline include:

- Symmetric Multiplicative Adjustment (SMA)
  - Adjusts each baseline hourly value (MW) during the event up or down by the ratio of
  - (a) the sum of hourly demands for the three hours beginning four hours prior to the event and (b) the sum of those same three hourly baseline demands
  - The adjustment is limited to a change in any individual baseline hour of plus or minus 20 percent.
  - If multiple events occur during the same day, the SMA is calculated only for the first event, but applied to all events that day.
- Weather Sensitive Adjustment (WSA)
  - Adjusts each baseline hourly value (MW) up or down by a Weather Adjustment Factor
  - The Weather Adjustment Factor is determined by a mathematical relationship derived through a regression analysis that considers the DRR load and historical hourly temperature data.

13.3.1.3 Evaluators MISO Models

The following CBL models were developed for each customer in accordance with MISO protocols.

For a 5-of-10 (or 5-of-5) unadjusted baseline, the Evaluators examine the load data from the most recent ten (or five) non-event, non-holiday weekdays relative to the event day and calculate the mean demand usage values of the five highest load days. This baseline is then adjusted for the SMA and WSA models utilizing the method described in Section 13.3.1.2.

TABLE 13-8 EVALUATORS' MISO CBL MODELS

Model Type	Baseline Days	SMA	WSA
Unadjusted	5-of-10	No	No
SMA-Adjusted	5-of-10	Yes	No
WSA-Adjusted	5-of-10	No	Yes
Unadjusted	5-of-5	No	No
SMA-Adjusted	5-of-5	Yes	No
WSA-Adjusted	5-of-5	No	Yes

13.3.1.4 Baseline and Proxy Day Development

The Evaluators defined proxy days as the top eight non-event, non-holiday, non-weekend days with the highest loads across all summer months. In addition, proxy days must display a maximum temperature of greater than or equal to the minimum temperature observed during normal curtailment hours during the events. The Evaluators used these defined proxy days to determine the ability of CBL models to predict actual usage for each customer.

13.3.1.5 Cross Program Participation Adjustments

Customers who participate in multiple demand response programs will have double counted savings if the savings estimates are not adjusted in each program where cross participation occurs. For some DR programs, the source of curtailment for the respective DR programs is fully independent, such as for the Battery Energy Storage System (BESS) Pilot program and the BYOT program (battery storage versus smart thermostat). When

the curtailment source is independent between two DR programs, cross participants for the two programs are removed during the impact estimation. The per unit or per account savings reductions are then extrapolated to the full population. For example, removing customers with dual enrollment in BYOT and BESS ensures that the BYOT-only savings estimates does not include impacts from the BESS program. In PY14, BESS events were called after all the BYOT events, therefore, adjusting for cross participation with BESS was not needed.

For other DR programs, the curtailment source driving the demand response impact overlaps, such as for BYOT and PTR, where both programs may both involve curtailment of cooling loads. In this case, a savings estimate was developed for participants with and without cross participation. The savings for those with cross participation was adjusted using the savings for those without cross participation in the respective programs, according to the following equation:

$$Cross\ Participant\ kW\ Reduction\ for\ PTR\ Program\ (PTR-BYOT\ Cohort) = Average\ kW\ Reduction\ (PTR-BYOT) * ((Average\ kW\ Reduction\ (PTR-only))/ (Average\ kW\ Reduction(BYOT-only) + Average\ kW\ Reduction\ (PTR-only))$$

Where:

$Average\ kW\ Reduction\ (PTR-BYOT)$ = Average estimated kW reduction for participants in both PTR and BYOT.

$Average\ kW\ Reduction\ (BYOT-only))$ = Average estimated kW reduction for participants in BYOT only.

$Average\ kW\ Reduction\ (PTR-only))$ = Average estimated kW reduction for participants in PTRonly.

The adjustment for the PTR-BYOT cross participant savings estimate reflects the percentage share of the PTR-only savings estimate out of the total savings for BYOT-only and PTR-only combined. A separate adjustment following similar logic occurs in the BYOT program to remove overlapping savings between BYOT and PTR cross participants.

13.3.1.6 Cohort Creation

The Evaluators created the following cohorts for the PTR Pilot in PY14. Participants without AMI data during DR events (approximately 5.1% of participants) were considered to have inactive accounts and were excluded from the extrapolation of estimated savings.

TABLE 13-9 PTR MEASURES

Measure (Cohort)	Total Number of Accounts in Participant Data	Number of Accounts with AMI Data
DR Participation: PTR-only	4,237	4,022
DR Participation: PTR-BYOT	926	879
Total	**5,163**	**4,900**

13.3.1.7 Savings Calculations and Extrapolation

The Evaluators estimated the Average kW Savings per Event per Participant using participants with complete AMI data during all events. The estimate is extrapolated and weighted based on the number of participants with AMI data on each demand response event date.

The Average kW Savings per Event per Participant is the average kW reduction for each participant across all demand response events in the season, as shown in the equations below.

$$Average\ kW\ Savings\ per\ Event\ per\ Participant = (\sum_{i=1}^{n} Average\ kW\ Reduction\ per\ Event_i)\ /n$$

$$Average\ kW\ Reduction\ per\ Event_i = (\sum_{h=1}^{hours} (Baseline\ kW_{ih} - Actual\ kW_{ih}))/hours$$

Where,

i = an indicator for participant *i*;

h = indicator for event hour *h;*

n = Total number of participants;

hours = total number of event hours;

$Baseline\ kW_{ih}$ = Baseline kW for participant *i* during event hour *h*.

$Actual\ kW_{ih}$ = Actual kW for participant *i* during event hour *h*.

The Evaluators also calculated the Average kW Savings per Event per Device as shown in the following equation:

$$Average\ kW\ Savings\ per\ Event\ per\ Device = Average\ kW\ Savings\ per\ Event\ per\ Participant * (\frac{Number\ of\ Devices}{Number\ of\ Participants})$$

13.3.2 NET IMPACT METHODOLOGIES

In demand response programs, it is typically assumed that there are neither spillover nor free-ridership effects (customers are not expected to curtail without participating). Although customers can find workarounds to make up for lost productivity due to demand response events, they are compensated only if they reduce their load during the peak demand window, the primary program goal. As such, the net-to-gross ratio for this program is assumed to be 100%.

13.4 Evaluation Findings

The Evaluators determined that 18% of PTR participants were also enrolled in the EasyCool BYOT program; therefore, savings were adjusted for cross participation. Savings for cross participants were adjusted to avoid double counting impacts across the two DR programs. The method of adjusting savings for cross participation is detailed in the Gross Impact Methodologies section.

The Evaluators defined two measure types for the PTR pilot: 1) PTR-only, representing participants that are only enrolled in the PTR pilot, and 2) PTR-BYOT, representing PTR participants that are dual enrolled in the BYOT program.

One small DR Pilot ran concurrently with BYOT in PY14, the Electric Vehicle (EV) Charging Pilot, and it showed some cross participation with BYOT. However, for the EV Charging Pilot, there are no demand response events for the program and the Evaluators estimated peak demand impacts for the EV Charging Pilot utilizing days when no demand response events were called. In addition, for BYOT and EV Pilot cross participants, the BYOT baselines incorporate any impacts from the EV Pilot so there is no need to adjust either program for cross participation.

In future programs years, the PTR program may need to adjust for cross participation with the BESS program in the same way the PTR pilot adjusts for cross participation with the BYOT program if BESS events are called on the same event days as PTR events. In PY14, BESS events were called later in the year than PTR events and no cross-participation adjustment was needed.

TABLE 13-10 EVENT DATES AND TIMES

Event Dates	Event Times (CDT)
7/2/2024	4:00-6:00
8/1/2024	5:00-7:00
8/7/2024	4:00-6:00
8/9/2024	4:00-6:00
8/14/2024	5:00-7:00

13.4.1 LOAD SHAPES AND MODEL PERFORMANCE

The figures below are average load shapes for each subgroup on proxy and event days and depict actual kWh and baseline kWh for the selected baseline model. The figures show that baseline kWh is a good match for actual kWh during the hours of curtailment on most proxy days.

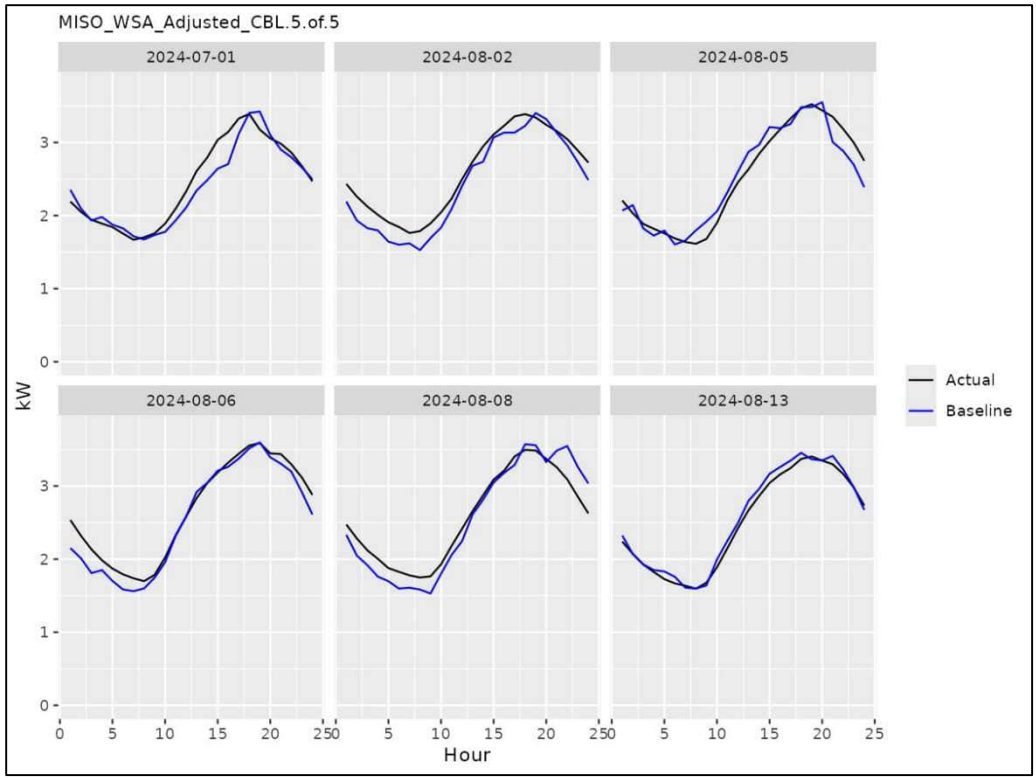


FIGURE 13-1 PTR PROXY DAY LOAD SHAPES, PTR-ONLY

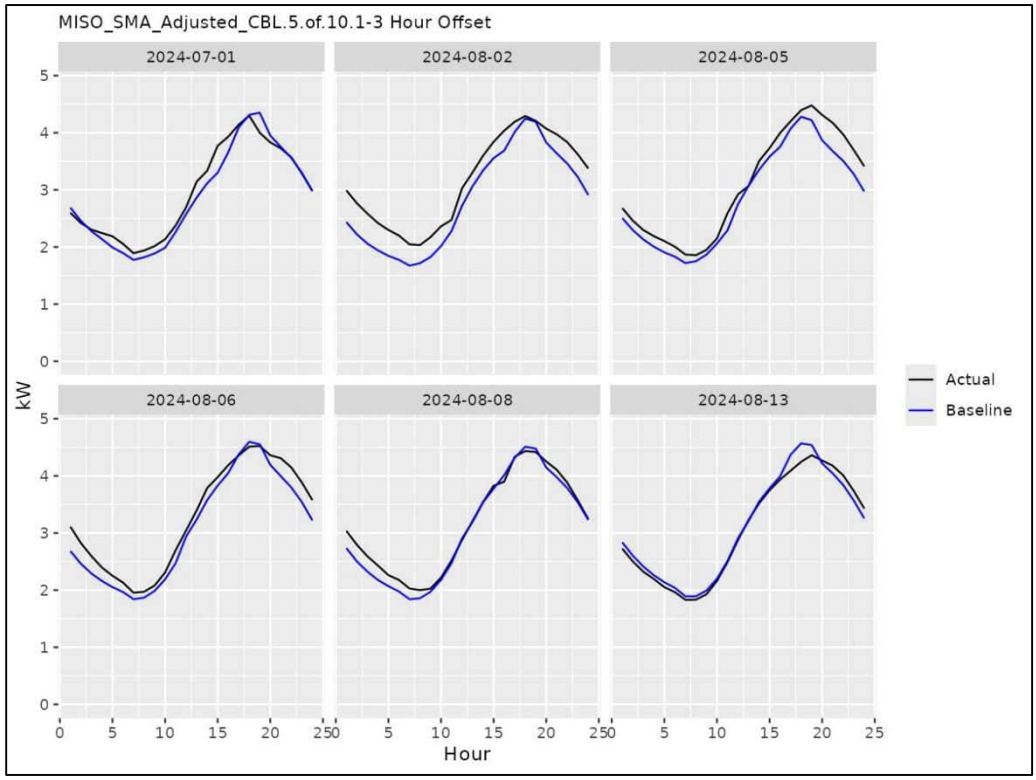


FIGURE 13-2 PTR PROXY DAY LOAD SHAPES, PTR-BYOT CROSS PARTICIPANTS

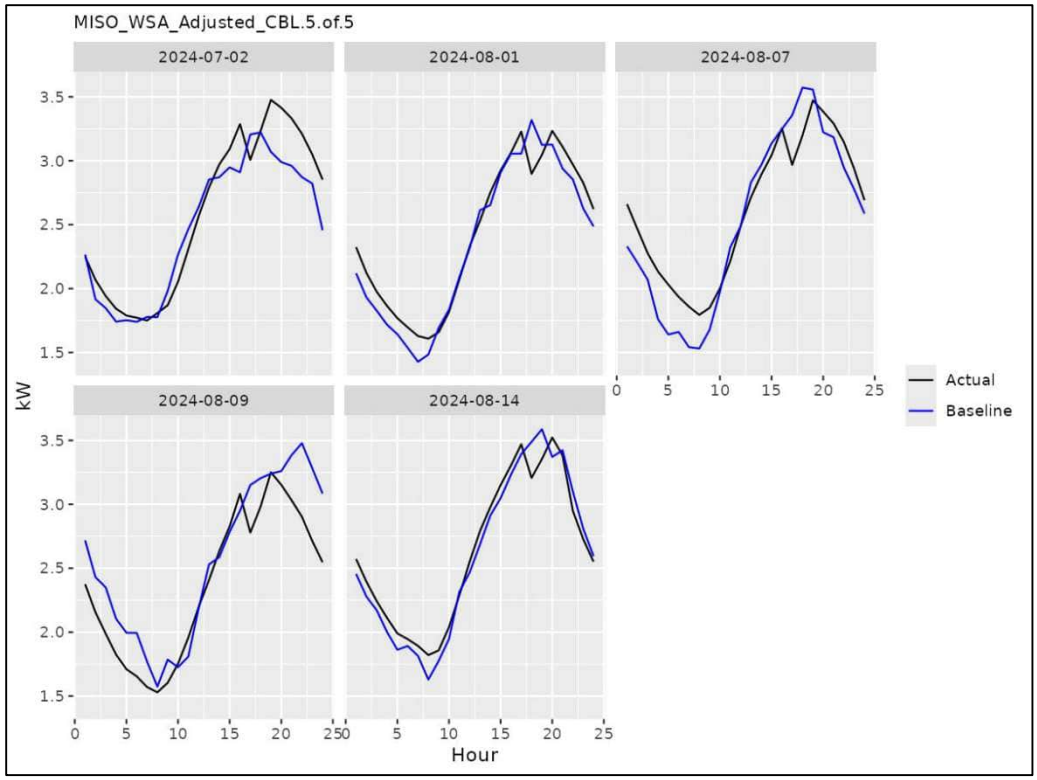


FIGURE 13-3 PTR EVENT DAY LOAD SHAPES, PTR-ONLY

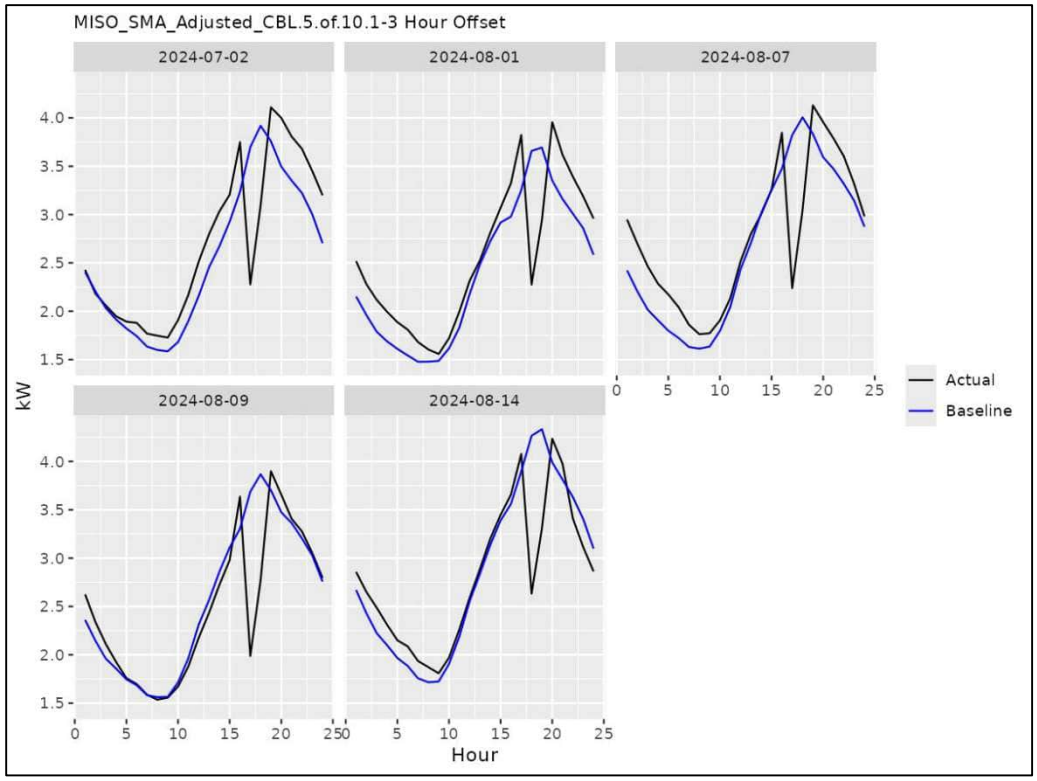


FIGURE 13-4 PTR EVENT DAY LOAD SHAPES, PTR-BYOT CROSS PARTICIPANTS

The Evaluators estimated bias and error for the Evaluators MISO models across all sites and when applied on a site-specific basis and selected for the model with the lowest bias.

TABLE 13-11 MODEL FIT AND BIAS

Measure (Cohort)	Model	Follow MISO Protocols	RRMSE	Bias	Selected Model
DR Participation: PTR-BYOT	MISO_SMA_Adjusted_CBL.5.of.10	X	0.038	0.78%	X
DR Participation: PTR-BYOT	MISO_WSA_Adjusted_CBL.5.of.5	X	0.038	-0.92%	
DR Participation: PTR-BYOT	MISO_Unadjusted_CBL.5.of.10	X	0.062	-2.37%	
DR Participation: PTR-BYOT	MISO_SMA_Adjusted_CBL.5.of.5	X	0.087	-7.15%	
DR Participation: PTR-BYOT	MISO_WSA_Adjusted_CBL.5.of.10	X	0.096	8.50%	
DR Participation: PTR-BYOT	MISO_Unadjusted_CBL.5.of.5	X	0.127	-10.57%	
DR Participation: PTR-only	MISO_WSA_Adjusted_CBL.5.of.5	X	0.034	-0.45%	X
DR Participation: PTR-only	MISO_Unadjusted_CBL.5.of.10	X	0.058	-1.16%	
DR Participation: PTR-only	MISO_SMA_Adjusted_CBL.5.of.10	X	0.040	1.50%	
DR Participation: PTR-only	MISO_SMA_Adjusted_CBL.5.of.5	X	0.081	-6.63%	
DR Participation: PTR-only	MISO_WSA_Adjusted_CBL.5.of.10	X	0.102	9.40%	
DR Participation: PTR-only	MISO_Unadjusted_CBL.5.of.5	X	0.119	-9.75%	

13.4.2 GROSS IMPACT FINDINGS

Using results from the CBLs, the Evaluators calculated the PY14 kW reduction. Results are shown below in the table below.

TABLE 13-12 TOTAL GROSS PTR DEMAND REDUCTIONS

Measure	Average Savings per Event per Participant (kW)	Number of Participants	Total Program kW Reduction
DR Participation: PTR-only	0.271377	4,022	1,091.42
DR Participation: PTR-BYOT	0.217486	879	191.08
Total	**0.261715**	**4,900**	**1,282.51**

The overall verified kW reduction is 200.46 kW.

The average savings for the PTR-BYOT cohort shown in the table above were adjusted for cross participation with the BYOT program, as detailed in section 12.3.1.5. BYOT participants without cross participation (i.e., BYOT-only) showed average savings per event per participant of 1.27 kW.

Table 13-13 provides the gross demand reductions per event for the PTR-only cohort. While there is significant day-to-day variation in the demand reductions due to the small treatment impact, the average demand reduction impact across event days is an unbiased estimate.

TABLE 13-13 GROSS DEMAND REDUCTIONS PER EVENT

Measure (Cohort)	Event Date	Average Savings per Event per Participant (kW)	Number of Participants	Total Program kW Reduction
DR Participation: PTR-only	7/2/2024	0.25562	4,078	1,042.42
DR Participation: PTR-only	8/4/2023	0.20216	4,027	814.08
DR Participation: PTR-only	8/8/2023	0.26985	4,007	1,081.28
DR Participation: PTR-only	8/9/2023	0.32237	4,003	1,290.43
DR Participation: PTR-only	8/10/2023	0.30769	3,994	1,228.92

13.4.3 NET IMPACT FINDINGS

For demand response programs, net savings equals gross savings.

TABLE 13-14 TOTAL EASYCOOL BYOT NET DEMAND REDUCTION RESULTS

Gross kW Reduction	Net-to-Gross Ratio	Net Demand Reduction
1,282.51	100%	1,282.51

13.4.4 NON ENERGY BENEFITS FINDINGS

There were no NEB identified in this program.

13.4.5 SAVER TYPE COMPARISON

The Evaluators provided the implementer with kWh savings estimates for each participant in PY14, adjusted for cross participation. As such, there were no differences in saver types between ex ante and ex post. This ensured that participants were paid incentives using the best fitting baseline model to avoid under or over payment of incentives.

13.4.6 PROCESS FINDINGS

The Evaluators conducted staff interviews and a participant survey of the Peak Time Rebate program in PY14.

13.4.6.1 Staff and Implementer Interviews

The following section summarizes the key findings from in-depth interviews with two ENO program staff and two Aptim staff; ENO staff participated in one interview and Aptim staff participated in a second interview. These in-depth interviews aimed to learn more about the Peak Time Rebate Pilot program design and operations, and the successes and challenges experienced during PY14. Interviews lasted approximately 30 minutes and were conducted using the Microsoft Teams platform. The evaluators recorded all interviews with participant permission. The following narrative summarizes these interviews.

PY14 marked the second year of the Peak Time Rebate program. The program is open to all residential customers interested in shifting their energy load. In PY13 the program had three incentive tiers, but in PY14 the tiers were condensed into two tiers: standard savers and high savers. Standard savers included customers who garnered any savings, as compared to their baseline usage; they received a $20 incentive for participating. High savers included customers in the top 15% of savers; they received a $50 incentive for participating. Typically, customers garner savings from HVAC usage reductions; customers do not receive an incentive unless they demonstrate energy savings and load shifting. Because this program is not automated and customers need to remember to shift their load on their own, many enrolled customers ultimately do not accomplish savings nor get the incentive. Enrolled customers receive regular emails with tips on how to save energy and shift their loads during events. Event notifications are sent via email and text 24 hours and one hour before each event. PY14 had five events.

Program staff set a goal of enrolling 10,000 customers, with 5,000 enrolling in PY14—an increase from 2,770 in PY13. Approximately half of the PY14 enrollees were returning participants from PY13. Enrollment targets were based on the average energy savings observed in PY13. However, official program goals are tied to energy savings, which can be difficult to predict due to the variability in event frequency. Program staff promote the program via customer newsletter, emails, and local news.

13.4.6.1.1 *Program Challenges and Successes*

Program staff identified several challenges with the Peak Time Rebate program. Notably, Entergy does not have variable rates based on timing, making the program purely behavioral. Additionally, customers do not receive regular feedback throughout the season, limiting opportunities for ongoing engagement. These factors reduce staff's ability to influence customer behavior and provide targeted feedback to encourage more load shifting. Another limitation is that program implementers receive only monthly data rather than continuous AMI data, restricting real-time insights.

Despite these challenges, staff recognized key successes. The program is highly inclusive, allowing customers without smart thermostats to participate in demand response events. Additionally, while the program did not reach its 10,000-customer enrollment goal, staff successfully enrolled 5,000 customers within a relatively short timeframe.

13.4.6.2 Participant Survey Findings

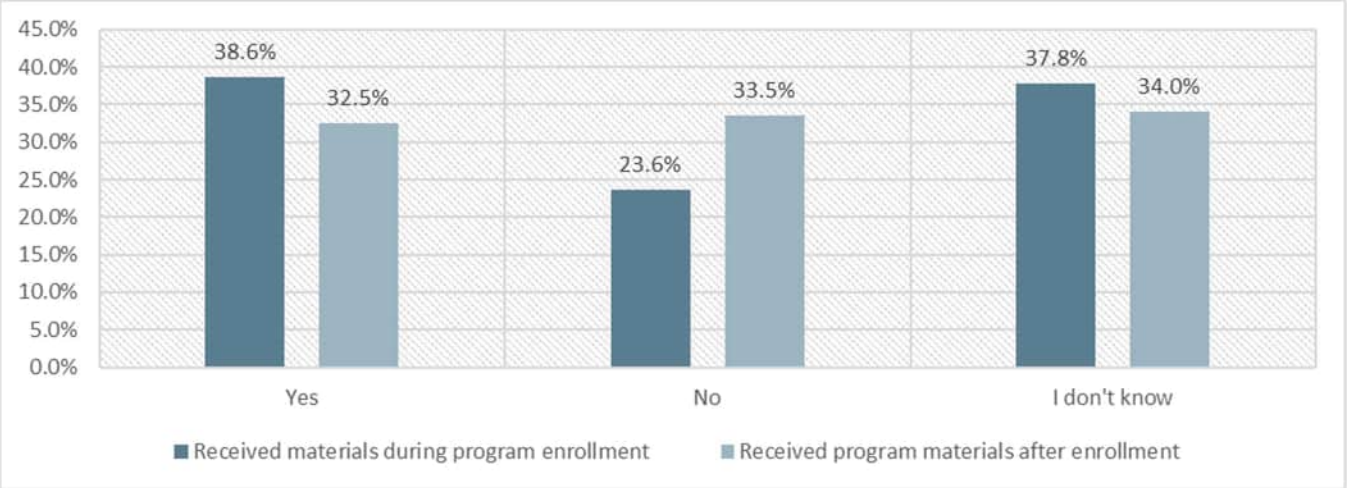
The Peak Time Rebate Program survey was conducted to evaluate participants' awareness, behaviors, and satisfaction with the program. The survey was distributed via email in January 2025 to 5,049 program contacts and 580 responses were obtained.

13.4.6.2.1 *Awareness and Motivations for Participation*

Awareness of the Peak Time Rebate Program was limited before and during enrollment. A third of (38.6%) of respondents reported receiving materials explaining key program details, such as the number of events or rebate calculations, prior to enrollment. After enrollment, only 32.5% of respondents reported receiving any educational materials.

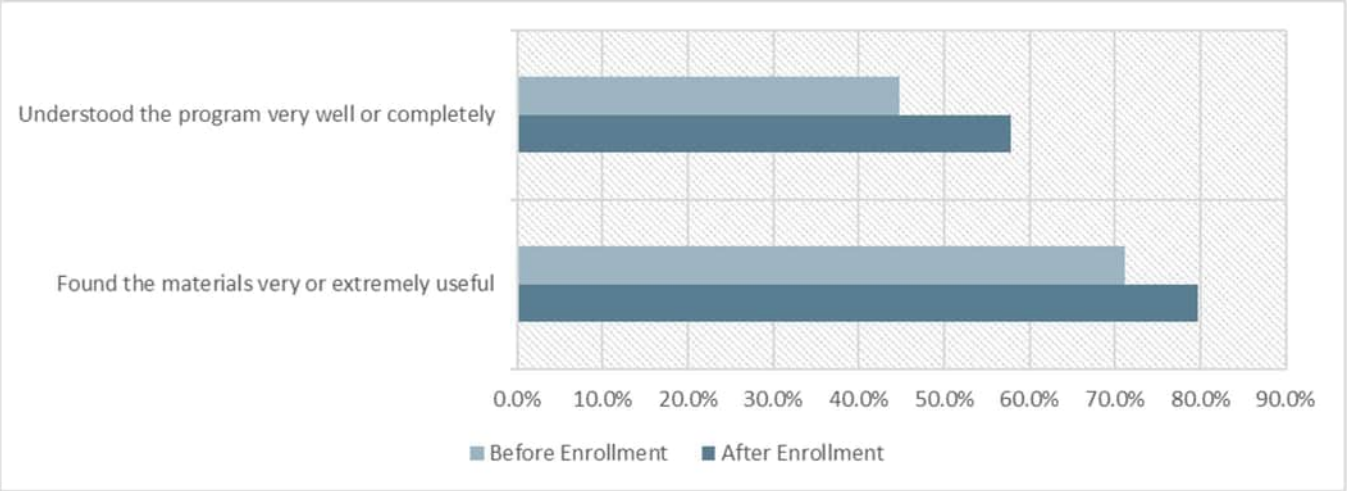
Figure 13-5 shows the timeline of receiving these materials.

FIGURE 13-5 TIMELINE OF RECEIVING PROGRAM MATERIALS (N=580)



Although respondents rated the program materials as useful, their overall self-assessed understanding of the program remained limited. Specifically, among those who received materials before enrollment, 71.2% found them very or extremely useful, while 79.7% of those who received them after enrollment rated them similarly. Yet, only 44.7% of respondents reported having a very good or complete understanding of the program before enrolling, a figure that increased modestly to 57.8% after enrollment (Figure 13-6).

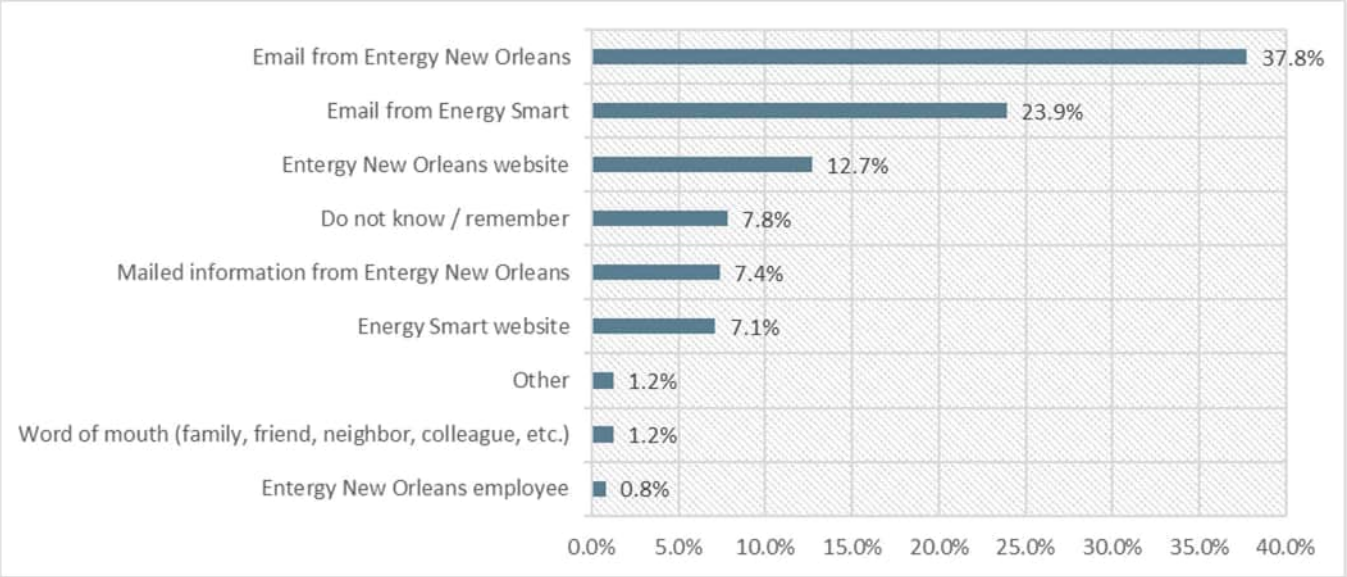
FIGURE 13-6 PROGRAM MATERIALS AND UNDERSTANDING: A PRE- AND POST- ENROLLMENT COMPARISON



Respondents requested clearer explanations of rebate calculations, timely peak event notifications, and feedback on energy savings. They suggested using various communication channels, not just email, to ensure important information reaches them. Additionally, many felt that additional materials with more detailed explanations about rebate calculations, qualifications, and energy usage assessments would have improved their understanding of the peak time rebate.

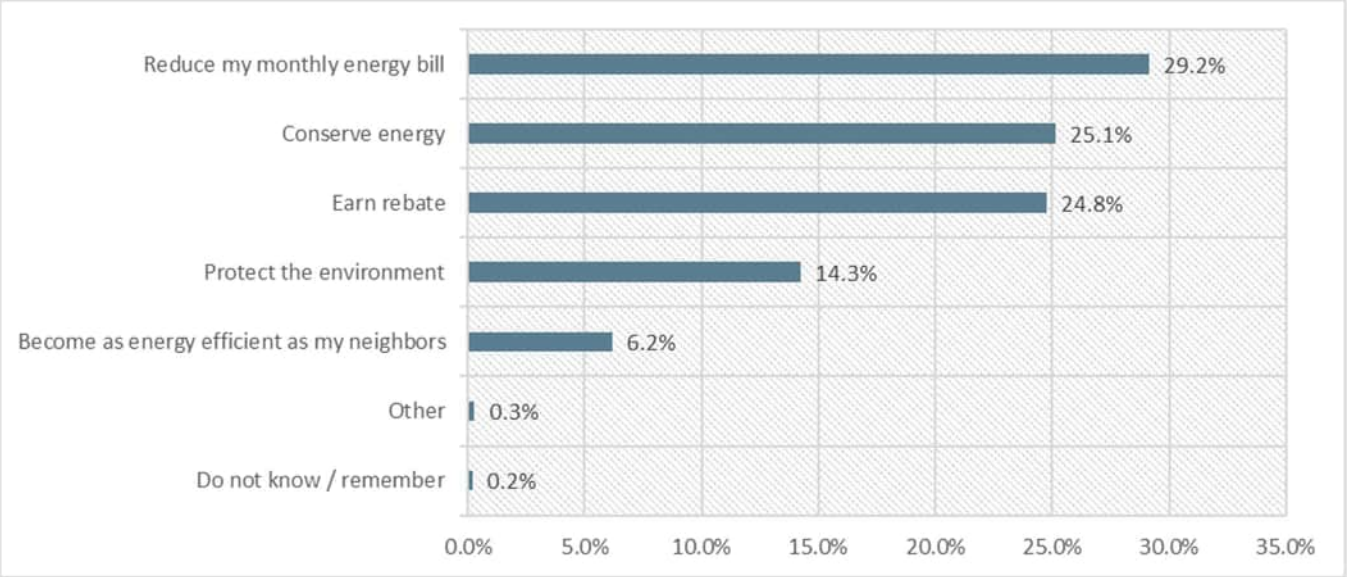
Emails from Entergy New Orleans were the most significant source of awareness, cited by 37.8% of respondents, while other sources like mailed information or the Energy Smart website contributed far less (Figure 13-7).

FIGURE 13-7 SOURCES OF AWARENESS (N=580)



Motivations for participation emphasized financial and energy-saving benefits. Reducing monthly energy bills was the top motivator for 29.2% of respondents, followed closely by conserving energy (25.1%) and earning rebates (24.8%). Protecting the environment was a motivating factor for 14.3%, while motivations related to social comparisons, such as matching neighbors' energy efficiency, were less significant (6.2%) (Figure 13-8).

FIGURE 13-8 MOTIVATION TO PARTICIPATE (N=580)

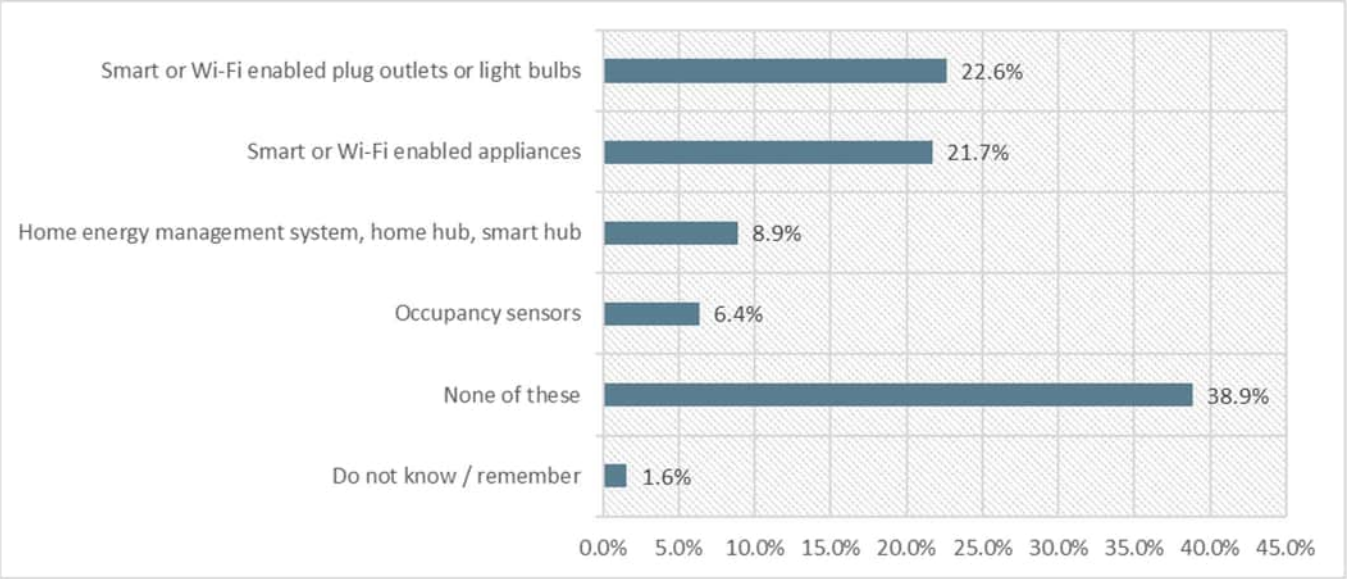


13.4.6.2.2 *Energy Use Management Behaviors*

Most respondents reported limited use of smart energy technologies. Only 22.6% of respondents used smart or Wi-Fi-enabled plug outlets or light bulbs, and 21.7% used smart or Wi-Fi-enabled appliances. Home energy management systems and occupancy sensors were even less common, with fewer than 10% of respondents

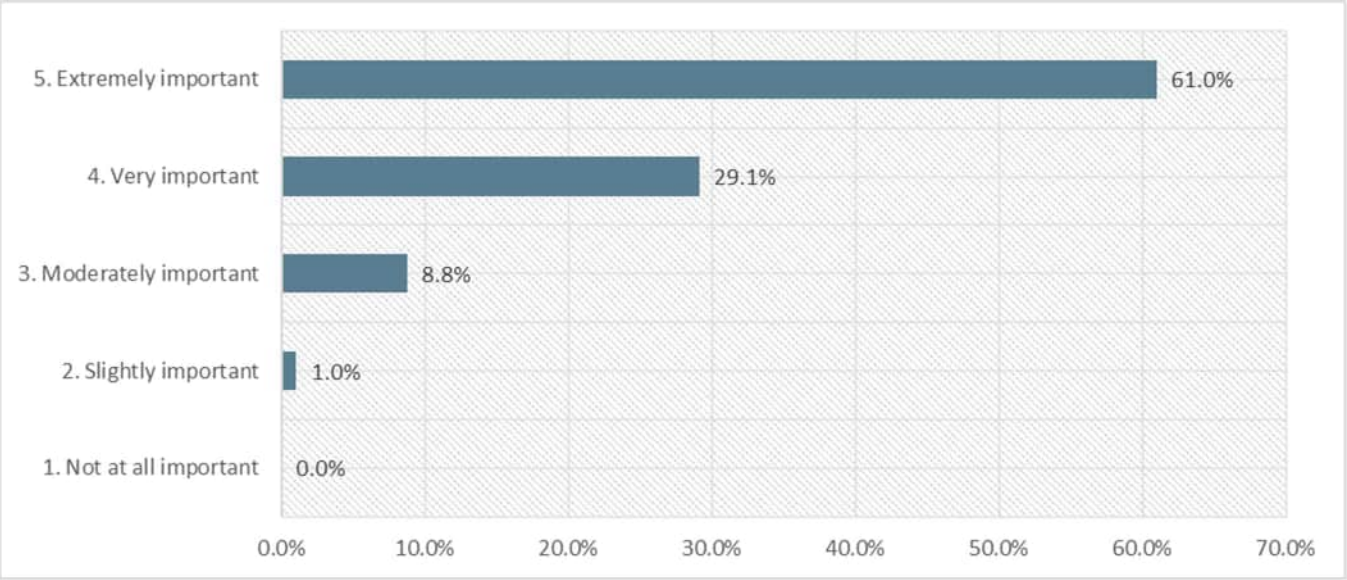
using these technologies. Notably, 38.9% reported not using any of the listed energy management technologies, indicating room for greater adoption of energy-efficient tools that could help participants understand how they are using energy and decreasing their load during an event (Figure 13-9).

FIGURE 13-9: TECHNOLOGY USED FOR HOME ENERGY USE MANAGEMENT (N=580)



Saving and lowering energy costs was a key priority for participants. A majority of respondents (61.0%) rated saving and lowering energy costs as "extremely important," while another 29.1% considered it "very important." Together, this highlights that nearly 90% of respondents placed high value on reducing energy expenses, underscoring the financial motivation driving energy use behaviors.

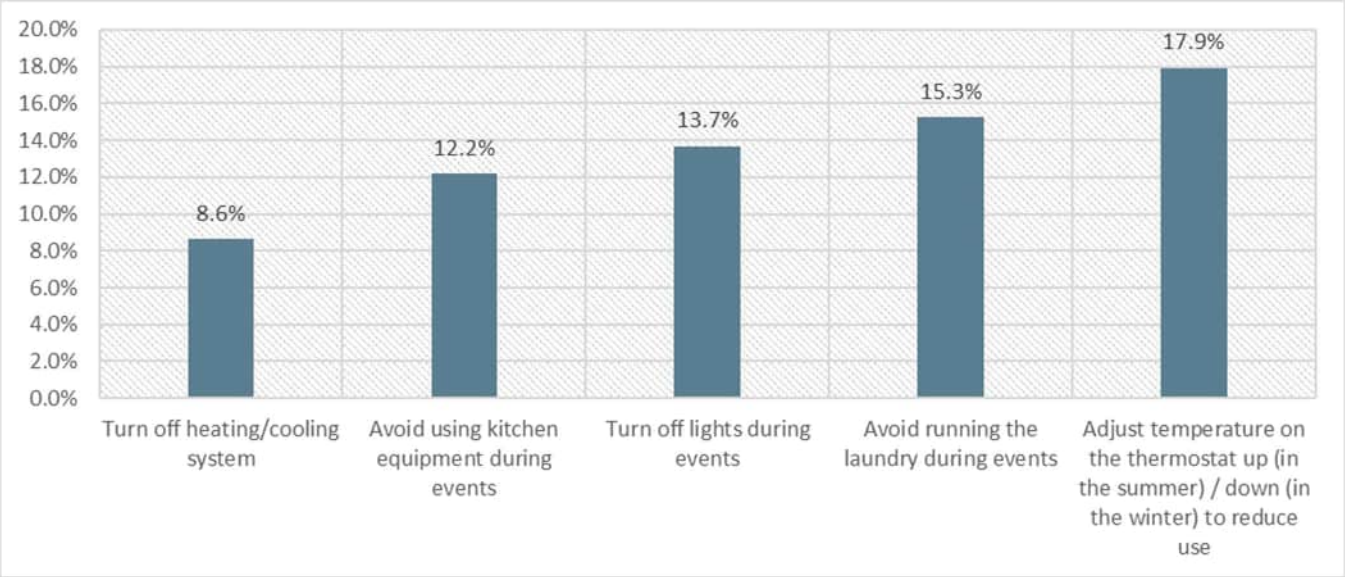
FIGURE 13-10: IMPORTANCE OF SAVING AND LOWERING ENERGY COSTS TO RESPONDENTS ON A SCALE OF ONE TO FIVE (N=580)



13.4.6.2.3 *Changes in Energy Use Management*

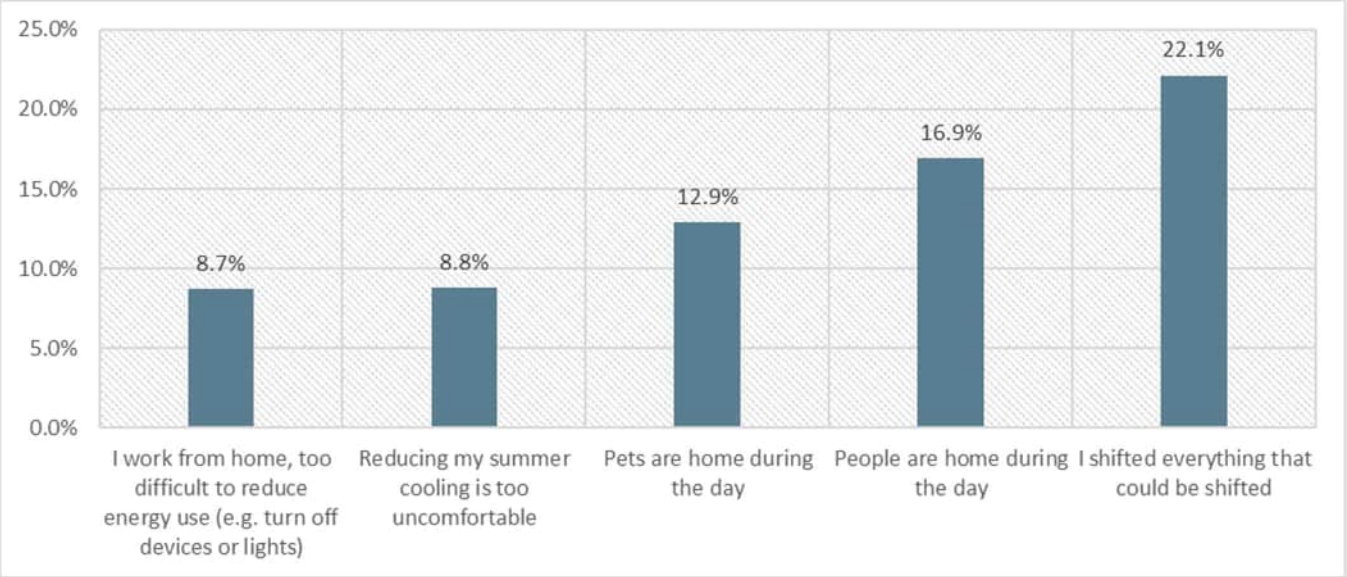
The majority of respondents reported making changes during peak demand events. Over 81% of participants reported modifying their energy use behaviors during peak events. Common actions included adjusting the thermostat settings (17.9%), avoiding laundry (15.3%), turning off lights (13.7%), and avoiding kitchen equipment use (12.2%). Less commonly, 8.6% turned off their heating or cooling systems entirely during events (Figure 13-11).

FIGURE 13-11: TOP FIVE HOUSEHOLD HABITS USED TO REDUCE ENERGY DURING EVENTS (N=580)



Barriers to reducing energy use reflect practical and situational challenges. The most frequently cited barrier was that participants had already shifted everything they could (22.1%), followed by the presence of people (16.9%) or pets (12.9%) at home during the day, which limited opportunities for additional changes. Comfort concerns, such as difficulties in reducing summer cooling, were also mentioned by 8.8% of respondents (Figure 13-12).

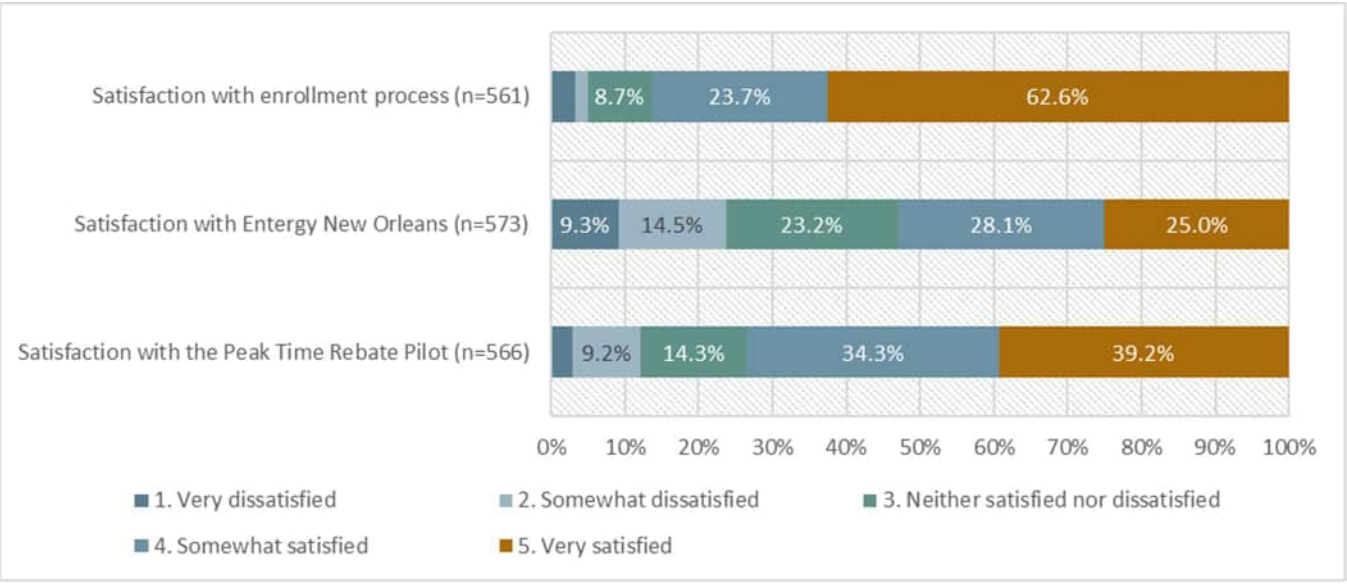
FIGURE 13-12: TOP FIVE BARRIERS TO REDUCING HOME ENERGY USE (N=580)



13.4.6.2.4 *Satisfaction*

Respondents expressed high satisfaction with key program elements. The majority of participants were satisfied with the enrollment process (86.3% somewhat or very satisfied), Entergy New Orleans (53.1% somewhat or very satisfied), and the Peak Time Rebate Pilot overall (73.5% somewhat or very satisfied). Satisfaction with the enrollment process was particularly high, with 62.6% reporting they were very satisfied (Figure 13-13).

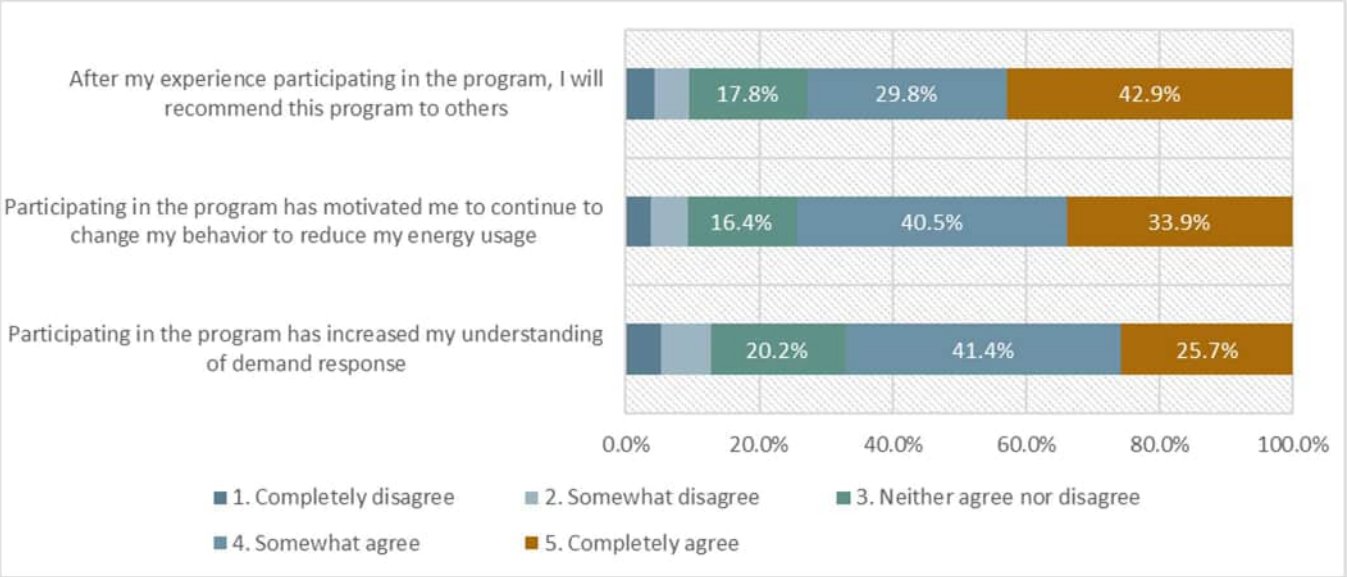
FIGURE 13-13: RESPONDENT SATISFACTION WITH KEY PROGRAM ELEMENTS



The program positively influenced participants' energy management behaviors. Nearly 73% of respondents agreed or completely agreed that they would recommend the program to others, and 74.4% reported that the

program motivated them to continue changing their behavior to reduce energy usage. Additionally, 67.1% felt the program increased their understanding of demand response, highlighting its role in promoting awareness and education.

FIGURE 13-14: PROGRAM EFFECTS (N=575)



Notably, some respondents expressed dissatisfaction with the rebate process—citing low or inconsistent payments, unclear calculations, and delays in receiving checks—as well as challenges with the notification process for peak events. Addressing these issues by enhancing transparency and diversifying communication channels—such as incorporating timely text messages alongside emails—can further boost participant engagement, promote energy-efficient practices, and maximize the program's impact on demand response and energy savings.

In addition, respondents recommended that Entergy New Orleans better educate customers about energy efficiency by using a variety of outreach methods, including app notifications, social media, and traditional mail. They emphasized the need for clear, plain-language educational materials—such as instructional videos, infographics, and in-person or digital workshops—as well as linking financial incentives more directly to energy-saving actions and providing practical tools like smart thermostats. Together, these insights offer actionable directions to enhance both customer education and overall program effectiveness.

13.5 Data Tracking Review

The Evaluators were able to perform the analysis as planned once advanced metering infrastructure (AMI) data was provided. The Evaluators found that roughly 95% of participants had AMI data during the evaluation period. ENO reported that this occurred due to participants with inactive accounts. All participants in the participant data that were not present in the AMI data were removed from the analysis when extrapolating kW reduction impacts.

13.6 Key Findings and Recommendations

The following summarizes the key findings and conclusions from the PY14 evaluation.

- The PTR pilot achieved 128% of its *ex-post* demand reduction (kW) target.
- The PTR pilot was fully subscribed in PY14.
- 5% of BYOT participants listed in the tracking data were missing AMI data and assumed inactive accounts. The Evaluators found that 95% of participants had AMI data during the evaluation period. The remaining were missing from the project data provided to the Evaluators. The likely explanation is that customers missing AMI data were inactive accounts.
- 18% of PTR participants had cross participation with the EasyCool BYOT program. The Evaluators adjusted ex-post savings for cross participants with the EasyCool BYOT program.
- Demand response event start, and end times were the same for customers with cross participation. The Evaluators provided this as a recommendation in PY13 and this may have helped ensure more accurate baselines could be utilized, which may have contributed to higher per participant savings (0.26 kW in PY14 versus 0.08 kW in PY13).
- Demand response events began and ended on the hour. This ensured that savings impacts could be accurately measured with hourly AMI interval data and was a key recommendation by the Evaluators in PY13.
- Interval AMI data was aggregated to hourly based on the hour ending datetime. This was a key recommendation by the Evaluators in PY13 and ensured that savings impacts could be accurately estimated for each event.
- Program Growth & Customer Engagement: Staff reported enrollment nearly doubled from PY13 to PY14, reaching 5,000 customers. However, because participation is not automated, many customers forget to shift their energy use, leading to inconsistent engagement and missed incentives. Survey results showed that while 81% of participants modified their behaviors during events.
- Limited Control & Feedback: Staff noted that Entergy does not have time-based variable rates, and implementers receive only monthly AMI data, making it difficult to provide real-time feedback and encourage additional savings. Survey respondents also cited practical barriers, such as already reducing energy use as much as possible (22.1%) and having people or pets at home limiting further adjustments (16.9%).
- Awareness Gaps & Communication Shortcomings: Although respondents rated the program materials as useful, their overall understanding of the program remained limited. Among those who received materials before enrolling, 71.2% found them very useful or extremely useful, and 79.7% of those who received materials after enrollment rated them similarly. However, only 44.7% of respondents reported having a very good or complete understanding of the program before enrolling, with this figure increasing modestly to 57.8% after enrollment. This indicates a need for more comprehensive and effective communication to ensure deeper understanding and engagement with program details and expectations.

Recommendations

All the recommendations from PY13 were adopted by ENO in PY14 and greatly improved the accuracy of savings estimates for the program. The Evaluators continue to offer the same recommendations provided in PY13 to ensure continuity in future program years.

- Demand response event start, and end times should be the same for customers with cross participation (e.g., customers participating in both BYOT and PTR) to accurately measure savings impacts. The offset adjustment hour used in some baseline models is adversely impacted (i.e., pushed further from the event time) if events in one program begin prior to events in another program. This is especially true for the BYOT program which has pre-cooling that already pushes the offset adjustment hour back one hour. Furthermore, because reductions during events are often higher at the start of events, adjusting reductions for interactive effects from cross participation is hampered because cross participants are being measured during different time intervals than participants without dual enrollments. In addition, if an event ends earlier for one program and later for another program, the snapback from the first program will impact the ability to measure savings in the other program during hours when snapback overlaps with the ongoing event.
- Demand response events should begin and end on the hour if hourly interval AMI data is provided. If demand response events are called on the half hour, then 30-minute interval data should be provided, with an interval measuring usage aggregated at the end of the interval (e.g., 4:30 PM represents usage from 4 PM to 4:30 PM). This will ensure that the complete duration of the event can be used for measuring reductions.
- Interval AMI data should be aggregated to hourly based on the hour ending datetime and should not aggregate usage across more than one hour. For example, a datetime ending at 4 PM should represent usage from 3 PM to 4 PM and not usage from 4 PM to 5 PM, or 3:45 PM to 4:45 PM.
- Implementers of demand response programs with cross participants should consider the number of demand response events that are called across all programs in that sector (e.g., residential DR programs). If too many events are called in future program years, this will adversely impact the number of proxy days available for testing baseline models. The Evaluators typically utilize 8 proxy days for residential programs. One way to minimize this potential problem is to ensure that events for residential DR programs are called on the same dates.
- Utilize the MISO WSA baseline model to estimate kWh savings for customers and for defining saver types to avoid underestimating program impacts.

The recommendations from the PY14 survey findings are as follows:

- Refine Program Messaging & Educational Materials: Enhance clarity around load-shifting strategies using plain language and instructional videos. Clearly explain key actions (such as pre-cooling or scheduling appliances) and the methods behind rebate calculations to build trust and understanding. Communicating these materials at the beginning of the peak period season will help to remind participants. Email communications could also be sent at relatively low cost that present reminders of strategies participants can use.
- Enhance Awareness Through Multi-Channel Outreach: Given limited recall of pre-enrollment materials, explore additional communication methods, such as text message reminders or app notifications, to

reinforce program expectations. Messages timed closer to enrollment and initial events may improve understanding and engagement.

14 RESIDENTIAL BATTERY PILOT

14.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, incentive spend, and *ex post* net NEBs, by measure, where applicable.

TABLE 14-1 PY14 RESIDENTIAL BATTERY PILOT ENERGY SAVINGS (KWH)

Measure	*Ex ante* Gross Savings (kWh)	Realization Rate (kWh)	*Ex post* Gross Savings (kWh)	NTG	*Ex post* Net Savings (kWh)
BESS pilot	0	N/A	0	N/A	0
Total	**0**	**N/A**	**0**	**N/A**	**0**

Sums may differ due to rounding.

TABLE 14-2 PY14 RESIDENTIAL BATTERY PILOT DEMAND REDUCTIONS (KW)

Measure	*Ex ante* Gross Demand (kW)	Realization Rate (kW)	*Ex post* Gross Demand (kW)	NTG	*Ex post* Net Demand (kW)
BESS pilot	332.28	N/A	383.17	100%	383.17
Total	**332.28**	**N/A**	**383.17**	**100%**	**383.17**

Sums may differ due to rounding.

TABLE 14-3 PY14 RESIDENTIAL BATTERY PILOT LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex post* Gross Lifetime Energy Savings (kWh)	*Ex post* Net Lifetime Energy Savings (kWh)
BESS pilot	1	0	0
Total	**1**	**0**	**0**

Sums may differ due to rounding.

TABLE 14-4 PY14 RESIDENTIAL BATTERY PILOT PARTICIPATION AND INCENTIVE SUMMARY

Measure	Participation (Count of Measures)	Incentive Spend ($)
BESS pilot	78	$34,201.40
Total	**78**	**$34,201.40**

Sums may differ due to rounding.

TABLE 14-5 PY14 RESIDENTIAL BATTERY PILOT NEB SUMMARY

Measure	*Ex post* Net ARCs ($)	*Ex post* Net Water Savings (gallons)	*Ex post* Net Avoided Arrearages
BESS pilot	$0	0	$0
Total	**$0**	**0**	**$0**

Sums may differ due to rounding.

14.2 Program Description

The residential Battery Energy Storage System (BESS) pilot offering allowed customers to earn an incentive for enrollment and by participating in peak demand events. During these events, Entergy New Orleans, LLC (ENO) accessed stored energy from a home battery system to help provide more reliable power to the grid. The program allowed customers the ability to opt out without penalties. Participation was free with an eligible battery system. The program was limited to the first 30 customers who enrolled and met system qualifications. Customers qualified if they had a compatible solar photovoltaic system-connected BESS.

Customers received a one-time enrollment incentive of $300 and annual participation incentive of up to $250 based on the ratio of actual participation in up to 8 peak demand events.

The program was first introduced in Program Year 13 (PY13), or 2023.

14.2.1 PROGRAM CHANGES

PY14 was the second year for the BESS offering. The implementation partner changed between PY13 and PY14.

14.2.2 TIMING OF PROJECTS

Enrollment occurred from September to November 2024.

14.2.3 TRADE ALLIES

There were no reported trade allies in this program.

14.2.4 GOAL ACHIEVEMENT

The program did not have ex post savings targets in PY14.

TABLE 14-6 EV PILOT PERFORMANCE TOWARDS GOAL

Ex post Gross Energy Savings (kWh) Goal	% to kWh Goal	*Ex post* Gross Energy Savings (kWh)	*Ex post* Gross Savings (kW) Target	% to kW Target	*Ex post* Gross Savings (kW)
53,347	N/A	0	0.00	N/A	383.17

14.3 EM&V Methodology

The Evaluators employed the following approach to complete impact evaluation activities for the program.

- Method 1: MISO Calculated Baseline using Interval (AMI) Data

Method 1 allowed the Evaluators to estimate peak demand impacts from batteries discharged during demand response events because the AMI data contained all imported and exported kWh values and included kWh from battery discharge to the grid[12].

A list of advantages and disadvantages for Method 1 is shown in the table below.

TABLE 14-7 EMV METHOD ADVANTAGES AND DISADVANTAGES

Method	Advantages	Disadvantages
1) Interval (AMI) Data	▪ Accounts for any potential behavioral changes due to the demand response events. ▪ Utilizes a census of demand response event days and times.	▪ Potentially introduces noise from consumption and solar generation unrelated to battery discharge.

For Method 1, the Evaluator followed the Calculated Baseline approach outlined in the Midcontinent Independent System Operator, Inc. (MISO) Business Practices Manual (BPM)[13]. The following impact evaluation steps were taken to determine the suitability of the MISO Calculated Baseline approach:

- Developed an Unadjusted Consumption (UC) Baseline, a Symmetric Multiplicative Adjustment (SMA) Baseline, and a Weather Sensitive Adjustment (WSA) Baseline for each program participant. Loads were calculated utilizing hourly AMI data.
- Determined days that will serve as proxy days for testing the suitability of the baseline approach. Proxy days represent days like demand response event days in terms of load shape and temperature profiles.
- Estimated bias (uncertainty) and error on proxy days for each model to assess baseline performance. Bias is assessed by examining the average percent error of the baseline predictions relative to the actual usage on proxy days. In a similar manner, error is assessed through various metrics such as Root Mean Squared Error (RRMSE) using baseline predictions and actual usage on proxy days.
- Selected the baseline model with the lowest absolute bias.

14.3.1GROSS IMPACT METHODOLOGIES

For most demand response programs, energy savings are estimated by comparing a participant's load shape during a demand response event with a baseline load shape. This baseline load is assumed to be a good estimate of the counterfactual load—that is, the load that would have manifested had there not been an event called that day. In the prior program year (PY13), the Evaluators initially believed the interval AMI data would not include kWh amounts from battery discharge to the grid, and this would have prevented solely using AMI data to analyze peak load impacts. However, the Evaluators compared imported and exported kWh values with participant telemetry data provided via the implementer portal and determined that the Channel 2 AMI interval

[12] ENO refers to this AMI data with kW Received and kW Delivered as Channel 2 (or Cycle 2).

[13] MISO Demand Response Business Practices Manual: BPM-026.

data accounted for kWh from battery discharge to the grid, as well as all kWh imported or exported to the grid (e.g., exported solar kWh, or imported battery charging kWh). Therefore, the Evaluators were successful in utilizing AMI data to estimate peak load impacts and constructed net kWh values for each participant by taking the difference between imported and exported kWh values.

The following equation defines the net kWh utilized to estimate peak load impacts for Method 1.

$$Net\ kWh_{it} = Imported\ kWh_{it} - Exported\ kWh_{it}$$

14.3.1.1 Data Sources

Data used for this evaluation include the following:

- 15-minute interval meter data (Channel 2 AMI) for each participant containing kW Received and kW Delivered.
- A full schedule of DR program events for each participant, including the date and time of the event and which customers participated in the event.
- Program tracking data that identifies which customers participated in the program.

The Evaluators were not provided with telemetry data in PY14.

14.3.1.2 MISO Calculated Baseline Approach (Customer Baselines)

The following details the general requirements for the MISO Calculated Baseline Approach. The Evaluators developed Customer Baselines (CBLs) in accordance with this approach. For a demand resource, the Consumption Baseline is a profile of hourly demand based on an averaged sample of historical data which may be adjusted for factors that reflect specific, on-the-day conditions, such as temperature.

The default consumption baseline is designed as follows:

- Separate hourly demand profiles for non-holiday weekdays and for weekends/holidays
- The “weekday” hourly profile is based on the average of the ten (10), but not less than five (5), most recent weekdays that are not holidays or other non-standard “event” days
- The “weekend/holiday” hourly profile is based on the average of the four (4), but not less than two (2), most recent weekend days or holidays that are not “event” days
- An “event” day is one during which there was, for the resource in question, a real- time energy or ancillary services dispatch, or a scheduled outage
- The maximum look-back window is limited to 45 days; and
- If the 45-day window contains insufficient days to meet the minimum number of days described above, the profiles are constructed based on the available days within the 45-day window that qualify, supplemented by the largest (MW) matching “event” day(s) values for that resource within that same window as necessary to obtain the minimum number of values.

Adjustment mechanisms to the default Consumption Baseline include:

- Symmetric Multiplicative Adjustment (SMA)
    - Adjusts each baseline hourly value (MW) during the event up or down by the ratio of

  - (a) the sum of hourly demands for the three hours beginning four hours prior to the event and (b) the sum of those same three hourly baseline demands
  - The adjustment is limited to a change in any individual baseline hour of plus or minus 20 percent.
  - If multiple events occur during the same day, the SMA is calculated only for the first event, but applied to all events that day.
- Weather Sensitive Adjustment (WSA)
  - Adjusts each baseline hourly value (MW) up or down by a Weather Adjustment Factor
  - The Weather Adjustment Factor is determined by a mathematical relationship derived through a regression analysis that considers the DRR load and historical hourly temperature data.

14.3.1.3 Evaluators MISO Models

The following CBL models were developed for each customer in accordance with MISO protocols.

For a 10-of-10 (or 5-of-5) unadjusted baseline, the Evaluators examine the load data from the most recent ten (or five) non-event, non-holiday weekdays relative to the event day and calculate the mean demand usage values of the five highest load days. This baseline is then adjusted for the SMA and WSA models utilizing the method described in Section 14.3.1.2.

TABLE 14-8 EVALUATORS' MISO CBL MODELS

Model Type	Baseline Days	SMA	WSA
Unadjusted	10-of-10	No	No
SMA-Adjusted	10-of-10	Yes	No
WSA-Adjusted	10-of-10	No	Yes
Unadjusted	5-of-5	No	No
SMA-Adjusted	5-of-5	Yes	No
WSA-Adjusted	5-of-5	No	Yes

14.3.1.4 Baseline and Proxy Day Development

The Evaluators defined proxy days as non-event, non-holiday, non-weekend days which display average temperature (F), maximum temperature (F), and Cooling Degree Days (CDD) that fall within the range of corresponding values seen on demand response event days. The Evaluators used these defined proxy days to determine the ability of CBL models to predict actual usage for each customer.

14.3.2 NET IMPACT METHODOLOGIES

In demand response programs, it is typically assumed that there are neither spillover nor free-ridership effects (customers are not expected to curtail without participating). Furthermore, participants are compensated only if they reduce their load during the peak demand window, the primary program goal. As such, the net-to-gross ratio for this program is assumed to be 100%.

14.4 Evaluation Findings

The results of the impact evaluation for Method 1 (AMI) are provided in the following sections.

A list of demand response event dates and times are shown in the table below.

TABLE 14-9 EVENT DATES AND TIMES

Event Dates	Event Times (CDT)
10/23/2024	1500-1700
11/5/2024	1200-1400
11/12/2024	1600-1800
11/21/2024	0900-1100
11/26/2024	1630-1830

14.4.1EM&V METHOD 1 (AMI) IMPACT RESULTS

EM&V Method 1 used interval data and allowed the Evaluators to estimate peak demand impacts from batteries discharged during demand response events because the AMI data contained all imported and exported kWh values. Critically, these values included kWh from battery discharge to the grid. In addition, exported kWh values account for any solar output sent to the grid while imported kWh accounts for recharging batteries after demand response events[14].

Imported kWh values were positive when the customer was receiving energy from the grid, while exported kWh values were positive when the customer was providing kWh to the grid. In general, participants were either importing or exporting during a given interval, such that imported kWh was positive and exported kWh was zero or vice versa, however, because intervals spanned 15 minutes, it was possible for a participant to have positive values for both imported and exported kWh values during a given interval.

14.4.1.1 Load Shapes and Model Performance

The figures below provide average load shapes for each program on average proxy days and event days and depict actual kW and baseline kW for the selected baseline model for EM&V Method 1. The figures show that baseline kW is a good match for actual kW during the hours of curtailment on the average proxy day. The Evaluators utilized 24 proxy days due to the small number of participants and the variability of participant loads[15].

[14] All import and export values are in aggregate such that the Evaluators cannot determine individual contributions from consumption, solar generation, or battery charge and discharge.

[15] Many participants had solar generation which results in more variable net consumption, all else equal. In addition, solar generation lowers net consumption during daylight hours which has an impact on bias calculations by bringing net consumption closer to zero.

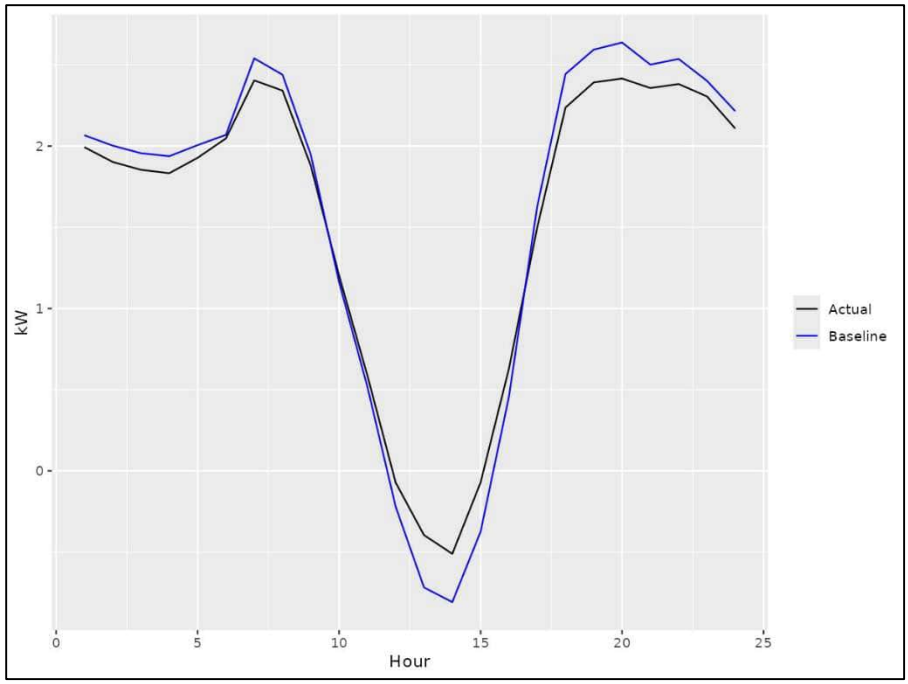


FIGURE 14-1 RESIDENTIAL BATTERY PILOT AVERAGE PROXY DAY LOAD SHAPE

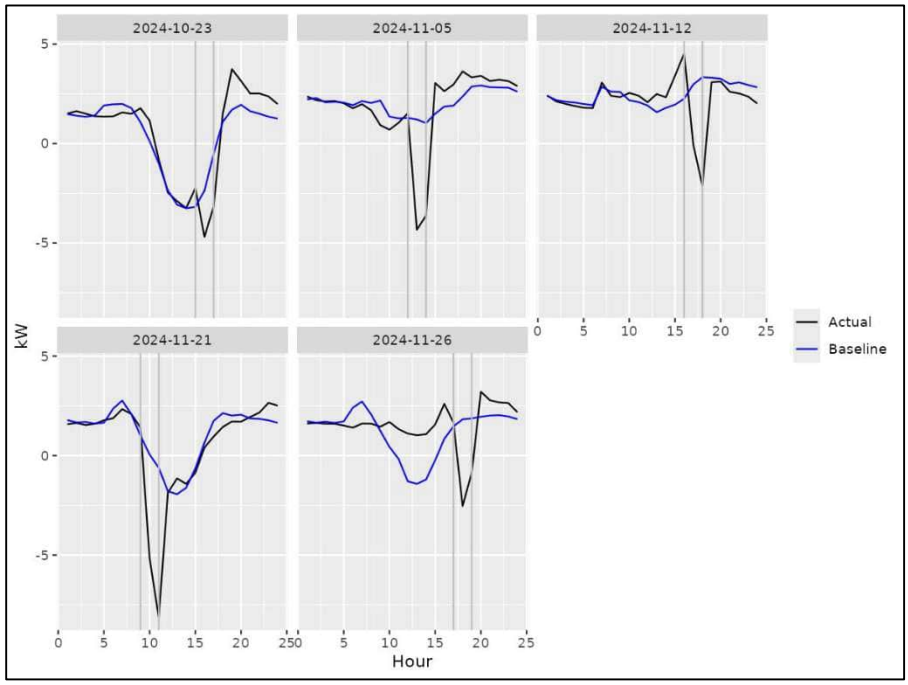


FIGURE 14-2 RESIDENTIAL BATTERY PILOT AVERAGE EVENT DAY LOAD SHAPES

The Evaluators estimated bias and error for the Evaluators MISO models for all participants and when applied on a site-specific basis and selected for the model with the lowest bias. As shown in the table below, the MISO SMA Adjusted CBL 5-of-5 model performed the best and had the lowest bias and error for the Residential Battery Pilot program.

TABLE 14-10 MODEL FIT AND BIAS

Model	Follow MISO Protocols	RRMSE	RMSE	Bias	Selected Model
MISO_SMA_Adjusted_CBL.5.of.5	X	0.185	0.227	-0.18%	X
MISO_WSA_Adjusted_CBL.10.of.10	X	0.240	0.294	1.36%	
MISO_SMA_Adjusted_CBL.10.of.10	X	0.170	0.209	1.63%	
MISO_Unadjusted_CBL.5.of.5	X	0.262	0.322	2.10%	
MISO_WSA_Adjusted_CBL.5.of.5	X	0.255	0.313	3.84%	
MISO_Unadjusted_CBL.10.of.10	X	0.257	0.316	5.92%	

14.4.1.2 Impact Findings

Using results from the CBLs, the Evaluators calculated the PY14 kW reduction for EM&V Method 1. Results are shown below in the table below.

TABLE 14-11 TOTAL GROSS RESIDENTIAL BATTERY PILOT DEMAND REDUCTIONS

Ex Ante Average Savings per Event per Participant	Number of Participants	*Ex Ante* Total Program kW Reduction	Average Savings per Event per Participant (kW)	Total Program kW Reduction	Realization Rate
4.260	78	332.28	4.912	383.17	115%

14.4.2 GROSS IMPACT FINDINGS

Using results from EM&V Method 1, the Evaluators calculated the PY14 kW reduction. Results are shown below in the table below.

TABLE 14-12 TOTAL GROSS RESIDENTIAL BATTERY PILOT DEMAND REDUCTIONS

Ex Ante Average Savings per Event per Participant	Number of Participants	*Ex Ante* Total Program kW Reduction	Average Savings per Event per Participant (kW)	Total Program kW Reduction	Realization Rate
4.260	78	332.28	4.912	383.17	115%

The overall verified kW reduction is 383.17 kW.

14.4.3 NET IMPACT FINDINGS

For demand response programs, net savings equals gross savings.

TABLE 14-13 TOTAL RESIDENTIAL BATTERY PILOT NET DEMAND REDUCTION RESULTS

Gross kW Reduction	Net-to-Gross Ratio	Net Demand Reduction
383.17	100%	383.17

14.4.4 NON ENERGY BENEFITS FINDINGS

There were no NEBs identified in this program.

14.4.5 PROCESS FINDINGS

The Evaluators conducted a limited process evaluation of the Residential Battery Pilot program in PY14.

14.4.5.1 Staff and Implementer Interviews

The following section summarizes the key findings from in-depth interviews with two ENO program staff, one Aptim staff, and one EnergyHub staff; ENO staff participated in one interview and Aptim and EnergyHub staff participated in a second interview. These in-depth interviews aimed to learn more about the Residential Battery Pilot program design and operations, and the successes and challenges experienced during PY14. Interviews lasted approximately 30 minutes and were conducted using the Microsoft Teams platform. The Evaluators recorded all interviews with participant permission. The following narrative summarizes these interviews.

14.4.5.1.1 *Program Description and Implementation*

PY14 marked the second year of the Residential Battery Pilot Program, which targets residential customers with interconnected battery systems. Typically, these customers use solar energy to charge their batteries, allowing them to reduce their reliance on energy from Entergy New Orleans.

Interconnected batteries are external battery systems that Entergy New Orleans can access and temporarily disable during grid emergencies. The purpose of this pilot is to assess the feasibility of a demand response battery program. During a demand response event, ENO staff can switch customers with interconnected batteries to rely on stored energy rather than drawing power from the grid. This shift is intended to reduce demand and alleviate pressure on the grid. Additionally, if the battery has sufficient capacity, Entergy New Orleans can utilize stored energy to help support the grid during peak events.

The implementation partner changed between PY13 and PY14. In the second year of the pilot, Tesla and EnPhase batteries were added to eligible equipment, which has allowed for program growth and increased customer engagement. The pilot utilizes a pay for performance incentive structure with $125 per kW delivered; residential customers can receive up to $600 in incentives while commercial customers can receive up to $1800.

14.5 Data Tracking Review

The Evaluators reviewed the advanced metering infrastructure (AMI) data that was provided and found that 99 percent of participants had complete AMI data during the evaluation period.

The Evaluators determined that the AMI data was sufficient to analyze program impacts because it contained all imported and exported kWh values, including battery discharge to the grid, solar generation provided to the grid, imported energy from the grid, etc...

Telemetry battery discharge data was not provided or available for download which prevented analyzing discharge data for all participants on all demand response events.

14.6 Key Findings and Recommendations

The following summarizes the key findings and conclusions from the PY14 evaluation.

- Achievement of Demand Reduction Target: The program did not have an *ex post* demand reduction target in PY14.
- Program Subscription: In the second year of the pilot, Tesla and EnPhase batteries were added to eligible equipment, which has allowed for program growth and increased customer engagement. The number of participants increased from 17 in PY13 to 78 in PY14. However, due to approval and contract delays, no demand response events occurred in 2024. Full implementation is planned for 2025.
- AMI Data: The Evaluators utilized Channel 2 AMI data containing kW delivered and kW received from the perspective of ENO, which allows for the calculation of net usage that incorporates exports to the grid (e.g., from solar and battery) and usage values imported from the grid.
- Feasibility Assessment & Enrollment Goals: The pilot aims to assess the viability of interconnected residential batteries for demand response. The 2025 enrollment goal is 100 customers, though staff anticipate 50 may be more realistic given the program's early stage.

The Evaluators have the following recommendations after completing the PY14 evaluation.

- AMI Data: ENO should provide Channel 2 AMI data containing kW delivered and kW received from the perspective of ENO for each participant, which allows for the calculation of net usage that incorporates exports to the grid (e.g., from solar and battery) and usage values imported from the grid. AMI data utilized for other EE and DR programs does not include usage discharged to the grid and cannot be used for the impact evaluation of the BESS program.
- Alignment of Demand Response Event Times: It is recommended to synchronize the start and end times of demand response events for customers participating in multiple programs (e.g., BYOT and PTR). Misalignment of event times can distort the accuracy of savings measurements, particularly impacting baseline models. For instance, if events in one program begin prior to events in another program, it can push the offset adjustment hour further from the event time, complicating measurements of interactive effects from cross participation. Additionally, discrepancies in event end times across programs can impede the measurement of savings during overlapping periods.
- Standardization of Event Timing: Demand response events should ideally commence and conclude on the hour, especially when hourly interval AMI data is available. If events are called on the half hour, 30-minute interval data should be provided to ensure precise measurement of reductions. This standardization facilitates the comprehensive utilization of event durations for accurately assessing energy savings.

- Consideration of DR Event Frequency: Implementers of demand response programs with cross participants should monitor the frequency of demand response events across all programs within a sector (e.g., residential DR programs). Excessive event scheduling can reduce the availability of proxy days for testing baseline models, impacting the accuracy of savings estimation. To mitigate this issue, events for residential DR programs should be scheduled on the same dates to optimize the use of proxy days.
- Utilization of MISO SMA Baseline Model: It is recommended to utilize the MISO SMA baseline model for estimating energy savings and defining saver types. This model helps avoid underestimating program impacts by providing robust estimates of energy savings for customers. Leveraging this baseline model enhances the accuracy of savings calculations and ensures a comprehensive evaluation of program effectiveness.
- Optimize Outreach & Enrollment Strategies: Since participation may be lower than the 100-customer goal, targeted outreach to existing battery owners—through installation partners, solar advocacy groups, or tailored marketing campaigns—could improve enrollment.
- Ensure Technical Readiness for 2025 Events: Ahead of full program launch, staff should work with implementation partners to validate remote battery control capabilities, ensure customer communication channels are in place for event participation, and address any potential integration challenges.

15 ELECTRIC VEHICLE PILOT

15.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, incentive spend, and *ex post* net NEBs, by measure, where applicable.

TABLE 15-1 PY14 ELECTRIC VEHICLE PILOT ENERGY SAVINGS (KWH)

Measure	*Ex ante* Gross Savings (kWh)	Realization Rate (kWh)	*Ex post* Gross Savings (kWh)	NTG	*Ex post* Net Savings (kWh)
EV Charging	0	N/A	0	N/A	0
Total	**0**	**N/A**	**0**	**N/A**	**0**

Sums may differ due to rounding.

TABLE 15-2 PY14 ELECTRIC VEHICLE PILOT DEMAND REDUCTIONS (KW)

Measure	*Ex ante* Gross Demand (kW)	Realization Rate (kW)	*Ex post* Gross Demand (kW)	NTG	*Ex post* Net Demand (kW)
EV Charging	N/A	N/A	97.21	100%	97.21
Total	**N/A**	**N/A**	**97.21**	**100%**	**97.21**

Sums may differ due to rounding.

TABLE 15-3 PY14 ELECTRIC VEHICLE PILOT LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex post* Gross Lifetime Energy Savings (kWh)	*Ex post* Net Lifetime Energy Savings (kWh)
EV Charging	1	0	0
Total	**1**	**0**	**0**

Sums may differ due to rounding.

TABLE 15-4 PY14 ELECTRIC VEHICLE PILOT PARTICIPATION AND INCENTIVE SUMMARY

Measure	Participation (Count of Measures)	Incentive Spend ($)
EV Charging	238	$13,727.00
Total	**238**	**$13,727.00**

Sums may differ due to rounding.

TABLE 15-5 PY14 ELECTRIC VEHICLE PILOT NEB SUMMARY

Measure	*Ex post* Net ARCs ($)	*Ex post* Net Water Savings (gallons)	*Ex post* Net Avoided Arrearages
EV Charging	$0	0	$0
Total	**$0**	**0**	**$0**

Sums may differ due to rounding.

15.2 Program Description

PY14 marked the first year of the "Bring Your Own Charger" (BYOC) program. This demand response pilot seeks to shift EV charging load to off-peak hours using a predetermined charging schedule. Sagewell uses software to identify potential EV chargers and invites them to participate in the program. Customers receive a monthly incentive for participating in the program. To qualify, customers must charge their car during off-peak hours at least three times a month and cannot override the charging schedule more than four times a month.

The program seeks to enroll 350 cars over the three-year pilot. Target audience is single-family home residents with level-2 chargers.

15.2.1 PROGRAM CHANGES

PY14 was the second year for the BYOC offering. No changes were made to the program in PY14.

15.2.2 TIMING OF PROJECTS

All new enrollments occurred from July to December 2024.

15.2.3 TRADE ALLIES

There were no reported trade allies in this program.

15.2.4 GOAL ACHIEVEMENT

The table below summarizes the programs' performance against goal.

TABLE 15-6 EV PILOT PERFORMANCE TOWARDS GOAL

Ex post Gross Energy Savings (kWh) Goal	% to kWh Goal	*Ex post* Gross Energy Savings (kWh)	*Ex post* Gross Savings (kW) Target	% to kW Target	*Ex post* Gross Savings (kW)
0	N/A	0	1,125.00	8.6%	97.21

15.3 EM&V Methodology

15.3.1 GROSS IMPACT METHODOLOGIES

In the evaluation of demand response programs, energy savings are estimated by comparing a participant's load shape with a baseline load shape. This baseline load is assumed to be a good estimate of the counterfactual load—that is, the load that would have manifested in the absence of the program. The Evaluators created the baseline load from a matched control group of customers with electric vehicles.

15.3.1.1 Data Collection

Data used for this evaluation include the following:

- 15-minute interval meter data (AMI) for each participant.
- A full schedule of DR program event dates and times for all DR programs (DR event dates were excluded).
- Program tracking data that identifies which customers participated in the program.

- Program tracking that identifies potential control customers.

15.3.1.2 Cohort and Study Period Definitions

The following definitions were utilized for the study period:

- Pre-period start date: 06/1/2023.
- Pre-period end date: 7/20/2023.
- Post-period: Summer 2024 (June – September).
- Dates when DR events were called were excluded from the pre- and post-periods because dual enrollment in other DR programs could impact usage and create biased impact estimates if treatment and control customers enroll or opt-out in other DR programs at different rates. Two dates were excluded from the post-period, while five dates were excluded from the pre-period.

The Evaluators restricted the study period to the summer months to measure peak kW reductions for the program. In addition, the program was expected to only shift load and not result in energy savings, therefore, there was not a need to extend the study period beyond the summer months. Furthermore, keeping the study period close to the enrollment dates of the participant would help ensure that customers had EV charging in the pre- and post-periods.

The study cohort was created using the following requirements:

- Participants were actively enrolled in the program.
- The participant enrolled in the program after the pre-period end date (see above) and before the post-period start date. This allowed for the accumulation of participants between July 16, 2023, and May 31, 2024.
- The participant showed electric vehicle charging throughout 2023 (identified by Sagewell).
- Potential control group customers were identified from the following sources: 1) Customers receiving the Electric Vehicle Supply Equipment (EVSE) rebate with no enrollment in the EV Pilot, 2) customers with the EVSE rebate and either incomplete enrollment in the EV Pilot and 3) customers identified by Sagewell as having an EV by observing EV charging patterns in their interval meter AMI data.
- Treatment and potential control customer AMI data must be 99% complete during the study period.

15.3.1.3 Control Group Creation

For each treatment premise in the participant population, a corresponding control group premise was selected such that the pre-period consumption patterns are as closely matching as possible.

The Evaluators utilized the following matching methods to develop control groups:

- Method 1: Propensity Score Matching (PSM) using pre-period weekday and weekend hourly load shapes. PSM utilizes a logistic function to predict the probability of belonging to the treatment group. Customers were matched using the nearest neighbor algorithm, with 1 treatment customer for 2 control customers (e.g., a matching ratio of 2) and matching with replacement of control customers. Customers were exactly matched based on low/high total consumption and low/high maximum demand during the pre-period.

- Method 2: Euclidian distance matching using each customer's frequency distribution of hourly pre-period energy usage (kWh), selecting the control customer with the minimum distance.
- Method 3: Vector angle distance matching using each customer's frequency distribution of hourly pre-period energy usage (kWh), selecting the control customer with the minimum distance.

With the PSM approach (Method 1), a propensity score is estimated for treatment customers and a group of customers who did not receive the treatment using a logit model. Two additional matching strategies were explored based on industry best practices[16] historically utilized by the Evaluators. These approaches reduced meter data for evaluated premises to a normalized histogram curve that describes a premise's normal usage pattern in a single vector of values; an example is shown in

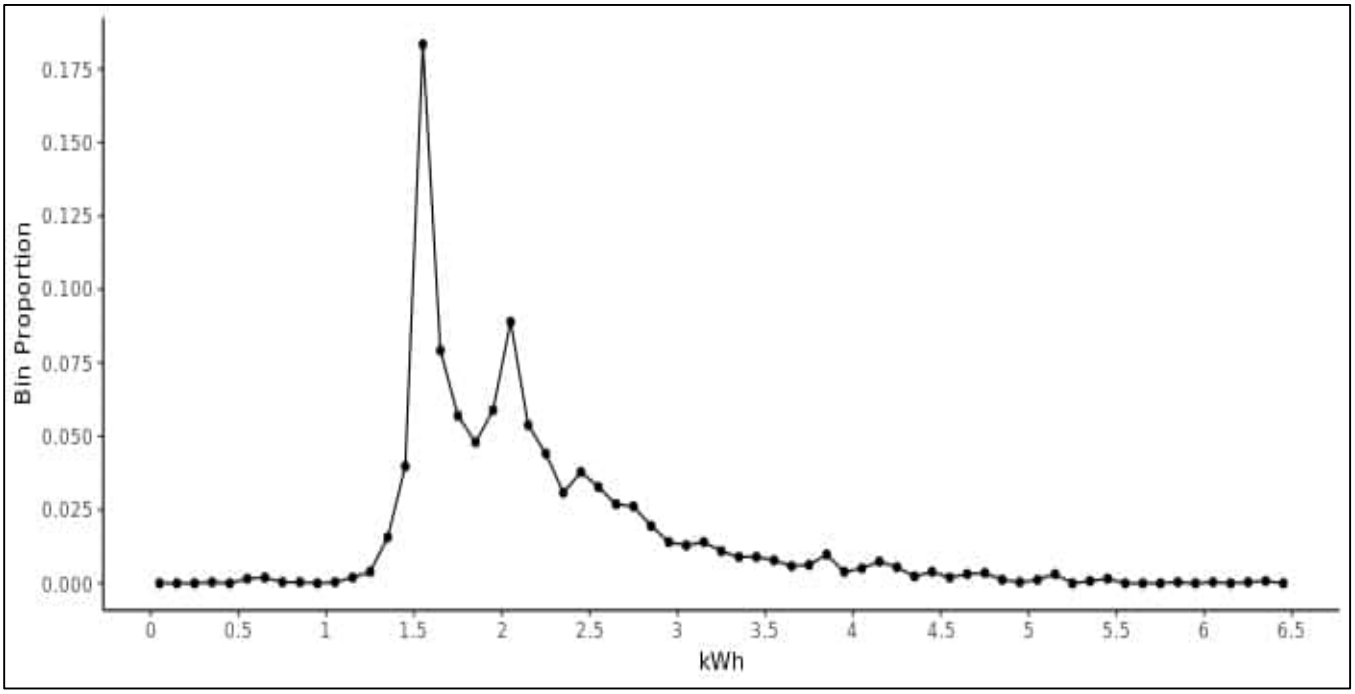


Figure 15-1. This approach has been found to optimize retention of both general consumption patterns and magnitudes in a condensed, easily comparable form. The Euclidean distance, the "ordinary" straight-line distance between two points in space denoted as *d* in the first equation below, for each set of premise values was calculated to determine matches by finding the treatment-control pair that had a minimum value *d* relative to other possible control premises. The bold letters, **q** and **p**, denote vectors where each represents a single premises' summarized consumption data; non-bold cases with number subscripts indicate a specific index position in each vector.

[16] McBride, C. *Finding the Perfect Baseline: Advanced Time Series Control Group Matching Strategies on Energy Consumption*. IEPEC 2019.

EQUATION 15-1: EUCLIDEAN DISTANCE MATCHING

$$d(\mathbf{q},\mathbf{p}) = \sqrt{\sum_{i=1}^{n}(q_i - p_i)^2} = \sqrt{(q_1 - p_1)^2 + (q_2 - p_2)^2 + \cdots + (q_n - p_n)^2}$$

EQUATION 2: VECTOR ANGLE DISTANCE MATCHING

$$\theta(\mathbf{q},\mathbf{p}) = cos^{-1}\left(\frac{\sum_{i=1}^{n} q_i * p_i}{\sqrt{\sum_{i=1}^{n} q_i * q_i} * \sqrt{\sum_{i=1}^{n} p_i * p_i}}\right)$$

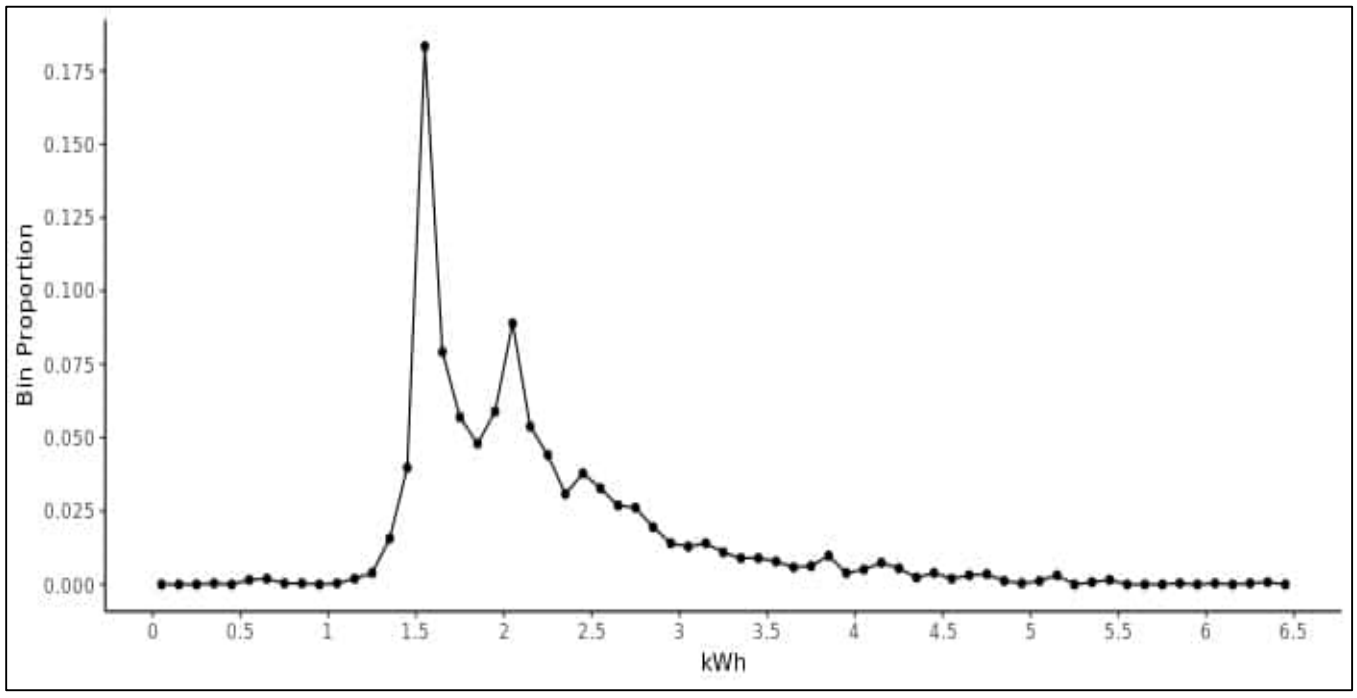


FIGURE 15-1: AVERAGE HOURLY ENERGY NORMALIZED HISTOGRAM BIN PROPORTIONS

To measure remaining error and bias after matching, the Evaluators utilized the Coefficient of Variation of Root Mean Squared Error (CV(RMSE)) to measure error and Normalized Mean Bias Error (NMBE) to measure bias[17].

15.3.1.4 Savings Calculations and Extrapolation

The Evaluators expected no energy savings (kWh) for the Electric Vehicle Pilot because the program was designed to shift EV charging away from the peak period toward off-peak hours.

[17] ASHRAE Guideline 14-2014. Measurement of Energy, Demand, and Water Savings.

The Evaluators calculated peak demand reductions (kW) by comparing usage in the post-period between matched control group customers and program participants (treatment customers). The post-period was defined as the period after which a large proportion of customers had enrolled in the program.

The peak demand reduction per participant (kW) was estimated during ENO's peak demand window according to the equation below.

$$Peak\ Demand\ Reduction\ (kW)\ per\ Participant = (\sum_{h=1}^{n} Average\ Control\ Customer\ kW_h - Average\ Treatment\ Customer\ kW_h) / (\#\ of\ Peak\ Hours)$$

Where,

h = an indicator for peak hour h;

$Average\ Control\ Customer\ kW_h$ = average kW during peak hour h across all matched control customers during the post-period;

$Average\ Treatment\ Customer\ kW_h$ = average kW during peak hour h across all treatment (participant) customers during the post-period;

Because electric vehicle loads were not weather sensitive in the selected post-period, the entire post-period was utilized when averaging hourly control and treatment customer usage.

The Average Peak Demand Reduction (kW) was extrapolated to the total number of participants that enrolled in the Pilot in PY13.

15.3.1.5 Cross Program Participation Adjustments

The Evaluators expected cross program participation with other DR programs for the EV Pilot. However, since the EV Pilot does not call DR events and instead causes participants to shift their EV charging away from the peak on any day of the week, no cross-program participation adjustments were made. This was determined by noting that MISO baselines for event-based DR programs would include any load shifting from the EV Pilot for customers with dual enrollment, because MISO baselines are based on prior-day averaging. In addition, the Evaluators removed all DR event days from other DR programs from the study period for the EV Pilot to avoid double counting or creating bias in the EV Pilot impact estimates.

15.3.2 NET IMPACT METHODOLOGIES

In demand response programs, it is typically assumed that there are neither spillover nor free-ridership effects (customers are not expected to curtail without participating). As such, the net-to-gross ratio for this program is assumed to be 100%.

15.4 Evaluation Findings

15.4.1 MATCHED CONTROL GROUP FINDINGS

Table 15-7 details the treatment and control cohort sizes before and after matching.

TABLE 15-7 COHORT SIZES BEFORE AND AFTER MATCHING

Matching Method	Number of Treatment Customers	Number of Potential Control Customers	Number of Matched Treatment Customers	Number of Matched Control Customers
Method 1 (PSM)	238	477	131	145
Method 2 (Euclidian)	238	477	53	108
Method 3 (Vector Angle)	238	477	53	108

Table 15-8 compares the matching methods using several statistical methods applied to the pre-period data after matching. The Evaluators selected Method 1 (PSM) as the most suitable matching method because it showed low error (RRMSE) and the lowest bias (NMBE). It also showed no statistically significant difference between treatment and control average pre-period usage after matching (p-value = 0.97).

TABLE 15-8 MATCHING METHOD COMPARISON

Matching Method	Average Treatment Pre-Period Usage (kW), After Matching	Average Control Pre-Period Usage (kW), After Matching	P-Value (Welch's T-Test)	RRMSE	NMBE
Method 1 (PSM)	3.15	3.15	0.97	0.087	-0.05%
Method 2 (Euclidian)	3.15	3.37	0.00	0.136	-7.19%
Method 3 (Vector Angle)	3.15	3.28	0.00	0.113	-4.37%

The figures below provide average pre- and post-period hourly usage before and after matching for the selected matching method (PSM). As shown in

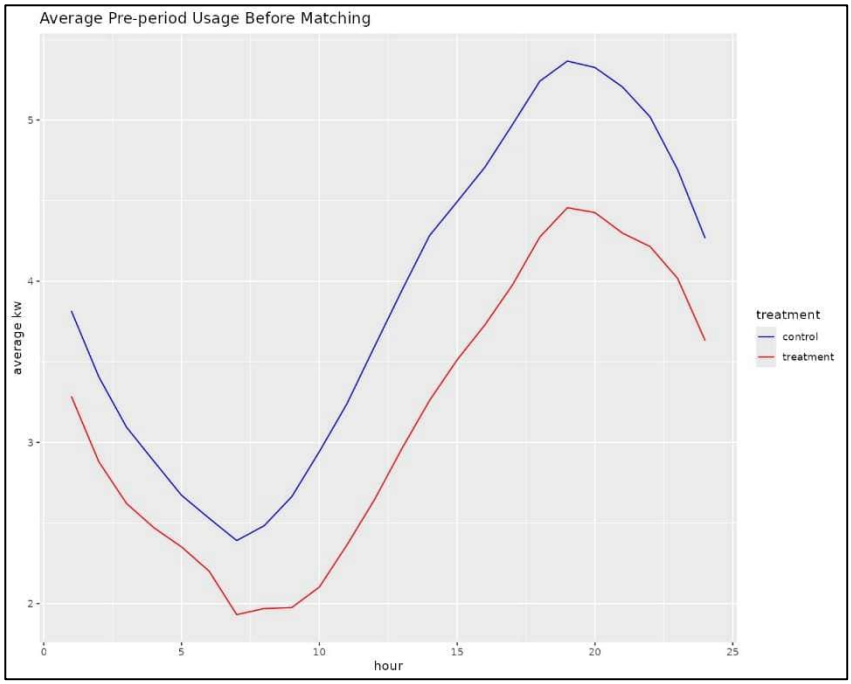


Figure 15-2, there are large differences between the control and treatment groups before matching, while in

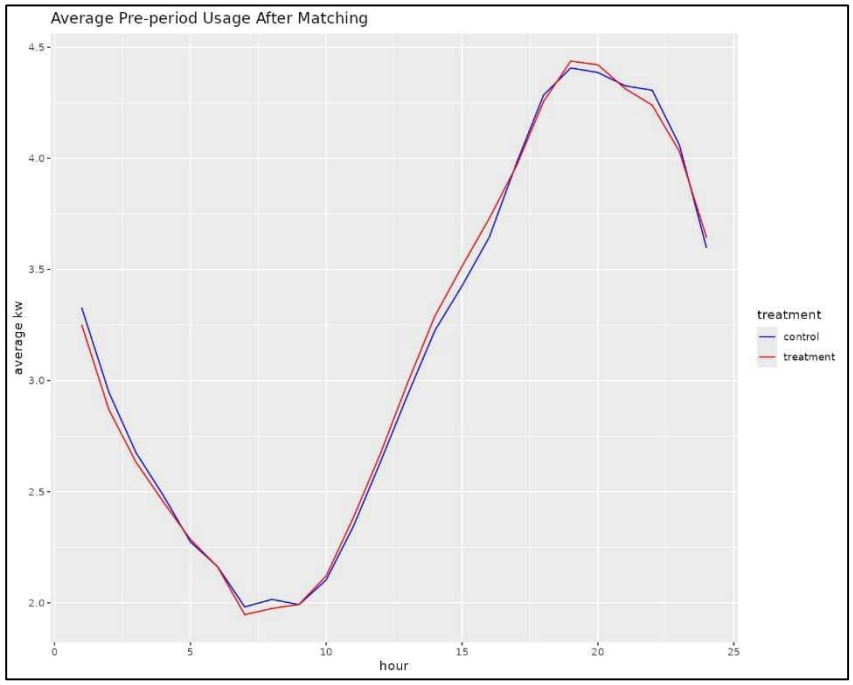


Figure 15-3, there is little difference in pre-period usage remaining after matching.

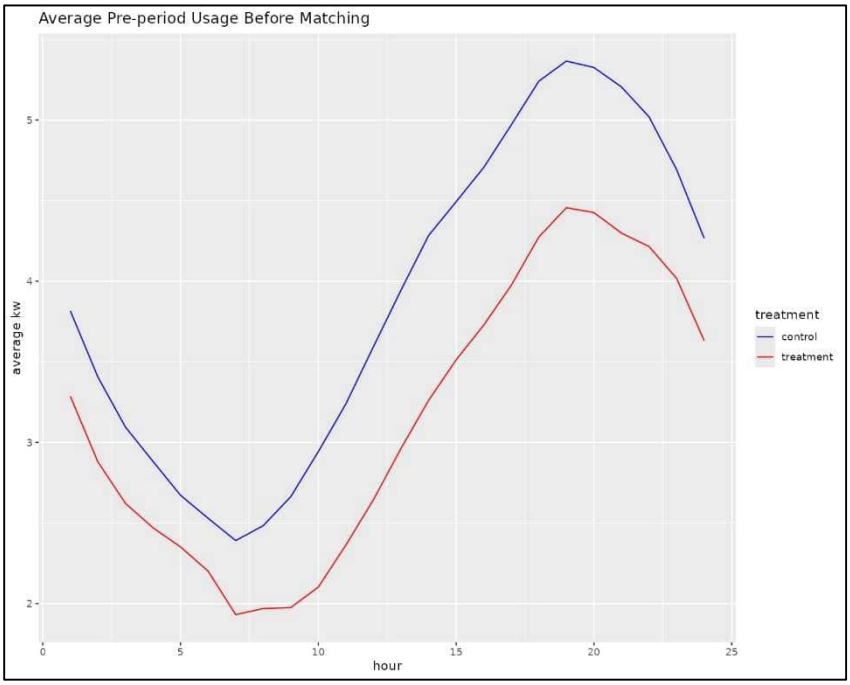


FIGURE 15-2 AVERAGE PRE-PERIOD USAGE BEFORE MATCHING

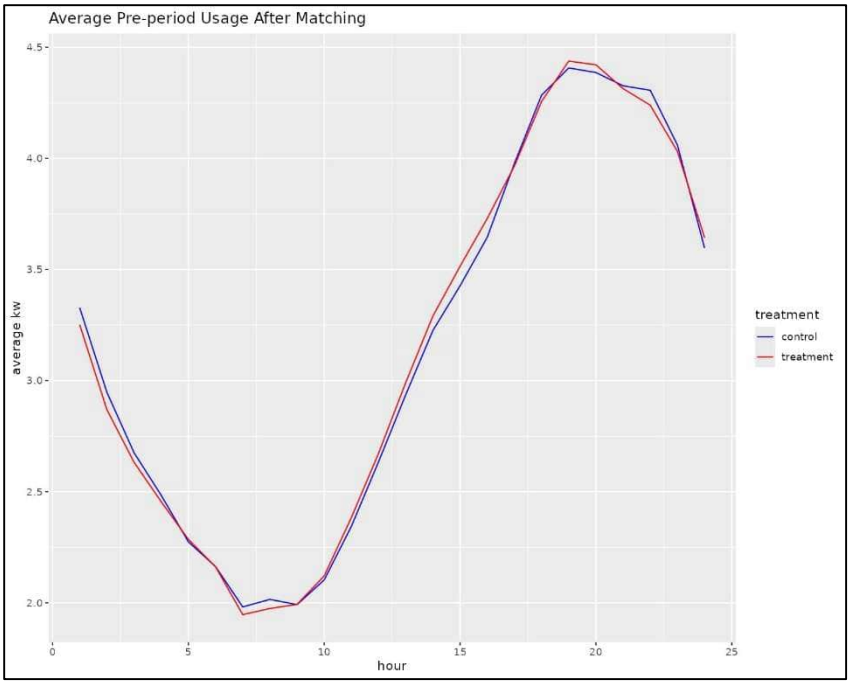


FIGURE 15-3 AVERAGE PRE-PERIOD USAGE AFTER MATCHING

15.4.2 GROSS IMPACT FINDINGS

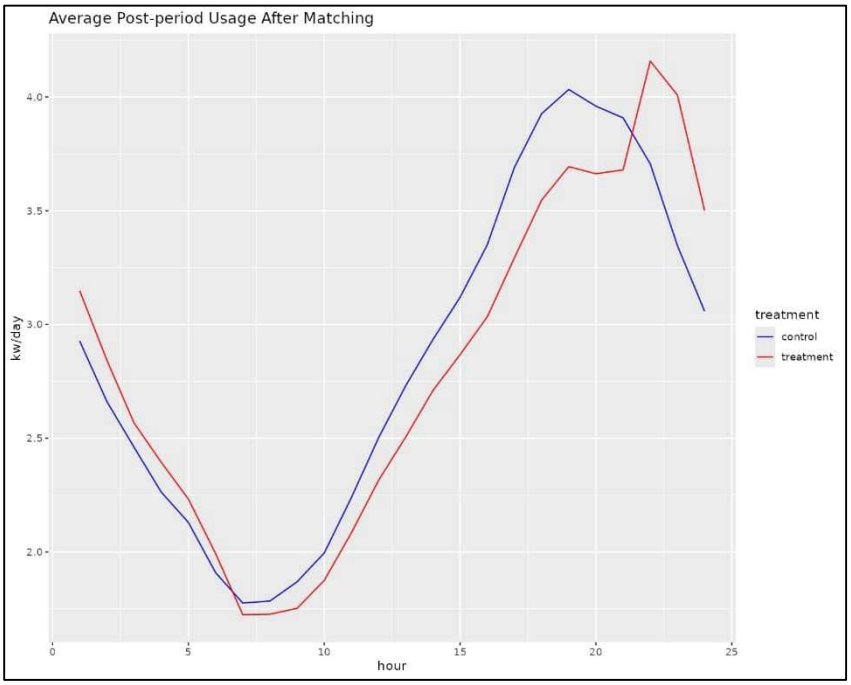


Figure **15-4** displays average post-period usage for the treatment and control groups after matching. The EV pilot required participants to charge their EV's during the off-peak hours from 9 PM to 6 AM on weekdays, and any time on weekends and holidays. The load shift is clearly visible during these hours, with increased usage between 9 PM and 6 AM, and decreased usage between 6 AM and 9 PM.

As expected, the Evaluators found no statistically significant kWh savings and peak kW reductions were not a function of temperature (F) in the study post-period.

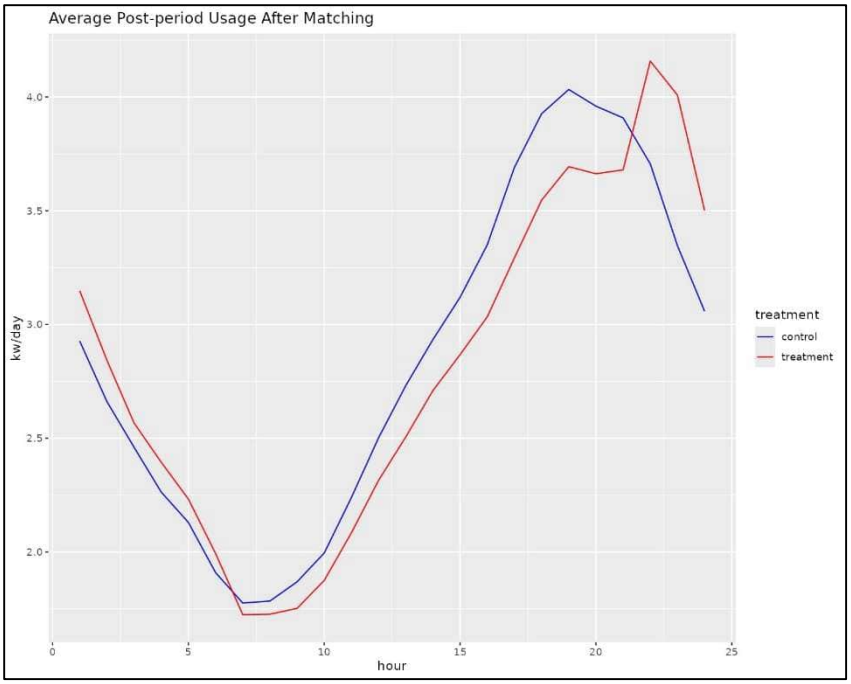


FIGURE 15-4 AVERAGE POST-PERIOD USAGE AFTER MATCHING

Table 15-9 provides average hourly kW reductions on weekdays in the post-period using the matched cohort. The largest kW reductions occur between 3 PM and 9 PM CDT and overlap with the peak period.

TABLE 15-9 PEAK KW REDUCTIONS BY HOUR, WEEKDAYS

Hour Ending (CDT)	Average Treatment Post-Period Usage (kW), After Matching	Average Control Post-Period Usage (kW), After Matching	% Change kW Usage	Absolute Change kW Usage
1	3.21	2.97	8.02%	0.24
2	2.91	2.69	8.16%	0.22
3	2.63	2.49	5.44%	0.14
4	2.45	2.28	7.52%	0.17
5	2.30	2.15	6.95%	0.15
6	2.05	1.93	6.10%	0.12
7	1.77	1.80	-1.65%	-0.03
8	1.76	1.78	-1.56%	-0.03
9	1.75	1.82	-4.04%	-0.07
10	1.83	1.91	-3.96%	-0.08
11	2.02	2.11	-4.23%	-0.09
12	2.24	2.37	-5.23%	-0.12
13	2.41	2.58	-6.46%	-0.17
14	2.61	2.79	-6.43%	-0.18
15	2.76	2.97	-7.01%	-0.21
16	2.93	3.22	-8.82%	-0.28
17	3.23	3.62	-10.88%	-0.39
18	3.49	3.89	-10.27%	-0.40
19	3.65	4.02	-9.20%	-0.37
20	3.65	3.97	-7.97%	-0.32
21	3.67	3.94	-6.79%	-0.27
22	4.23	3.75	12.90%	0.48
23	4.10	3.38	21.20%	0.72
24	3.56	3.07	16.00%	0.49

Using results from the matched control group, the Evaluators calculated the PY14 kW reduction. Results are shown below in the table below. The Evaluators utilized the same peak period hours used for demand response program DR events when calculating the peak kW reduction, namely, 3 PM to 7 PM CDT. The peak kW reductions are statistically significant at the 99.99% level.

TABLE 15-10 TOTAL GROSS EV PILOT DEMAND REDUCTIONS

Measure	Average kW Reduction per Participant per Unit	Average kW Reduction per Participant	Number of Electric Vehicles	Number of Participants	Total Program kW Reduction
EV Charging	0.376401	0.408435	258	238	97.21
Total	**0.376401**	**0.408435**	**258**	**238**	**97.21**

The overall verified kW reduction is 97.21 kW.

The Evaluators estimated an average reduction per participant of 0.4084 kW.

15.4.3 NET IMPACT FINDINGS

For demand response programs, net savings equals gross savings.

TABLE 15-11 TOTAL EV PILOT NET DEMAND REDUCTION RESULTS

Gross kW Reduction	Net-to-Gross Ratio	Net Demand Reduction
97.21	100%	97.21

15.4.4 NON ENERGY BENEFITS FINDINGS

There were no NEBs identified in this program.

15.4.5 PROCESS EVALUATION FINDINGS

The Evaluators conducted a limited process evaluation of the Electric Vehicle pilot program in PY14.

15.4.5.1 Staff and Implementer Interviews

The following section summarizes key findings from in-depth interviews with two ENO program staff and one Sagewell staff member. ENO staff participated in one interview, while Sagewell staff participated in a separate interview.

These interviews aimed to gather insights into the design and operations of the EV Charging Pilot Program, as well as the successes and challenges experienced during PY14. Each interview lasted approximately 30 minutes and was conducted via Microsoft Teams. With participant permission, evaluators recorded all interviews. The following narrative presents a summary of these discussions.

15.4.5.1.1 *Program Description and Implementation*

PY14 marked the second year of the 'Bring Your Own Charger' (BYOC) program, a demand response pilot designed to shift EV charging load to off-peak hours through a predetermined charging schedule.

Sagewell uses software to identify potential EV owners and invites them to participate. Customers who enroll receive a $7 monthly incentive for charging their vehicle during off-peak hours—weekdays between 9:00 PM and 6:00 AM—at least three times per month. Additionally, participants cannot override the charging schedule more than four times per month. The incentive, which equates to approximately 2,000 miles of driving annually,

is distributed quarterly via check, PayPal, or Venmo. Most participants receive the full incentive, while those who do not are typically charging their vehicles at other locations rather than at home.

The program aims to enroll 350 vehicles per year, targeting single-family home residents with Level 2 chargers. However, in PY14, enrollment did not meet expectations. Program staff speculate that fewer EVs exist in the service territory than initially estimated and/or that customers may not be using Level 2 chargers as frequently as anticipated.

15.4.5.1.2 *Marketing*

Staff recruit participants through emails and direct mailers, while also leveraging existing Energy Smart programs to promote the new pilot. As the program is still relatively new, staff continue to assess which recruitment strategies are most effective.

Due to low enrollment rates in both PY13 and PY14, program staff are exploring additional marketing efforts. However, the reasons behind the low participation remain unclear. While enrolled customers generally report positive experiences, overall awareness and initial interest in the program remain low.

15.5 Data Tracking Review

The Evaluators reviewed the tracking data and found no issues. AMI data was provided which allowed the Evaluators to estimate program impacts.

15.6 Key Findings and Recommendations

The following summarizes the key findings from the PY14 evaluation.

- Performance of EV Pilot: The EV Pilot attained 9% of its ex-post demand reduction (kW) target.
- Creation of Matched Control Group: The Evaluators successfully established a matched control group for the baseline counterfactual, enhancing the accuracy of the evaluation.
- Statistically Significant Peak kW Reductions: The EV Pilot demonstrated statistically significant peak kW reductions, achieving an average reduction of 0.41 kW per participant.
- Target Achievement Projection: To meet the demand reduction target of 530 kW, the program aims to enroll nearly 1,000 customers by the third year of the pilot. This projection underscores the necessity of scaling up customer enrollment to achieve program objectives.
- Enrollment Challenges & Market Uncertainty: The program did not meet its PY13 or PY14 enrollment goals. The implementation team suspects that there are fewer EV owners in the service territory than expected or that many do not use Level 2 chargers at home. They also noted that the limited frequency of data updates on newly eligible customers constrains their outreach efforts.
- Participant Satisfaction & Compliance: Enrolled customers generally follow charging schedules and receive the full incentive, suggesting that the program is effective for those who do participate. However, limited awareness and unclear enrollment barriers hinder broader adoption.

The Evaluators have the following recommendations after completing the PY14 evaluation.

- Hourly Aggregation of Interval AMI Data: Interval AMI data should undergo aggregation to hourly intervals based on the hour ending datetime. It is imperative that usage is not aggregated across more

than one hour. For instance, data ending at 4 PM should exclusively represent usage from 3 PM to 4 PM, ensuring accurate measurement and analysis.

- Procurement of Potential Control Customers: For future program years, the procurement of potential control customers should follow the same methodology utilized in 2023 and 2023. This includes sourcing control customers from various channels such as Sagewell's EV Finder algorithm, individuals who enrolled after the program year commenced, and participants who initiated but did not complete the enrollment process. This approach ensures consistency and reliability in selecting control groups for evaluation purposes.
- Adjust Enrollment Targets for Realistic Growth: According to 2023 EIA data, there are an estimated 188,026 residential ENO customers, and based on 2023 U.S. Census American Community Survey data, the average New Orleans household has 1.7 vehicles. If 1% of all vehicles are EVs, this suggests there are approximately 3,196 EVs in the customer base, with around 1,880 residential customers likely owning at least one EV. A target of 350 enrollments per year would require enrolling 18.6% of all EV-owning customers annually, which is likely high given that not all EV owners will be aware of the program, willing to participate, or have the necessary charging setup at home. Additionally, participation in voluntary programs tends to grow gradually over time rather than achieving high enrollment immediately. Adjusting expectations to align with a more gradual adoption rate would help set achievable goals while ensuring steady program growth.
- Optimize Recruitment Messaging: Test variations of email and direct mail campaigns with different value propositions (e.g., cost savings, environmental impact) to see which messaging resonates most with potential participants before investing in larger marketing efforts.

16 LARGE C&I DEMAND RESPONSE

16.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend.

TABLE 16-1 PY14 LARGE C&I DR ENERGY SAVINGS (KWH)

Measure	*Ex Ante* Gross Savings (kWh)	Realization Rate (kWh)	*Ex Post* Gross Savings (kWh)	NTG	*Ex Post* Net Savings (kWh)
DR Participation	43,300	92%	36,961	100%	36,961
Total	**43,300**	**92%**	**36,961**	**100%**	**36,961**

Sums may differ due to rounding.

TABLE 16-2 PY14 LARGE C&I DR DEMAND REDUCTIONS (KW)

Measure	*Ex Ante* Gross Demand (kW)	Realization Rate (kW)	*Ex Post* Gross Demand (kW)	NTG	*Ex Post* Net Demand (kW)
DR Participation	2,925.90	85%	2,494.77	100%	2,494.77
Total	**2,925.90**	**85%**	**2,494.77**	**100%**	**2,494.77**

Sums may differ due to rounding.

TABLE 16-3 PY14 LARGE C&I DR LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex Post* Gross Lifetime Energy Savings (kWh)	*Ex Post* Net Lifetime Energy Savings (kWh)
DR Participation	1	36,961	36,961
Total	**1**	**36,961**	**36,961**

Sums may differ due to rounding.

TABLE 16-4 PY14 LARGE C&I DR PARTICIPATION AND INCENTIVE SUMMARY

Measure	Participation	Incentive Spend ($)
DR Participation	19	$139,256
Total	**19**	**$139,256**

Sums may differ due to rounding.

16.2 Program Description

The Large C&I Demand Response (Large C&I DR) program is designed to help reduce the strain on the electric grid during periods of peak demand. The automated program is free, flexible, and easy to use. The program provides scaled incentives based on the load provided (with seasonal payments in summer and winter). Customers nominate the load they will provide in collaboration with Honeywell (the program implementer) and

may provide the curtailment with automated controls or via manual curtailment of the proposed systems. Curtailed systems may include HVAC, lighting, industrial processes, or any other applicable end-use.

16.2.1 PROGRAM DELIVERY CHANNELS AND EXPECTED SAVINGS

Incentives are based on twice-yearly payments based on average demand reduction across all events during a performance period ($50/kW for summer, $10/kW for non-summer).

Motivation to participate varies from customer-to-customer, and program staff noted that they will tailor their sales pitch to meet this variety. Some customers are driven by the financial incentive, while others look at participation purely from a sustainability standpoint. However, program staff emphasized that lowering energy costs are not a main selling point, as it could just be one outcome of the program, not a main driver. Being able to return to in-person engagement has really helped the program this year and seen as an overall success. Additionally, being able to present to larger hospitals in the area, paving the way for enrollment for new program year, has also been a huge success.

The program did not hit the demand reduction target of 8,870 kW in PY14.

16.2.2 TIMING OF PROJECTS

All projects occurred from July to August.

16.2.3 TRADE ALLIES

There were no reported trade allies in this program.

16.2.4 GOAL ACHIEVEMENT

The table below summarizes the programs' performance against goal.

TABLE 16-5 LARGE C&I DR PERFORMANCE TOWARDS GOAL

Ex Post Gross Energy Savings (kWh) Goal	% to kWh Goal	*Ex Post* Gross Energy Savings (kWh)	*Ex Post* Gross Savings (kW) Target	% to kW Target	*Ex Post* Gross Savings (kW)
0	NA	39,961	8,870.00	28.1%	2,494.77

16.3 EM&V Methodology

The Evaluators employed the following approach to complete impact evaluation activities for the program. The Evaluator followed the Calculated Baseline approach outlined in the Midcontinent Independent System Operator, Inc. (MISO) Business Practices Manual (BPM)[18]. The following impact evaluation steps were taken to determine the suitability of the MISO Calculated Baseline approach:

[18] *Ibid.*

- Developed an Unadjusted Consumption (UC) Baseline, a Symmetric Multiplicative Adjustment (SMA) Baseline, and a Weather Sensitive Adjustment (WSA) Baseline for each program participant. Loads were calculated utilizing 15-minute AMI data.
- Determined days that will serve as proxy days for testing the suitability of the baseline approach. Proxy days represent days like demand response event days in terms of load shape and temperature profiles.
- Estimated bias (uncertainty) and error on proxy days for each model to assess baseline performance. Bias is assessed by examining the average percent error of the baseline predictions relative to the actual usage on proxy days. In a similar manner, error is assessed through various metrics such as Root Mean Squared Error (RRMSE) using baseline predictions and actual usage on proxy days.
- Assigned the model/baseline with the lowest bias to each customer.
- Assessed bias and error for the entire program population and customers with the largest nominated loads, with the goal of minimizing bias and error for the program overall.

16.3.1GROSS IMPACT

In the evaluation of demand response programs, energy savings are estimated by comparing a participant's load shape during a demand response event with a baseline load shape. This baseline load is assumed to be a good estimate of the counterfactual load—that is, the load that would have manifested had there not been an event called that day.

16.3.1.1 Data Sources

Data used for this evaluation includes program tracking data that identifies which customers participated in the program and contains data fields such as contract curtailment amount, hourly usage, hourly baseline estimates, 15-minute interval meter data (AMI) for each customer participating in the program, and a full schedule of DR program events, including the time of the event.

16.3.1.2 MISO Calculated Baseline Approach (Customer Baselines)

The following details the general requirements for the MISO Calculated Baseline Approach. The Evaluators developed Customer Baselines (CBLs) in accordance with this approach. For a demand resource, the Consumption Baseline is a profile of hourly demand based on an average sample of historical data which may be adjusted for factors that reflect specific, on-the-day conditions, such as temperature.

The default consumption baseline is designed as follows:

- Separate hourly demand profiles for non-holiday weekdays and for weekends/holidays
- The "weekday" hourly profile is based on the average of the ten (10), but not less than five (5), most recent weekdays that are not holidays or other non-standard "event" days
- The "weekend/holiday" hourly profile is based on the average of the four (4), but not less than two (2), most recent weekend days or holidays that are not "event" days
- An "event" day is one during which there was, for the resource in question, a real- time energy or ancillary services dispatch, or a scheduled outage
- The maximum look-back window is limited to 45 days
- If the 45-day window contains insufficient days to meet the minimum number of days described above, the profiles are constructed based on the available days within the 45-day window that qualify,

supplemented by the largest (MW) matching "event" day(s) values for that resource within that same window as necessary to obtain the minimum number of values.

Adjustment mechanisms to the default Consumption Baseline include:

- Symmetric Multiplicative Adjustment (SMA)
  - Adjusts each baseline hourly value (MW) during the event up or down by the ratio of
  - (a) the sum of hourly demands for the three hours beginning four hours prior to the event and (b) the sum of those same three hourly baseline demands
  - The adjustment is limited to a change in any individual baseline hour of plus or minus 20 percent.
  - If multiple events occur during the same day, the SMA is calculated only for the first event, but applied to all events that day.
- Weather Sensitive Adjustment (WSA)
  - Adjusts each baseline hourly value (MW) up or down by a Weather Adjustment Factor
  - The Weather Adjustment Factor is determined by a mathematical relationship derived through a regression analysis that considers the DRR load and historical hourly temperature data.

16.3.1.3 Evaluators MISO Models

The following CBL models were developed for each customer in accordance with MISO protocols.

For a 10-of-10 (or 5-of-5) unadjusted baseline, the Evaluators examine the load data from the most recent ten (or five) non-event, non-holiday weekdays relative to the event day and calculate the mean demand usage values of the ten (or five) highest load days. This baseline is then adjusted for the SMA and WSA models utilizing the method described in Section 16.3.1.2.

TABLE 16-6 EVALUATORS' MISO CBL MODELS

Model Type	Baseline Days	SMA	WSA
Unadjusted	10-of-10	No	No
SMA-Adjusted	10-of-10	Yes	No
WSA-Adjusted	10-of-10	No	Yes
Unadjusted	5-of-5	No	No
SMA-Adjusted	5-of-5	Yes	No
WSA-Adjusted	5-of-5	No	Yes

16.3.1.4 Baseline and Proxy Day Development

The Evaluators defined proxy days as the top four non-event, non-holiday, non-weekend days with the highest loads across all summer months. In addition, proxy days must display a maximum temperature of greater than or equal to the minimum temperature observed during normal curtailment hours during the events. The Evaluators used these defined proxy days to determine the ability of CBL models to predict actual usage for each customer.

16.3.2 NET IMPACT

In demand response programs, it is typically assumed that there are neither spillover nor free-ridership effects (customers are not expected to curtail without participating). Furthermore, participants are compensated only if they reduce their load during the peak demand window, the primary program goal. As such, the net-to-gross ratio for this program is assumed to be 100%.

16.4 Evaluation Findings

16.4.1 GROSS IMPACT

Five events were called during the summer of 2024 between the hours of 1600 and 1900 CDT, as shown in the table below.

TABLE 16-7 EVENT DATES AND TIMES

Event Dates	Event Times (CDT)
7/02/2024	16:00-18:00
8/01/2024	17:00-19:00
8/07/2024	16:00-18:00
8/09/2024	16:00-18:00
8/14/2024	17:00-19:00

16.4.1.1 Performance Versus Nomination Comparison

The Evaluator compared realized kW for each site with their nominated kW to summarize the extent to which participants have met their nominated load curtailments. The names of sites have been anonymized to protect customer confidentiality.

The ex post gross demand (kW) curtailment as a percentage of nominated load is 90%. Load nominations have consistently been higher than ex post gross demand (kW) on average each program year.

TABLE 16-8 SITE LEVEL RESULTS

Site	Nominated kW	Ex Post Gross Demand (kW)	% of Nominated Load
Site 1	71	39.31	55%
Site 2	35	6.59	19%
Site 3	17	1.18	7%
Site 4	1,257	0.22	0%
Site 5	36	17.16	47%
Site 6	477	348.14	73%
Site 7	139	5.82	4%
Site 8	80	25.66	32%
Site 9	99	37.82	38%
Site 10	-	29.37	-
Site 11	308	177.26	58%
Site 12	93	57.72	62%
Site 13	-	1,538.28	-
Site 14	10	3.14	31%
Site 15	5	0.60	12%
Site 16	5	0.47	10%
Site 17	105	181.55	173%
Site 18	41	3.03	7%
Site 18	2,785	21.43	1%
Total	**2,778.94**	**2,494.77**	**90%**

16.4.1.2 Load Shapes and Model Performance

The figures below are average load shapes for all sites on proxy and event days and depict actual kW and baseline kW. While the figures show that baseline kW is not an exact match for actual kW during the hours of curtailment, the differences are expected to average out, with some days over-estimating the baseline and other days under-estimating the baseline. In addition, the Evaluators determined that the site with the largest usage has erratic loads that are not easily predicted using the agreed-upon MISO models, which depend on either weather or prior usage patterns.

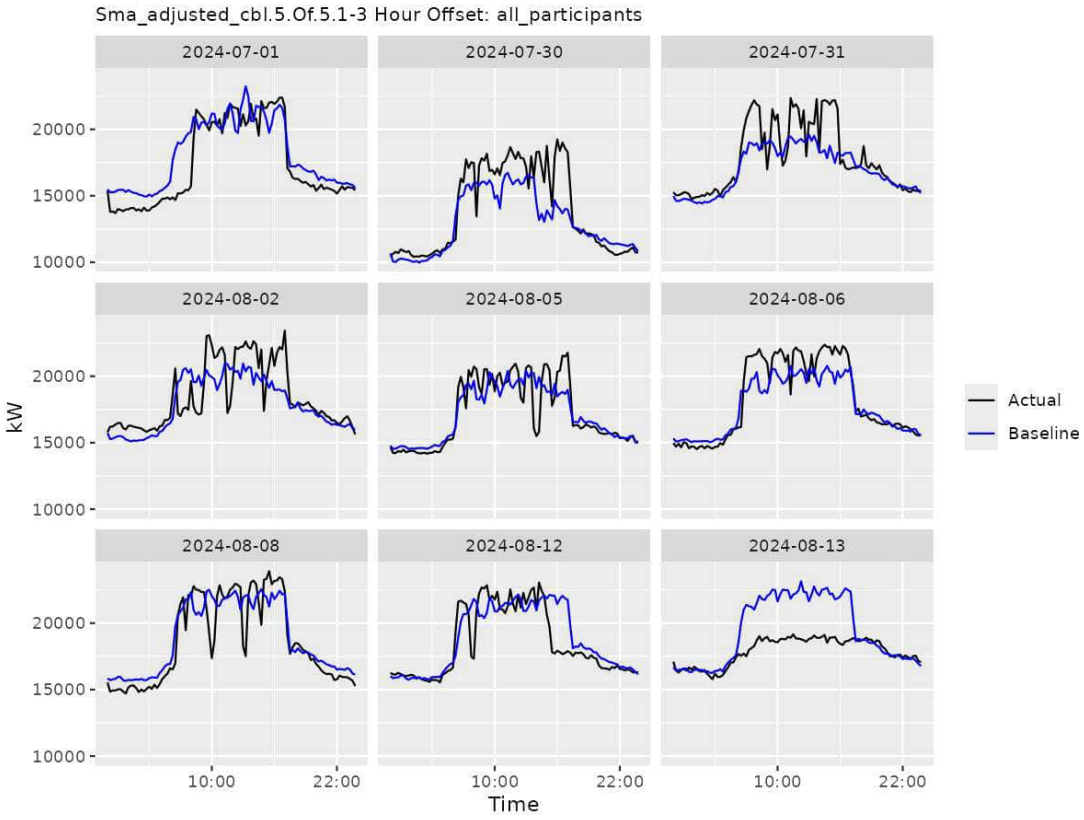


FIGURE 16-1 PROXY DAY LOAD SHAPES

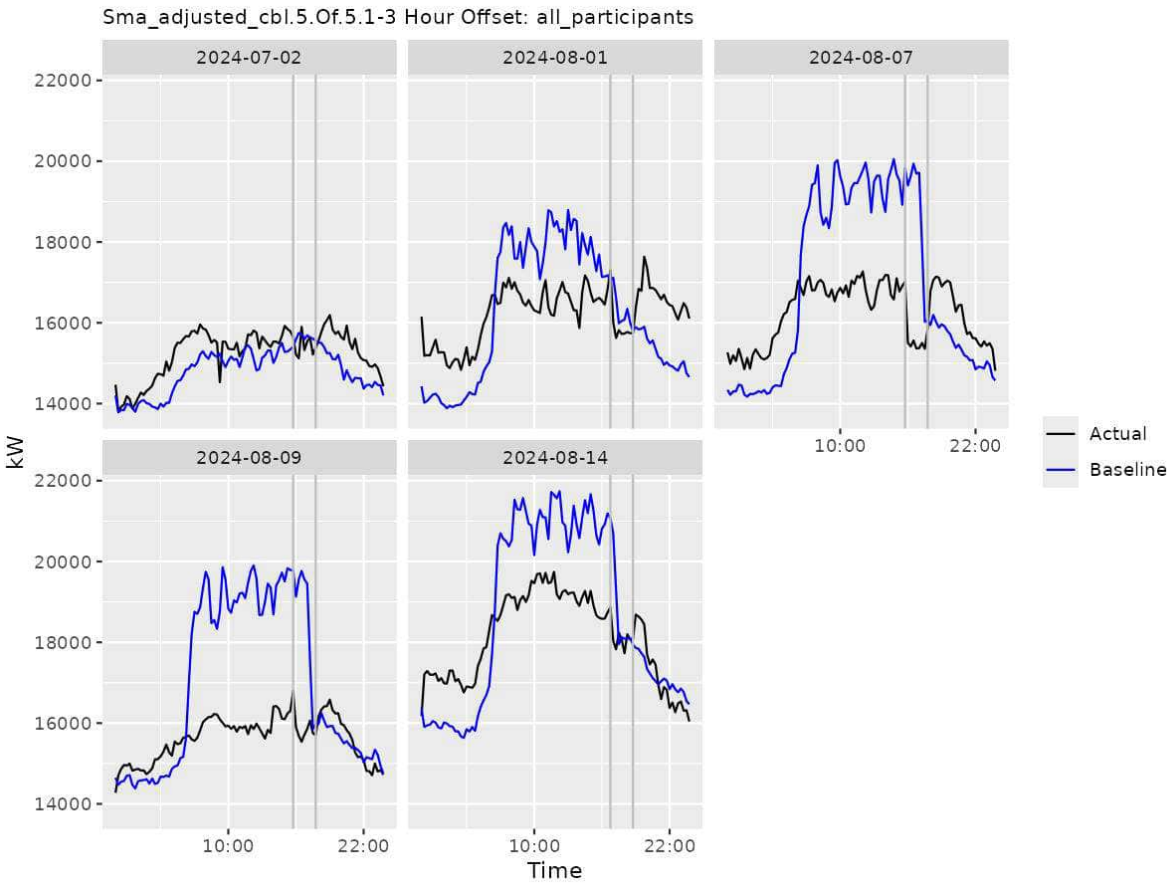


FIGURE 16-2 EVENT DAY LOAD SHAPES

The Evaluators estimated bias and error for the Evaluators' MISO models across all sites and when applied on a site-specific basis and selecting for the model with the lowest bias (shown as the "SMA Adjusted CBL 5-of-5"). In addition, the Evaluator estimated and verified Honeywell's *Ex Ante* model for all sites. As shown in the table below, the Evaluator's baseline model performed the best by having the lowest absolute bias. The Evaluator determined that the method of additive adjustment for Honeywell's CBL model does not match the approved adjustment factors in the MISO protocols which only allow for multiplicative or weather-sensitive adjustments[19].

[19] Per MISO, the offset factor must also begin three hours prior to the event start time, whereas Honeywell's utilizes a one hour offset factor beginning two hours prior to the event start time.

TABLE 16-9 MODEL FIT

Model	Follows MISO Protocols	RRMSE	RMSE	Bias	Best Fit Model (Lowest Absolute Bias)
SMA Adjusted CBL 5-of-5	X	0.097	46.555	-0.45%	X
WSA Adjusted CBL 10-of-10	X	0.188	113.942	-3.22%	
SMA Adjusted CBL 10-of-10	X	0.165	99.710	-2.76%	
Mixed Model CBL (site-specific)	X	0.103	52.050	-0.86%	
WSA Adjusted CBL 5-of-5	X	0.113	54.357	-0.91%	
Unadjusted CBL 5-of-5	X	0.125	60.062	-2.78%	
Honeywell CBL 10-of-10 Additive Adjustment (2-Hour Offset)		0.125	62.037	8.98%	
Unadjusted CBL 10-of-10	X	0.215	129.708	-6.96%	

The table below shows the expected savings, verified savings and realization rate for the program. The realization rate of kWh is 92% because the *ex-ante* Honeywell baselines had large positive bias on proxy days and the Honeywell baselines were higher than any of the *ex post* MISO models.

TABLE 16-10 VERIFIED GROSS IMPACTS

Measure	Expected kWh	Expected kW	Verified Gross kWh	Verified Gross kW	Realization Rate kWh	kW Realization Rate
DR Participation	43,300	2,925.90	39,961	2,494.77	92%	85%

16.4.2 NET IMPACT

The NTG is assumed to be 100% for demand response programs.

Program results can be found in tables in Section 16.1.

16.4.3 PROCESS FINDINGS

The Evaluators conducted a limited process evaluation of the Large C&I Demand Response program in PY14.

16.4.3.1 Staff and Implementer Interviews

The following section summarizes key findings from in-depth interviews with two ENO program staff and three Honeywell staff members. ENO staff participated in one interview, while Honeywell staff participated in a separate interview. The Honeywell interviewees included the former Program Manager, the new Program Manager, and the Outreach Manager.

These interviews aimed to gather insights into the design and operations of the Large C&I Demand Response Program, as well as the successes and challenges experienced during PY14. Each interview lasted approximately 30 minutes and was conducted via Microsoft Teams. With participant permission, evaluators recorded all interviews.

The following narrative presents a summary of these discussions.

16.4.3.1.1 *Program Description and Implementation*

The Large C&I Demand Response (Large C&I DR) program is designed to help reduce the strain on the electric grid during periods of peak demand. The automated program is free, flexible, and easy to use. The program provides performance-based incentives; participants receive $50 for every kW saved. Participants reduce energy load by adjusting building temperatures, pumps, and drivers. Curtailed systems may include HVAC, lighting, industrial processes, or any other applicable end-use.

PY14 witnessed minimal changes to the Large C&I DR program. Program staff continue to recruit, market to, and enroll program participants. When beginning a new project, program staff conduct a demand response survey to understand their clients' operational restrictions and typical utility usage. From there, they can make calculations that predict how much energy the customers can reduce during peak events. Customers then sign up for specific kilowatt reduction goals that they can meet over the course of the peak demand events. The program is completely voluntary; customers can opt out of events at any time.

Customers typically receive a notification about 24 hours in advance of an upcoming event. Since the program is automated, energy usage is automatically reduced once the event begins unless the customer opts out. Events generally last 2–3 hours and occur during heat waves or other predictable high-demand periods. Participants are informed at enrollment that they can expect between 4–8 events per year.

While some customers initially express concerns about comfort during events, staff note that the setpoint adjustments are minimal, and most participants do not notice a difference. To further ease concerns, program staff encourage customers to plan ahead and practice pre-cooling before an event. Staff emphasize that this is not an energy savings program but a load-shifting, demand reduction program designed to alleviate stress on the grid during peak periods.

At the end of each season, participants receive a report that summarizes their energy usage and load shifting so they can make more informed changes moving forward.

16.4.3.1.2 *Marketing*

Program marketing consists of word-of-mouth, handouts, information on the website, lunch-n-learns, and industry presentations. Staff note that word of mouth accounts for most of their recruitment. Honeywell manages all program marketing, communicating for account managers to help with scheduling and logistics.

16.4.3.1.3 *Program Progress*

As of the Fall 2024 interview, 23 customers had enrolled in the program, with three additional customers in the enrollment pipeline.

Program staff identified staff turnover within participating companies as one of the biggest barriers to engagement and participation. Additionally, some companies occupy older buildings, making it more challenging to achieve energy savings.

16.5 Data Tracking Review

The following points summarize key observations from the review of the AMI data:

- Time Discrepancies: Evaluators observed that the recorded timestamps for a subset of sites were captured in different time zones, leading to inconsistencies.

- Missing Site Information: Certain sites contained only partial data for the event dates, while others had gaps in their recorded data, further affecting the completeness and reliability of the analysis.
- Incomplete Data: Certain sites contained only partial data for the event dates, while others have gaps in their recorded data, further impacting the completeness and reliability of the analysis.

To enhance data tracking and consistency, evaluators recommend implementing a standardized procedure that ensures data extraction for all sites within the same time frame, time zone, usage metrics, baseline values, and unit of measurement for each program year.

16.6 Findings and Recommendations

The following summarizes the key findings and conclusions from the PY14 evaluation.

- Utilization of Hourly Interval AMI Data: Throughout PY14, the evaluation capitalized on hourly interval AMI data across all sites, ensuring comprehensive data coverage for robust analysis and evaluation.
- Enrollment Goals and Performance: The program achieved 28% of the demand target in PY14.
- Recruitment Strategies: Program recruitment primarily relies on word-of-mouth referrals, underscoring the significance of personal recommendations and positive experiences in driving participation. Additionally, program marketing initiatives encompass a range of strategies, including the distribution of informative handouts, dissemination of program details through the official website, hosting of educational sessions such as lunch-n-learns, and active participation in industry presentations. Staff members acknowledge the paramount role played by word of mouth in recruitment efforts, highlighting its effectiveness in fostering program engagement and participation within the target audience.
- Stable Program Operations & Recruitment Challenges: The Large C&I DR program remained largely unchanged in PY14, with ongoing participant recruitment and engagement efforts. While 23 customers were enrolled, staff turnover within participating companies and the challenges of older building infrastructure were identified as barriers to participation.
- Automated Demand Response & Minimal Comfort Impact: The program operates automatically once customers are enrolled, with most participants not experiencing noticeable comfort disruptions. Staff emphasize that this is a load-shifting program, not an energy savings program, and encourage participants to use pre-cooling strategies before events.

The following summarizes key recommendations after completing the PY14 evaluation.

- Strengthen Collaborative Partnerships: It is recommended that the program continues to foster relationships with other C&I programs. Leveraging partnerships with other C&I initiatives can serve as an effective strategy for identifying and recruiting potential customers interested in participating in the demand response program. Collaborative efforts can enhance outreach and engagement efforts, ultimately expanding the program's reach and impact within the C&I sector.
- Conduct Educational Workshops: Consider organizing educational workshops focused on demand response for both prospective and current customers. Many customers face challenges in comprehending incentive structures and program mechanics related to demand response initiatives. Therefore, conducting educational workshops can address these knowledge gaps and provide customers with valuable insights into baseline measurement methodologies, the overall EM&V process, and the

estimation of potential benefits. By enhancing customer understanding, these workshops can contribute to improved retention rates, particularly for key accounts that contribute significantly to kW reductions.

- Implement Cross-Promotion Strategies: Explore opportunities to cross-promote the Large C&I Demand Response program with relevant projects under the Large C&I Solutions umbrella. Large C&I Solutions initiatives often involve customer engagements centered on building commissioning or the deployment of building automation systems (BAS). Capitalizing on these engagements presents an ideal scenario to advocate for the registration of BAS-covered systems for demand response load shedding rebates. By aligning incentives and highlighting the synergies between demand response and BAS implementation, businesses can be incentivized to actively participate in demand response activities, thus furthering energy efficiency objectives and maximizing program impact.
- Strengthen Customer Retention Strategies: Given the impact of staff turnover at participating companies, develop materials tailored for new facility managers or sustainability officers to ensure continuity in program participation.
- Expand Targeted Outreach: Identify industries or business types with higher flexibility for load shifting and tailor recruitment efforts, such as direct outreach to large facilities with existing energy management systems

17 SMALL C&I SOLUTIONS

17.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend, by measure, where applicable. Additionally, the tables above represent evaluation findings for each measure, whereas the analysis described in this chapter summarize the findings of the evaluation by type (e.g., OLM, kit, etc.) and by stratum.

TABLE 17-1 PY13 SMALL C&I SOLUTIONS ENERGY SAVINGS (KWH)

Measure	*Ex Ante* Gross Savings (kWh)	Realization Rate (kWh)	*Ex Post* Gross Savings (kWh)	NTG	*Ex Post* Net Savings (kWh)
AC Tune Up	1,487,427	87.5%	1,301,652	95.8%	1,247,553
Advanced Power Strip	6,365	100.0%	6,367	95.8%	6,102
Assessment	0	N/A	0	95.8%	0
BMS	136,746	N/A	117,641	95.8%	112,751
CCx	951,915	98.2%	934,832	95.8%	895,978
Chiller	43,450	65.3%	28,390	95.8%	27,210
Door Closer	24,636	95.7%	23,571	195.8%	46,162
Door Gasket	234,443	96.2%	225,475	95.8%	216,104
ECM	4,824	101.1%	4,879	95.8%	4,677
Faucet Aerator	9,013	99.9%	9,008	95.8%	8,633
HVAC	94,995	99.7%	94,710	95.8%	90,773
LED EXIT Sign	10,883	97.9%	10,659	95.8%	10,216
LED Fixture	433,531	97.1%	421,041	95.8%	403,542
LED Lamp	194,214	85.4%	165,874	95.8%	158,980
Lighting Controls	846	100.0%	846	95.8%	811
Linear LED	864,746	94.5%	817,064	95.8%	783,105
Smart Thermostat	43,011	96.7%	41,612	95.8%	39,882
Strip Curtain	3,606	98.5%	3,551	95.8%	3,403
TA Bonus	0	N/A	0	95.8%	0
VFD	25,930	97.9%	25,395	95.8%	24,339
Total	**4,570,580**	**92.6%**	**4,232,566**	**95.8%**	**4,056,652**

Sums may differ due to rounding.

TABLE 17-2 PY14 SMALL C&I SOLUTIONS DEMAND REDUCTIONS (KW)

Measure	*Ex Ante* Gross Demand (kW)	Realization Rate (kW)	*Ex Post* Gross Demand (kW)	NTG	*Ex Post* Net Demand (kW)
AC Tune Up	510.99	87.0%	444.57	95.8%	426.09
Advanced Power Strip	0.00	N/A	0.00	95.8%	0.00
Assessment	0.00	N/A	0.00	95.8%	0.00
BMS	0.00	N/A	0.00	95.8%	0.00

CCx	0.00	N/A	0.00	95.8%	0.00
Chiller	31.88	61.4%	19.59	95.8%	18.77
Door Closer	3.40	95.9%	3.26	195.8%	6.38
Door Gasket	26.72	96.3%	25.73	95.8%	24.66
ECM	0.55	97.5%	0.54	95.8%	0.52
Faucet Aerator	1.92	98.5%	1.89	95.8%	1.81
HVAC	11.58	100.5%	11.64	95.8%	11.15
LED EXIT Sign	0.96	100.0%	0.96	95.8%	0.92
LED Fixture	49.12	96.9%	47.62	95.8%	45.64
LED Lamp	48.80	85.3%	41.62	95.8%	39.89
Lighting Controls	0.07	101.0%	0.07	95.8%	0.07
Linear LED	206.60	94.2%	194.51	95.8%	186.43
Smart Thermostat	0.00	N/A	0.00	95.8%	0.00
Strip Curtain	0.49	99.6%	0.49	95.8%	0.47
TA Bonus	0.00	N/A	0.00	95.8%	0.00
VFD	0.50	100.0%	0.50	95.8%	0.48
Total	**893.58**	**88.7%**	**792.98**	**95.8%**	**760.02**

Sums may differ due to rounding.

TABLE 17-3 PY14 SMALL C&I SOLUTIONS LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex Post* Gross Lifetime Energy Savings (kWh)	*Ex Post* Net Lifetime Energy Savings (kWh)
AC Tune Up	3	3,904,956	3,742,658
Advanced Power Strip	10	63,671	61,025
Assessment	1	0	0
BMS	15	1,764,613	1,691,272
CCx	5	4,674,159	4,479,891
Chiller	20	567,801	544,202
Door Closer	8	188,568	180,731
Door Gasket	4	901,901	864,416
ECM	15	73,190	70,148
Faucet Aerator	10	90,077	86,333
HVAC	15	1,420,647	1,361,602
LED EXIT Sign	15	159,880	153,235
LED Fixture	15	6,315,616	6,053,126
LED Lamp	15	2,488,104	2,384,694
Lighting Controls	8	6,768	6,487
Linear LED	15	12,255,966	11,746,582
Smart Thermostat	11	457,728	438,704
Strip Curtain	5	17,754	17,017
TA Bonus	1	0	0
VFD	15	380,922	365,090
Total	**8.4**	**35,732,322**	**34,247,212**

Sums may differ due to rounding.

TABLE 17-4 PY14 SMALL C&I SOLUTIONS COUNT OF MEASURES AND INCENTIVE SPEND

Measure	Participation (Count of Measures)	Incentive Spend ($)
AC Tune Up	3,225	$198,643
Aerator	16	$102
APS	104	$1,857
Assessment	218	$35,040
BAS	2	$20,512
Chiller	171	$8,570
Door Closer	45	$2,605
Door Gaskets	4,761	$35,353
ECM	6	$600
HVAC	146	$11,982
LED EXIT Sign	12	$264
LED Fixture	189	$55,074
LED Lamp	1,349	$8,957
Lighting Controls	1	$316
Linear LED	10,423	$201,328
Pumps	1	$2,255
Smart Thermostats	93	$16,187
Strip Curtains	74	$535
Unspecified	14	$103,316
VFD	1	$1,071
Total	**20,851**	**$704,568**

Sums may differ due to rounding.

17.2 Program Description

The Small C&I Solutions program provides higher incentives to small business owners to help overcome the first-cost barrier that small businesses face in adopting energy efficiency improvements. By offering enhanced financial incentives, the program generates significant cost-effective energy savings for small businesses using added market-segmented strategies that encourage the adoption of diverse efficiency measures in target sub-sectors.

The incentives provided are summarized below in the table below.

TABLE 17-5 SUMMARY OF OFFERING INCENTIVES

Measure	Incentive
Prescriptive	$ per unit
Custom Lighting	$0.15 per kWh Saved
Custom Non-Lighting	$0.15 per kWh Saved

The offering is designed to provide small business owners with energy efficiency information and develop awareness of energy and non-energy benefits of energy efficiency. The information helps small business customers invest in energy efficient technologies and help overcome high “first costs.” It is intended to increase awareness of the latest energy efficient technologies available to small business customers. Through the offering, a network of trade allies was developed that work specifically with small business customers. The offerings provide the tools and training for trade allies to quantify the energy savings and incentives for small business customers.

This year, staff are very pleased with their more streamlined application process and having more outreach staff on-hand to help walk participants through the application process. Additionally, staff noted that ENO is forwarding project leads or requests for program information, which has been helpful in increasing program participation and program awareness. Also, being able to return to in-person engagement this year has also attributed to the program successes.

17.2.1PROGRAM DELIVERY CHANNELS AND EXPECTED SAVINGS

The evaluation approach for PY14 included the following activities: database review, desk review, site visits, participant surveys and staff interviews.

A total of 361 projects were completed across PY14. The figure below shows the contribution to savings by offering as part of the overall expected savings.

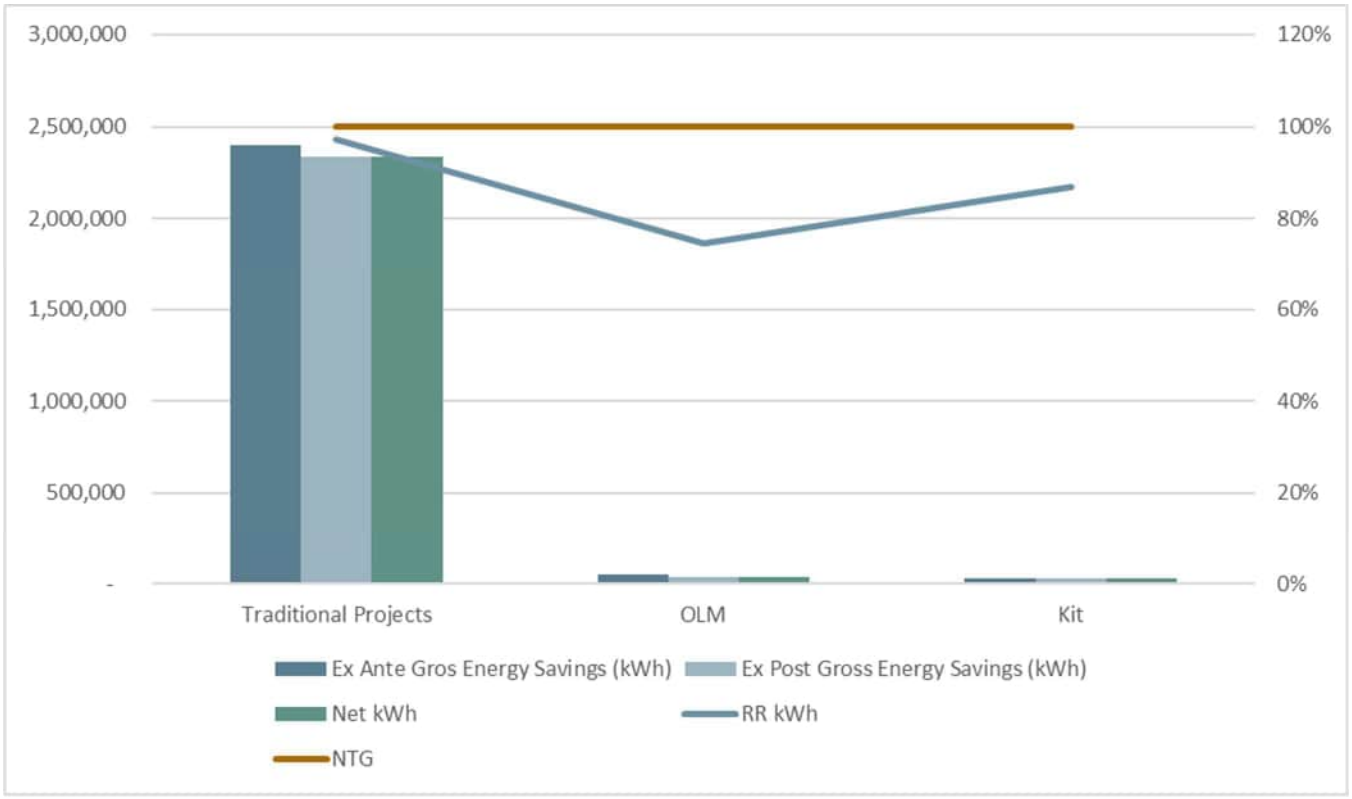


FIGURE 17-1 SAVINGS BY PROJECT TYPE

17.2.2 TIMING OF PROJECTS

Expected energy savings and the month in which the project was closed out are shown in the figures below.

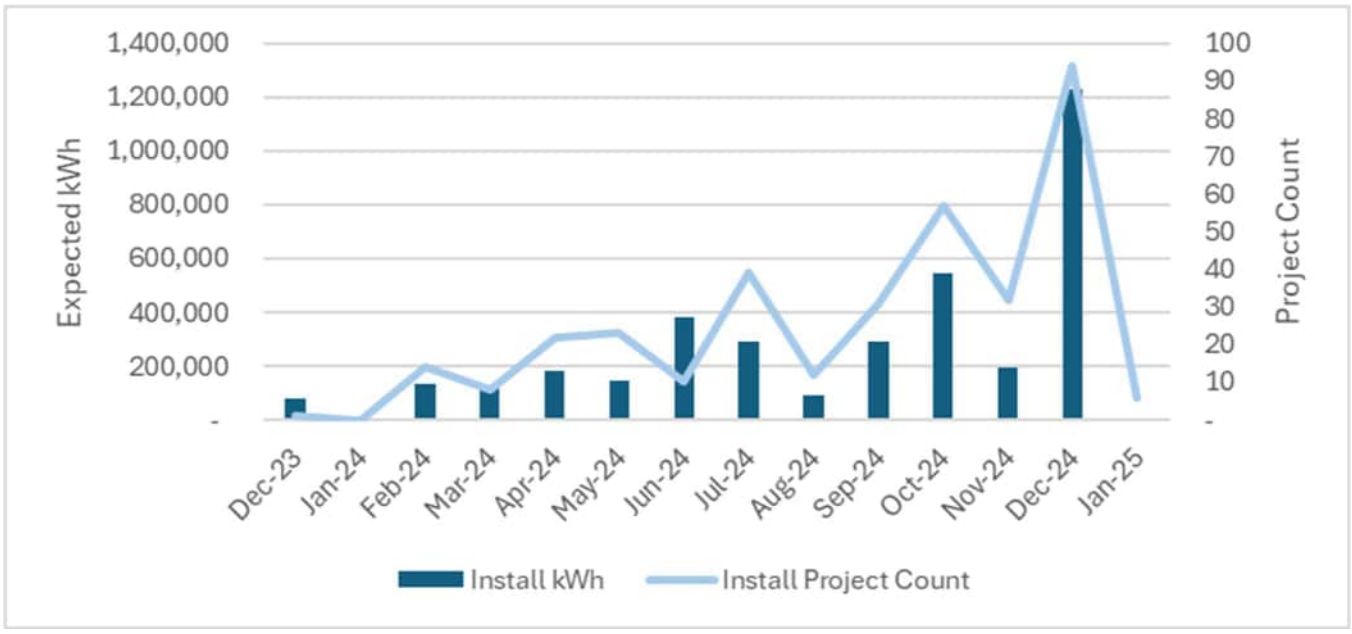


FIGURE 17-2 SMALL C&I SOLUTIONS MONTHLY PROGRAM PAYMENT

Six projects had a completion date listed as January of 2024. Project close outs happened in 2024 (final invoices, payments, etc.) but all installation work was completed by December 31, 2023 with the exception of one project with an installation date noted as being in December of 2023.

17.2.3TRADE ALLIES

In PY14, the program saw projects completed by 37 different trade allies. The below table shows trade ally activity.

TABLE 17-6 SMALL C&I SOLUTIONS TRADE ALLY ACTIVITY

Trade Ally	Ex Ante kWh	Project Count	Ex Ante kWh %
Trade Ally 1	849,030	223	18.6%
Trade Ally 2	81,624	1	1.8%
Trade Ally 3	55,122	1	1.2%
Trade Ally 4	472	2	0.0%
Trade Ally 5	20,733	3	0.5%
Trade Ally 6	10,833	1	0.2%
Trade Ally 7	4,431	2	0.1%
Trade Ally 8	75,272	7	1.6%
Trade Ally 9	12,943	6	0.3%
Trade Ally 10	807	1	0.0%
Trade Ally 11	68,087	1	1.5%
Trade Ally 12	12,100	8	0.3%
Trade Ally 13	7,139	1	0.2%
Trade Ally 14	43,450	1	1.0%
Trade Ally 15	18,653	10	0.4%
Trade Ally 16	272,052	14	6.0%
Trade Ally 17	885	1	0.0%
Trade Ally 18	77,597	15	1.7%
Trade Ally 19	1,817	1	0.0%
Trade Ally 20	5,786	1	0.1%
Trade Ally 21	568	1	0.0%
Trade Ally 22	714,297	41	15.6%
Trade Ally 23	280,699	48	6.1%
Trade Ally 24	17,519	3	0.4%
Trade Ally 25	82,559	1	1.8%
Trade Ally 26	439,313	4	9.6%
Trade Ally 27	60,278	4	1.3%
Trade Ally 28	13,147	1	0.3%

Trade Ally 29	10,883	1	0.2%
Trade Ally 30	920,365	15	20.1%
Trade Ally 31	36,354	1	0.8%
Trade Ally 32	4,206	1	0.1%
Trade Ally 33	9,216	1	0.2%
Trade Ally 34	76,044	1	1.7%
Trade Ally 35	18,791	1	0.4%
Trade Ally 36	5,390	2	0.1%
Trade Ally 37	4,824	1	0.1%

17.2.4GOAL ACHIEVEMENT

The total verified savings and percentage of goals for the program are summarized in the table below.

TABLE 17-7 SMALL C&I SOLUTIONS SUMMARY OF GOAL ACHIEVEMENT

Ex post Gross Energy Savings (kWh) Goal	% to kWh Goal	*Ex post* Gross Energy Savings (kWh)	*Ex post* Gross Savings (kW) Target	% to kW Target	*Ex post* Gross Savings (kW)
6,349,948	66.7%%	4,232,566	1,112.00	71.3%	792.98

17.3 EM&V Methodology

Evaluation of the offering requires the following:

- Stratified Random Sampling (as detailed in section Stratified Sampling by selecting large saving sites with certainty).
- The Evaluators conducted eight site visits for the Small C&I solutions Program.
- Where custom project hours were used, publicly-available facility hours or phone calls were made to project contacts to verify schedules.
- Gross savings were estimated using proven techniques, including engineering calculations using industry standards and verification of computer simulations developed by program trade allies to determine energy savings.
- Interviewing of program participants and trade allies.

17.3.1SITE VISITS

To approach the impact evaluation, data was collected through review of program materials and on-site inspections were performed to inform savings calculations. Based on data provided by staff, sample designs were developed for the impact evaluation.

The on-site inspection was used to help verify installations and to determine any changes to the operating parameters since the measures were first installed. Lighting projects made up 39.9% of total expected savings. The Evaluators verified that NO TRM V7.0 lighting hours of operation had been correctly assigned by space type. Projects were deemed analyzed using the methods described in the NO TRM V7.0, Section D.6.2 and 3, Lighting Efficiency and Lighting Controls. Specific algorithms for lighting savings and an explanation of deemed inputs are below.

17.3.2 LIGHTING SAVINGS CALCULATIONS

$$kWh_{savings} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times AOH \times IEF_E$$

$$kW_{savings} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times CF \times IEF_D$$

Where:

Nfixt(i), pre = Pre-retrofit number of fixtures of type i

Nfixt(i), post = Post-retrofit number of fixtures of type i

Wfixt(i), pre = Rated wattage of pre-retrofit fixtures of type i (Standard Wattage Table, Appendix E pages C-323 to C-475)

Wfixt(i), post = Rated wattage of post-retrofit fixtures of type i (Appendix E)

CF = Peak demand coincidence factor (TRM Table 227, pages C-294 to C-295)

AOH = Annual operating hours for specified space type (TRM Table 227, pages C-294 to C-295)

IEFD = Interactive effects factor for demand savings (TRM Table 228, page C-296)

IEFE = Interactive effects factor for energy savings (TRM Table 228, page C-296)

17.3.2.1 Sample Design

Sampling for evaluation of the program was developed using the Stratified Random Sampling procedure detailed in section Stratified Sampling. This procedure provides 90% confidence and +/- 10% precision with a significantly reduced sample than simple random sampling would require by selecting the highest saving facilities with certainty, thereby minimizing the variance that non-sampled sites can contribute to the overall results.

The participant population for the offering was divided into four strata. The strata boundaries, sample frames and sample statistics are in Table 17-8 below.

TABLE 17-8 PROGRAM SAMPLE DESIGN

	Stratum 1	Stratum 2	Stratum 3	Stratum 4	Totals
Strata boundaries (kWh)	< 6,500	6,501 - 20,000	20,001 - 60,000	60,001 - 200,000	> 200,001
Number of projects	212	100	28	20	1
Total kWh savings	559,351	1,148,621	931,729	1,605,123	325,757
Average kWh Savings	2,638	11,486	33,276	80,256	325,757
Standard deviation of kWh savings	1,710	3,438	12,112	28,512	#DIV/0!
Coefficient of variation	0.648	0.299	0.364	0.171	0.000
Final design sample	**12**	**9**	**4**	**3**	**1**

TABLE 17-9 EXPECTED SAVINGS FOR SAMPLED/NON-SAMPLED PROJECTS BY STRATUM

Stratum	Sample Expected Savings	Total Expected Savings
1	23,448	558,878
2	105,748	1,148,621
3	97,140	931,729
4	278,297	1,605,123
5	325,757	325,757
Total	**830,390**	**4,570,108**

The achieved sampling precision was ±9.40% at 90% confidence.

To determine gross realization rates, the Evaluators performed a literature review to determine ISRs. The tables below shows the literature review results per measure.

17.4 Evaluation Findings

17.4.1GROSS IMPACT FINDINGS

17.4.1.1 Traditional Project Realization

The Evaluators reviewed all project documentation, including invoices, spec sheets and site photos to verify the installation of the equipment. Energy and demand reduction calculations were reviewed to verify that they were consistent with the NO TRM and that all inputs were appropriate. Changes and corrections between *ex ante* and *ex post* savings estimates were documented and realization rates based on verified savings were developed for each site. The realization rates for sites within each stratum were then applied to the non-sampled sites within their respective stratum.

TABLE 17-10 EXPECTED AND VERIFIED SAVINGS BY SAMPLED PROJECT

Project ID(s)	End Use	Ex Ante Gross Energy (kWh)	Ex Post Gross Energy (kWh)	Realization Rate
159332-2024-W4M0	Linear LED	448	403	90.0%
CIP_945	HVAC	652	425	65.2%
CIP_942	Door Gasket	705	705	100.0%
CIP_987	HVAC	807	672	83.3%
165184-2024-J7W0	LED Lamp	940	1,221	129.9%
164654-2024-C7Y1	Smart Thermostat	944	941	99.7%
164649-2024-F3S7	Smart Thermostat	994	915	92.1%
165183-2024-T0F9	Smart Thermostat	1,522	1,308	85.9%
169412-2024-W8X0	Smart Thermostat	2,936	3,212	109.4%
169165-2024-B0Z1	Smart Thermostat	3,027	3,313	109.4%
165623-2024-S6J1	LED Lamp	5,115	5,542	108.3%
CIP_975	AC Tune Up	5,358	5,060	94.4%
163420-2024-P0N1	Linear LED	7,307	7,307	100.0%
163419-2024-H3X2	Smart Thermostat	7,455	7,463	100.1%
161287-2024-Z1T3	Linear LED	7,796	7,796	100.0%
CIP_995	AC Tune Up	9,757	8,365	85.7%

162480-2024-H5G6	LED Lamp	10,785	10,014	92.9%
CIP_963	Linear LED	11,712	11,712	100.0%
CIP_931	LED Fixture	13,147	13,147	100.0%
CIP_910	VFD	18,791	18,765	99.9%
CIP_928	Linear LED	18,998	18,998	100.0%
159331-2024-L4L9	LED Lamp	21,275	21,275	100.0%
162741-2024-R8L0	LED Lamp	22,122	13,425	60.7%
159994-2024-C4W1	Smart Thermostat	26,604	24,371	91.6%
CIP_981	AC Tune Up	27,139	4,400	16.2%
CIP_936	CCx	76,044	76,044	100.0%
CIP_918	Linear LED	82,559	82,559	100.0%
190842-2025-H8W5	Linear LED	119,694	119,694	100.0%
CIP_998	LED Fixture	325,757	327,961	100.7%
Totals:		**830,389**	**797,013**	**96.0%**

TABLE 17-11 SUMMARY OF KWH SAVINGS BY SAMPLE STRATUM

Stratum	Sample *Ex Ante* Gross Energy Savings (kWh)	Sample *Ex Post* Gross Energy Savings (kWh)	Stratum Realization Rate
1	23,448	**558,878**	**565,290**
2	105,748	**1,148,621**	**1,124,932**
3	97,140	**931,729**	**608,789**
4	278,297	**1,605,123**	**1,605,123**
5	325,757	**325,757**	**327,960**

17.4.1.2 Causes of Variance in Realization

Some sampled projects used annual hours of lighting operation and peak CF that were not correct for the space type. Verified savings calculations reflect hours of use and peak CF specific to the type of space the lamps were installed in, resulting in slightly different verified savings estimates. The largest cause of variance in realization rate was in baseline fixture wattages used in the ex-ante analysis. The *ex ante* estimates were calculated using an average wattage range that was on average higher than the wattages of the actual baseline equipment which is what was used in the *ex post* analysis. The table below shows projects with a realization rate that is ±10% from 100% and the cause of the variance in savings.

TABLE 17-12 CAUSES OF VARIANCE IN PROJECT SAVINGS

Project ID(s)	Expected kWh Savings	Verified kWh Savings	Realization Rate	Causes of Variance in Savings
159332-2024-W4M0	448	403	90.0%	Ex ante analysis uses nominal lighting fixture wattage, but ex post calculations include ballast factor.
CIP_945	652	425	65.2%	The ex ante analysis used and IEER baseline of 14.7 and an EER baseline of 11.1, as well as a cooling capacity equal to 12,000. In ex post calculations, these values were changed to 14.8, 11.2 and 118,000, respectively to reflect TRM baselines

				and AHRI-rated capacity. After correcting these inputs, resulting savings are 65.2% of expectations.
CIP_987	807	672	83.3%	The ex ante analysis used and IEER baseline of 14.7 and an EER baseline of 11.1, and IEER and EER post values.In ex post calculations, these values were changed to 14.8, 11.2, respectively to reflect TRM baselines. After correcting these inputs, resulting savings are 83.3% of expectations.
165184-2024-J7W0	940	1,221	129.9%	The ex-post calculator used the fixture/lamp types and quantities provided and prescriptive TRM values for the AOH, IEF_E, IEF_D, CF, and baseline wattage. Ex-Ante analysis used system wattage inclusive of ballast factors. Ex-Post analysis uses prescriptive wattage for nominally 40W LF lamps with magnetic ballasts (ballast type specified in Ex-Ante)
164649-2024-F3S7	994	915	92.1%	The ex-post analysis used verified capacities and efficiencies of the HVAC equipment, whereas ex ante savings were estimated using deemed inputs from the TRM.
165183-2024-T0F9	1,522	1,308	85.9%	The ex-post analysis used verified capacities and efficiencies of the HVAC equipment, whereas ex ante savings were estimated using deemed inputs from the TRM.
169412-2024-W8X0	2,936	3,212	109.4%	The ex-post calculator used the fixture/lamp types and quantities provided and prescriptive TRM values for the AOH, IEFE, IEFD, CF, and baseline wattage. Ex-Ante analysis used system wattage inclusive of ballast factors.
169165-2024-B0Z1	3,027	3,313	109.4%	The ex-post calculator used the fixture/lamp types and quantities provided and prescriptive TRM values for the AOH, IEFE, IEFD, CF, and baseline wattage. Ex-Ante analysis used system wattage inclusive of ballast factors.
165623-2024-S6J1	5,115	5,542	108.3%	The ex-post calculator used the fixture/lamp types and quantities provided and prescriptive TRM values for the AOH, IEFE, IEFD, CF, and baseline wattage. Ex-Ante analysis used system wattage inclusive of ballast factors.
CIP_975	5,358	5,060	94.4%	Ex-Ante analysis did not include a PF in their power calculation and therefore is not valid to calculate EER. Ex-post used the TRM method assuming evaporator and condenser cleaning w/o refrigerant recharge.
CIP_995	9,757	8,365	85.7%	Ex-Ante method did not include a PF in their power calculation and therefore is not valid to calculate EER. Ex-post used the TRM method assuming evaporator and condenser cleaning w/o refrigerant recharge.
162480-2024-H5G6	10,785	10,014	92.9%	Ex ante calculations used a baseline wattage which did not account for the EISA backstop. This baseline was changed form 60W to 43W, lower project realization.
162741-2024-R8L0	22,122	13,425	60.7%	All lighting items used outdated baseline wattages which did not account for EISA baselines.
159994-2024-C4W1	26,604	24,371	91.6%	The ex-post calculator used the fixture/lamp types and quantities provided and prescriptive TRM values for the AOH, IEFE, IEFD, CF, and baseline wattage. Ex-Ante analysis used system wattage inclusive of ballast factors.
CIP_981	27,139	4,400	16.2%	Ex-Ante method did not include a PF in their power calculation and therefore is not valid to calculate EER. Ex-post used the

				TRM method assuming evaporator and condenser cleaning w/o refrigerant recharge.

17.4.1.3 Realization of Traditional Projects

Using the realization rates presented in Table 17-13, the Evaluators extrapolated results from sampled sites to non-sampled sites in developing offering-level savings estimates. Table 17-13 presents results by stratum.

TABLE 17-13 REALIZATION BY STRATUM

Strat.	# Sites	*Ex Ante* Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	RR kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	RR kW
1	211	558,878	565,290	101.1%	151.76	147.96	97.49%
2	100	1,148,621	1,124,932	97.9%	281.77	281.90	100.04%
3	28	931,729	608,789	65.3%	256.47	157.58	61.44%
4	20	1,605,123	1,605,123	100.0%	162.15	163.84	101.04%
b	1	325,757	327,960	100.7%	41.43	41.71	0.00%
Total	**360**	**4,570,108**	**4,232,094**	**92.6%**	**893.58**	**792.98**	**88.74%**
Totals do not include OLM items.							

17.4.1.4 Online Marketplace Realization

Savings from the OLM were analyzed separately from the stratified sample of traditional projects and kits. Results are as follows.

TABLE 17-14 OLM PURCHASES SAVINGS BY MEASURE

Measure	*Ex Ante* Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	RR kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	RR kW
Smart Thermostat	472	472	100%	-	-	NA
Totals	**472**	**472**	**100%**	**-**	**-**	**NA**

TABLE 17-15 VERIFIED SAVINGS

Project Type	*Ex Ante* Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	RR kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	RR kW
Custom & Prescriptive Projects	4,570,108	4,232,094	92.6%	893.58	792.98	88.7%
OLM	472	472	100.0%	-	-	N/A
Total	**4,570,580**	**4,232,566**	**92.6%**	**893.58**	**792.98**	**88.7%**

The overall verified energy savings is 4,311,554 kWh and the peak demand reduction is 818.08 kW resulting in realization rates of 94.3% and 91.6% respectively.

17.4.1.5 Avoided Replacement Cost

The Evaluators have added the benefits of avoided replacement costs (ARC). The table below summarize the ARC by measure in Small C&I Solutions.

Information on methodology can be found in Section 3.4.1.3 Avoided Replacement Costs.

TABLE 17-16 SUMMARY OF ARC FOR SMALL C&I SOLUTIONS

Measure	*Ex Post* Gross ARCs ($)	*Ex Post* Net ARCs ($)
AC Tune Up	$0	$0
Advanced Power Strip	$0	$0
Assessment	$0	$0
BMS	$0	$0
CCX	$0	$0
Chiller	$0	$0
Door Closer	$0	$0
Door Gasket	$0	$0
ECM	$0	$0
Faucet Aerator	$0	$0
HVAC	$0	$0
LED EXIT Sign	$0	$0
LED Fixture	$8,065	$7,730
LED Lamp	$0	$0
Lighting Controls	$0	$0
Linear LED	$33,875	$32,467
Smart Thermostat	$0	$0
Strip Curtain	$0	$0
TA Bonus	$0	$0
VFD	$0	$0
Total	**$41,940**	**$40,196**

Sums may differ due to rounding.

17.4.2 NET IMPACT FINDINGS

An average of participant survey responses from the PY12 and PY13 evaluations were used to estimate the net savings of the program. The net-to-gross ratio was 95.8%.

17.4.2.1 Net Savings Results

Net savings by measure can be found in Section 16.1 Summary.

17.4.2.2 Program Activity

In PY14, the offering had an expected energy savings of 4,570,108 kWh and an expected peak demand reduction of 896.58 kW. The expected savings are the result of three distinct delivery channels within the program, traditional retrofits (traditional), items purchased from the Energy Smart Online Market (OLM) Place. The count of participants and the expected savings from each channel is found in the table below.

TABLE 17-17 SMALL C&I SOLUTIONS SAVINGS EXPECTATION BY DELIVERY CHANNEL

Delivery Channel	Count of Project Components	*Ex Ante* Gross Energy Savings (kWh)	*Ex Ante* Gross Demand Reductions (kW)
Custom & Prescriptive Projects	360	4,570,108	893.58
OLM	1	472	0.00
Total	**361**	**4,570,580**	**893.58**

In PY13, the savings were largely made up of prescriptive measure offerings, which accounted for 70% of the expected energy savings. The measure counts below are off compared to the tables above as line items with no expected energy savings were included (incentive bonuses and the Hurricane Ida Relief Fund to increase incentives to customers).

TABLE 17-18 SMALL C&I SOLUTIONS SAVINGS EXPECTATION BY MEASURE TYPE

Project Component	Count of Measures	*Ex Ante* Gross Energy Savings (kWh)	Expected kW Savings	Percentage of Savings Contribution
AC Tune Up	3,225	1,487,427	510.99	33%
Advanced Power Strip	104	6,365	0.00	0%
Assessment	218	0	0.00	0%
BMS	2	136,746	0.00	3%
CCx	13	951,915	0.00	21%
Chiller	171	43,450	31.88	1%
Door Closer	45	24,636	3.40	1%
Door Gasket	4,761	234,443	26.72	5%
ECM	6	4,824	0.55	0%
Faucet Aerator	16	9,013	1.92	0%
HVAC	146	94,995	11.58	2%
LED EXIT Sign	12	10,883	0.96	0%
LED Fixture	189	433,531	49.12	9%
LED Lamp	1,349	194,214	48.80	4%
Lighting Controls	1	846	0.07	0%
Linear LED	10,423	864,746	206.60	19%
Smart Thermostat	93	43,011	0.00	1%
Strip Curtain	74	3,606	0.49	0%
TA Bonus	1	0	0.00	0%
VFD	2	25,930	0.50	1%
Total	**20,851**	**4,570,580**	**893.58**	

TABLE 17-19 SMALL C&I SOLUTIONS PARTICIPATION SUMMARY COMPARISON

Project Year	# Projects	*Ex Ante* Gross kWh	kWh per Project
PY14	361	4,570,580	12,661
PY13	291	2,486,454	8,544
PY12	281	4,249,756	17,964

17.4.3 PROCESS FINDINGS

The Evaluators conducted interviews with Small C&I Solutions staff, participants, and trade allies. The following sections summarize the findings.

17.4.3.1 Staff and Implementer Interviews

The following section summarizes key findings from in-depth interviews with two ENO program staff and two APTIM staff. ENO staff participated in one interview, while APTIM staff participated in a separate interview.

These interviews aimed to gather insights into the design and operations of the Small Commercial Solutions Program, as well as the successes and challenges experienced during PY14. Each interview lasted approximately 45 minutes and was conducted via Microsoft Teams. With participant permission, evaluators recorded all interviews. The following narrative presents a summary of these discussions.

17.4.3.1.1 *Program Description and Implementation*

The Small C&I Solutions program provides incentives to small business owners to help overcome the first-cost barrier that small businesses face in adopting energy efficiency improvements. By offering enhanced financial incentives, the program generates significant cost-effective energy savings for small businesses using added market-segmented strategies that encourage the adoption of diverse efficiency measures in target sub-sectors.

Staff indicated that, as in previous years, commercial programs continue to face challenges. They explained that annual program goals increase despite rising market saturation, making it increasingly difficult to meet targets.

Additionally, workforce shortages remain a concern, as highlighted in the PY13 nonparticipant trade ally focus groups. Staff also noted that many small businesses lack the upfront capital needed to invest in energy efficiency upgrades, further limiting program engagement.

17.4.3.1.2 *Program Changes*

In response to historically lagging participation, staff increased the programs' incentive amounts in PY14. Additionally, Entergy New Orleans and Aptim have adopted a stronger and more direct marketing strategy to recruit participants; rather than waiting for customers to reach out to them, implementation staff proactively search for potential projects and sending out trade allies for assessments and sales pitches. Although the trade ally network for this program is quite large, staff have focused on a core dozen or so trade allies who are most engaged to help with this direct recruitment.

Although introduced in PY13 rather than PY14, the Small Business Energy Assessment offering continues to expand. Staff reported strong interest from small business owners and are considering extending the offering to large commercial customers.

Similar to last year, the assessment includes a facility evaluation, free direct-install measures, and recommendations for larger upgrades. Staff highlighted that this offering has successfully increased participation in other programs, making it a valuable initial touchpoint for customer engagement.

Despite its success in its second year, staff identified opportunities for further growth, noting that awareness and cost barriers still limit participation.

Unlike previous years, the program did not offer an incentive bonus in the fourth quarter. Staff explained that the end-of-year bonus creates additional workload and encourages customers to delay submitting paperwork until the last quarter, leading to a backlog and increased stress in November and December.

17.4.3.1.3 *Trade Allies*

Entergy New Orleans has a commercial trade ally network of about 75-90 trade allies. Of these trade allies, there are about a dozen highly active market actors. In general, trade allies generate their own leads and are responsible for much of the program marketing. Program staff assign project leads that come through Entergy either via call center or direct install program, based on trade ally capacity and previous performance. Typically, the most active trade allies are offered project leads first to sustain their engagement.

17.4.3.1.4 *Challenges*

Staff noted that inflation continues to pose challenges for commercial programs. Many businesses—both small and large—have closed since COVID, while those that survived often struggle with cash flow issues. Additionally, ongoing supply chain disruptions make it difficult for customers to obtain necessary equipment in a timely manner.

Further complicating matters, the program approval process was delayed in PY14, postponing both the program launch and participant recruitment. Staff explained that they had no control over the approval process and were unable to begin their efforts until receiving official approval from the city council.

Program staff emphasized the ongoing challenges in meeting commercial program goals. Despite persistent year-over-year struggles, program targets continue to increase at a rate that outpaces population growth. As one staff member noted, *'We have not met our goal since 2019, yet the goals still increase every year.*'

Staff also highlighted challenges with the evaluation process that hinder program progress. In particular, the Option C requirement to distribute savings across multiple years makes it difficult to set long-term expectations, especially given that the program undergoes annual council approval.

Additionally, implementation staff continue to experience delays with Bluebox projects due to wait times and the requirement for pre- and post-tests by evaluators. While they acknowledge the importance of pre- and post-loggers, the lengthy installation process causes project delays. Lastly, staff noted that the lack of deemed lighting savings adds extra calculations and administrative work, further slowing project timelines.

17.4.3.1.5 *Successes*

Although implementation staff lamented the status of the commercial programs, indicating they continue to be the largest challenge across the portfolio, staff did identify some successes across the commercial programs in PY14. Firstly, staff applauded the success of the Small Business Energy Assessments, noting that this offering has resulted in increased engagement and program awareness across previously hard to reach customers. Additionally, program staff have strengthened relationships with some trade allies.

17.4.3.2 Participant Interviews

The Evaluators conducted six interviews with customers who participated in Small C&I Solutions to gain insight into customer satisfaction and feedback.

Table **17-20** displays respondents' firmographics.

TABLE 17-20 RESPONDENT FIRMOGRAPHICS

Program	Business Type	Employees
	Owner, Retail	Less than 5

Small Commercial & Industrial	Contractor, Lighting	51+
	Office Manager, Shipping	11-20
	Owner, Leased Property	Less than 5
	Owner, Coffee Shop	5-10
	Owner, Salon	Less than 5

17.4.3.2.1 *Program Strengths*

The Small Commercial & Industrial Solutions Energy Smart program received positive feedback from most businesses. They appreciated the ease of engagement, the financial benefits through rebates and energy savings, and the program's contribution to sustainability efforts. The program was seen as straightforward, cost-effective, and beneficial for businesses and the environment.

The program provides significant financial benefits through energy cost reductions and rebates. All six small businesses mentioned cost savings and rebates.

> *"It helped us do something we probably needed anyway and have Entergy foot the bill for it." – Office Manager, Shipping, Small Commercial & Industrial Solutions*

The program's efficient application and installation process was another highlight:

> *" I saw an email come through...They were there within two weeks, did everything within a day. It was super simple." – Office Manager, Shipping, Small Commercial & Industrial Solutions*

Additionally, three businesses valued the program's role in sustainability efforts

> *"We try to focus on sustainability as much as possible… Having that program as a second set of eyes to realize how many bulbs were still 10 years old in that building." – Owner, Coffee Shop, Small Commercial & Industrial Solutions*

17.4.3.2.2 *Program Challenges*

While the Small Commercial & Industrial Solutions Energy Smart program was well-received, some Businesses encountered challenges. The key issues included difficulties finding available certified electricians, limitations in program offerings for specific business needs, and delays in implementation. These hurdles sometimes prevented full participation or reduced the program's potential benefits.

Finding available electricians was a common issue:

> *" All the electricians in the program were booked out solid, so I couldn't use that program." - Owner, Leased Property, Small Commercial & Industrial Solutions*

Limited awareness also affected participation, with two businesses noting a lack of outreach:

> *"I went to the roundtable… and many people sitting at the table had no idea what the program was... I was shocked that not enough people had heard of it."*
> *– Owner, Coffee Shop, Small Commercial & Industrial Solutions*

Additionally, one business reported difficulty getting responses from Entergy when seeking assistance:

> *"I reached out, being like, hey, I can't get a hold of any electricians. What do I do? Oh, no response. Just minimal response."*
> *– Owner, Leased Property, Small Commercial & Industrial Solutions*

17.4.3.2.3 *Program Engagement Opportunities*

Businesses suggested several areas for improvement in the Small Commercial & Industrial Solutions Energy Smart program. The main recommendations focused on improving communication and outreach, assisting with program applications, and expanding the program's offerings. These suggestions aim to make the program more accessible, comprehensive, and efficient for a wider range of businesses.

Four of six small businesses mentioned increasing program awareness through better marketing.

> *"I wouldn't say that I get very much advertisement from Entergy. I don't think they were the ones that told me."*
> *– Owner, Coffee Shop, Small Commercial & Industrial Solutions*

Three businesses suggested providing more direct assistance with the application process:

> *"Maybe someone with some of the buildings around town could send a rep out to walk people through it… The people I've talked to about it, when I show them the workbooks, they're afraid to tackle it.*
> *– Office Manager, Shipping, Small Commercial & Industrial Solutions*

One business suggested updating and expanding the list of available contractors.

> *"Every single person that I called on their list that they had offered to do the work… was unavailable, and they were no longer in business. They need to update their list of who you can use."*
> *– Owner, Leased Property, Small Commercial & Industrial Solutions*

17.4.3.3 Trade Ally Interviews

Evaluators conducted five interviews with trade allies partnered with the Small C&I Solutions program to gain insight into their experiences. Overall, trade allies were satisfied with the program's benefits and processes, particularly its ability to help fund energy efficiency projects for low-income customers and small businesses.

However, some challenges were noted, including administrative complexities, frequent changes in calculation tools, and limitations in prescriptive measures for certain upgrades. Despite these hurdles, trade allies expressed a strong interest in continuing their engagement with Entergy New Orleans, citing positive interactions with program representatives and the program's potential to support business growth and drive energy savings for customers.

Table 17-20 display a respondent overview.

TABLE 17-21 RESPONDENT OVERVIEW

Program	Business Type	Employees
Small Commercial & Industrial	Installer, Consultant	5-10
	Installer	5-10
	Consultant	51+
	Installer, Distributor	Less than 5
	Distributor	51+

17.4.3.3.1 *Program Strengths*

The Energy Smart Small Commercial & Industrial Solutions program is highly regarded for its user-friendly process, financial benefits, and ability to strengthen customer relationships. Trade allies appreciate the straightforward incentive structure and the program's role in making energy-efficient upgrades more accessible, particularly for small businesses and organizations with limited budgets. Additionally, the program supports contractors by helping them build and maintain a loyal customer base, creating long-term business opportunities.

All five trade allies highlighted cost reduction and financial benefits as a major strength:

> *"We're really grateful for the program and the opportunity to capture some of the costs again on behalf of the customer so they can turn it into additional efficiency projects."*
> *– Distributor, Lighting, Small Commercial & Industrial Solutions*

Four out of five trade allies praised the program's ease of use and responsive customer service:

> *"The representative was very thorough and explained how the program works, and they're always contacting me to help."*
> *– Installer, Electrical Contracts, Small Commercial & Industrial Solutions*

Two out of five trade allies noted that the program helps businesses attract and retain customers:

> *"It's a good way to build your customer base because as you develop that relationship with the customer and you're offering them a rebate, you're actually putting yourself in place to maybe get their … service call, their air's not blowing cold, their heater's not coming on, whatever."*
> *– Installer, Lighting, Small & Large Commercial & Industrial Solutions*

17.4.3.3.2 *Program Challenges*

The main challenges of the Energy Smart Small Commercial & Industrial Solutions program include administrative burdens, payment delays, and frequent changes in program tools. Trade allies expressed frustration with the extensive paperwork required, especially for smaller projects, which can be time-consuming relative to the incentives received. Long wait times for rebate payments—sometimes up to two months—also create cash flow issues for some contractors. Additionally, frequent changes in calculation tools and rebate structures make it difficult to provide accurate customer quotes and maintain consistent business practices.

Three out of five trade allies cited administrative complexity as a challenge:

> *"The amount of work it takes me to turn in one rebate... I spend a lot of time for my little, tiny bit of money." – Owner/Installer, HVAC, Small Commercial & Industrial Solutions*

Two trade allies found frequent updates to program calculators and tools frustrating:

> *"The only gripes we've had over the years are mostly about some of these calculators or the tools we're using to determine the rebates have changed."*
> *– Installer, Lighting, Small & Large Commercial & Industrial Solutions*

One trade ally noted that the prescriptive measures are limited, requiring a more complex custom approval process for some upgrades:

> *"Looking at the prescriptive measures, they're not all-inclusive... Replacing fluorescent would be terrific."*
> *– Distributor, Lighting, Small Commercial & Industrial Solutions*

17.4.3.3.3 *Deeper Trade Ally Engagement Opportunities*

Suggestions for improving the Energy Smart Small Commercial & Industrial Solutions program include enhancing lead generation, increasing specific incentives, and expanding eligible measures. Trade allies expressed a desire for Entergy to leverage its customer base to generate more direct job opportunities, reducing the burden on

contractors to source projects independently. There was also strong interest in increasing incentives for certain upgrades, particularly HVAC systems, to better align with market conditions and technology trends. Expanding prescriptive measures—especially for lighting—could simplify the application process and make the program more accessible.

Three out of five trade allies suggested improving lead generation and customer outreach:

> *"If they could do a better job of influencing the customers to call us and find us instead of us having to find them, it would be a big thing. They have all the accounts and control of the customers. So, we could surely use a lot of help in the process of getting jobs." – Installer, Electrical Contracts, Small Commercial & Industrial Solutions*

Two trade allies recommended expanding prescriptive measures and increasing incentives:

> *"The incentives for lighting are competitive. The incentives for HVAC could be a little bit higher compared to other programs… advanced rooftop controls would be good." – Installer, Lighting, Small & Large Commercial & Industrial Solutions*

One trade ally suggested implementing a 'look back' period for projects completed without preapproval to allow for partial incentives.

> *"A couple of programs up in Michigan have offered in years past, like a look back period, you would get half of the incentive amount, but it would be for anything that didn't get preapproval... You'd have this window of time, 60 days, to submit projects again for 50% of the incentive rate." – Distributor, Lighting, Small Commercial & Industrial Solutions*

17.5 Key Findings & Recommendations

Below are key findings for this program after the evaluation.

- Ex ante calculators use baseline wattages which are 11 years out of date. Ex ante calculators used by program administrators use baseline wattages for A-lamps which do not comply with the reduced EISA baselines which went into effect in 2013. This oversight led to significantly reduced realization in multiple sites.
- Increased Incentives & Proactive Outreach: In response to historically low participation, program staff raised incentive amounts in PY14 and shifted to a more direct marketing approach. Instead of waiting for customer inquiries, staff proactively identified potential projects and engaged a core group of active trade allies to conduct assessments and sales pitches.
- Participation & Implementation Challenges: According to staff, inflation, supply chain disruptions, and limited upfront capital continue to hinder small business participation. Additionally, delays in program approval postponed the program launch and restricted participant recruitment. Trade allies cited

administrative burdens, slow rebate payments, and frequent updates to calculation tools as barriers that make it difficult to provide accurate quotes and manage their workflow.

- Positive Customer & Trade Ally Experience: Small business participants valued the financial benefits, sustainability impact, and ease of engagement. Meanwhile, trade allies appreciated the program's ability to generate business and foster long-term customer relationships. However, participants reported difficulties finding available contractors and noted a lack of awareness about the program prior to enrollment.

Below are recommendations for this program after the PY14 evaluation.

- Update ex ante calculators to use EISA baselines. Existing baselines are 11 years out of date and can significantly overestimate program-level savings.
- Optimize Trade Ally Participation & Payment Processing: The program relies heavily on trade allies, but administrative complexity and delayed rebate payments can limit engagement. Streamlining paperwork requirements—particularly for smaller projects—could improve efficiency without compromising oversight. Additionally, ensuring that rebate processing times are competitive with industry standards could help retain engaged trade allies. While trade allies requested fewer changes to calculation tools, some updates are necessary. A balance should be struck between maintaining consistency and making adjustments that improve accuracy.
- Expand Prescriptive Measures: While trade allies suggested expanding prescriptive measures and increasing HVAC incentives, any program adjustments should be carefully evaluated to ensure they align with cost-effectiveness thresholds and regulatory requirements. If specific measures (such as HVAC upgrades) are found to have a strong cost-benefit ratio, increasing incentives or streamlining the approval process for these upgrades could be considered.
- Improve Contractor Availability & Trade Ally Directory Management: A shortage of available contractors was a recurring issue among participants. Periodic reviews and updates to the trade ally directory, as well as continued recruitment efforts, could help ensure that businesses can more easily access qualified contractors. Exploring additional mechanisms, such as incentives for trade allies to prioritize Small C&I projects, may also help alleviate delays.

18 LARGE C&I SOLUTIONS

18.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend, by measure, where applicable. Additionally, the tables above represent evaluation findings for each measure, whereas the analysis described in this chapter summarizes the findings of the evaluation stratum.

FIGURE 18-1 PY14 LARGE C&I SOLUTIONS ENERGY SAVINGS (KWH)

Measure	*Ex Ante* Gross Savings (kWh)	Realization Rate (kWh)	*Ex Post* Gross Savings (kWh)	NTG	*Ex Post* Net Savings (kWh)
BMS	7,684,845	96.2%	7,392,094	97.2%	7,182,442
CCX	1,869,162	88.8%	1,659,683	97.2%	1,612,612
Chiller	1,372,556	87.1%	1,195,975	97.2%	1,162,055
Coil Cleaning	1,014,590	89.0%	903,386	97.2%	877,765
Door Gaskets	91,310	97.9%	89,381	97.2%	86,846
ECM	42,612	99.9%	42,583	97.2%	41,375
GREM	576,550	97.8%	563,768	97.2%	547,779
HVAC Replacement	760,199	91.7%	697,471	97.2%	677,689
HVAC Tune-Up	4,512,581	92.8%	4,189,901	97.2%	4,071,068
LED Fixture	768,055	92.5%	710,690	97.2%	690,533
Lighting Controls	6,643	99.4%	6,605	97.2%	6,418
Linear LED	1,768,773	91.7%	1,622,598	97.2%	1,576,578
Screw Based LED	473,847	86.9%	411,562	97.2%	399,889
Strip Curtains	630	97.6%	615	97.2%	598
VFD	7,540,293	97.1%	7,324,528	97.2%	7,116,792
Total	**28,482,645**	**94.1%**	**26,810,839**	**97.2%**	**26,050,437**

Sums may differ due to rounding.

TABLE 18-1 PY14 LARGE C&I SOLUTIONS DEMAND REDUCTIONS (KW)

Measure	*Ex Ante* Gross Demand (kW)	RR (kW)	*Ex Post* Gross Demand (kW)	NTG	*Ex Post* Net Demand (kW)
BMS	449.22	96.4%	433.24	97.2%	420.95
CCX	302.92	92.5%	280.11	97.2%	272.16
Chiller	170.50	92.8%	158.20	97.2%	153.72
Coil Cleaning	84.95	93.4%	79.32	97.2%	77.07
Door Gaskets	10.32	96.0%	9.91	97.2%	9.63
ECM	4.88	86.4%	4.21	97.2%	4.09
GREM	0.00	N/A	0.00	97.2%	0.00
HVAC Replacement	181.17	92.0%	166.67	97.2%	161.95
HVAC Tune-Up	1977.62	93.4%	1846.20	97.2%	1,793.84
LED Fixture	138.50	94.1%	130.29	97.2%	126.59
Lighting Controls	0.41	88.8%	0.36	97.2%	0.35
Linear LED	386.99	94.0%	363.92	97.2%	353.60
Screw Based LED	37.12	92.1%	34.18	97.2%	33.21
Strip Curtains	0.06	97.1%	0.06	97.2%	0.06
VFD	701.08	99.9%	700.56	97.2%	680.70
Total	**4,445.74**	**94.6%**	**4,207.24**	**97.2%**	**4,087.92**

Sums may differ due to rounding.

TABLE 18-2 PY14 LARGE C&I SOLUTIONS LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex Post* Gross Lifetime Energy Savings (kWh)	*Ex Post* Net Lifetime Energy Savings (kWh)
Assessment	1.0	0	0
TA Bonus	1.0	0	0
BMS	15.0	66,213,597	64,335,665
CCX	5.0	21,446,451	20,838,192
Chiller	20.0	23,919,497	23,241,099
Coil Cleaning	3.0	2,710,158	2,633,294
Cool Roof	15.0	5,127,552	4,982,126
Door Gaskets	4.0	357,523	347,383
ECM	15.0	638,741	620,625
GREM	8.0	4,510,144	4,382,229
HVAC Replacement	15.0	12,475,909	12,122,070
HVAC Tune-Up	3.0	12,569,703	12,213,204
Insulation	20.0	128,216	124,580
LED Fixture	15.0	10,660,347	10,358,001
Lighting Controls	8.0	52,840	51,341
Linear LED	15.0	24,338,966	23,648,671
Pumps	15.0	9,110,330	8,851,945
RCx Study	1.0	0	0
Screw Based LED	1.0	411,562	399,889
Strip Curtains	15.0	9,227	8,965
VFD	15.0	98,743,743	95,943,200
Total	**10.9**	**293,424,504**	**285,102,479**

Sums may differ due to rounding.

TABLE 18-3 PY14 LARGE C&I SOLUTIONS COUNT OF MEASURES AND INCENTIVE SPEND

Measure	Participation (Count of Measures)	Incentive Spend ($)
Adjustment	13	$239,653
BMS	16	$927,745
CCX	10	$256,998
Chiller	1805	$200,014
Coil Cleaning	6	$152,188
Door Gaskets	794	$11,116
ECM	53	$5,300
GREM	1624	$204,225
HVAC Replacement	1295	$121,315
HVAC Tune-Up	48703.2	$1,000,257
LED Fixture	1370	$73,771
Lighting Controls	9	$872
Linear LED	19818	$258,380
Screw Based LED	17444	$76,257
Strip Curtains	21	$84
VFD	11	$480,166
Total	**92,992**	**4,008,341**

Sums may differ due to rounding.

18.2 Program Description

Large Commercial & Industrial Solutions (Large C&I Solutions) program provides financial incentives and technical service to non-residential customers whose average monthly peak demand exceeds 100 kW to implement energy-savings measures. The program is designed to help this customer segment overcome barriers in energy improvement, such as higher initial cost of efficient equipment and a lack of technical knowledge or resources.

The incentives provided are summarized below in the table below.

TABLE 18-4 LARGE C&I SOLUTIONS SUMMARY OF OFFERING INCENTIVES

Measure	Incentive
Prescriptive	Various based on $ per unit
Custom Lighting	$0.125 per kWh Saved
Custom Non-Lighting	$0.15 per kWh Saved
Retro-commissioning	$0.04-$0.07/kWh Saved

18.2.1 PROGRAM DELIVERY CHANNELS AND EXPECTED SAVINGS

The evaluation approach for PY14 included the following activities, database review, desk reviews, site visits, participants surveys and staff interviews.

TABLE 18-5 LARGE C&I SOLUTIONS EXPECTED SAVINGS SUMMARY

Count of Projects	*Ex Ante* Gross Energy Savings (kWh)	*Ex Ante* Gross Demand Reductions (kW)
159	28,482,645	4,445.74

The table below shows the split of savings coming from custom and prescriptive projects.

TABLE 18-6 LARGE C&I SOLUTIONS SAVINGS EXPECTATIONS BY PROJECT COMPONENT

Project Component	Count	*Ex Ante* Gross Energy Savings (kWh)	*Ex Ante* Gross Demand Reductions (kW)
Prescriptive	84,880	7,317,566	2,400.69
Custom	8,112	21,165,079	2,045.04
Total	**92,992**	**28,482,645**	**4,445.74**
Project count is high due to projects with both prescriptive and custom components.			

18.2.2TIMING OF PROJECTS

According to the tracking data, in PY14 55.7% of ex ante kWh savings had a project install date between November and December of 2024 with the largest single start month being December of 2024 which accounted for 40.3% of total program ex ante kWh.

Figure 18-2 below outlines ex ante kWh and project count by the project reported start date for projects claimed in PY14.

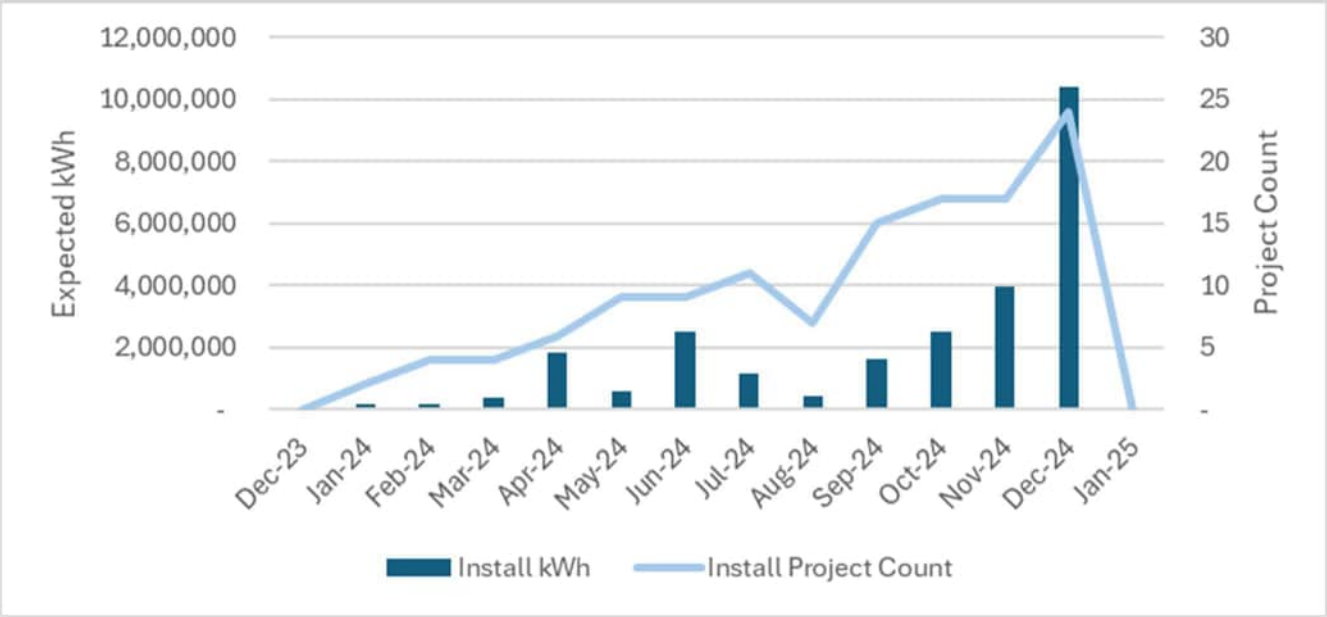


FIGURE 18-2 LARGE C&I PROGRAM PARTICIPATION BY START MONTH

18.2.3TRADE ALLIES

In PY13, the program saw projects completed by 36 different trade allies. The contribution to savings by Trade Ally is outlined below in Table 18-7.

TABLE 18-7 LARGE C&I TRADE ALLY CONTRIBUTION

Trade Ally	Ex Ante kWh	Project Count	Ex Ante kWh %
Self Install	1,475,537	6	7.5%
Trade Ally 1	33,375	1	0.2%
Trade Ally 2	1,839,275	20	9.3%
Trade Ally 3	395	1	0.0%
Trade Ally 4	18,959	2	0.1%
Trade Ally 5	182,748	1	0.9%
Trade Ally 6	71,195	2	0.4%
Trade Ally 7	67,655	1	0.3%
Trade Ally 8	69,255	1	0.4%
Trade Ally 9	79,250	2	0.4%
Trade Ally 10	2,220,184	39	11.3%
Trade Ally 11	146,959	5	0.7%
Trade Ally 12	11,535	2	0.1%
Trade Ally 13	14,392	1	0.1%
Trade Ally 14	1,014,590	6	5.1%
Trade Ally 15	570,059	3	2.9%
Trade Ally 16	91,940	2	0.5%
Trade Ally 17	688,702	3	3.5%
Trade Ally 18	3,512,965	10	17.8%
Trade Ally 19	921,637	3	4.7%
Trade Ally 20	14,317	1	0.1%
Trade Ally 21	63,900	1	0.3%
Trade Ally 22	83,070	1	0.4%
Trade Ally 23	360,325	5	1.8%
Trade Ally 24	1,004,860	7	5.1%
Trade Ally 25	110,894	1	0.6%
Trade Ally 26	150,900	1	0.8%
Trade Ally 27	379,584	1	1.9%
Trade Ally 28	47,104	2	0.2%
Trade Ally 29	1,690,478	2	8.6%
Trade Ally 30	293,494	1	1.5%
Trade Ally 31	772,726	2	3.9%
Trade Ally 32	1,539,106	8	7.8%
Trade Ally 33	130,460	1	0.7%
Trade Ally 34	51,828	1	0.3%

18.2.4 GOAL ACHIVEMENT

In PY13, the program's net energy savings obtained 98% of the kWh goal. The program's net peak demand reduction obtained 140% of the peak demand target.

TABLE 18-8 LARGE C&I PY13 SAVINGS GOALS

Ex Post Gross Energy Savings (kWh) Goal	% to kWh Goal	*Ex Post* Gross Energy Savings (kWh)	*Ex Post* Gross Demand Reduction (kW) Goal	% to kW Goal	*Ex Post* Gross Demand Reduction (kW)
45,589,079	58.8%	26,810,839	7,291	57.7%	4,207

18.3 EM&V Methodology

Evaluation of the program involved the following:

- Stratified Random Sampling (as detailed in section (as detailed in Section 3.3.1) and by selecting large saving sites with certainty.
- On-site verification for eight projects, desk reviews of all 38 sampled projects; and
- Interviewing program participants and trade allies.

18.3.1 SITE VISITS

The on-site inspections were used to verify installations and to determine any changes to the operating parameters since the measures were first installed. Energy savings was estimated using proven techniques, including engineering calculations using industry standards to determine energy savings.

18.3.2 SAMPLE DESIGN

Sampling was developed using the Stratified Random Sampling procedure detailed in Section 3.3. This procedure provides 90% confidence and +/- 10% precision with a significantly reduced sample than simple random sampling would require by selecting the highest saving facilities with certainty, thereby minimizing the variance that non-sampled sites can contribute to the overall results.

The participant population was divided into five strata. Table 18-9 summarizes the strata boundaries and sample frames for the program and

Table 18-10 summarizes expected savings of both the sample and population. The achieved sampling precision was ±8.91% at 90% confidence.

TABLE 18-9 LARGE C&I PROGRAM SAMPLE DESIGN

	Stratum 1	Stratum 2	Stratum 3	Stratum 4	Stratum 5	Totals
Strata boundaries (kWh)	< 20,000	20,001 - 45,000	45,001 - 150,000	150,001 - 1,000,000	> 1,000,001	
Number of projects	33	24	57	40	5	**159**
Total kWh savings	308,415	800,113	5,049,251	11,447,015	10,877,852	**28,482,646**
Average kWh Savings	9,346	33,338	88,583	286,175	2,175,570	**179,136**
Standard deviation of kWh savings	5,761	7,941	30,647	28,512	1,949,240	**492,605**
Coefficient of variation	0.616	0.238	0.346	0.491	0.896	**2.750**

Final design sample	**7**	**6**	**9**	**11**	**5**	**38**

TABLE 18-10 LARGE C&I EXPECTED SAVINGS FOR SAMPLED AND NON-SAMPLED PROJECTS BY STRATUM

Strata	Sample Expected Savings	Total Expected Savings	% Savings in M&V Sample
Stratum 1	308,415	308,415	100.0%
Stratum 2	800,113	800,113	99.9%
Stratum 3	5,049,251	5,049,251	97.6%
Stratum 4	11,447,015	11,447,015	86.4%
Stratum 5	10,877,852	10,877,852	100.0%
Totals	**28,482,646**	**28,482,646**	**97.3%**

18.4 Evaluation Findings

18.4.1GROSS IMPACT FINDINGS

18.4.1.1 Large C&I Site Level Realization

Desk reviews of documentation for all sites chosen within each stratum were performed: All project documentation, calculations, invoices, photos, were carefully examined to verify the installation and operation of equipment. In addition, the Evaluators visited two sites to verify installation and operation of measures and collect data. Where there was uncertainly, the Evaluators contacted staff or site contacts for clarification. This information was then used to verify savings or adjust *ex ante* estimates based on findings. The realization rates for sites within each stratum were then applied to the non-sampled sites within their respective stratum. Table 18-11 presents realization at the stratum level.

TABLE 18-11 SUMMARY OF KWH SAVINGS FOR LARGE C&I OFFERING BY SAMPLE STRATUM

Stratum	Sample Ex Ante Gross Energy Savings (kWh)	Sample Ex Post Gross Energy Savings (kWh)	Realization Rate
1	67,577	67,576	100.0%
2	209,542	209,398	99.9%
3	773,363	755,116	97.6%
4	2,819,676	2,437,025	86.4%
5	10,877,852	10,879,179	100.0%
Total	**14,748,010**	**14,348,294**	**97.3%**

Table 18-12 shows the expected and verified energy savings for the sampled projects.

TABLE 18-12 LARGE C&I EXPECTED AND VERIFIED SAVINGS BY SAMPLED PROJECT

Project ID(s)	Facility Type	Expected kWh Savings	Verified kWh Savings	Realization Rate
CIP_953	Linear LED	197	197	99.8%
CIP_937	Linear LED	395	395	100.0%
CIP_1003	Door Gaskets	9,545	9,545	100.0%

CIP_930	Linear LED	11,160	11,159	100.0%
CIP_920	Linear LED	12,235	12,235	100.0%
CIP_1033	LED Fixture	14,317	14,317	100.0%
CIP_978	HVAC Tune-Up	19,728	19,728	100.0%
CIP_724	Adjustment	28,464	28,320	99.5%
CIP_934	Screw Based LED	33,375	33,375	100.0%
CIP_950	HVAC Tune-Up	34,123	34,124	100.0%
CIP_1085	HVAC Tune-Up	36,267	36,267	100.0%
CIP_1188	HVAC Tune-Up	36,938	36,938	100.0%
CIP_1175	HVAC Tune-Up	40,375	40,375	100.0%
CIP_970	HVAC Tune-Up	48,123	67,982	141.3%
CIP_1174	HVAC Tune-Up	53,320	53,320	100.0%
CIP_949	HVAC Tune-Up	56,396	56,396	100.0%
CIP_935	BMS	59,134	21,027	35.6%
CIP_985	HVAC Tune-Up	60,528	60,528	100.0%
CIP_926	LED Fixture	90,829	90,829	100.0%
CIP_1187	HVAC Tune-Up	124,249	124,249	100.0%
CIP_1102	HVAC Tune-Up	139,976	139,976	100.0%
CIP_956	HVAC Tune-Up	140,809	140,809	100.0%
CIP_968	HVAC Tune-Up	154,759	154,936	100.1%
CIP_962	BMS	165,696	18,689	11.3%
CIP_1179	HVAC Tune-Up	168,220	168,220	100.0%
CIP_1180	HVAC Tune-Up	168,707	168,707	100.0%
CIP_842	Other	168,855	227,079	134.5%
CIP_971	HVAC Tune-Up	203,257	203,257	100.0%
CIP_1181	HVAC Tune-Up	221,460	221,460	100.0%
CIP_923	BMS	311,784	309,449	99.3%
CIP_944	Chiller	369,700	381,725	103.3%
CIP_984	BMS	428,347	196,321	45.8%
CIP_816	Screw Based LED	458,892	387,182	84.4%
CIP_774B	BMS	1,055,195	1,056,522	100.1%
CIP_982	BMS	1,261,392	1,261,392	100.0%
CIP_881	BMS	1,340,558	1,340,558	100.0%
CIP_792B	BMS	1,574,091	1,574,091	100.0%
CIP_914	VFD	5,646,616	5,646,616	100.0%
Total		**14,748,009**	**14,348,294**	**97.3%**

18.4.1.2 Program-level Realization

Using the realization rates presented in Table 18-11 the Evaluators extrapolated results from sampled sites to non-sampled sites in developing offering-level savings estimates. Table 18-13 presents results by stratum.

TABLE 18-13 LARGE C&I SOLUTIONS PROGRAM LEVEL REALIZATION RATE BY STRATUM

Stratum	# Sites	*Ex Ante* Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	kWh RR	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	kW RR
1	33	308,415	308,410	100.0%	106.86	93.37	87.38 %
2	24	800,113	799,563	99.9%	319.58	276.14	86.41 %
3	57	5,049,251	4,930,117	97.6%	1,064.44	1,033.15	97.06 %
4	40	11,447,015	9,893,570	86.4%	2,023.64	1,873.57	92.58 %
5	5	10,877,852	10,879,179	100.0%	931.22	931.00	0.00%
Total	**159**	**28,482,646**	**26,810,839**	**94.1%**	**4,445.74**	**4,207.24**	**94.64 %**

Table 18-14 shows the verified savings across the program.

TABLE 18-14 LARGE C&I SOLUTIONS PROGRAM LEVEL REALIZATION

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	kW Realization Rate
45,589,079	58.8%	26,810,839	7,291	57.7%	4,207

18.4.1.3 Causes of Savings Deviations

For illustrative purposes, the Evaluators have summarized these adjustments to kWh savings in Table 18-15.

TABLE 18-15 LARGE C&I CAUSES OF VARIANCE IN SAVINGS

Project ID(s)	Expected kWh Savings	Verified kWh Savings	Realization Rate	Causes of Variance in Savings
CIP_970	48,123	67,982	141.3%	- Savings claimed for project and savings in implementer's calculator do not match. - Discrepancies between the kWh and kW results of this analysis and those of the implementer's calculator are mostly due to a difference in the building type used for EFLH. The implementer claimed 'Large Office' as the building type, but the facility is a barracks that appears to include (but is not limited to) a museum, sections of warehouse, offices, engineering facilities, a gate house, and floors of a building with no stated purpose. An 'Unknown' space was chosen as the building type for the ex post analysis.

CIP_935	59,134	21,027	35.6%	The ex-post calculator used some assumptions about the baseline conditions and new operating conditions that match the ENO TRM since no trending data or supporting data was provided. The calculation method utilizes a reduced fan and heating energy usage resulting from installing controls onto the fan motors that will allow them to operate on a schedule rather than operating continuously. The fan motor schedule savings are slightly lower because the site visit confirmed a daily operation of 12 hours a day whereas the ex ante analysis used a post daily hour operation of 11 hours. The heating schedule component of the measure is much lower than the ex ante estimation because of a vast difference in what the pre and post conditions were. The ex ante calculations assumed that the electrical resistance heating elements would be operating at 75% capacity throughout the year, regardless of any heating requirements. And the proposed operating hours were reduced by a fraction of HDD divided by HDD plus CDD. This assumption assumes that with the new controls, the fans will now operate either in full cooling or full heat at all operating hours. This assumption was not substantiated with any trending data or statements that confirmed the heating element was operating for a majority of the year. Without any evidence, the ex post analysis used the EFLH for heating for a large office as the operating hours for the heating element for the post conditions. To estimate the baseline conditions with constant fan operation, the pre EFLH was calculated by multiplying the TRM EFLH value by a ratio of CDD without an implemented schedule divided by the CDD with the facility hours implemented.
CIP_962	165,696	18,689	11.3%	The ex-post calculator used some assumptions about the baseline conditions and new operating conditions that match the ENO TRM since no trending data or supporting data was provided. The calculation method utilizes a reduced heating energy usage resulting from installing controls onto the fan motors that will allow them to operate on a schedule rather than operating continuously. The heating savings are much lower than the ex ante estimation because of a vast difference in what the pre and post conditions were. The ex ante calculations assumed that the electrical resistance heating elements would be operating at 75% capacity throughout the year, regardless of any heating requirements. And the proposed operating hours were reduced by a fraction of HDD divided by HDD plus CDD. This assumption assumes that with the new controls, the fans will now operate either in full cooling or full heat at all operating hours. This assumption was not substantiated with any trending data or statements that confirmed the heating element was

				operating for a majority of the year. Without any evidence, the ex post analysis used the EFLH for heating for a large office as the operating hours for the heating element for the post conditions. To estimate the baseline conditions with constant fan operation, the pre EFLH was calculated by multiplying the TRM EFLH value by a ratio of CDD without an implemented schedule divided by the CDD with the facility hours implemented.
CIP_842	168,855	227,079	134.5%	The ex-post analysis used the provided utility data, actual weather, and TMY3 weather data. The utility data and actual weather data was used to create a baseline and proposed regression coefficients. These coefficients were then used with the TMY3 weather data to create a weather normalized savings profile. It is unknown why the savings are higher, since a working calculator was not provided.
CIP_984	428,347	196,321	45.8%	The ex-post calculator adjusted the calculation values to match the information on the provided screen captures of the three units being controlled. The ex-ante method assumed that all three units would operate at a maximum 64,000 cfm all the time, but this was not able to be substantiated. During the site visit, it was stated that trending data was unavailable. Therefore, the only values viable were the values from the screenshot.
CIP_816	458,892	387,182	84.4%	The ex-post calculator used the fixture type and quantity provided, which were verified during the site visit, and the prescriptive TRM values for the AOH, IEFE, IEFD, and CF. The prescriptive building type used was “Lodging (Hotel/Motel/Dorm): Room” for all spaces because it best fits the space description where the lighting retrofit took place.

18.4.1.4 Avoided Replacement Costs

The Evaluators have added the benefits of avoided replacement costs (ARC). The table below summarize the ARC by measure in Large C&I Solutions.

Information on methodology can be found in Section 3.4.1.3 Avoided Replacement Costs.

TABLE 18-16 SUMMARY OF ARC FOR LARGE C&I SOLUTIONS

Measure	*Ex Post* Gross ARCs ($)	*Ex Post* Net ARCs ($)
Assessment	$0	$0
TA Bonus	$0	$0
BMS	$0	$0
CCX	$0	$0
Chiller	$0	$0
Coil Cleaning	$0	$0
Cool Roof	$0	$0
Door Gaskets	$0	$0
ECM	$0	$0

GREM	$0	$0
HVAC Replacement	$0	$0
HVAC Tune-Up	$0	$0
Insulation	$0	$0
LED Fixture	$51,237	$49,784
Lighting Controls	$0	$0
Linear LED	$64,409	$62,582
Pumps	$0	$0
RCx Study	$0	$0
Screw Based LED	$0	$0
Strip Curtains	$0	$0
VFD	$0	$0
Total	**$115,646**	**$112,366**

Sums may differ due to rounding.

18.4.2 NET IMPACT FINDINGS

An average of participant survey responses from the PY12 and PY13 evaluations were used to estimate the net savings of the program. The net-to-gross ratio was 97.2%.

18.4.2.1 Net Savings Results

Net savings by measure can be found in Figure 18-1.

18.4.3 PROCESS FINDINGS

The Evaluators conducted staff interviews as well as administered large commercial and industrial participant and trade ally interviews.

18.4.3.1 Staff and Implementer Interviews

Much of the findings from staff and implementers for the program design and operations for commercial programs, including Large C&I, are presented in the Small C&I Solutions section. Please refer to that section for more details.

18.4.3.2 Participant Interviews

The Evaluators conducted four interviews with customers who participated in Large C&I Solutions to gain insight into customer satisfaction and feedback.

TABLE 17-20 Table 18-7 displays respondents' firmographics.

TABLE 18-17 RESPONDENT FIRMOGRAPHICS

Program	Business Type	Employees
Large Commercial & Industrial	Engineer, Hotel	51+
	Owner, Retail Property	Less than 5
	Director of Engineering, Commercial Spaces	5-10
	Manager, Hotel	51+

18.4.3.2.1 *Program Strengths*

Businesses expressed high satisfaction with the Large Commercial & Industrial Solutions Energy Smart program, citing its financial benefits, ease of use, sustainability support, and educational value.

All four large businesses highlighted the program's financial incentives and rebates, which make energy efficiency upgrades more affordable:.

> *"The money is always nice. The rebates are always nice. The savings and energy costs are nice."*
> *– Manager, Hotel, Large Commercial & Industrial Solutions*

Three businesses praised the seamless process for implementing energy efficiency upgrades.

> *"Everything went smoothly... I didn't have any hang-ups or anything."*
> *– Director of Engineering, Commercial Spaces, Large Commercial & Industrial Solutions*

> *"The vendor was absolutely wonderful. They explained everything to me in great detail… They were incredibly professional and timely. One of the best vendors I've ever had the pleasure of working with."*
> *– Manager, Hotel, Large Commercial & Industrial Solutions*

Additionally, three businesses appreciated the knowledgeable and helpful program staff:

> *"I had a really pleasant experience. He was knowledgeable and educated me a lot because the building is really old."*
> *– Owner, Retail Property, Large Commercial & Industrial Solutions*

18.4.3.2.2 *Program Challenges*

Businesses reported few challenges with the Large Commercial & Industrial Solutions Energy Smart program. The main concerns were the initial complexity of the application process, delays in equipment delivery, and

limited program awareness. However, these issues were minor and did not significantly impact overall satisfaction.

Three of four large businesses noted that the application process can be time-consuming and complex, especially for those with limited resources:

> *"When I started with it, I think the workbooks were a little confusing... Once I got familiar with it, it wasn't so bad." – Director of Engineering, Commercial Spaces, Large Commercial & Industrial Solutions*

One business mentioned delays in equipment delivery:

> *"[It took] a little time to get the actual fixtures in. I think anybody could control that." – Manager, Hotel, Large Commercial & Industrial Solutions*

Another business cited limited awareness as a challenge:

> *"A lot of people just know about it...I know there are emails, but I think they can expand it." – Director of Engineering, Commercial Spaces, Large Commercial & Industrial Solutions*

18.4.3.2.3 *Program Engagement Opportunities*

Businesses suggested several improvements to the Large Commercial & Industrial Solutions Energy Smart program, focusing on increasing accessibility, expanding educational efforts, and enhancing program offerings. Key recommendations included raising awareness, providing additional support for complex applications, and considering additional incentives or rate reductions.

Two businesses emphasized the need to increase program awareness and accessibility:

> *"I feel like many people would participate if they knew about it and could see the results on their bill." – Owner, Retail Property, Large Commercial & Industrial Solutions*

One business suggested offering more support for complex applications

> *"They could send a rep out to walk people through it. The people that I've talked to about it, when I showed them the workbooks, they're afraid to tackle it."– Director of Engineering, Commercial Spaces, Large Commercial & Industrial Solutions*

Another business recommended exploring additional incentives or rate reductions:

> *"Offer me a cheaper rate in conjunction with it."*
> *– Manager, Hotel, Large Commercial & Industrial Solutions*

18.4.3.3 Trade Ally Interviews

Evaluators conducted three interviews with trade allies partnered with the Large Commercial & Industrial Solutions program to gain insights into their experiences. Overall, trade allies expressed satisfaction with the rebate incentives, highlighting the program's role in helping customers implement energy-saving measures they might not otherwise afford.

However, challenges were noted, including frequent changes to calculation tools, limitations on recognized operating hours for 24/7 facilities, and occasional miscommunications about rebate amounts. Despite these issues, trade allies remain strongly committed to the program, citing its positive impact on their businesses and continued value in supporting energy efficiency efforts.

Table 17-20 display a respondent overview.

TABLE 18-18 RESPONDENT OVERVIEW

Program	Business Type	Employees
Large Commercial & Industrial	Consultant	51+
	Installer, Distributor	Less than 5
	Consultant, Distributor, Manufacturer	51+

18.4.3.3.1 *Program Strengths*

The Energy Smart Large Commercial & Industrial Solutions program is praised for its user-friendly process, clear communication, and financial benefits. Trade allies appreciate the straightforward incentive structure and the program's ability to make energy-efficient upgrades more accessible, particularly for small businesses and organizations with limited budgets. The program's impact on facilitating energy-efficient projects across various sectors is a key strength.

All three trade allies emphasized the program's significant cost savings and incentives:

> *"We've been to numerous projects where the customer can get almost a free project through some of this. And the benefits for large facilities such as hotels and hospitals were major." – Installer, Lighting, Small & Large Commercial & Industrial Solutions*

They also highlighted how the program enables businesses to complete energy-efficient upgrades that might not otherwise be feasible:

> *"Between the amount of money that they're going to save with lowering their energy costs, but also with the help of this electrician and his team, they really were able to see the benefit of it."– Manufacturer, Lighting, Large Commercial & Industrial Solutions*

Two trade allies praised the program's straightforward process and clear communication from Entergy:

> *"It's a pretty easy process... All the incentives are laid out pretty well. Having one page where we can see what's offered is really helpful "*
> *– Consultant, HVAC, Small & Large Commercial & Industrial Solutions*

18.4.3.3.2 *Program Challenges*

Challenges in the Energy Smart Large Commercial & Industrial Solutions program primarily relate to administrative processes and program awareness. Frequent changes in calculation tools and rebate structures make it difficult for trade allies to provide accurate customer quotes. While necessary, the preapproval process can sometimes slow down project implementation. Additionally, trade allies noted that many clients are unaware of the rebates and benefits available, potentially leading to missed opportunities.

One trade ally found frequent changes in calculation tools and rebate amounts frustrating:.

> *"The only gripes we've had over the years really concern how often some of these calculators or the tools we're using to determine the rebates have changed."*
> *– Installer, Lighting, Small & Large Commercial & Industrial Solutions*

Another trade ally noted that the preapproval process can delay projects:

> *"We get preapproval whenever we can. We always try to say when we can get away with not having preapproval. It's always easier. It helps us keep the projects happening." – Consultant, HVAC, Small & Large Commercial & Industrial Solutions*

One trade ally expressed concern about program awareness:

> *" Most people don't know the extent to which these are available. And I think that could be a mistake. I missed a lot of opportunities."*
> *– Manufacturer, Lighting, Large Commercial & Industrial Solutions*

18.4.3.3.3 *Deeper Trade Ally Engagement*

Suggestions for improving the Energy Smart Large Commercial & Industrial Solutions program focus on enhancing outreach, refining incentives, and simplifying the application process. Increasing awareness through proactive communication and education about available programs is a key priority. Trade allies also recommend

improving incentives for specific technologies, particularly HVAC systems, and providing more assistance with paperwork and program navigation to help businesses fully utilize the program's benefits.

Two trade allies emphasized the need for increased awareness and outreach:

> *"My biggest piece of advice is to make people aware of the programs. That's the biggest thing." – Manufacturer, Lighting, Large Commercial & Industrial Solutions*

One trade ally suggested improving incentives for specific technologies:

> *"The incentives for lighting are competitive. The incentives for HVAC could be a little bit higher compared to other programs… Advanced rooftop controls would be good." – Consultant, HVAC, Small & Large Commercial & Industrial Solutions*

Another trade ally recommended offering more assistance with paperwork and program navigation:

> *"If there's someone out there who can say, hey, here's all the paperwork. I just need you in finance to sign it and get your electrician to do it."*
> *– Manufacturer, Lighting, Large Commercial & Industrial Solutions*

18.5 Findings and Recommendations

The following summarizes the key findings and conclusions from the evaluation.

- Financial Incentives & Ease of Participation: Businesses and trade allies reported high satisfaction with the program, particularly appreciating its financial benefits, straightforward rebate structure, and ease of implementation. Participants valued the ability to complete energy efficiency projects with significant cost savings.
- Challenges with Application Process & Program Awareness: While generally well-received, some businesses found the initial application process confusing and time-consuming. Additionally, both participants and trade allies noted limited program awareness, suggesting that more businesses might participate if they were better informed.
- Administrative & Implementation Barriers for Trade Allies: Trade allies cited frequent changes in calculation tools and rebate structures as a challenge in providing accurate quotes and maintaining consistency in project planning. The preapproval process, while necessary, was sometimes seen as slowing down implementation.

The following summarizes key recommendations.

- Simplify & Streamline the Application Process: Given that some businesses found the application process complex, providing additional guidance—such as clearer instructions, pre-filled forms, or direct application assistance—could reduce the burden on participants. A dedicated support representative or

an online step-by-step guide could help businesses, especially smaller organizations, navigate the process more easily.

- Increase Program Awareness & Outreach Efforts: Limited program awareness was a recurring theme across both businesses and trade allies. Expanding outreach efforts through direct engagement, industry events, and customer education campaigns could help more businesses take advantage of the program. Leveraging trade allies as outreach partners may also enhance awareness and recruitment.
- Enhance Trade Ally Support & Predictability in Incentive Structures: Frequent updates to rebate calculations and program tools can create uncertainty for trade allies and customers. Evaluators recommend balancing necessary updates with stability, ensuring changes are communicated clearly and well in advance. Additionally, trade allies suggested increasing incentives for specific technologies like HVAC, which could be evaluated for feasibility based on program cost-effectiveness metrics.
- Improve Preapproval Process to Reduce Delays: While preapproval ensures project validity, some trade allies found it to be a barrier to timely implementation. Exploring ways to streamline or expedite the process—such as implementing a fast-track option for certain projects—could improve efficiency while maintaining necessary oversight.

19 C&I CONSTRUCTION SOLUTIONS

The tables below report ex ante gross, ex post gross, ex post net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend, by measure, where applicable. Additionally, the tables above represent evaluation findings for each measure, whereas the analysis described in this chapter summarizes the findings of the evaluation.

TABLE 19-1 PY14 C&I CONSTRUCTION SOLUTIONS ENERGY SAVINGS (KWH)

Measure	*Ex Ante* Gross Savings (kWh)	Realization Rate (kWh)	*Ex Post* Gross Savings (kWh)	NTG	*Ex Post* Net Savings (kWh)
HVAC	27,840	55.8%	15,528	68.2%	10,596
Interior NC Lighting	69,849	91.6%	63,967	68.2%	43,651
Exterior NC Lighting	4,048	80.1%	3,242	68.2%	2,212
Refrigeration	781	110.8%	865	68.2%	590
Total	**102,518**	**81.5%**	**83,603**	**68.2%**	**57,050**

Sums may differ due to rounding.

TABLE 19-2 PY14 C&I CONSTRUCTION SOLUTIONS DEMAND SAVINGS (KW)

Measure	*Ex Ante* Gross Demand (kW)	Realization Rate (kW)	*Ex Post* Gross Demand (kW)	NTG	*Ex Post* Net Demand (kW)
HVAC	6.86	58.3%	4.00	68.2%	2.73
Interior NC Lighting	15.03	68.7%	10.32	68.2%	7.04
Exterior NC Lighting	0.00	N/A	0.00	68.2%	0.00
Refrigeration	0.09	112.5%	0.10	68.2%	0.07
Total	**21.98**	**65.6%**	**14.42**	**68.2%**	**9.84**

Sums may differ due to rounding.

TABLE 19- C&I CONSTRUCTION SOLUTIONS LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex Post* Gross Lifetime Energy Savings (kWh)	*Ex Post* Net Lifetime Energy Savings (kWh)
HVAC	15	232,924	158,947
Interior NC Lighting	15	959,510	654,769
Exterior NC Lighting	15	48,629	33,185
Energy Star Refrigerator	12	10,380	7,083
Total	**15**	**1,251,444**	**853,984**

Sums may differ due to rounding.

TABLE 19-3 C&I CONSTRUCTION SOLUTIONS INCENTIVE SPEND SUMMARY

Measure	Participation (Count of Measures)	Incentive Spend ($)
Incentive Bonus	3	$3,000
HVAC	61	$3,063
Interior NC Lighting	4,957	$10,876
Exterior NC Lighting	636	$855
Refrigeration	1	$121
Total	**5,655**	**$14,916**

19.1 Program Description

The Commercial & Industrial Construction Solutions (C&I NC) program intends to encourage customers to design and construct higher efficiency facilities than required by building codes or planned designs. This offering is available to ground-up construction, additions, or expansions, building repurposing and commercial building restorations. Incentives are available for the following:

- Predefined prescriptive savings based on units installed
- Lighting wattage below approved baseline
- Custom qualifying measures
- Whole Building

19.1.1 PROGRAM DELIVERY CHANNELS AND EXPECTED SAVINGS

The evaluation approach for PY14 included the following activities, database review, desk reviews, site visits, participants surveys and staff interviews. A total of three projects were completed in the C&I NC program in PY14.

19.1.2 TIMING OF PROJECTS

According to the tracking data, in PY14, the three projects completed in the program had start months in February, October, and November of 2024.

19.1.3 TRADE ALLIES

In PY14, the program saw projects completed by three trade allies. The program participation is shown below.

TABLE 19-4 C&I NC TRADE ALLY PARTICIPATION

Trade Ally	Ex Ante kWh	Project Count	Ex Ante kWh %
Trade Ally 1	26,903	1	26%
Trade Ally 2	26,971	1	26%
Trade Ally 3	48,643	1	47%

19.1.4 GOAL ACHIEVEMENT

In PY14, the program had a verified savings of 72,538 kWh and a verified peak demand reduction of 10.62 kW.

TABLE 19-5 C&I NC SUMMARY OF GOAL ACHIEVEMENT

Ex post Gross Energy Savings (kWh) Goal	% to kWh Goal	*Ex post* Gross Energy Savings (kWh)	*Ex post* Gross Savings (kW) Target	% to kW Target	*Ex post* Gross Savings (kW)
4,301,994	1.9%	83,603	987.00	1.5%	14.42

19.2 Evaluation Methodology

Evaluation of the program involved the following:

- Census review of PY14 projects
- Interviewing of program participants and trade allies.

During PY14 only three projects were completed. The Evaluators analyzed all and the results are discussed below.

19.2.1 GROSS IMPACT FINDINGS

The Evaluators reviewed all project documentation, including invoices, spec sheets and site photos to verify the installation of the equipment. Energy and demand reduction calculations were reviewed to verify that they were consistent with the TRM and that all inputs were appropriate. Changes and corrections between Ex Ante and Ex Post savings estimates were documented and realization rates based on verified savings were developed for each site. In PY14, there were a total of three projects completed in the program:

CIP_1057 Is a reconverted residence used as an office space who installed new construction interior and exterior lighting and an above-code heat pump. Verification was completed via photographic evidence. The project achieved a 143.8% realization rate due to the fact that expected savings were calculated lighting power density allowances of 1.00 W/ft^2 'interior religious gathering,' 0.8 W/ft^2 exterior 'sales canopies (free-standing and attached)' assumptions, whereas verified savings were calculated using IECC 2015 lighting power density allowances (0.82 W/ft^2 interior office, 0.33 W/ft^2 entry canopies) which reflected the intended use of the spaces. .Verified savings calculations for the HVAC portion were carried out using actual equipment specifications.

TABLE 19-6: PROJECT CIP_1057 SAVINGS

Measure	*Ex Ante* Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	kWh RR	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	kW RR
Interior Lighting	18,979	32,541	171.5%	3.12	5.35	171.5%
Exterior Lighting	758	16	2.1%	0.00	-	N/A
Prescriptive HVAC	7,166	6,135	85.6%	-0.74	-0.42	N/A
Total	**26,903**	**38,691**	**143.8%**	**2.38**	**4.93**	**207.0%**

CIP_1099 Is a reconverted residence used as an office space who installed new construction interior and exterior lighting, an above-code heat pump and a solid door ENERGY STAR refrigerator. Verification was completed via

photographic evidence. The project achieved a low realization rate (64.1%) due to the fact that expected savings were calculated using outdated LPD allowances and incorrect space types (interior was assumed to be a hospital with an allowance of 1.05 W/ft^2 but was verified to be an office). Verified savings were calculated using IECC 2015 lighting power density allowances (0.82 W/ft^2 interior office).. Further, three line items did not have lighting installed, yet savings was claimed using 0 W/ft^2 as an efficient condition, which is not allowable and no savings can be attributed to these spaces. Verified savings calculations for the HVAC and refrigeration portions of the project were carried out using actual equipment specifications. These errors in ex ante LPD savings calculation assumptions resulted in the low project realization.

TABLE 19-7: PROJECT CIP_1099 SAVINGS

Measure	*Ex Ante* Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	kWh RR	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	kW RR
Interior Lighting	20,311	11,064	54.5%	4.64	2.18	47.0%
Exterior Lighting	2,737	2,532	92.5%	0.00	0.00	N/A
Prescriptive HVAC	3,144	2,831	90.0%	0.35	0.62	176.5%
ENERGY STAR Refrigerators	781	865	110.8%	0.09	0.10	112.5%
Total	**26,971**	**17,292**	**64.1%**	**5.08**	**2.90**	**57.1%**

CIP_193 Is a three-story retail building being renovated for use as a hotel. In the renovation, new construction interior and exterior lighting was installed as was an above-code AC unit. Verification was completed via photographic evidence. Project documentation listed one of the two interior spaces as 'Hotel/Motel' with an allowance of 1.1W/ft^2. The source of this allowance could not be verified. Verified savings were calculated using IECC 2015 lighting power density allowances of 0.87 W/ft^2 for a 'hotel/motel' building area, and 1.06 W/ft^2 for common space).Verified savings calculations for the HVAC portion of the project were carried out using actual equipment specifications. These errors in ex ante LPD savings calculation assumptions resulted in the very low project realization, 56.8%.

TABLE 19-8: PROJECT CIP_193 SAVINGS

Measure	*Ex Ante* Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	kWh RR	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	kW RR
Interior Lighting	30,559	20,363	66.6%	7.28	2.80	38.4%
Exterior Lighting	554	694	125.4%	-	-	N/A
Prescriptive HVAC	17,531	6,563	37.4%	6.51	3.80	58.3%
Total	**48,643**	**27,620**	**56.8%**	**13.79**	**6.60**	**47.8%**

TABLE 19-9 VERIFIED SAVINGS

Ex Ante Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	RR kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	RR kW
102,518	**83,603**	**81.5%**	**21.98**	**14.42**	**65.6%**

The overall verified energy savings is 83,603 kWh and the peak demand reduction is 14.42 kW resulting in realization rates of 81.5% and 65.6% respectively.

19.2.1.1 Avoided Replacement Costs

The Evaluators have added the benefits of avoided replacement costs (ARC). The table below summarizes the ARC by measure.

Information on methodology can be found in Section 3.4.1.3.

TABLE 19-10 C&I NC ARC SUMMARY

Measure	*Ex Post* Gross ARCs ($)	*Ex Post* Net ARCs ($)
Adjustments	$0	$0
HVAC	$0	$0
Interior NC Lighting	$16,109	$10,993
Exterior NC Lighting	$91,164	$62,210
Refrigeration	$0	$0
Total	**$107,273**	**$73,203**

19.2.2 NET IMPACT FINDINGS

An average of participant survey responses from the PY12 and PY13 evaluations were used to estimate the net savings of the program. The net-to-gross ratio was 68.2%.

19.2.3 PROCESS EVALUATION FINDINGS

The findings from the process evaluation are found in the subsections below.

19.2.3.1 Staff and Implementer Interviews

The following section summarizes key findings from in-depth interviews with two ENO program staff and two APTIM staff. ENO staff participated in one interview, while APTIM staff participated in a separate interview.

These interviews aimed to gather insights into the design and operations of the New Construction Solutions program, as well as the successes and challenges experienced during PY14. Each interview lasted approximately 45 minutes and was conducted via Microsoft Teams. With participant permission, evaluators recorded all interviews. The following narrative presents a summary of these discussions.

19.2.3.1.1 *Program Description and Implementation*

The Commercial & Industrial Construction Solutions (C&I NC) program intends to encourage customers to design and construct higher efficiency facilities than required by building codes or planned designs. This offering is available to ground-up construction, additions, or expansions, building repurposing, and commercial building restorations.

The New Construction program continues to struggle. Programmatic challenges include long lead times and difficulties connecting with construction companies and developers. Most notably, staff indicated they struggle with the strict preapproval timeline which makes it difficult to build a customer pipeline.

Staff are working on increasing direct outreach and finding construction firms and developers that might be most interested in the program.

19.2.3.2 Trade Ally Interviews

Evaluators conducted an interview with a trade ally participating in the Energy Smart Commercial & Industrial Construction Solutions program to gain insight into their experience. The trade ally highlighted the program's tangible benefits for both their business and clients, emphasizing its role in promoting energy efficiency and sustainability in building design and construction.

Proactive engagement from Entergy representatives and the minimal time investment required from the trade ally were cited as key factors contributing to the program's success. The interviewee did not identify any significant challenges or opportunities for improvement related to Entergy's implementation of the program..

Table 17-20 display a respondent overview.

TABLE 19-11 RESPONDENT OVERVIEW

Program	Business Type	Employees
Commercial & Industrial Construction Solutions	Engineering Firm	11-20

19.2.3.2.1 *Program Strengths*

The trade ally identified several strengths of working with the Energy Smart Commercial & Industrial Construction Solutions program. The program's efficiency and minimal time investment allow them to provide valuable energy credits to clients without significant additional effort. Additionally, they highlighted the program's effectiveness as a marketing tool, helping their business stand out by demonstrating innovative ways to save clients money and energy.

> *"It's a good marketing tool for us because it is something that not many people know about or are doing. So, we can show the owners that we can find different avenues to save them money and energy. So, I think it helps in marketing our firm versus other firms." – Design Engineer, Electrical and Mechanical, Commercial & Industrial Construction Solutions*

The trade ally did not identify any challenges or suggestions for improvement. They expressed high satisfaction with the program's process and outcomes:

> *"On my end, I think I'm pretty satisfied. I can't think of anything off the top of my head that I would like to see... I like their approach and the people they have in place who contact us. They are very proactive, looking for jobs that apply to the program and helping*

us navigate that." – Design Engineer, Electrical and Mechanical, Commercial & Industrial Construction Solutions

19.3 Findings and Recommendations

The following summarizes the key findings and conclusions from the PY13 evaluation.

- Strict Preapproval Timelines: Staff indicated that the program's strict preapproval requirements create challenges in developing a customer pipeline, as projects must be approved before construction begins.
- Difficulty Connecting with Developers: Staff noted ongoing struggles in engaging construction firms and developers, which limits program participation. The long lead times for new construction projects further complicate recruitment efforts.
- Minimal Burden on Trade Allies: The single interviewed trade ally reported that program participation requires minimal effort while offering tangible energy efficiency benefits for clients. The trade ally found the program beneficial for business growth, allowing them to differentiate themselves by helping clients maximize energy savings.

The following summarizes key recommendations.

- Refine Preapproval Process: If feasible, consider adjusting the preapproval process to allow more flexibility in project timelines. Staff cited this as a primary challenge, and minor adjustments (such as an extended approval window or conditional approvals) could improve participation without compromising oversight.
- Expand Outreach to Developers: Strengthening direct outreach efforts to construction firms and developers could help address engagement challenges. Strategies may include targeted industry presentations, networking with architecture and engineering firms, or partnering with permitting offices to identify eligible projects earlier in the design phase.
- Evaluate Alternative Engagement Strategies: Given the difficulty in building a strong customer pipeline, program staff could explore alternative ways to encourage participation, such as offering technical assistance early in the project design process or providing case studies that highlight the program’s benefits to developers.

20 PUBLICLY FUNDED INSTITUTIONS

20.1 Summary

The tables below report *ex ante* gross, *ex post* gross, *ex post* net energy savings (kWh) (both annual and lifetime), demand reductions (kW), participation, and incentive spend, by measure, where applicable. Additionally, the tables above represent evaluation findings for each measure, whereas the analysis described in this chapter summarize the findings of the evaluation stratum.

TABLE 20-1 PY14 PFI ENERGY SAVINGS (KWH)

Measure	*Ex Ante* Gross Savings (kWh)	Realization Rate (kWh)	*Ex Post* Gross Savings (kWh)	NTG	*Ex Post* Net Savings (kWh)
AC Tune-Up	242,468	99.9%	242,329	92.9%	225,196
BMS	1,907,367	96.9%	1,847,817	92.9%	1,717,175
Chiller	161,435	100.0%	161,358	92.9%	149,950
LED Fixture	576,096	97.9%	564,079	92.9%	524,198
Linear LED	743,253	97.8%	726,560	92.9%	675,192
Screw Based LED	82,567	94.9%	78,330	92.9%	72,792
Total	**3,713,186**	**97.5%**	**3,620,474**	**92.9%**	**3,364,504**

Sums may differ due to rounding.

TABLE 20-2 PY14 PFI DEMAND REDUCTIONS (KW)

Measure	*Ex Ante* Gross Demand (kW)	Realization Rate (kW)	*Ex Post* Gross Demand (kW)	NTG	*Ex Post* Net Demand (kW)
AC Tune-Up	84.35	100.0%	84.35	92.9%	78.38
BMS	191.08	102.6%	195.99	92.9%	182.13
Chiller	17.86	100.0%	17.86	92.9%	16.59
LED Fixture	59.42	100.1%	59.47	92.9%	55.26
Linear LED	98.50	104.7%	103.17	92.9%	95.88
Screw Based LED	10.84	102.6%	11.12	92.9%	10.33
Total	**462.05**	**102.1%**	**471.95**	**92.9%**	**438.59**

Sums may differ due to rounding.

TABLE 20-3 PY14 PFI LIFETIME SAVINGS SUMMARY

Measure	EUL	*Ex Post* Gross Lifetime Energy Savings (kWh)	*Ex Post* Net Lifetime Energy Savings (kWh)
AC Tune-Up	3	726,988	675,589
BMS	15	27,717,251	25,757,619
Chiller	20	3,227,164	2,999,001
LED Fixture	9	5,076,712	4,717,784
Linear LED	16	11,624,968	10,803,074
Screw Based LED	1	78,330	72,792
Total		**48,451,412**	**45,025,859**

Sums may differ due to rounding.

TABLE 20-4 PY14 PFI COUNT OF MEASURES AND INCENTIVE SPEND

Measure	Participation (Count of Measures)	Incentive Spend ($)
AC Tune-Up	1,431	39,750
BMS	5	238,740
Chiller	2	24,215
LED Fixture	366	52,785
Linear LED	9,868	66,739
Screw Based LED	915	3,831
TA Bonus	1	13,352
Total	**12,588**	**439,412**

Sums may differ due to rounding.

20.2 Program Description

The Publicly Funded Institutions (PFI) program provides financial incentives and technical services to encourage the participation of publicly funded customers. The PFI offering is designed to help this customer segment overcome barriers to energy improvement, such as higher first-cost of efficiency equipment and a lack of technical knowledge or resources. The incentives are based on the total demand (kW) of the facility; above or below 100 kW. Rebates are available for the following categories: prescriptive (TRM-based); custom lighting; and custom non-lighting.

20.2.1 PROGRAM DELIVERY CHANNELS AND EXPECTED SAVINGS

The program was open and available to customers between January 1, 2024, and December 31, 2024. Project documentation showed that there were nineteen projects completed. These twenty projects have a total expected energy savings of 3,713,186 kWh and a peak demand reduction of 462.05 kW.

TABLE 20-5 PFI SAVINGS EXPECTATIONS

Project Count	Measure Count	*Ex Ante* Gross Energy Savings (kWh)	*Ex Ante* Gross Demand Reductions (kW)
21	12,587	3,713,186	462.05

TABLE 20-6 PFI SAVINGS EXPECTATIONS BY MEASURE TYPE

Program Component	Count of Project Components	*Ex Ante* Gross Energy Savings (kWh)	*Ex Ante* Gross Demand Reductions (kW)	Percent Savings (kWh)
AC Tune-Up	1,431	242,468	84.35	7%
BMS	5	1,907,367	191.08	51%
Chiller	2	161,435	17.86	4%
LED Fixture	366	576,096	59.42	16%
Linear LED	9,868	743,253	98.50	20%
Screw Based LED	915	82,567	10.84	2%
Total	**12,587**	**3,713,186**	**462.05**	

20.2.2TIMING OF PROJECTS

Below outlines ex ante kWh and project count by the project reported install date for projects claimed in PY14.

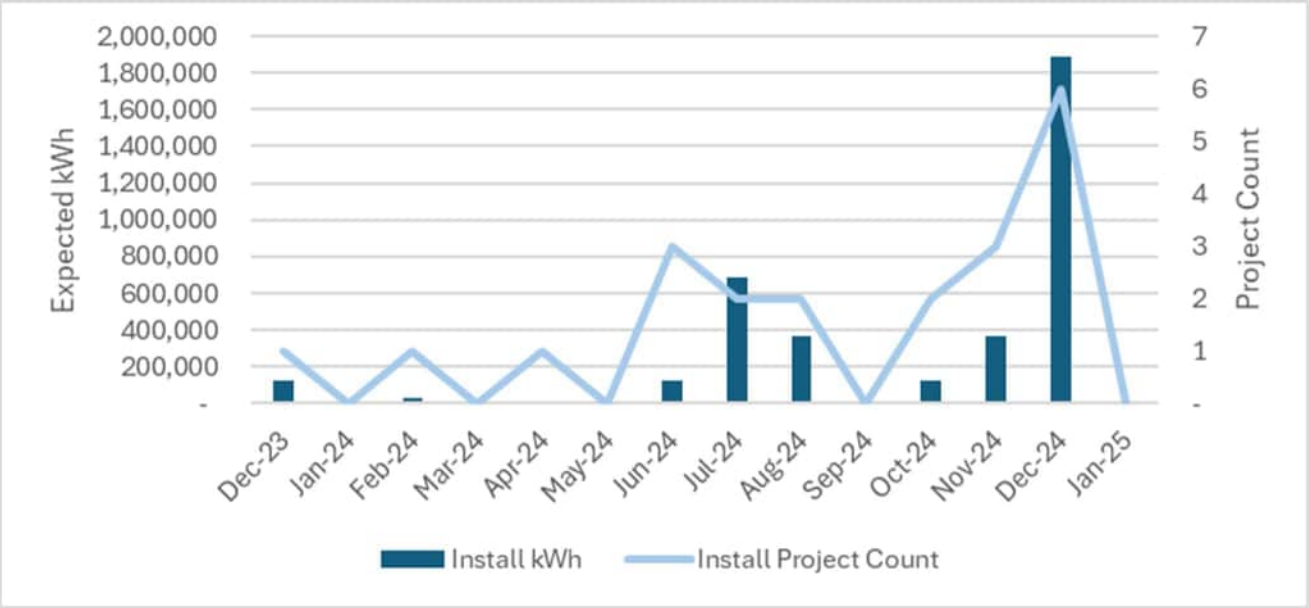


FIGURE 20-1 PFI PARTICIPATION BY PROJECT INSTALL MONTH

The program had the largest number of projects completed in December of 2024 (12 projects) and saw its largest expected energy reduction claimed in December of 2024 (1,884,090 kWh) which was 51% of the total expected energy savings for the year.

20.2.3TRADE ALLIES

The program saw eleven trade allies complete projects, their participation is summarized below.

TABLE 20-7 PFI TRADE ALLY PARTICIPATION

Trade Ally	Ex Ante kWh	Project Count	Ex Ante kWh %
Trade Ally 1	1,796,415	2	48.4%
Trade Ally 2	142,927	1	3.8%
Trade Ally 3	212,702	1	5.7%
Trade Ally 4	28,582	1	0.8%
Trade Ally 5	23,709	1	0.6%
Trade Ally 6	5,611	1	0.2%
Trade Ally 7	135,564	2	3.7%
Trade Ally 8	242,468	3	6.5%
Trade Ally 9	444,612	3	12.0%
Trade Ally 10	666	1	0.0%
Trade Ally 11	88,540	1	2.4%
Trade Ally 12	126,372	1	3.4%
Trade Ally 13	50,525	1	1.4%
Trade Ally 14	414,495	2	11.2%

20.2.4GOAL ACHIEVEMENT

The program had a verified savings of 3,620,474kWh and a verified peak demand reduction of 471.95kW.

TABLE 20-8 PFI SUMMARY OF GOAL ACHIEVEMENT

Ex post Gross Energy Savings (kWh) Goal	% to kWh Goal	*Ex post* Gross Energy Savings (kWh)	*Ex post* Gross Savings (kW) Target	% to kW Target	*Ex post* Gross Savings (kW)
15,730,841	23.0%	3,620,474	397.00	118.9%	471.95

20.3 EM&V Methodology

Evaluation of the PFI offering requires the following:

- Stratified Random Sampling (as detailed in Section 3.3.) and by selecting large saving sites with certainty.
- Four on-site verifications were conducted, desk reviews of all seven sampled; and
- Interviewing program participants and trade allies.

Energy savings was estimated using proven techniques, including engineering calculations using industry standards to determine energy savings. Methods for evaluating lighting measures are described in the Small C&I Solutions Chapter, Section 1.2.1 M&V Methodology.

20.3.1SITE VISITS

There were four site visits in PY14.

20.3.2SAMPLE DESIGN

Sampling for evaluation of the program was developed using the Stratified Random Sampling procedure detailed in Section 3.3. This procedure provides 90% confidence and +/- 10% precision with a significantly reduced sample than simple random sampling would require by selecting the highest saving facilities with certainty, thereby minimizing the variance that non-sampled sites can contribute to the overall results. Table 20-9 summarizes the total participation in the PY13 PFI offering.

TABLE 20-9 PY13 PFI OFFERING PARTICIPATION AND SAMPLING SUMMARY

# Projects	Expected kWh	Expected Peak kW	Sample Size
21	3,713,186	462.05	7

The participant population was divided into five strata. Table 20-10 summarizes the strata boundaries and sample frames for the program. Table 20-10 summarizes expected savings for of both the sample and population. The achieved sampling precision was ±8.60% at 90% confidence.

TABLE 20-10 PFI OFFERING SAMPLE DESIGN

	Stratum 1	Stratum 2	Stratum 3	Stratum 4	Stratum 5	Totals

Strata boundaries (kWh)	< 30,000	30,001 - 75,000	75,001 - 200,000	200,001 - 400,000	> 400,001	
Number of projects	4	5	7	3	2	**21**
Total kWh savings	58,568	279,250	766,756	812,197	1,796,415	**3,713,186**
Average kWh Savings	14,642	55,850	109,537	270,732	898,208	**176,818**
Standard deviation of kWh savings	13,582	12,065	20,134	28,512	369,056	**266,718**
Coefficient of variation	0.928	0.216	0.184	0.197	0.411	**1.508**
Final design sample	**2**	**1**	**1**	**1**	**2**	**7**

TABLE 20-11 PFI EXPECTED SAVINGS FOR SAMPLED AND NON-SAMPLED PROJECTS BY STRATUM

Stratum	Total Expected Savings	Sampled Expected Savings
1	58,568	29,320
2	279,250	50,525
3	766,756	88,540
4	812,197	317,467
5	1,796,415	1,796,415
Total	**3,713,186**	**2,282,267**

20.4 Evaluation Findings

20.4.1GROSS IMPACT FINDINGS

20.4.1.1 PFI Project Level Results

Sites chosen within each stratum were reviewed to verify installation of rebated equipment. The reviewed information was used to perform calculations to determine the ex post verified savings. The realization rates for sites within each stratum were then applied to the non-sampled sites within their respective stratum.

TABLE 20-12 SUMMARY OF PFI KWH SAVINGS FOR PFI OFFERING BY SAMPLE STRATUM

Stratum	Sample *Ex Ante* Gross Energy Savings (kWh)	Sample *Ex Post* Gross Energy Savings (kWh)	Realization Rate
1	29,320	29,320	**100.0%**
2	50,525	50,525	**100.0%**
3	88,540	88,479	**99.9%**
4	317,467	317,467	**100.0%**
5	1,796,415	1,704,231	**94.9%**
Total	**2,282,267**	**2,190,022**	**97.5%**

The specific site level realization rates are shown in Table 20-13 below.

TABLE 20-13 PFI EXPECTED AND VERIFIED SAVINGS BY SAMPLED PROJECT

Project ID(s)	Facility Type	*Ex Ante* Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate
CIP_953	Large Office	5,611	5,611	100.0%
CIP_937	Large Office	23,709	23,709	100.0%
CIP_870	Education: K-12	50,525	50,525	100.0%
CIP_952	Public Assembly	88,540	88,479	99.9%
CIP_924	Education: College, University, Vocational, Day Care, and K-12 w/ Summer Session	317,467	317,467	100.0%
CIP_730	Large Office	637,245	545,061	85.5%
CIP_884	Large Office	1,159,170	1,159,170	100.0%
Totals:		**2,282,267**	**2,190,203**	**96.0%**

20.4.1.2 PFI Program Level Results

Using the realization rates presented in Table 20-12, the evaluators extrapolated the results from the sampled projects to non-sampled projects to determine the program level verified results.

TABLE 20-14 PFI OFFERING LEVEL REALIZATION BY STRATUM

Stratum	# Sites	*Ex Ante* Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	Realization Rate kWh	*Ex Ante* Gross Demand Reductions (kW)	*Ex Post* Gross Demand Reductions (kW)	Realization Rate kW
1	4	58,568	58,568	100.0%	10.67	14.71	137.9%
2	5	279,250	279,250	100.0%	59.62	59.62	100.0%
3	7	766,756	766,228	99.9%	131.46	131.46	100.0%
4	3	812,197	812,197	100.0%	31.75	31.75	100.0%
5	2	1,796,415	1,704,231	94.9%	228.55	234.42	0.0%
Total	**21**	**3,713,186**	**3,620,474**	**97.5%**	**462.05**	**471.95**	**102.1%**

The *ex post* gross energy savings (kWh) in PY14 are 3,620,474 kWh and 471.95 kW resulting in realization rates of 97.5% and 102.1% respectively.

20.4.1.3 PFI Causes of Savings Deviations

For illustrative purposes, the Evaluators have summarized these adjustments and others in Table 20-15.

TABLE 20-15 PFI CAUSES OF VARIANCE IN KWH SAVINGS

Project ID(s)	*Ex Ante* Gross Energy Savings (kWh)	*Ex Post* Gross Energy Savings (kWh)	RR	Causes of Variance in Savings
CIP_730	637,245	545,061	85.5%	The ex-post calculator used the fixture/lamp types and quantities provided and prescriptive TRM values for the

				AOH, IEFE, IEFD, CF, and baseline wattage. Ex-Ante analysis used system wattage inclusive of ballast factors.

20.4.2 NET IMPACT

An average of participant survey responses from the PY12 and PY13 evaluations were used to estimate the net savings of the program. The net-to-gross ratio was 92.9%.

20.4.2.1 Avoided Replacement Costs

The Evaluators have added the benefits of avoided replacement costs (ARC). The table below summarize the ARC by measure in PFI.

Information on methodology can be found in Section 3.4.1.3 Avoided Replacement Costs.

TABLE 20-16 SUMMARY OF ARC FOR PFI

Measure	*Ex Post* Gross ARCs ($)	*Ex Post* Net ARCs ($)
TA Bonus	$0	$0
Screw Based LED	$0	$0
Linear LED	$32,071	$29,804
LED Fixture	$35,278	$32,784
Chiller	$0	$0
BMS	$0	$0
AC Tune Up	$0	$0
Total	**$67,349**	**$62,587**

Sums may differ due to rounding.

20.4.3 PROCESS FINDINGS

The Evaluators conducted staff interviews and administered participant and trade ally interviews.

20.4.3.1 Staff and Implementer Interviews

The following section summarizes key findings from in-depth interviews with two ENO program staff and two APTIM staff. ENO staff participated in one interview, while APTIM staff participated in a separate interview.

These interviews aimed to gather insights into the design and operations of the Publicly Funded Institutions program, as well as the successes and challenges experienced during PY14. Each interview lasted approximately 45 minutes and was conducted via Microsoft Teams. With participant permission, evaluators recorded all interviews. The following narrative presents a summary of these discussions.

20.4.3.1.1 *Program Description and Implementation*

The Publicly Funded Institutions (PFI) program provides financial incentives and technical services to help publicly funded customers overcome barriers to energy efficiency improvements, such as the high upfront cost of equipment and limited technical knowledge or resources.

While the program saw strong engagement in PY12, participation declined in PY13 and PY14. Program staff have struggled to gain traction with key PFI customers, such as the City of New Orleans and the Sewerage and Water Board, noting that city offices are not interested in participating. Staff are unsure why these offices no longer engage with the program, as they appear to have the necessary capital and resources for upgrade projects but choose not to participate.

20.4.3.2 Participant Interviews

Evaluators conducted interviews with five participants of the Publicly Funded Institutions program.

Table 17-20 display a respondent overview.

TABLE 20-17 RESPONDENT OVERVIEW

Program	Business Type	Employees
Publicly Funded Institutions	Director of Facilities, Private Catholic High School	Prefer not to answer
	Chief Operating Officer, Rec Center	51+
	Facility Director, College Prep School	51+
	Electrical Supervisor, City Water Management	51+
	Chief Operating Officer, Charter School	51+

20.4.3.2.1 *Program Strengths*

The Publicly Funded Institutions Energy Smart Program received positive feedback, with businesses highlighting financial incentives, an easy installation process, and noticeable energy savings. The program was seen as a valuable tool for upgrading facilities, reducing energy consumption, and supporting sustainability goals. Many participants expressed high satisfaction with the program and its outcomes.

All five publicly funded businesses cited cost savings and financial incentives as key benefits.

> *"It's all about trying to save a dollar when you're in a school setting, you have limited resources on certain things, and we're able to capture some of the funds to allow us to do some of the projects we wanted to do around campus."*
> *– Facility Director, College Prep School, Publicly Funded Institutions*

Four businesses emphasized improved energy efficiency and lower utility bills.

> *"It's trying to save the company money on reducing the energy bill or the energy usage."*
> *– Electrical Supervisor, City Water Management, Publicly Funded Institutions*

> *"It's just a better light. I think it's better for the kids in the classrooms we're putting them in... I think it produces more productive students in the classroom."*
> *– Facility Director, College Prep School, Publicly Funded Institutions*

20.4.3.2.2 *Program Challenges*

While the Publicly Funded Institutions Energy Smart Program was well-received, some participants identified challenges or areas for improvement. The main hurdles included the complexity of the application process, the need for upfront costs or partial funding, and occasional issues with the quality or performance of installed equipment. These factors sometimes deterred full participation or limited the scope of projects undertaken.

Three of five publicly funded institutions cited the application process as time-consuming and complex, particularly for those with limited staff resources.

> *"I don't have a lot of time; just sitting down and figuring out what to apply for and what works and doesn't work is too time-consuming."*
> *– Chief Operating Officer, Charter School, Publicly Funded Institutions*

Two of five publicly funded institutions noted that rebates did not cover full project costs, making it harder to justify the investment.

> *"I think some people are put off because if the rebates don't cover the full cost… it's not covering the full cost of switching to LED light."*
> *– Chief Operating Officer, Charter School, Publicly Funded Institutions*

One of five publicly funded institutions reported reduced lighting brightness after upgrades, which can be problematic for certain facilities.

> *"I wish I would have done a little more research in terms of the actual outcome of the job. Because in some cases, our ballparks went from real bright on the field to a little less bright with the LEDs." – Chief Operating Officer, Rec Center, Publicly Funded Institutions*

20.4.3.2.3 *Program Engagement Opportunities*

Publicly funded institutions suggested several ways Entergy could enhance the Publicly Funded Institutions Energy Smart Program. Key areas for improvement included increasing financial incentives, simplifying the application process, and providing more comprehensive information about available options and their impacts.

Two of five publicly funded institutions recommended offering more upfront details on energy-efficient upgrades and their potential outcomes.

> *"I would like a sample of options on the front end. Like, okay, if we install these lights, you'll save on the energy side, but this will make your gym a little dimmer."*
> *– Chief Operating Officer, Rec Center, Publicly Funded Institutions*

Two of five publicly funded institutions suggested increasing rebates or covering a larger percentage of project costs for schools and other publicly funded organizations with limited budgets.

> *"[Prioritize businesses] like schools and hospitals, where they get a higher percentage of money so they don't have out-of-pocket costs, that's probably more helpful."*
> *– Chief Operating Officer, Charter School, Publicly Funded Institutions*

One publicly funded institution recommended expanding the program to include more HVAC upgrades and providing additional information on these options.

> *"I would like more information on that HVAC side and ways that we can take on more projects and be more efficient because we have some older systems around here."*
> *– Facility Director, College Prep School, Publicly Funded Institutions*

20.4.3.3 Trade Ally Interviews

Evaluators conducted an interview with a trade ally partnered with the Publicly Funded Institutions program to gain insight into their experience. The trade ally emphasized the importance of sustainability in their business model and their focus on installing energy-efficient equipment, such as HVAC systems and lighting.

They expressed high satisfaction with Entergy New Orleans' Energy Smart program, praising its straightforward application process, responsive staff, and the sense of partnership it fosters. They noted that the program's financial incentives are crucial in enabling customers to implement energy-efficient upgrades they might not otherwise afford.

The trade ally reported no major challenges with the program but suggested minor improvements, such as adding application status notifications and establishing a more formal approval process.

TABLE 17-20 display a respondent overview.

TABLE 20-18 RESPONDENT OVERVIEW

Program	Business Type	Employees
Government & Public Education	Engineering Firm, Installer	51+

20.4.3.3.1 *Program Strengths*

The Energy Smart program offered by Entergy New Orleans has several notable strengths. The trade ally highlighted the program's straightforward application requirements, the responsiveness and helpfulness of Entergy staff, and the strong sense of partnership that made the process feel collaborative. They also praised the program's financial incentives, which help customers implement energy-efficient upgrades that might otherwise be unaffordable, leading to reduced energy usage and improved sustainability.

> *"The application requirements were straightforward. They were well laid out."*

– Manager, Engineering Energy Services, Publicly Funded Institutions

"If I had questions… the contacts at Entergy were very responsive and willing to help." – Manager, Engineering Energy Services, Publicly Funded Institutions

"It allows our customers to do projects that they might not be able to afford otherwise. So, the financial incentives help pay for the project." – Manager, Engineering Energy Services, Publicly Funded Institutions

20.4.3.3.2 *Program Challenges*

The trade ally had a highly positive experience with the Energy Smart program and did not identify major challenges. The only minor inconvenience mentioned was the lack of an automated notification system for application status.

"With some other utilities… you receive immediate notification on the status of your applications, and that's helpful because if you send a rebate application in and you're waiting a few weeks… You want to correct [errors] as soon as possible." – Manager, Engineering Energy Services, Publicly Funded Institutions

20.4.3.3.3 *Deeper Trade Ally Engagement*

The trade ally suggested implementing a more formal or automated approval process to improve efficiency, as mentioned above.

20.5 Key Findings and Recommendations

The following summarizes the key findings and conclusions.

- Declining Participation from Key Public Entities: Key government agencies, such as the City of New Orleans and the Sewerage and Water Board, are not engaging with the program despite having the resources for upgrades. Staff are unsure why participation has dropped.
- Limited Awareness of Upgrade Options: Some participants wanted more upfront information on how different upgrades would impact their facilities, such as lighting brightness changes in gyms and ballparks.
- Application Process Complexity: Participants cited the application process as time-consuming, particularly for organizations with limited staff.
- Partial Cost Coverage: Some institutions found the rebates insufficient to cover full project costs, making it difficult to justify upgrades.

The following summarizes key recommendations.

- Develop Pre-Project Comparison Tools for Upgrade-Impacts: Participants expressed concerns about the impact of upgrades on their facilities, such as how lighting retrofits might affect brightness levels in schools and recreational spaces. Providing clearer pre-project assessments, such as case studies, visual comparisons, or pre- and post-installation energy savings estimates, would help institutions make more informed decisions. Site visits to facilities that have undergone similar upgrades could also offer firsthand insights into expected outcomes. By improving transparency about upgrade impacts, the program can increase confidence in participation.
- Streamline and Support the Application Process: Given that multiple participants cited the complexity of the application process as a barrier, simplifying and providing more guidance could improve accessibility. Offering a more user-friendly online portal with pre-filled forms based on previous submissions, creating step-by-step application guides, and providing dedicated program liaisons for publicly funded institutions could ease the burden. Additionally, hosting technical assistance sessions where program staff walk applicants through paperwork could ensure that interested organizations complete the process successfully.
- Reassess Incentive Structures for High Need Institutions: To increase participation among schools and other publicly funded institutions with budget constraints, program staff should consider increasing incentives for select customer segments, and exploring partnerships with third-party funders or state energy efficiency grants to offset remaining project costs.

21 APPENDIX A: COMMERCIAL SITE REPORTS

159332-2024-W4M0

Executive Summary

This facility is a service site that has completed a retrofit of the interior lighting. The kWh realization rate for this project is 90% and the peak coincidence kW realization rate 90%.

Project Description

This project consisted of the following work:

- (8) T8/T12 Fixtures replaced with (8) 14 W LED Fixtures

Measurement and Verification Effort

The Evaluators performed a desk review to verify the savings claimed for this project. Savings are calculated using the lamp type, quantity and location using the approach from the New Orleans TRM v7 section 2.6.1 Lighting Efficiency. The following equations were used to calculate the annual energy savings from the retrofit:

$$\text{kWh}_{\text{Savings}} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times AOH \times IEF_E$$

$$\text{kW}_{\text{Savings}} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times CF \times IEF_E$$

$$therms_{penalty} = kWh_{savings} \times IEF_G$$

Where:

kWhsavings	= Annual energy savings
kWsavings	= Peak energy demand reduction
Nfixt	= Quantity of fixtures either being removed or installed
Wfixt	= Rated wattage of the fixture being removed or installed
AOH	= Annual operating hours for specified building type
IEFE	= Interactive effects factor for energy savings
IEFD	= Interactive effects factor for demand savings
IEFG	= Interactive effects factor for gas heating savings
CF	= Peak demand coincidence factor
pre	*= Denotes pre-installation state*
post	*= Denotes post-installation state*

TABLE 1 SAVINGS PARAMETERS

Measure	*Pre Quantity (Fixtures)*	*Post Quantity (Fixtures)*	*Pre Wattage*	*Post Wattage*	*Hours*	*IEFe*

Lighting Efficiency	8	8	31	14	3,406	0.87

TABLE 2 ENERGY SAVINGS

Measure	*Expected kWh Savings*	*Realized kWh Savings*	*Realization Rate*	*EUL*	*Lifetime Savings*
Lighting Efficiency	448	403	90%	15	6,045

TABLE 3 PEAK KW REDUCTION

Measure	*CF*	*IEFd*	*Expected Peak kW Reductions*	*Realized Peak kW Reductions*	*Realization Rate*
Lighting Efficiency	0.9	1.2	0.16	0.15	90%

Results

TABLE 4 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	*Expected*	*Measured*	*Realization Rate*
Coincident Peak kW	0.16	0.15	90%
Annual kWh	448	403	90%

The kWh realization rate for this project is 90% and the peak coincidence kW realization rate is 90%.

The ex-post calculator used the fixture type and quantity provided, which were verified during the desk review, and the prescriptive TRM values for the AOH, IEFE, IEFD, and CF. The prescriptive building type used was "Service: Excluding Food" for all spaces because it best fits the space description where the lighting retrofit took place.

The following table is a list of changes between the ex-ante and ex-post calculators:

TABLE 5 CAUSES OF DISCREPANCY

Variable	*Ex-Ante*	*Ex-Post*	*Reason*
Pre-Fixture Wattage	32	31	Ex ante uses fixture wattage only and Ex post considered ballast factor

CIP_945

Executive Summary

This facility is a full menu restaurant that replaced two (2) high efficiency AC units. The kWh realization rate for this project is 65% and the peak coincidence kW realization rate 195%.

Project Description

This project consisted of the following work:

- (2) High Efficiency AC Unit Replacement

Measurement and Verification Effort

The Evaluators performed a desk review to verify the savings claimed for this project. The desk review for this project was conducted with unit capacity and deemed values from New Orleans TRM v7.0 section 2.3.2 Unitary and Split System AC/HP Equipment. The following equations were used to calculate the annual energy savings from the tune-up:

$$\text{kWh}_{\text{Savings}} = Capacity \times \frac{1\ kW}{1{,}000\ W} \times EFLH_C \times \left(\frac{1}{IEER_{Base}} - \frac{1}{IEER_{Post}}\right)$$

$$\text{kW}_{\text{Savings}} = Capacity \times \frac{1\ kW}{1{,}000\ W} \times CF \times \left(\frac{1}{EER_{Base}} - \frac{1}{EER_{Post}}\right)$$

Where:

$kWh_{savings}$	= Annual energy savings
$kW_{savings}$	= Peak energy demand reduction
Capacity	= Nameplate output capacity of AC Unit (btu/hr)
IEER	= Integrated Energy Efficiency Ratio
EER	= Full Load efficiency of AC Unit
EFLH	= Effective Full Load Hours of AC Unit based on building type
CF	= Coincidence Factor

TABLE 1 SAVINGS PARAMETERS

Unit	Capacity	$IEER_{Base}$	$IEER_{Post}$	EER_{Base}	EER_{Post}	EFLH	CF
RTU-2	118,000	14.8	15	11.2	11	1997	0.85
RTU-3	118,000	14.8	15	11.2	11	1997	0.85

TABLE 2 ENERGY SAVINGS

Measure	Expected kWh Savings	Realized kWh Savings	Realization Rate	EUL	Lifetime Savings
AC replacement	652	425	65%	15	6,369

TABLE 3 PEAK KW REDUCTION

Measure	*Expected Peak kW Reductions*	*Realized Peak kW Reductions*	*Realization Rate*
AC replacement	-0.17	-0.33	195%

Results

TABLE 4 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	*Expected*	*Measured*	*Realization Rate*
Coincident Peak kW	-0.17	-0.33	195%
Annual kWh	652	425	65%

The kWh realization rate for this project is 65% and the peak coincidence kW realization rate is 195%.

The ex-post analysis used the output capacities of each AC unit along with prescriptive TRM values for IEER, EER, EFLH, and CF. The prescriptive building type used was “Full Menu Restaurant”. Differences in ex-post calculations leading to a low kWh realization rate and a high kW realization rate can be attributed to baseline minimum efficiency values.

The following table is a list of changes between the ex-ante and ex-post calculators:

TABLE 5 CAUSES OF DISCREPANCY

Variable	*Ex-Ante*	*Ex-Post*	*Reason*
$IEER_{Base}$	14.7	14.8	Ex-Ante value was an average of the minimum efficiency values
EER_{Base}	11.1	11.2	Ex-Ante value was an average of the minimum efficiency values
Cooling Capacity	120,000	118,000	Changed to match AHRI rating

CIP_987

Executive Summary

This facility is a retail building that replaced one (1) high efficiency AC unit. The kWh realization rate for this project is 83%; as there are no ex-post peak coincidence kW savings, there is no peak coincidence kW realization rate.

Project Description

This project consisted of the following work:

- (1) High Efficiency AC Unit Replacement

Measurement and Verification Effort

The Evaluators performed a desk review to verify the savings claimed for this project. The desk review for this project was conducted with unit capacity and deemed values from New Orleans TRM v7.0 section 2.3.2 Unitary and Split System AC/HP Equipment. The following equations were used to calculate the annual energy savings from the tune-up:

$$\text{kWh}_{\text{Savings}} = Capacity \times \frac{1\ kW}{1{,}000\ W} \times EFLH_C \times \left(\frac{1}{IEER_{Base}} - \frac{1}{IEER_{Post}}\right)$$

$$\text{kW}_{\text{Savings}} = Capacity \times \frac{1\ kW}{1{,}000\ W} \times CF \times \left(\frac{1}{EER_{Base}} - \frac{1}{EER_{Post}}\right)$$

Where:

$kWh_{savings}$	= Annual energy savings
$kW_{savings}$	= Peak energy demand reduction
Capacity	= Nameplate output capacity of AC Unit (btu/hr)
IEER	= Integrated Energy Efficiency Ratio
EER	= Full Load efficiency of AC Unit
EFLH	= Effective Full Load Hours of AC Unit based on building type
CF	= Coincidence Factor

TABLE 1 SAVINGS PARAMETERS

Unit	Capacity	$IEER_{Base}$	$IEER_{Post}$	EER_{Base}	EER_{Post}	EFLH	CF
RTU-1	69,000	14.8	15.5	11.2	11.2	1997	0.85

TABLE 2 ENERGY SAVINGS

Measure	Expected kWh Savings	Realized kWh Savings	Realization Rate	EUL	Lifetime Savings
AC replacement	807	672	83%	15	10,078

TABLE 3 PEAK KW REDUCTION

Measure	*Expected Peak kW Reductions*	*Realized Peak kW Reductions*	*Realization Rate*
AC replacement	0.05	0.00	-%

Results

TABLE 4 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	*Expected*	*Measured*	*Realization Rate*
Coincident Peak kW	0.05	0.00	-%
Annual kWh	807	672	83%

The kWh realization rate for this project is 83%; there is no peak coincidence kW realization rate.

The ex-post analysis used the output capacities of each AC unit along with prescriptive TRM values for IEER, EER, EFLH, and CF. The prescriptive building type used was “Retail”. Differences in ex-post calculations leading to a low kWh realization rate and no kW realization rate can be attributed to baseline and post minimum efficiency values.

The following table is a list of changes between the ex-ante and ex-post calculators:

TABLE 5 CAUSES OF DISCREPANCY

Variable	*Ex-Ante*	*Ex-Post*	*Reason*
$IEER_{Base}$	14.7	14.8	Ex-Ante value was an average of the minimum efficiency values
EER_{Base}	11.1	11.2	Ex-Ante value was an average of the minimum efficiency values
$IEER_{Post}$	16	15.5	Ex-Post value used was from the provided AHRI specification sheet
EER_{Post}	11	11.2	Ex-Post value used was from the provided AHRI specification sheet

165184-2024-J7W0

Executive Summary

This facility is a tattoo parlor that has completed a retrofit of some of its lighting from fluorescent to LED. The kWh realization rate for this project is 130% and the peak coincidence kW realization rate 130%.

Project Description

This project consisted of the following work:

- (7) 15W CFL lamps to (7) 9W LED lamps
- (10) 40W (nominal) linear fluorescent T12 lamps to (10) 14W linear LED lamps

Measurement and Verification Effort

The Evaluators performed a desk review to verify the savings claimed for this project. Savings are calculated using the lamp type, quantity and location using the approach from the New Orleans TRM v7 section 2.6.1 Lighting Efficiency. The following equations were used to calculate the annual energy savings from the retrofit:

$$\text{kWh}_{\text{Savings}} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times AOH \times IEF_E$$

$$\text{kW}_{\text{Savings}} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times CF \times IEF_E$$

$$therms_{penalty} = kWh_{savings} \times IEF_G$$

Where:

$kWh_{savings}$	= Annual energy savings
$kW_{savings}$	= Peak energy demand reduction
N_{fixt}	= Quantity of fixtures either being removed or installed
W_{fixt}	= Rated wattage of the fixture being removed or installed
AOH	= Annual operating hours for specified building type
IEF_E	= Interactive effects factor for energy savings
IEF_D	= Interactive effects factor for demand savings
IEF_G	= Interactive effects factor for gas heating savings (0.00)
CF	= Peak demand coincidence factor
pre	*= Denotes pre-installation state*
post	*= Denotes post-installation state*

TABLE 1 SAVINGS PARAMETERS

Measure	Pre Quantity (Fixtures)	Post Quantity (Fixtures)	Pre Wattage	Post Wattage	AOH	IEFe
15W CFL to 9W LED	7	7	15	9	3,406	0.87
40W LF to 14W TLED	10	10	51	14	3,406	0.87

TABLE 2 ENERGY SAVINGS

Measure	Expected kWh Savings	Realized kWh Savings	Realization Rate	EUL	Lifetime Savings
15W CFL to 9W LED	131	125	95%	4	498
40W LF to 14W TLED	809	1,096	136%	15	16,446

TABLE 3 PEAK KW REDUCTION

Measure	CF	IEFd	Expected Peak kW Reductions	Realized Peak kW Reductions	Realization Rate
15W CFL to 9W LED	0.9	1.2	0.048	0.045	94%
40W LF to 14W TLED	0.9	1.2	0.295	0.400	136%

Results

TABLE 4 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	Expected	Measured	Realization Rate
Coincident Peak kW	0.342	0.445	130%
Annual kWh	939.6	1,221	130%

The kWh realization rate for this project is 130% and the peak coincidence kW realization rate is 130%.

The ex-post calculator used the fixture/lamp types and quantities provided and prescriptive TRM values for the AOH, IEF_E, IEF_D, CF, and baseline wattage. The prescriptive building type used was “Service: Excluding Food” for all spaces because it best fits the space description where the lighting retrofits took place.

The following table is a list of changes between the ex-ante and ex-post calculators:

TABLE 5 CAUSES OF DISCREPANCY

Variable	Ex-Ante	Ex-Post	Reason
Pre Wattage (Linear Fluorescents)	40	51	Ex-Ante analysis used nominal wattage. Ex-Post analysis uses prescriptive wattage for nominally 40W LF lamps with magnetic ballasts (ballast type specified in Ex-Ante)

164649-2024-F3S7

Executive Summary

This facility is a retail building which installed two smart thermostats. The kWh realization rate for this project is 92%; as there are no ex-post peak coincidence kW savings, there is no peak coincidence kW realization rate.

Project Description

This project consisted of the following work:

- (2) Smart Thermostat

Measurement and Verification Effort

The Evaluators performed a desk review to verify the savings claimed for this project. The desk review for this project was conducted with unit capacity and efficiency with deemed EFLH values from New Orleans TRM v7.0 section 2.3.8 Smart Thermostats. The following equations were used to calculate the annual energy savings from the tune-up:

$$kWh\ Savings = Capacity(C) \times \frac{1}{SEER \times 1000} \times EFLH_C \times Savings\%_C + Capacity(H) \times \frac{1}{HSPF \times 1000} \times EFLH_H \times Savings\%_H$$

Where:

Capacity(C) = Cooling capacity (BTU)
SEER = Efficiency of controlled AC. Use current code requirements if nameplate actual is not available.
1000 = unit conversion
EFLH(C) = Equivalent Full Load Cooling Hours. See table below.
Capacity(H) = Heating capacity (BTU)
HSPF = Heating Efficiency of controlled HVAC system. Use current code requirements if nameplate actual is not available.
EFLH(H) = Equivalent Full Load Heating Hours. See table below.
Savings%(C) = Annual percent cooling savings
Savings%(H) = Annual percent heating savings

TABLE 1 SAVINGS PARAMETERS

Unit	*Capacity*	*SEER*	*EFLHc*
Area 1	60,000	13	2,056
Area 2	60,000	14	2,056

TABLE 2 ENERGY SAVINGS

Measure	*Expected kWh Savings*	*Realized kWh Savings*	*Realization Rate*	*EUL*	*Lifetime Savings*
Smart Thermostat	497	474	95%	11	5,218
Smart Thermostat	497	440	89%	11	4,845

Results

TABLE 4 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	*Expected*	*Measured*	*Realization Rate*
Annual kWh	994	915	92%

The kWh realization rate for this project is 92%; there is no peak coincidence kW realization rate.

The ex-post analysis used verified capacities and efficiencies of the HVAC equipment, whereas ex ante savings were estimated using deemed inputs from the TRM.

164657-2024-D6L8

Executive Summary

This facility is a service site that has completed the following measures: interior lighting retrofit, installed advanced power strips, and installed a smart thermostat. The kWh realization rate for this project is 84% and the peak coincidence kW realization rate 114%.

Project Description

This project consisted of the following work:

- (8) T8 Fixtures replaced with (8) 14 W LED Fixtures
- (1) Smart Thermostat

Measurement and Verification Effort

The Evaluators performed a site visit to verify the savings claimed for this project.

Lighting

Savings are calculated using the lamp type, quantity and location using the approach from the New Orleans TRM v7 section 2.6.1 Lighting Efficiency. The following equations were used to calculate the annual energy savings from the retrofit:

$$\mathrm{kWh_{Savings}} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times AOH \times IEF_E$$

$$\mathrm{kW_{Savings}} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times CF \times IEF_D$$

$$therms_{penalty} = kWh_{savings} \times IEF_G$$

Where:

kWhsavings	= Annual energy savings
kWsavings	= Peak energy demand reduction
Nfixt	= Quantity of fixtures either being removed or installed
Wfixt	= Rated wattage of the fixture being removed or installed
AOH	= Annual operating hours for specified building type
IEFE	= Interactive effects factor for energy savings
IEFD	= Interactive effects factor for demand savings
IEFG	= Interactive effects factor for gas heating savings
CF	= Peak demand coincidence factor
pre	*= Denotes pre-installation state*
post	*= Denotes post-installation state*

TABLE 1 SAVINGS PARAMETERS

Measure	*Pre Quantity (Fixtures)*	*Post Quantity (Fixtures)*	*Pre Wattage*	*Post Wattage*	*Hours*	*IEFe*
Lighting Efficiency	8	8	32	14	4,312	0.98

Smart Thermostats

Savings are calculated using the approach from the New Orleans TRM v7 section 2.3.8 Smart Thermostats. The following equations were used to calculate the annual energy savings from the retrofit:

$$\text{kWh}_{\text{Savings}} = \text{CAP} \times \frac{EFLH}{SEER \times 1000} \times Savings\%$$

Where:

CAP	= Unit Capacity in BTU
EFLH	= Effective Full Load Hours for cooling
SEER	= Unit efficiency of controlled AC
Savings%	= Deemed annual percentage cooling savings

TABLE 2 ENERGY SAVINGS

Measure	*CAP*	*EFLH*	*SEER*	*Savings%*	*$kWh_{Savings}$*
Smart Thermostats	57,000	3,191	13	5%	700

TABLE -21-1 ENERGY SAVINGS

Measure	*Expected kWh Savings*	*Realized kWh Savings*	*Realization Rate*	*EUL*	*Lifetime Savings*
Lighting Efficiency	578	609	105%	15	9,128
Smart Thermostats	944	700	74%	11	7,695
Total	1,522	1,308	86%		16,823

TABLE 3 PEAK KW REDUCTION

Measure	*Expected Peak kW Reductions*	*Realized Peak kW Reductions*	*Realization Rate*
Lighting Efficiency	0.15	0.16	105%
Smart Thermostats	0	0	-
Total	0.15	0.16	105%

Results

TABLE 4 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	*Expected*	*Measured*	*Realization Rate*
Coincident Peak kW	0.15	0.16	105%
Annual kWh	1,522	1,308	86%

The kWh realization rate for this project is 86% and the peak coincidence kW realization rate is 105%.

The ex-post calculator used the fixture type and quantity provided, which were verified during the site visit, and the prescriptive TRM values for the AOH, IEFE, IEFD, and CF. The prescriptive building type used was "Service: Excluding Food" for all spaces because it best fits the space description where the lighting retrofit took place.

The following table is a list of changes between the ex-ante and ex-post calculators:

TABLE 5 CAUSES OF DISCREPANCY

Variable	*Ex-Ante*	*Ex-Post*	*Reason*
Pre-Fixture Wattage	31	32	Ex ante uses fixture wattage only and Ex post considered ballast factor
Smart Thermostat	Deemed	TRM	Ex ante used a deemed value per unit instead of using the actual AC unit controlled, as per the TRM guidelines.

CIP_995

Executive Summary

This facility is a retail facility that performed an AC tune up on seven (7) AC units. The kWh realization rate for this project is 86% and the peak coincidence kW realization rate 86%.

Project Description

This project consisted of the following work:

- (7) AC Tune-ups

Measurement and Verification Effort

The Evaluators performed a desk review to verify the savings claimed for this project. The desk review for this project was conducted with unit capacity and deemed values from New Orleans TRM v7.0 section 2.3.5 Air Conditioner and Heat Pump Tune-up. The following equations were used to calculate the annual energy savings from the tune-up:

$$\mathrm{kWh}_{\mathrm{Savings}} = \frac{Capacity}{EER} \times \frac{1\ kW}{1{,}000\ W} \times EFLH_C \times Savings\%$$

$$\mathrm{kW}_{\mathrm{Savings}} = \frac{Capacity}{EER} \times \frac{1\ kW}{1{,}000\ W} \times LF \times Savings\%$$

Where:

$kWh_{savings}$	= Annual energy savings
$kW_{savings}$	= Peak energy demand reduction
Capacity	= Nameplate output capacity of AC Unit (btu/hr)
EER	= Full Load efficiency of AC Unit
EFLH	= Effective Full Load Hours of AC Unit based on building type
CF	= Coincidence Factor
Savings%	= Savings percentage

TABLE 1 SAVINGS PARAMETERS

Unit	Capacity	EER	EFLH	Savings%	kWh Savings	CF	kW Savings
1	60,000	11	3,191	6.32%	1,100	0.88	0.30
2	90,000	10.8	3,191	6.32%	1,681	0.88	0.46
3	60,000	11	3,191	6.32%	1,100	0.88	0.30
4	90,000	10.8	3,191	6.32%	1,681	0.88	0.46
5	60,000	12	3,191	6.32%	1,008	0.88	0.28
6	60,000	13	3,191	6.32%	931	0.88	0.26
7	60,000	14	3,191	6.32%	864	0.88	0.24

TABLE 2 ENERGY SAVINGS

Measure	Expected kWh Savings	Realized kWh Savings	Realization Rate	EUL	Lifetime Savings
AC Tune-up	9,757	8,365	86%	10	83,647

TABLE 3 PEAK KW REDUCTION

Measure	Expected Peak kW Reductions	Realized Peak kW Reductions	Realization Rate
AC Tune-up	2.69	2.31	86%

Results

TABLE 4 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	Expected	Measured	Realization Rate
Coincident Peak kW	2.69	2.31	86%
Annual kWh	9,757	8,365	86%

The kWh realization rate for this project is 86% and the peak coincidence kW realization rate is 86%.

The ex-post analysis used the output capacities of each AC unit along with prescriptive TRM values for Savings percentage, EER, EFLH, and CF. The prescriptive building type used was “Retail”. Differences in ex-post calculations leading to a low realization rate can be attributed to difference in the calculation methodology. The ex-ante method attempted to calculate savings by measuring the unit efficiency before and after the tune up. However, this method was not done properly with correct measurements including a power factor, which resulted in measure reading that show a EER value that is much higher than the manufacturer specifications ideal efficiency. This extremely high EER values makes the provided measured data unable to be used and therefore, the deemed savings percentage method and default EER values from the TRM were necessary.

CIP_981

Executive Summary

This facility is a retail facility that performed an AC tune up on four (4) AC units. The kWh realization rate for this project is 16% and the peak coincidence kW realization rate 16%.

Project Description

This project consisted of the following work:

- (4) AC Tune-ups

Measurement and Verification Effort

The Evaluators performed a desk review to verify the savings claimed for this project. The desk review for this project was conducted with unit capacity and deemed values from New Orleans TRM v7.0 section 2.3.5 Air Conditioner and Heat Pump Tune-up. The following equations were used to calculate the annual energy savings from the tune-up:

$$\text{kWh}_{\text{Savings}} = \frac{Capacity}{EER} \times \frac{1\ kW}{1{,}000\ W} \times EFLH_C \times Savings\%$$

$$\text{kW}_{\text{Savings}} = \frac{Capacity}{EER} \times \frac{1\ kW}{1{,}000\ W} \times LF \times Savings\%$$

Where:

$kWh_{savings}$	= Annual energy savings
$kW_{savings}$	= Peak energy demand reduction
Capacity	= Nameplate output capacity of AC Unit (btu/hr)
EER	= Full Load efficiency of AC Unit
EFLH	= Effective Full Load Hours of AC Unit based on building type
CF	= Coincidence Factor
Savings%	= Savings percentage

TABLE 1 SAVINGS PARAMETERS

Unit	*Capacity*	*EER*	*EFLH*	*Savings%*	*kWh Savings*	*CF*	*kW Savings*
1	60,000	9.5	2,095	6.32%	3,512	0.88	1.29
2	60,000	9.5	2,095	6.32%	5,017	0.88	1.84
3	60,000	9.8	2,095	6.32%	2,270	0.88	0.83
4	60,000	9.8	2,095	6.32%	2,270	0.88	0.83

TABLE 2 ENERGY SAVINGS

Measure	*Expected kWh Savings*	*Realized kWh Savings*	*Realization Rate*	*EUL*	*Lifetime Savings*
AC Tune-up	27,139	4,400	16%	10	44,001

TABLE 3 PEAK KW REDUCTION

Measure	*Expected Peak kW Reductions*	*Realized Peak kW Reductions*	*Realization Rate*
AC Tune-up	7.48	1.21	16%

Results

TABLE 4 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	*Expected*	*Measured*	*Realization Rate*
Coincident Peak kW	7.48	1.21	16%
Annual kWh	27,139	4,400	16%

The kWh realization rate for this project is 16% and the peak coincidence kW realization rate is 16%.

The ex-post analysis used the output capacities of each AC unit along with prescriptive TRM values for Savings percentage, EER, EFLH, and CF. The prescriptive building type used was “Retail”. Differences in ex-post calculations leading to a low realization rate can be attributed to difference in the calculation methodology. The ex-ante method attempted to calculate savings by measuring the unit efficiency before and after the tune up. However, this method was not done properly with correct measurements including a power factor, which resulted in measure reading that show a EER value that is much higher than the manufacturer specifications ideal efficiency. This extremely high EER values makes the provided measured data unable to be used and therefore, the deemed savings percentage method and default EER values from the TRM were necessary.

CIP_970

Executive Summary

This facility is a military barracks that performed an AC tune up on twenty-five (25) AC units. The kWh realization rate for this project is 141% and the peak coincidence kW realization rate 92%.

Project Description

This project consisted of the following work:

- (25) AC Tune-ups

Measurement and Verification Effort

The Evaluators performed a desk review to verify the savings claimed for this project. The desk review for this project was conducted with unit capacity and deemed values from New Orleans TRM v7.0 section 2.3.5 Air Conditioner and Heat Pump Tune-up. The following equations were used to calculate the annual energy savings from the tune-up:

$$\mathrm{kWh}_{\mathrm{Savings}} = \frac{Capacity}{EER} \times \frac{1\ kW}{1{,}000\ W} \times EFLH_C \times Savings\%$$

$$\mathrm{kW}_{\mathrm{Savings}} = \frac{Capacity}{EER} \times \frac{1\ kW}{1{,}000\ W} \times LF \times Savings\%$$

Where:

$kWh_{savings}$	= Annual energy savings
$kW_{savings}$	= Peak energy demand reduction
Capacity	= Nameplate output capacity of AC Unit (btu/hr)
EER	= Full Load efficiency of AC Unit
EFLH	= Effective Full Load Hours of AC Unit based on building type
CF	= Coincidence Factor
Savings%	= Savings percentage

TABLE 1 SAVINGS PARAMETERS

Unit	Capacity	EER	EFLH	Savings%	kWh savings	CF	kW Savings
1	252,000	9.5	2,095	6.32%	3,512	0.77	1.29
2	360,000	9.5	2,095	6.32%	5,017	0.77	1.84
3	168,000	9.8	2,095	6.32%	2,270	0.77	0.83
4	168,000	9.8	2,095	6.32%	2,270	0.77	0.83
5	360,000	9.5	2,095	6.32%	5,017	0.77	1.84
6	540,000	9.5	2,095	6.32%	7,526	0.77	2.77
7	540,000	9.5	2,095	6.32%	7,526	0.77	2.77
8	540,000	9.5	2,095	6.32%	7,526	0.77	2.77
9	540,000	9.5	2,095	6.32%	7,526	0.77	2.77
10	540,000	9.5	2,095	6.32%	7,526	0.77	2.77
11	84,000	10.8	2,095	6.32%	1,030	0.77	0.38
12	96,000	10.8	2,095	6.32%	1,177	0.77	0.43
13	48,000	11	2,095	6.32%	578	0.77	0.21
14	36,000	11	2,095	6.32%	433	0.77	0.16
15	36,000	11	2,095	6.32%	433	0.77	0.16
16	36,000	11	2,095	6.32%	433	0.77	0.16
17	36,000	11	2,095	6.32%	433	0.77	0.16
18	36,000	11	2,095	6.32%	433	0.77	0.16
19	120,000	10.8	2,095	6.32%	1,471	0.77	0.54
20	36,000	11	2,095	6.32%	433	0.77	0.16
21	96,000	10.8	2,095	6.32%	1,177	0.77	0.43
22	96,000	10.8	2,095	6.32%	1,177	0.77	0.43
23	36,000	11	2,095	6.32%	433	0.77	0.16
24	36,000	11	2,095	6.32%	433	0.77	0.16
25	162,000	9.8	2,095	6.32%	2,189	0.77	0.80

TABLE 2 ENERGY SAVINGS

Measure	Expected kWh Savings	Realized kWh Savings	Realization Rate	EUL	Lifetime Savings
AC Tune-up	48,123	67,982	141%	10	679,820

TABLE 3 PEAK KW REDUCTION

Measure	Expected Peak kW Reductions	Realized Peak kW Reductions	Realization Rate
AC Tune-up	27.26	24.99	92%

Results

TABLE 4 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	*Expected*	*Measured*	*Realization Rate*
Coincident Peak kW	27.26	24.99	92%
Annual kWh	48,123	67,982	141%

The kWh realization rate for this project is 141% and the peak coincidence kW realization rate is 92%.

The ex-post analysis used the output capacities of each AC unit along with prescriptive TRM values for IEER, EER, EFLH, and CF. The prescriptive building type used was “Full Menu Restaurant”. Differences in ex-post calculations leading to a low kWh realization rate and a high kW realization rate can be attributed to baseline minimum efficiency values.

The following table is a list of changes between the ex-ante and ex-post calculators:

TABLE 5 CAUSES OF DISCREPANCY

Variable	*Ex-Ante*	*Ex-Post*	*Reason*
EFLH	1,483	2,095	Ex-Ante used “Large Office” as the building type, Ex-post thought “Lodging” was a better fit
CF	0.84	0.77	Same reason as above

CIP_935

Executive Summary

This facility is a large office that retrofit existing fan motors with electrical resistance with Direct Digital Control (DDC) to implement a runtime schedule. The kWh realization rate for this project is 36% and no peak coincidence kW.

Project Description

This project consisted of the following retrofits:

- DDC on (7) fan motors with electrical resistance
- Implemented occupancy schedule

Measurement and Verification Effort

The Evaluators performed a site visit to verify the installation of DDC on seven fan motors. During the site visit, controls, occupancy schedule and motor quantity were verified to be accurate versus the ex-ante expectations. Savings are calculated using custom calculations and assumptions from the New Orleans TRM v7. The following equations were used to calculate the annual energy savings from the retrofit:

$$\text{kWh}_{\text{Savings}} = kWh_{savings,fan} + kWh_{savings,heat}$$

$$\text{kWh}_{\text{Savings,fan}} = kW_{fan} \times (AOH_{pre} - AOH_{post}) \times LF$$

$$\text{kWh}_{\text{Savings,heat}} = kW_{hea} \times (EFLH_{pre} - ELFH_{post}) \times LF$$

$$\text{EFLH}_{pre} = EFLH_{post} \times \frac{CDD_{no\ sch}}{CDD_{sc}}$$

Where:

kW_{fan}	= Fan motor operating energy consumption
AOH	= Annual operating hours
LF	= Motor load factor
kW_{heat}	= Unit heating energy consumption
$EFLH_{post}$	= Effective Full Load Hours heating, taken from the ENO TRM for HP heating
$EFLH_{pre}$	= Estimated Effective Full Load Hours before equipment had a control schedule
$CDD_{no\ sch}$	= Cooling Degree Days calculated from TMY3 weather without a schedule
CDD_{sch}	= Cooling Degree Days calculated from TMY3 weather with a schedule

TABLE 1 SAVINGS PARAMETERS

kW_{fan}	kW_{heat}	AOH_{pre}	AOH_{post}	LF	$EFLH_{pre}$	$EFLH_{post}$	$CDD_{no\ sch}$	CDD_{sch}
4.96	18	8,760	4,368	0.75	392	652	3,047	1,833

TABLE 2 ENERGY SAVINGS

Measure	*Expected kWh Savings*	*Realized kWh Savings*	*Realization Rate*	*EUL*	*Lifetime Savings*
Fan Motor Schedule	17,710	16,354	92%	10	163,544
Heating Schedule	41,424	4,672	11%	10	46,723
Total	59,134	20,855	35%	10	210,267

Results

TABLE 3 PEAK KW REDUCTION

Metric	*Expected*	*Measured*	*Realization Rate*
Coincident Peak kW	0	0	-
Annual kWh	59,134	20,855	35%

The kWh realization rate for this project is 35% with no peak coincidence kW.

The ex-post calculator used some assumptions about the baseline conditions and new operating conditions that match the ENO TRM since no trending data or supporting data was provided. The calculation method utilizes a reduced fan and heating energy usage resulting from installing controls onto the fan motors that will allow them to operate on a schedule rather than operating continuously.

The fan motor schedule savings are slightly lower because the site visit confirmed a daily operation of 12 hours a day whereas the ex ante analysis used a post daily hour operation of 11 hours.

The heating schedule component of the measure is much lower than the ex ante estimation because of a vast difference in what the pre and post conditions were. The ex ante calculations assumed that the electrical resistance heating elements would be operating at 75% capacity throughout the year, regardless of any heating requirements. And the proposed operating hours were reduced by a fraction of HDD divided by HDD plus CDD. This assumption assumes that with the new controls, the fans will now operate either in full cooling or full heat at all operating hours. This assumption was not substantiated with any trending data or statements that confirmed the heating element was operating for a majority of the year. Without any evidence, the ex post analysis used the EFLH for heating for a large office as the operating hours for the heating element for the post conditions. To estimate the baseline conditions with constant fan operation, the pre EFLH was calculated by multiplying the TRM EFLH value by a ratio of CDD without an implemented schedule divided by the CDD with the facility hours implemented.

CIP_962

Executive Summary

This facility is a large office that retrofit existing fan motors with electrical resistance with Direct Digital Control (DDC) to implement a runtime schedule. The kWh realization rate for this project is 11% and no peak coincidence kW.

Project Description

This project consisted of the following retrofits:

- DDC on (12) VAV boxes with electrical resistance heating
- Implemented occupancy schedule

Measurement and Verification Effort

The Evaluators performed a site visit to verify the installation of DDC on 16 vav mixing boxes. During the site visit, controls, occupancy schedule and motor quantity were verified to be accurate versus the ex-ante expectations. Savings are calculated using custom calculations and assumptions from the New Orleans TRM v7. The following equations were used to calculate the annual energy savings from the retrofit:

$$\mathrm{kWh}_{\mathrm{Savings,heat}} = kW_{hea} \times (EFLH_{pre} - ELFH_{post})$$

$$\mathrm{EFLH}_{pre} = EFLH_{post} \times \frac{CDD_{no\ sch}}{CDD_{sch}}$$

Where:

kW_{heat}	= Unit heating energy consumption
$EFLH_{post}$	= Effective Full Load Hours heating, taken from the ENO TRM for HP heating
$EFLH_{pre}$	= Estimated Effective Full Load Hours before equipment had a control schedule
$CDD_{no\ sch}$	= Cooling Degree Days calculated from TMY3 weather without a schedule
CDD_{sch}	= Cooling Degree Days calculated from TMY3 weather with a schedule

TABLE 1 SAVINGS PARAMETERS

kW_{heat}	$EFLH_{pre}$	$EFLH_{post}$	$CDD_{no\ sch}$	CDD_{sch}
72	392	652	3,047	1,833

TABLE 2 ENERGY SAVINGS

Measure	Expected kWh Savings	Realized kWh Savings	Realization Rate	EUL	Lifetime Savings
Heating Schedule	165,696	18,689	11%	4.5	84,101
Total	165,696	18,689	11%	4.5	84,101

Results

TABLE 3 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	*Expected*	*Measured*	*Realization Rate*
Coincident Peak kW	0	0	-
Annual kWh	165,696	18,689	11%

The kWh realization rate for this project is 11% with no peak coincidence kW.

The ex-post calculator used some assumptions about the baseline conditions and new operating conditions that match the ENO TRM since no trending data or supporting data was provided. The calculation method utilizes a reduced heating energy usage resulting from installing controls onto the fan motors that will allow them to operate on a schedule rather than operating continuously.

The heating savings are much lower than the ex ante estimation because of a vast difference in what the pre and post conditions were. The ex ante calculations assumed that the electrical resistance heating elements would be operating at 75% capacity throughout the year, regardless of any heating requirements. And the proposed operating hours were reduced by a fraction of HDD divided by HDD plus CDD. This assumption assumes that with the new controls, the fans will now operate either in full cooling or full heat at all operating hours. This assumption was not substantiated with any trending data or statements that confirmed the heating element was operating for a majority of the year. Without any evidence, the ex post analysis used the EFLH for heating for a large office as the operating hours for the heating element for the post conditions. To estimate the baseline conditions with constant fan operation, the pre EFLH was calculated by multiplying the TRM EFLH value by a ratio of CDD without an implemented schedule divided by the CDD with the facility hours implemented.

CIP_842

Executive Summary

This facility is a college facility that implemented a Monitoring Based Commissioning (MBCx) service in 2023. Savings for this service was estimated and then 40% of the savings were incentivized in the 2023 year, with the remainder to be paid in 2024 after enough data could be collected after the commissioning process was done to create a pre and post utility regression. The kWh realization rate for this project is 134% and with no peak kW savings since savings are mostly from adjusted equipment schedules during non peak hours.

Project Description

This project consisted of the following work:

- Monitoring Based Commissioning (MBCx) service

Measurement and Verification Effort

The Evaluators performed a desk review to verify the savings claimed for this project. The desk review for this project was conducted using the IPMVP Option C guideline. The following equations were used to calculate the annual energy savings from the tune-up:

$$\text{kWh}_{\text{Savings}} = \sum_{Base} A \times CDD + B - \sum_{Post} A \times CDD + B$$

Where:

A, B = Variable coefficient from utility regression
CDD = Cooling degree days

TABLE 1 REGRESSION RESULTS

	R^2	A	B	kWh
Base	0.71	188.2	53,133	1,283,856
Post	0.88	111.3	46,600	941,441

TABLE 2 ENERGY SAVINGS

Measure	Expected kWh Savings	Realized kWh Savings	Realization Rate	EUL	Lifetime Savings
MBCx	168,855	227,079	135%	10	2,270,789

Results

TABLE 3 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	Expected	Measured	Realization Rate
Coincident Peak kW	0.00	0.00	-
Annual kWh	168,855	227,079	135%

The kWh realization rate for this project is 135% and no peak coincidence kW reduction.

The ex-post analysis used the provided utility data, actual weather, and TMY3 weather data. The utility data and actual weather data was used to create a baseline and proposed regression coefficients. These coefficients were then used with the TMY3 weather data to create a weather normalized savings profile. It is unknown why the savings are higher, since a working calculator was not provided.

CIP_984

Executive Summary

This facility is a university building that retrofit their system with a Building Automation System (BAS) to implement a reduction in the supply air temperature. The kWh realization rate for this project is 46% and the peak coincidence kW realization rate is 46%.

Project Description

This project consisted of the following retrofits:

- BAS controls on three air handling units

Measurement and Verification Effort

The Evaluators performed a site visit to verify the implementation of the BAS on three air handling units. During the site visit, controls, schedules and setpoints were verified to be accurate versus the ex-ante expectations. Savings are calculated using custom calculations and assumptions from the New Orleans TRM v7. The following equations were used to calculate the annual energy savings from the retrofit:

$$\text{kWh}_{Savings} = kWh_{pre} - kWh_{post}$$

$$\text{kWh} = \left(\frac{BTU_{per\ unit}}{12{,}000}\right) \times kW_{per\ ton} \times AOH \times LF \times Q$$

$$\text{kWh} = \left(\frac{BTU_{per\ unit}}{12{,}000}\right) \times kW_{per\ ton} \times LF \times Q$$

$$BTU_{per\ unit} = 1.08 \times \text{CFM} \times (\text{MA} - \text{SA})$$

Where:

$BTU_{per\ unit}$	= Heat transfer rate per air handling unit
$BTU_{per\ ton}$	= Unit Converstion factor, BTUs to Ton
$kW_{per\ ton}$	= Unit efficiency in kW per ton
AOH	= Annual operating hours
LF	= Unit load factor
Q	= Unit quantity

TABLE 1 SAVINGS PARAMETERS

Unit	*CFM*	*MA*	*SA*	*$kW_{per\ ton}$*	*AOH*	*LF*	*Q*
1	41,630	73.96	45	0.539	8,760	75%	1
2	14,040	73.29	45	0.539	8,760	60%	1
3	43,920	75.81	45	0.539	8,760	60%	1

TABLE 2 ENERGY SAVINGS

Measure	*Expected kWh Savings*	*Realized kWh Savings*	*Realization Rate*	*EUL*	*Lifetime Savings*
BAS	428,347	196,321	46%	15	2,944,820
Total	428,347	196,321	46%	15	2,944,820

Results

TABLE 3 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	*Expected*	*Measured*	*Realization Rate*
Coincident Peak kW	48.9	22.4	46%
Annual kWh	428,347	196,321	46%

The kWh realization rate for this project is 46% and the peak coincidence kW realization rate is 46%.

The ex-post calculator adjusted the calculation values to match the information on the provided screen captures of the three units being controlled. The ex-ante method assumed that all three units would operate at a maximum 64,000 cfm all the time, but this was not able to be substantiated. During the site visit, it was stated that trending data was unavailable. Therefore, the only values viable were the values from the screenshot.

CIP_816

Executive Summary

This facility is a hotel that has completed an interior lighting retrofit. The kWh realization rate for this project is 84% and the peak coincidence kW realization rate 93%.

Project Description

This project consisted of the following retrofits:

- (4668) Compact Fluorescents replaced with (4668) 16 W LED Screws
- (9382) Compact Fluorescents replaced with (9382) 9 W LED Screws
- (3380) Compact Fluorescents replaced with (3380) 10 W LED Screws

Measurement and Verification Effort

The Evaluators performed a site visit to verify the installation of lighting fixtures and re-lamping. During the site visit the lamp quantity, lamp type, and space type were verified to be accurate versus the ex-ante expectations. Savings are calculated using the lamp type, quantity and location using the approach from the New Orleans TRM v7 section 2.6.1 Lighting Efficiency. The following equations were used to calculate the annual energy savings from the retrofit:

$$\mathrm{kWh_{Savings}} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times AOH \times IEF_E$$

$$\mathrm{kW_{Savings}} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times CF \times IEF_D$$

$$therms_{penalty} = kWh_{savings} \times IEF_G$$

Where:

kWhsavings	= Annual energy savings
kWsavings	= Peak energy demand reduction
Nfixt	= Quantity of fixtures either being removed or installed
Wfixt	= Rated wattage of the fixture being removed or installed
AOH	= Annual operating hours for specified building type
IEFE	= Interactive effects factor for energy savings
IEFD	= Interactive effects factor for demand savings
IEFG	= Interactive effects factor for gas heating savings
CF	= Peak demand coincidence factor
pre	*= Denotes pre-installation state*
post	*= Denotes post-installation state*

TABLE 1 SAVINGS PARAMETERS

Measure	Pre Quantity (Fixtures)	Post Quantity (Fixtures)	Pre Wattage	Post Wattage	Hours	IEFe
Lighting Efficiency	4,668	4,668	23	16	3,370	1.09
Lighting Efficiency	7,002	7,002	13	8.8	3,370	1.09
Lighting Efficiency	2,380	2,380	13	8.8	3,370	1.09
Lighting Efficiency	3,380	3,380	20	10	3,370	1.09

TABLE 2 ENERGY SAVINGS

Measure	Expected kWh Savings	Realized kWh Savings	Realization Rate	EUL	Lifetime Savings
Lighting Efficiency	120,029	120,029	100.0%	4	480,115
Lighting Efficiency	133,746	108,026	80.8%	4	432,104
Lighting Efficiency	43,712	34,970	80.0%	4	139,879
Lighting Efficiency	161,405	124,158	76.9%	4	496,630

TABLE 3 PEAK KW REDUCTION

Measure	CF	IEFd	Expected Peak kW Reductions	Realized Peak kW Reductions	Realization Rate
Lighting Efficiency	0.25	1.2	8.90	9.80	110.1%
Lighting Efficiency	0.25	1.2	9.92	8.82	88.9%
Lighting Efficiency	0.25	1.2	3.24	2.86	88.3%
Lighting Efficiency	0.25	1.2	11.97	10.14	84.7%

Results

TABLE 4 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	Expected	Measured	Realization Rate
Coincident Peak kW	34.04	31.62	93%
Annual kWh	458,892	387,182	84%

The kWh realization rate for this project is 84% and the peak coincidence kW realization rate is 93%.

The ex-post calculator used the fixture type and quantity provided, which were verified during the site visit, and the prescriptive TRM values for the AOH, IEFE, IEFD, and CF. The prescriptive building type used was “Lodging (Hotel/Motel/Dorm): Room” for all spaces because it best fits the space description where the lighting retrofit took place.

The following table is a list of changes between the ex-ante and ex-post calculators:

TABLE 5 CAUSES OF DISCREPANCY

Variable	*Ex-Ante*	*Ex-Post*	*Reason*
IEDe	1.09	1.2	TRM value
IEDd	1.09	1.2	TRM value

CIP_730

Executive Summary

This facility is an office that has completed a retrofit of the interior and exterior lighting. The kWh realization rate for this project is 85.5% and the peak coincidence kW realization rate 115.7%.

Project Description

This project consisted of the following work:

- (513) 9W LED w/ integrated ballast fixtures replacing (513) 27W CFL fixtures
- (52) 9W LED w/ integrated ballast fixtures replacing (26) 2L 26W CFL Multi 4-Pin fixtures
- (2) 22W LED w/ integrated ballast fixtures replacing (2) 2L 26W CFL Multi 4-Pin fixtures
- (16) 16W LED w/ integrated ballast fixtures replacing (16) 2L 26W CFL Multi 4-Pin fixtures
- (8) 9W LED w/ integrated ballast fixtures replacing (2) 4L 22W CFL Twin fixtures
- (114) 9W LED w/ integrated ballast fixtures replacing (19) 6L 26W CFL Quad fixtures
- (155) 16W LED w/ integrated ballast fixtures replacing (155) 1L 38W CFL 2D fixtures
- (3) 10W LED - Non-Int. Ballast fixtures replacing (3) 2' 1L T8 fixtures
- (14) 7W LED - Non-Int. Ballast fixtures replacing (7) 2' 2L T8 fixtures
- (38) 10W LED - Non-Int. Ballast fixtures replacing (38) 2' 1L T5 fixtures
- (53) 10W LED - Non-Int. Ballast fixtures replacing (53) 4' 1L T8 25W RLO fixtures
- (770) 11W LED - Non-Int. Ballast fixtures replacing (385) 4' 2L T8 25W RLO fixtures
- (45) 9W LED - Non-Int. Ballast fixtures replacing (15) 4' 3L T8 25W RLO fixtures
- (996) 9W LED - Non-Int. Ballast fixtures replacing (249) 4' 4L T8 25W RLO fixtures
- (728) 11W LED - Non-Int. Ballast fixtures replacing (182) 4' 4L T8 25W RLO fixtures
- (1026) 9W LED - Non-Int. Ballast fixtures replacing (171) 4' 6L T8 RLO fixtures
- (704) 9W LED - Non-Int. Ballast fixtures replacing (88) 4' 8L T8 RLO fixtures
- (18) 9W LED - Non-Int. Ballast fixtures replacing (2) 4' 6L T8 28W fixtures
- (2) 11W LED - Non-Int. Ballast fixtures replacing (1) 4' 2L T8 44W HO fixtures
- (152) 11W LED - Non-Int. Ballast fixtures replacing (38) 4' 4L T5 fixtures
- (30) 18W LED - Non-Int. Ballast fixtures replacing (5) 4' 6L T5HO fixtures
- (2) 145W LED - Non-Int. Ballast fixtures replacing (2) 400W HPS fixtures
- (19) 124W LED - Non-Int. Ballast fixtures replacing (19) 450W MH fixtures
- (116) 62W LED - Non-Int. Ballast fixtures replacing (116) 450W MH fixtures
- (8) 21W LED - Non-Int. Ballast fixtures replacing (8) 100W 1L Halogen fixtures

Measurement and Verification Effort

The Evaluators performed a desk review to verify the savings claimed for this project. Savings are calculated using the lamp type, quantity and location using the approach from the New Orleans TRM v7 section 2.6.1 Lighting Efficiency. The following equations were used to calculate the annual energy savings from the retrofit:

$$\text{kWh}_{\text{Savings}} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times AOH \times IEF_E$$

$$\text{kW}_{\text{Savings}} = \sum \left(\left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{pre} - \left[N_{fixt(i)} \times \frac{W_{fixt(i)}}{1000} \right]_{post} \right) \times CF \times IEF_D$$

$$therms_{penalty} = kWh_{savings} \times IEF_G$$

Where:

kWhsavings	= Annual energy savings
kWsavings	= Peak energy demand reduction
Nfixt	= Quantity of fixtures either being removed or installed
Wfixt	= Rated wattage of the fixture being removed or installed
AOH	= Annual operating hours for specified building type
IEFE	= Interactive effects factor for energy savings
IEFD	= Interactive effects factor for demand savings
IEFG	= Interactive effects factor for gas heating savings
CF	= Peak demand coincidence factor
pre	*= Denotes pre-installation state*
post	*= Denotes post-installation state*

TABLE 1 SAVINGS PARAMETERS

Measure	*Pre Quantity (Fixtures)*	*Post Quantity (Fixtures)*	*Pre Wattage*	*Post Wattage*	*Hours*	*IEFe*
Lighting Efficiency	1	1	27	9	5,159	1.09
Lighting Efficiency	24	48	51	9	5,159	1.09
Lighting Efficiency	2	4	51	9	5,159	1.09
Lighting Efficiency	2	2	51	22	5,159	1.09
Lighting Efficiency	16	16	51	16	5,159	1.09
Lighting Efficiency	2	8	108	9	5,159	1.09
Lighting Efficiency	19	114	150	9	5,159	1.09
Lighting Efficiency	512	512	27	9	5,159	1.09
Lighting Efficiency	42	42	32	16	5,159	1.09
Lighting Efficiency	113	113	32	16	5,159	1.09
Lighting Efficiency	3	3	18	10	5,159	1.09
Lighting Efficiency	7	14	33	7	5,159	1.09
Lighting Efficiency	38	38	18	10	5,159	1.09
Lighting Efficiency	53	53	21	10	5,159	1.09
Lighting Efficiency	7	14	38	11	5,159	1.09
Lighting Efficiency	30	60	38	11	5,159	1.09

Lighting Efficiency	4	8	38	11	5,159	1.09
Lighting Efficiency	344	688	38	11	5,159	1.09
Lighting Efficiency	3	9	57	9	5,159	1.09
Lighting Efficiency	3	9	57	9	5,159	1.09
Lighting Efficiency	9	27	57	9	5,159	1.09
Lighting Efficiency	16	64	73	9	5,159	1.09
Lighting Efficiency	233	932	73	9	5,159	1.09
Lighting Efficiency	177	708	73	11	5,159	1.09
Lighting Efficiency	5	20	73	11	5,159	1.09
Lighting Efficiency	163	978	142	9	5,159	1.09
Lighting Efficiency	8	48	142	9	5,159	1.09
Lighting Efficiency	88	704	184	9	5,159	1.09
Lighting Efficiency	2	18	126	9	5,159	1.09
Lighting Efficiency	1	2	98	11	5,159	1.09
Lighting Efficiency	25	100	126	11	5,159	1.09
Lighting Efficiency	13	52	126	11	5,159	1.09
Lighting Efficiency	5	30	330	18	5,159	1.09
Lighting Efficiency	2	2	465	145	4,319	1.00
Lighting Efficiency	19	19	499	124	4,319	1.00
Lighting Efficiency	116	116	499	62	4,319	1.00
Lighting Efficiency	8	8	100	21	4,319	1.00

TABLE 2 ENERGY SAVINGS

Measure	*Expected kWh Savings*	*Realized kWh Savings*	*Realization Rate*	*EUL*	*Lifetime Savings*
Lighting Efficiency	104	104	100.0%	4	416
Lighting Efficiency	4,454	4,589	103.0%	4	18,354
Lighting Efficiency	371	382	103.0%	4	1,530
Lighting Efficiency	315	326	103.5%	4	1,305
Lighting Efficiency	3,059	3,149	102.9%	4	12,596
Lighting Efficiency	583	583	100.0%	4	2,330
Lighting Efficiency	8,302	7,404	89.2%	4	29,617
Lighting Efficiency	53,264	53,264	100.0%	4	213,056
Lighting Efficiency	2,645	2,645	100.0%	4	10,581
Lighting Efficiency	7,117	7,117	100.0%	4	28,467
Lighting Efficiency	135	135	100.0%	15	2,024
Lighting Efficiency	510	524	102.7%	15	7,853
Lighting Efficiency	1,709	1,709	100.0%	15	25,642
Lighting Efficiency	4,769	3,278	68.7%	15	49,176

Lighting Efficiency	692	441	63.7%	15	6,613
Lighting Efficiency	2,964	1,889	63.7%	15	28,341
Lighting Efficiency	565	360	63.7%	15	5,398
Lighting Efficiency	33,988	21,665	63.7%	15	324,982
Lighting Efficiency	808	506	62.6%	15	7,592
Lighting Efficiency	566	354	62.5%	15	5,314
Lighting Efficiency	2,424	1,518	62.6%	15	22,774
Lighting Efficiency	3,779	2,330	61.7%	15	34,955
Lighting Efficiency	55,030	33,935	61.7%	15	509,025
Lighting Efficiency	36,927	20,902	56.6%	15	313,528
Lighting Efficiency	1,490	844	56.6%	15	12,653
Lighting Efficiency	86,362	56,142	65.0%	15	842,126
Lighting Efficiency	6,055	3,936	65.0%	15	59,045
Lighting Efficiency	43,784	38,796	88.6%	15	581,945
Lighting Efficiency	1,449	354	24.4%	15	5,314
Lighting Efficiency	360	427	118.6%	15	6,411
Lighting Efficiency	26,851	11,668	43.5%	15	175,026
Lighting Efficiency	9,774	4,247	43.5%	15	63,709
Lighting Efficiency	4,743	4,330	91.3%	15	64,949
Lighting Efficiency	2,764	2,764	100.0%	15	41,462
Lighting Efficiency	27,408	30,773	112.3%	15	461,593
Lighting Efficiency	198,398	218,939	110.4%	15	3,284,081
Lighting Efficiency	2,730	2,730	100.0%	15	40,944

TABLE 3 PEAK KW REDUCTION

Measure	*CF*	*IEFd*	*Expected Peak kW Reductions*	*Realized Peak kW Reductions*	*Realization Rate*
Lighting Efficiency	1	1.2	0.02	0.02	100.0%
Lighting Efficiency	1	1.2	0.66	0.75	113.6%
Lighting Efficiency	1	1.2	0.06	0.06	100.0%
Lighting Efficiency	1	1.2	0.05	0.05	100.0%
Lighting Efficiency	1	1.2	0.46	0.52	113.0%
Lighting Efficiency	1	1.2	0.04	0.08	200.0%
Lighting Efficiency	1	1.2	0.60	1.06	176.7%
Lighting Efficiency	1	1.2	7.95	8.75	110.1%
Lighting Efficiency	1	1.2	0.19	0.38	200.0%
Lighting Efficiency	1	1.2	0.51	1.02	200.0%
Lighting Efficiency	1	1.2	0.02	0.02	100.0%
Lighting Efficiency	1	1.2	0.04	0.08	200.0%

Lighting Efficiency	1	1.2	0.26	0.28	107.7%
Lighting Efficiency	1	1.2	0.71	0.54	76.1%
Lighting Efficiency	1	1.2	0.05	0.06	120.0%
Lighting Efficiency	1	1.2	0.21	0.27	128.6%
Lighting Efficiency	1	1.2	0.08	0.06	75.0%
Lighting Efficiency	1	1.2	2.45	3.10	126.5%
Lighting Efficiency	1	1.2	0.12	0.08	66.7%
Lighting Efficiency	1	1.2	0.04	0.05	125.0%
Lighting Efficiency	1	1.2	0.36	0.25	69.4%
Lighting Efficiency	1	1.2	0.27	0.33	122.2%
Lighting Efficiency	1	1.2	3.96	4.86	122.7%
Lighting Efficiency	1	1.2	2.66	2.99	112.4%
Lighting Efficiency	1	1.2	0.22	0.14	63.6%
Lighting Efficiency	1	1.2	6.22	8.04	129.3%
Lighting Efficiency	1	1.2	0.90	0.65	72.2%
Lighting Efficiency	1	1.2	3.15	5.56	176.5%
Lighting Efficiency	1	1.2	0.10	0.05	50.0%
Lighting Efficiency	1	1.2	0.05	0.07	140.0%
Lighting Efficiency	1	1.2	4.01	1.92	47.9%
Lighting Efficiency	1	1.2	0.70	0.61	87.1%
Lighting Efficiency	1	1.2	0.34	0.62	182.4%
Lighting Efficiency	0	1	0.00	0.00	-
Lighting Efficiency	0	1	0.00	0.00	-
Lighting Efficiency	0	1	0.00	0.00	-
Lighting Efficiency	0	1	0.00	0.00	-

Results

TABLE 21-2 VERIFIED GROSS SAVINGS/REALIZATION RATES

Metric	*Expected*	*Measured*	*Realization Rate*
Coincident Peak kW	37.47	43.34	115.7%
Annual kWh	637,245	545,061	85.5%

The kWh realization rate for this project is 90% and the peak coincidence kW realization rate is 116%.

The ex-post calculator used the fixture type and quantity provided, which were verified during the desk review, and the prescriptive TRM values for the AOH, IEFE, IEFD, and CF. The prescriptive building type used was “Office” for all interior spaces and “Exterior” for all outdoor spaces because it best fits the space description where the lighting retrofit took place.

The following table is a list of changes between the ex-ante and ex-post calculators:

TABLE 21-3 CAUSES OF DISCREPANCY

Variable	*Ex-Ante*	*Ex-Post*	*Reason*
IEF_D	1.09	1.20	Ex ante calculator calls IEF_D to calculate kWh savings. (see section 1.1.3 of this report)
Control CF	0.26	0.30	Evaluators calculate the control CF by subtracting the power adjustment factor (PAF) from one. Ex ante calculations have determined values for lighting controls.
Pre-Fixture Wattage	50	51	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	162	150	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	32.5	33	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	26	21	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	47.1	38	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	74.9	57	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	96	73	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	188.68	141.5	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	198	184	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	265	126	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	86	98	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	234	126	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	351	330	Ex ante uses fixture wattage only and Ex post considered ballast factor
Pre-Fixture Wattage	458	499	Ex ante uses fixture wattage only and Ex post considered ballast factor

22 APPENDIX B: COST-EFFECTIVENESS METHODS

22.1 Summary

The Evaluators estimated the cost-effectiveness for the overall energy efficiency and demand response portfolio of programs, based on PY14 costs and savings estimates provided by ENO and their third-party implementers. This appendix provides the cost-effectiveness results, as well as a brief overview of the approach taken by the Evaluators. The portfolio and energy efficiency programs pass all the cost-effectiveness tests except the RIM test. The table below presents the cost-effectiveness results for the PY14 portfolio.

TABLE 22-1 PY14 COST-EFFECTIVENESS RESULTS

Program	TRC	UCT	RIM	PCT	SCT
HPwES	1.57	1.53	0.41	4.90	2.02
RLA	0.46	0.42	0.20	2.79	0.52
MF Solutions	1.40	1.71	0.42	3.71	1.78
IQW	1.54	1.58	0.58	2.81	2.03
A/C Solutions	5.83	2.26	0.50	31.91	7.27
SK&E	0.94	0.94	0.28	6.59	1.07
AR&R	0.03	0.03	0.02	1.92	0.03
Behavioral	2.01	2.01	0.43	NA	2.01
EasyCool (BYOT)	0.92	0.67	0.67	0.00	0.92
PTR Pilot	0.59	0.41	0.41	NA	0.59
BESS Pilot	0.27	0.21	0.21	NA	0.27
Small C&I Solutions	0.51	0.87	0.28	1.95	0.62
Large C&I Solutions	1.18	1.36	0.32	4.84	1.43
PFI	0.64	1.05	0.29	2.55	0.79
C&I NC Solutions	0.16	0.05	0.04	7.23	0.17
Large C&I DR	9.05	1.31	1.27	NA	9.05
EV Charging Pilot	2.82	0.51	0.51	NA	2.82
Total	**1.12**	**1.23**	**0.36**	**4.10**	**1.37**

22.2 Methods

The California Standard Practice Model was used as a guideline for the calculations, along with guidance from the ENO TRM V7.0, the IL TRM V9.0, and the AR TRM v9.1. The cost-effectiveness analysis methods that were used in this analysis are among the set of standard methods used in this industry and include the Utility Cost Test (UCT)[20], Total Resource Cost Test (TRC), Ratepayer Impact Measure Test (RIM), and Participant Cost Test (PCT). All tests weigh monetized benefits against costs. These monetized amounts are presented as Net Present Value (NPV) evaluated over the lifespan of the measure. The benefits and costs differ for each test based on the perspective of the test. The definitions below are taken from the California Standard Practice Manual.

[20] The UCT is also referred to as the Program Administrator Cost Test (PACT).

The TRC 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.

The UCT measures the net costs of a demand-side management program as a resource option based on the costs incurred by the program administrator (including incentive costs) and excluding any net costs incurred by the participant. The benefits are similar to the TRC benefits. Costs are defined more narrowly.

The PCT is the measure of the quantifiable benefits and costs to the customer due to participation in a program. Since many customers do not base their decision to participate in a program entirely on quantifiable variables, this test cannot be a complete measure of the benefits and costs of a program to a customer.

The RIM test measures what happens to customer bills or rates due to changes in utility revenues and operating costs caused by the program. Rates will go down if the change in revenues from the program is greater than the change in utility costs. Conversely, rates or bills would go up if revenues collected after program implementation is less than the total costs incurred by the utility in implementing the program. This test indicates the direction and magnitude of the expected change in customer bills or rate levels.

A common misperception is that there is a single best perspective for evaluation of cost-effectiveness. Each test is useful and accurate, but the results of each test are intended to answer a different set of questions. The questions to be addressed by each cost test are shown in the table below.[21]

TABLE 22-2 QUESTIONS ADDRESSED BY THE VARIOUS COST TESTS

Cost Test	Questions Addressed
Participant Cost Test (PCT)	▪ Is it worth it to the customer to install energy efficiency?
	▪ Is it likely that the customer wants to participate in a utility program that promotes energy efficiency?
Ratepayer Impact Measure (RIM)	▪ What is the impact of the energy efficiency project on the utility's operating margin?
	▪ Would the project require an increase in rates to reach the same operating margin?
Utility Cost Test (UCT)	▪ Do total utility costs increase or decrease?
	▪ What is the change in total customer bills required to keep the utility whole?
Total Resource Cost Test (TRC)	▪ What is the regional benefit of the energy efficiency project (including the net costs and benefits to the utility and its customers)?
	▪ Are all of the benefits greater than all of the costs (regardless of who pays the costs and who receives the benefits)?
	▪ Is more or less money required by the region to pay for energy needs?

Overall, the results of all four cost-effectiveness tests provide a more comprehensive picture than the use of any one test alone. The TRC cost test addresses whether energy efficiency is cost-effective overall. The PCT, UCT,

[21] https://www.epa.gov/energy/understanding-cost-effectiveness-energy-efficiency-programs

and RIM address whether the selection of measures and design of the program are balanced from the perspective of the participants, utilities, and nonparticipants. The scope of the benefit and cost components included in each test are summarized in the table below.[22]

TABLE 22-3 BENEFITS AND COSTS INCLUDED IN EACH COST-EFFECTIVENESS TEST

Test	Benefits	Costs
PCT (Benefits and costs from the perspective of the customer installing the measure)	▪ Incentive payments	▪ Incremental equipment costs
	▪ Bill Savings	▪ Incremental installation costs
	▪ Applicable tax credits or incentives	
UCT (Perspective of utility, government agency, or third party implementing the program	▪ Energy-related costs avoided by the utility	▪ Program overhead costs
	▪ Capacity-related costs avoided by the utility, including generation, transmission, and distribution	▪ Utility/program administrator incentive costs
TRC (Benefits and costs from the perspective of all utility customers in the utility service territory)	▪ Energy-related costs avoided by the utility	▪ Program overhead costs
	▪ Capacity-related costs avoided by the utility, including generation, transmission, and distribution	▪ Program installation costs
	▪ Additional resource savings	▪ Incremental measure costs
	▪ Monetized non-energy benefits as outlined by the TRM.	
RIM (Impact of efficiency measure on non-participating ratepayers overall)	▪ Energy-related costs avoided by the utility	▪ Program overhead costs
	▪ Capacity-related costs avoided by the utility, including generation, transmission, and distribution	▪ Lost revenue due to reduced energy bills
		▪ Utility/program administrator installation costs

22.2.1 LINE LOSSES

The Evaluators used the line losses provided by ENO for the PY14 evaluation.

[22] *Ibid*.

22.2.2 ECONOMIC INPUTS

The Evaluators used the economic inputs provided by ENO for the cost benefit analysis, this included avoided costs that were estimated using the Real Economic Carrying Charge (RECC) approach. The rates utilized for avoided water from Protocol L in the AR TRM V9.1.

The Evaluators used the discount rates provided by ENO to perform the cost benefit analysis, and these values align with the rates used in the PY14 Plan. The evaluated net energy savings (kWh) and demand reductions (kW) values utilized in the cost benefit analysis include a line loss factor, those values are in the table below. Additionally, the table below outlines the discount rates, escalation rate and avoided costs used in the PY14 cost-effectiveness analysis.

TABLE 22-4 ECONOMIC INPUTS FOR COST EFFECTIVENESS ANALYSIS

Discount Rates	
Utility (TRC)	6.86%
Utility (UCT)	6.86%
Utility (RIM)	6.86%
Societal (SCT)	3.00%
Participant (PCT)	10.00%
Line Losses	
Line Losses (demand)	4.66%
Line Losses (energy)	4.19%
Escalation rate	2.00%
Avoided Costs	
Avoided Energy ($/kWh)	$0.05
Avoided Demand ($/kW)	$84.59

22.3 Findings

The tables below outline the results for each test, for both the programs and the portfolio as a whole.

TABLE 22-5 PY14 COST-EFFECTIVENESS RESULTS BY PROGRAM

Program	TRC	UCT	RIM	PCT	SCT
HPwES	1.57	1.53	0.41	4.90	2.02
RLA	0.46	0.42	0.20	2.79	0.52
MF Solutions	1.40	1.71	0.42	3.71	1.78
IQW	1.54	1.58	0.58	2.81	2.03
A/C Solutions	5.83	2.26	0.50	31.91	7.27
SK&E	0.94	0.94	0.28	6.59	1.07
AR&R	0.03	0.03	0.02	1.92	0.03
Behavioral	2.01	2.01	0.43	NA	2.01
EasyCool (BYOT)	0.92	0.67	0.67	0.00	0.92
PTR Pilot	0.59	0.41	0.41	NA	0.59
BESS Pilot	0.27	0.21	0.21	NA	0.27
Small C&I Solutions	0.51	0.87	0.28	1.95	0.62
Large C&I Solutions	1.18	1.36	0.32	4.84	1.43
PFI	0.64	1.05	0.29	2.55	0.79
C&I NC Solutions	0.16	0.05	0.04	7.23	0.17
Large C&I DR	9.05	1.31	1.27	NA	9.05
EV Charging Pilot	2.82	0.51	0.51	NA	2.82
Total	**1.12**	**1.23**	**0.36**	**4.10**	**1.37**

Sums may differ due to rounding.

TABLE 22-6 PY14 COST-EFFECTIVENESS BENEFITS BY PROGRAM

Program	TRC Benefits	UCT Benefits	RIM Benefits	PCT Benefits	SCT Benefits
HPwES	$2,457,152	$2,457,152	$2,457,152	$4,636,763	$3,151,661
RLA	$602,560	$602,560	$602,560	$2,311,788	$690,036
MF Solutions	$1,590,619	$1,590,619	$1,590,619	$3,043,500	$2,027,971
IQW	$4,189,398	$4,189,398	$4,189,398	$5,711,929	$5,541,992
A/C Solutions	$2,080,142	$2,080,142	$2,080,142	$3,446,947	$2,592,952
SK&E	$212,100	$212,100	$212,100	$552,831	$242,709
AR&R	$9,524	$9,524	$9,524	$174,945	$11,369
Behavioral	$1,034,908	$1,034,908	$1,034,908	$1,868,483	$1,034,908
EasyCool (BYOT)	$554,625	$554,625	$554,625	$229,825	$554,625
PTR Pilot	$114,406	$114,406	$114,406	$83,559	$114,406
BESS Pilot	$33,996	$33,996	$33,996	$34,201	$33,996
Small C&I Solutions	$1,284,853	$1,244,657	$1,244,657	$3,457,747	$1,538,535
Large C&I Solutions	$10,262,284	$10,149,919	$10,149,919	$25,293,661	$12,489,345
PFI	$1,585,195	$1,522,608	$1,522,608	$3,736,813	$1,955,371
C&I NC Solutions	$104,647	$31,444	$31,444	$151,657	$112,645
Large C&I DR	$223,127	$223,127	$223,127	$150,353	$223,127
EV Charging Pilot	$8,625	$8,625	$8,625	$13,727	$8,625
HPwES	$2,457,152	$2,457,152	$2,457,152	$4,636,763	$3,151,661
Total	**$26,348,161**	**$26,059,809**	**$26,059,809**	**$54,898,729**	**$32,324,272**

Sums may differ due to rounding.

TABLE 22-7 PY14 COST-EFFECTIVENESS COSTS BY PROGRAM

Program	TRC Costs	UCT Costs	RIM Costs	PCT Costs	SCT Costs
HPwES	$1,563,650	$1,602,269	$5,954,122	$946,770	$1,563,650
RLA	$1,322,275	$1,432,292	$3,089,012	$828,218	$1,322,275
MF Solutions	$1,136,697	$927,872	$3,830,710	$821,358	$1,136,697
IQW	$2,724,100	$2,648,588	$7,174,943	$2,029,830	$2,724,100
A/C Solutions	$356,664	$922,062	$4,199,666	$108,033	$356,664
SK&E	$226,123	$226,123	$758,673	$83,880	$226,123
AR&R	$376,372	$373,493	$477,595	$91,329	$376,372
Behavioral	$515,380	$515,380	$2,383,863	$0	$515,380
EasyCool (BYOT)	$602,861	$832,686	$832,686	$0	$602,861
PTR Pilot	$195,186	$277,286	$278,744	$0	$195,186
BESS Pilot	$126,940	$161,141	$161,141	$0	$126,940
Small C&I Solutions	$2,494,979	$1,429,126	$4,510,904	$1,770,421	$2,494,979
Large C&I Solutions	$8,703,557	$7,484,952	$32,106,770	$5,226,946	$8,703,557
PFI	$2,471,680	$1,447,496	$5,258,509	$1,463,596	$2,471,680
C&I NC Solutions	$664,613	$661,541	$733,292	$20,987	$664,613
Large C&I DR	$24,665	$170,804	$175,018	$0	$24,665
EV Charging Pilot	$3,063	$16,790	$16,790	$0	$3,063
Total	**$23,508,807**	**$21,129,903**	**$71,942,440**	**$13,391,368**	**$23,508,807**

Sums may differ due to rounding.

TABLE 22-8 PY14 COST-EFFECTIVENESS NET BENEFITS BY PROGRAM

Program	TRC Net Benefits	UCT Net Benefits	RIM Net Benefits	PCT Net Benefits	SCT Net Benefits
HPwES	$893,502	$854,883	-$3,496,969	$3,689,994	$2,204,891
RLA	-$719,715	-$829,732	-$2,486,452	$1,483,570	-$138,182
MF Solutions	$453,922	$662,747	-$2,240,091	$2,222,142	$1,206,614
IQW	$1,465,298	$1,540,810	-$2,985,544	$3,682,100	$3,512,162
A/C Solutions	$1,723,478	$1,158,080	-$2,119,525	$3,338,914	$2,484,919
SK&E	-$14,023	-$14,023	-$546,573	$468,952	$158,829
AR&R	-$366,848	-$363,969	-$468,072	$83,616	-$79,960
Behavioral	$519,528	$519,528	-$1,348,955	$1,868,483	$1,034,908
EasyCool (BYOT)	-$48,237	-$278,062	-$278,062	$229,825	$554,625
PTR Pilot	-$80,780	-$162,880	-$164,338	$83,559	$114,406
BESS Pilot	-$92,944	-$127,145	-$127,145	$34,201	$33,996
Small C&I Solutions	-$1,210,126	-$184,470	-$3,266,247	$1,687,325	-$231,886
Large C&I Solutions	$1,558,727	$2,664,966	-$21,956,852	$20,066,715	$7,262,399
PFI	-$886,485	$75,112	-$3,735,901	$2,273,217	$491,774
C&I NC Solutions	-$559,966	-$630,097	-$701,848	$130,670	$91,657
Large C&I DR	$198,462	$52,323	$48,109	$150,353	$223,127
EV Charging Pilot	$5,562	-$8,165	-$8,165	$13,727	$8,625
Total	**$2,839,355**	**$4,929,906**	**-$45,882,631**	**$41,507,361**	**$18,932,905**

Sums may differ due to rounding.