Com Ed. Energy Efficiency Program



ENERGY STAR AWARD 2014 AWARD 2015 AWARD 2016 AWARD 2016 AWARD 2017 AWARD 2018 AWARD 2018 AWARD 2019

PARTNER OF THE YEAR Sustained Excellence Sustained Exce

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Portfolio Summary

671,418

Actual Net MWh YTD

1,680,221

CY2019 MWh Forecast

1,629,783

CY2019 MWh Filed Goal

\$154,451,991

Actual Spend YTD

\$351,334,190

CY2019 Spending Cap

PORTFOLIO

- Through Q2, the portfolio has achieved 40% of its CY2019 forecast of 1,680,221 MWh and 42% of its CY2019 filed goal of 1,629,783 MWh.
- Since its inception in 2008, the ComEd Energy Efficiency Program has saved ComEd customers over \$4 billion on their electric bills.

RESIDENTIAL PROGRAMS

- Through Q2, residential programs have achieved 48% of its combined CY2019 forecast of 315,303 MWh.
- Customers have received over 108,000 rebates, recycled over 24,000 appliances, and over 21,000 homeowners and tenants have received free direct install products from assessments through Q2.
- ComEd has collected and responsibly recycled more than 441,400 refrigerators and freezers since ComEd began to
 offer this service to our customers in June 2008.

INCOME ELIGIBLE PROGRAMS

- Through Q2, income eligible programs have achieved 47% of their combined CY2019 forecast of 78,148 MWh.
- Over 32,400 income eligible households have participated through Q2.

BUSINESS PROGRAMS

- Through Q2, business private sector programs have achieved 45% of its combined CY2019 forecast of 673,584 MWh; business public sector programs have achieved 28% of its combined CY2019 forecast of 152,357 MWh.
- Over 4,800 business private sector projects and 265 business public sector projects have been completed through Q2.

THIRD PARTY PROGRAMS

Through Q2, third party programs have achieved 26% of their combined CY2019 forecast of 112,211 MWh.

Residential Programs

Home Energy Reports

Overview: The Home Energy Report provides select residential customers with information on how they use energy within their households. Reports and the online portal include usage comparison to that of similar, nearby households, personalized energy efficiency advice, program promotions, and application of behavioral principles and social norms to drive adoption of energy efficient behaviors.

- 27,997 MWh savings achieved (48% of forecast)
- ComEd began two pilots with Oracle during Q2. The Paperless Pilot is a chance to test how customers save when paper reports are eliminated. The second pilot, Target Rank, tests a new way to message energy savings opportunities. The pilots will test new delivery methods and messaging that may influence future program design.

Lighting Discounts

Overview: The Lighting Discounts Program provides instant in-store discounts to ComEd residential customers at participating retail stores on select ENERGY STAR® certified lighting: LEDs, LED trim kits, and LED integrated fixtures.

- 72,151 MWh savings achieved (49% of forecast) based on 2,457,696 units sold
- In honor of Earth Day, the program supported outreach events around the ComEd territory promoting the ComEd EE residential offerings. Some of the events included one at Northwest Community Hospital in Arlington Heights and one at S&C Electric in Chicago.

Appliance Rebates

Overview: Appliance Rebates offers rebates to ComEd residential customers on the purchase of new, select ENERGY STAR® certified appliances/products including: air purifier, clothes washer, electric clothes dryer, refrigerator, freezer, dehumidifier, variable speed pool pump, room air conditioner, smart thermostat, and advanced power strip.

- 18,479 MWh savings achieved (51% of forecast) based on 94,533 appliance rebates issued
- The program implemented functional enhancements to the online rebate application portal. These enhancements were made to improve the customer experience.

Fridge and Freezer Recycling

Overview: The Fridge and Freezer Recycling Program provides ComEd customers free pickup and recycling of older, working refrigerators and freezers from residential customer homes. In addition to free pickup, customers receive a \$50 dollar incentive for fridge and freezer units and \$10 for AC units and dehumidifiers when collected in conjunction.

- 9,326 MWh savings achieved (49% of forecast) based on 24,215 units
- Held 2 free recycling events with overwhelming customer participation, collecting approximately 1,600 units total.
- Successfully launched text messaging functionality offering convenience for customers who opt-in to participate.

Home Energy Assessment

Overview: Offered in partnership with Nicor Gas, North Shore Gas, and Peoples Gas, the Home Energy Assessment is a free walkthrough assessment with an energy advisor that determines the ways energy is used in the home. Customers receive personalized energy-efficiency recommendations, and the following energy-saving products are installed for free: ENERGY STAR® certified LEDs, programmable thermostats, WaterSense® certified showerheads, faucet aerators, and hot water pipe insulation. Advanced Power Strips are provided and left behind for the customer to install. Nest Learning and Nest E smart thermostats are also available for purchase at a discount and include free installation.

- 12,828 MWh savings achieved (43% of forecast) based on 10,279 assessments
- ° Online scheduling launched on June 18 at ComEd.com/Assessment.

Residential Programs

Program is behind goal with increased production expected for the second half of the year with additional field technicians performing assessments and geo-targeted marketing efforts to ensure a strong pipeline.

Multi-Family Energy Savings

Overview: In partnership with Nicor Gas, North Shore Gas, and Peoples Gas, the Multi-Family Energy Savings Program provides multi-family tenants and property owners and managers with a variety of ways to save electricity and natural gas. The program will serve as a "one stop shop" to generate energy savings throughout the property. After an initial assessment, immediate energy savings are generated by the direct installation of energy-saving products in both tenant and common area spaces. The program further provides Service Provider installs of common area lighting measures.

- 6,056 MWh savings achieved (42% of forecast)
- Completed direct install work in 11,473 tenant units and 261 common area spaces; completed 85 service provider projects.
- The program has been experiencing greater demand than anticipated compared to the initial forecast for the year.
- Smart thermostats adoption is higher than anticipated with 794 installed for CY2019 through Q2.

Heating & Cooling Rebates

Overview: The Heating & Cooling Rebates Program promotes investment in long-term savings by providing rebates for the purchase and installation of high efficiency central air conditioners, air source heat pumps, ductless mini-split heat pumps, ECM furnace blower motors, smart thermostats, and ground source heat pumps.

- 3,811 MWh savings achieved (46% of forecast) based on 12,920 rebates
- At the end of Q2, after great outreach & communication efforts, a majority (93%) of program EESPS (568 of 612) recertified with the ICC and remained part of the Heating & Cooling Rebates offering network.

- ECM + Smart Thermostat "bundle bonus" launch in Q2 for instant discount installations.
- Reduced AFUErequirement for ECM retrofit rebate to 64.4% (from 90%).

Weatherization Rebates

Overview: The Weatherization Rebates Program promotes investment in long-term savings by providing rebates for the purchase and installation of weatherization measures including air sealing, duct sealing, and attic and wall insulation. The program is offered jointly with Nicor Gas, North Shore Gas and Peoples Gas.

- 177 MWh savings achieved (35% of forecast) based on 578 projects
- Customers are reporting high satisfaction with the results of home weatherization work.

Residential New Construction

Overview: In partnership with Nicor Gas, the Residential New Construction Program increases awareness and understanding among Home Energy Rating System (HERS) rating companies and home builders of the benefits of energy-efficient building practices with a focus on capturing energy efficiency opportunities available during the design and construction of new single-family homes. Incentives are provided to HERS-certified consultants that certify homes and builders who construct homes that are at least 20 percent more energy-efficient than what currently is required by the State of Illinois Energy Code. Incentives are also provided to RESNET/HERS-certified consultants for submitting homes to the program.

- 113 MWh savings achieved (53% of forecast) based on 351 homes
- The offering has completed 3 high performance electric only homes averaging 35% better than code and 4400 kWh saved per unit. Two more electric only units are in process and expected to complete in August.
- The offering took a substantial hit on Realization Rate for 2018 and 2019, dropping from 1.0 to 0.76.
- The current RNC offering will be sunset at the end of 2019.

Income Eligible Programs

Income Eligible Product Discounts

Overview: Income Eligible Retail Discounts provides deeper instant in-store discounts to ComEd residential customers at participating retail stores on select ENERGY STAR® certified lighting: LEDs, LED trim kits, and LED integrated fixtures as well as instant in-store discounts on select ENERGY STAR certified appliances such as air purifiers and room air conditioners. Instant in-store discounts are also available on advanced power strips. Instant Discounts are offered to minimize the burden on the target market by lowering barriers to participation.

- 31,448 MWh savings achieved (47% of forecast) based on 732,739 units sold – 697,512 bulbs/fixtures and 35,227 appliances
- To support upcoming Income Eligible (IE) blitz initiatives, the program developed flyers that provide lists of specific store locations within the IE blitz area where customers can purchase energy-efficient products with the ComEd instant discount. These flyers will be distributed at outreach events.

Single-Family Retrofits

Overview: The Single-Family Retrofits Program is implemented by Resource Innovations and the Illinois Community Action Agencies, as well as Franklin Energy, the Chicago Bungalow Association (CBA) and the Chicagoland Vintage Home Association (CVHA). Implementers complete comprehensive home energy audits and work with contractors to make weatherization and additional upgrades at no cost to the customer. With Franklin/CBA/CVHA, CBA/CVHA identifies and determines qualified vintage homeowners located in the City of Chicago and coordinates Home Assessments to identify areas prone to air leaks or drafts and works with contractors to make weatherization updates at no cost to the customer. This program covers costs associated with completing Air Sealing, Attic and wall insulation, duct sealing, direct install measures (LEDs, water saving measures, programmable thermostats) as well as Health & Safety improvements. This program is delivered in partnership with Peoples Gas. With Resource Innovation/CAA, ComEd, in coordination with the northern gas utilities is partially and, in some cases, fully funding whole home energy upgrades, in coordination with the State and its Illinois Home Weatherization Assistance

Program. Measures may include all of those in the Franklin/CBA side, as well as mechanicals.

- 2,085 MWh savings achieved (45% of forecast) based on 1087 homes
- The program targeted marketing for two community action agencies (DuPage County Department of Human Services and Community Contacts Incorporated) seeking additional pipeline for both braided and utility-only projects. The resultant newsletter piece showcases local clients who benefited from the program and will be followed up by a targeted mailer in O3.

Multi-Family Retrofits

Overview: The Multi-Family Energy Upgrade Program is implemented by Elevate Energy, and Resource Innovations and the Illinois Community Action Agencies. The program is a one-stop shop for multi-family building owners and managers whose buildings serve income-eligible residents, including energy assessments, direct installation of energy-saving devices, and replacement of inefficient equipment/systems at no or very limited cost. The CAA work is jointly funded with the gas utilities and Elevate is joint with Peoples/NorthShore.

- 2,537 MWh savings achieved (61% of forecast)
- Elevate
 - 716 units completed
 - 7 of 14 community action agencies are now considering utilityfunded income-qualified multi-family projects for the remainder of this year and into 2020; this is the largest number to-date for this program.
- ° IHWAP
 - 396 projects, 14,703 residential units completed

Income Eligible Programs

Affordable Housing New Construction

Overview: The Affordable Housing New Construction Program offers technical support and incentives for whole-building efficiency for new construction and rehab projects that increase the energy efficiency of income eligible households.

- 547 MWh savings achieved (23% of forecast) based on 4 projects
- ° In Q2 of 2019 the AH-NC offering:
 - Administrative improvement: Increased participant benefit and reduced administrative process by switching 28 projects to receive a single, final payment.
 - Technical advancement: conducted extensive research and modeling to include new measures and encourage broader participation with in the ComEd Multi-family Standard to "version 2.0" which is under development.

Standard

Overview: The Standard Program provides monetary incentives to customers on a "Standard" per-unit or per-fixture basis. Offered measures include LEDs, T-8 and T-5 lighting and controls, building automation systems, air- and water-cooled chillers and variable speed drives, ground source heat pumps, roof top units, Q-sync motors, energy recovery ventilators, absorbent air cleaners, as well as equipment with niche or targeted market applications, such as laboratory, farm and commercial food service equipment, and grocery refrigeration measures.

- Private: 71,877 MWh savings achieved (42% of forecast) based on 1086 projects
- Public: 8,030 MWh savings achieved (35% of forecast) based on
 222 projects
- Participation in ComEd's Standard Offering continues to remain strong.
 Monthly application inflow of both pre and final applications exceeded 2018 in every month of the 2nd quarter.
- To date, the program has seen a 27% increase in the number of pre-apps and a 47% increase in final apps submitted compared to the same time period in 2018.

Custom

Overview: The Custom Program identifies and implements site-specific and unique cost-effective energy efficiency opportunities that are not available via the Standard element. Customized incentives based on per kWh basis and calculated for specific customer projects are offered. Measures include process efficiency improvements, system upgrades, and those measures not covered by the Standard program.

- Private: 4,853 MWh savings achieved (24% of forecast) based on
 44 projects
- Public: 524 MWh savings achieved (16% of forecast) based on 11 projects
- The program is finding challenges with public sector engagement. The team is working to leverage the high number of submitted VSD application through

the standard program, by sending emails to participants encouraging further improvements to their HVAC equipment through the custom program.

Combined Heat & Power (CHP)

Overview: The Combined Heat and Power (CHP) Program supports the investigation of CHP opportunities for conventional and waste heat to power (WHP) systems, existing systems that have been dormant for at least three years, and generation equipment that currently does not have waste heat recovery capabilities. The program provides an economic assessment of site-specific CHP opportunities and promotes implementation of CHP projects by customers.

- Received 9 feasibility applications this year, generating a possible pipeline of 7,176 MWh.
- ° Presented segment specific CHP webinars and site visits.
- Joined the DOE packaged CHP accelerator to advance packaged CHP Technology.

Small Business Energy Savings (SBES) & Small Facilities

Overview: The SBES Program and Public Small Facilities Program implement energy efficiency projects for customers under 100 kW peak demand. The program provides comprehensive energy savings solutions for customers including advanced lighting, refrigeration, HVAC, and compressed air.

- Private: 79,727 MWh savings achieved (44% of forecast) based on 3,367 projects
- Public: 6,175 MWh savings achieved (50% of forecast) based on 137 projects
- Launched 2 campaigns targeting small businesses in 27 underserved zip codes.
- Added 2 new Service Providers to the apprenticeship initiative designed to develop and support diverse contractors serving small businesses in low participating areas.
- HVAC optimization measures were added to the offering the beginning of Q2

Business Instant Discounts

Overview: The Instant Discounts Program provides instant discounts on qualifying commercial screw-in, pin-base, HID, and exit signs. Linear fluorescent lamps can be replaced with reduced wattage T8 lamps or Tubular LED (TLED) lamps. All screw-in, pin-base and exit sign replacements are LED.

- Private: 112,161 MWh savings achieved (59% of forecast) based on 1,245,030 products sold
- Public: 12,042 MWh savings achieved (76% of forecast) based on 214,042 products sold
- In Q2, there continues a positive trend of widening distributor participation among the 120 distributor network.
- Omni-directional A lamp transactions were high in Q2 due to sunsetting of program incentives effective 6/30/19.

C&I New Construction

Overview: The New Construction Program provides technical assistance, support for the Leadership in Energy and Environmental Design (LEED) rating system, and incentives for efficient designs and measure implementation to influence building design practices during the design and construction of new buildings, major renovations of existing buildings, and tenant build-outs in the C&I market.

- Private: 4,088 MWh savings achieved (29% of forecast) based on 15 projects
- Public: 818 MWh savings achieved (71% of forecast) based on 3 projects
- After a 2019 dip, future year pipelines are projected to be much stronger in both number of applications and gross kWh
- A preliminary net-to-gross number from evaluators, if confirmed, would be by far lowest received by the program in its ten-year history.
- Based on evaluator feedback, the program is proactively adjusting savings calculations for ~50 pipeline projects where we had previously proposed a particular-makeup air controls measure.

Industrial Systems

Overview: The Industrial Systems offering is a study-based program for compressed air, process cooling, industrial refrigeration and wastewater treatment plant. The target customer is over 500 kW but under 10 MW. Because this is a study-based program, there are no predefined measures. Measures are a mix of no- to low-cost system optimization as well as capital improvements like custom measures.

- Private: 5,682 MWh savings achieved (24% of forecast) based on 89 projects
- Public: 0 MWh savings achieved (0% of forecast)
- Development of the Fix-It-Now Program for Wastewater Treatment Plants, Industrial Refrigeration and Process Cooling has been well received by partnering Service Providers. Working closely with these Service Providers to utilize these calculations and identify any needs for enhancements. This new Fix-It-Now process will help bridge the gap between smaller and larger potential customers and improve project completion timelines.
- Public sector is under-performing due to a lack of Public sector engagement.
 Additional marketing and site contact will be an area of focus to improve performance.

Retro-Commissioning (RCx)

Overview: The RCx Optimization Program provides detailed engineering analysis of building systems designed to identify energy-saving operational improvements with a bundled simple payback of 18 months or less. Incentives are provided to customers who commit to implementing agreed-upon energy-saving equipment scheduling, optimization of economizer operations, and adjustment of heating, ventilation, and air conditioning (HVAC) setpoints.

- Private: 20,747 MWh savings achieved (43% of forecast) based on 88 projects
- Public: 1,808 MWh savings achieved (22% of forecast) based on 25 projects
- A marketing video/case study for MBCx projects at Michigan Plaza (205/225 N Michigan) has been completed.

- DX Tune-Up expenses are running far ahead of forecast and offer was paused until 2020. This is primarily due to unexpectedly high percentage of relatively expensive RTU replacement measures vs. lower-cost measures.
- Virtual Commissioning offer has potential to outperform forecast by a significant amount if additional budget were made available, as it can be scaled relatively easily.

Strategic Energy Management (SEM)

Overview: Strategic Energy Management provides tools, coaching and technical resources to support customers' energy goals through a year-long series of workshops and one-on-one coaching. It draws on principles of continuous improvement and organizational change and integrates Lean, Six Sigma and other cost savings and operational excellence initiatives. SEM helps implement organizational structures, behavior changes, and systematic practices that can lead to reducing energy costs by up to 15% for both electricity and natural gas.

- Private: 0 MWh savings achieved (0% of forecast)
- Public: 0 MWh savings achieved (0% of forecast)
- Continued strong engagement with cohorts among Wastewater, Industrial Refrigeration, Industrial, Commercial Real Estate and K-12 Schools, including the alumni program.
- Performance impacts generally result at the end of the year.

LED Street Lighting

Overview: The program is to replace existing ComEd-owned mercury vapor (MV) or high-pressure sodium (HPS) fixtures with LED street lights. These street lights are installed and maintained by ComEd and the municipality pays a rental charge for the fixture as well as an energy charge. LED street lights provide energy efficient lighting which reduces operating costs and increases the life of street lighting.

- Private (ComEd Owned): 1.237 MWh savings achieved (9% of forecast) based on 2,025 fixtures
- Public (Municipality Owned): 11,651 MWh savings achieved (15% of forecast) based on 15,878 fixtures

While there is a lag between the completion of fixture installations and the processing of final applications, we still are on track to achieve 93,000 MWh by year end.

Operational Savings

Overview: The Operational Savings Program identifies no-cost/low-cost opportunities that do not qualify for incentives. These opportunities are identified by engineers during various types of ComEd Energy Efficiency Program studies and Facility Assessments. Examples of such opportunities include shutting off idle equipment, optimizing the efficiency of existing systems and changes in the operating habits of occupants.

- Private: 1,020 MWh savings achieved (34% of forecast) based on 77 implemented measures
- Public: 275 MWh savings achieved (60% of forecast) based on 15 implemented measures
- A total of 1,147 FAs were completed in 2018, more than double 2017's total FAs completed.
- Through Q2, 600 FAs have been completed in 2019, on pace to surpass last year's record total.
- 30% more operational measures have implemented in 2019 through Q2 than the first two guarters of 2018 (92 in 2019 vs 71 in 2018).

Business Energy Analyzer (BEA)

Overview: Business Energy Analyzer provides business customers with tools to visualize their energy usage over time, pinpointing high use periods and suggesting potential strategies to reduce energy costs. Customers receive personalized energy-efficiency solutions based on their unique energy use and the ability to compare usage patterns with similar businesses.

- ° Forecasting methodology has been updated to reflect expected savings based on past evaluated performance, and monthly YTD estimated savings have been adjusted accordingly.
- BEA is currently assigned a 1-year EUL. It is uncertain whether or not that may increase in future years.

Public Housing Retrofits

Overview: The Public Housing Retrofits Program provides energy efficiency retrofits in Public Housing Authority (PHA) facilities in the ComEd service territory. The program offers energy assessments and incentives to upgrade most inefficient equipment in buildings owned and managed by a PHA, including residential units, and common areas at no cost. For energy efficiency projects requiring funding beyond program incentives, technical assistance will be offered to support implementation and identify financing options.

- ° 1,445 MWh savings achieved (53% of forecast)
- ° Completed 52 projects and upgraded 9,845 residential units
- In Q2, the Public Housing program completed 3 capital projects, 1 SPIA lighting projects, 2 prescriptive projects, and 6 DI projects in public housing authority sites.

Third Party Programs

Elementary Energy Education

Overview: ComEd, Nicor Gas, North Shore Gas, and Peoples Gas have partnered to offer schools the opportunity to teach 5th grade students and their families how to use less energy at home. Students learn about valuable ways to save energy and money through in-class education. They also receive free take-home kits containing ENERGY STAR®-certified LEDs, faucet aerators, and other energy-saving products to install at home with their families.

- 2,358 MWh savings achieved (27% of forecast) based on 21,936 kits
- The program incorporated marketing changes to the box design and will scale up to 74,000 kits in 2019 from 53,000 in 2018.

Small Business Kits

Overview: The Small Business Kits Program targets harder to reach electric energy savings in office, restaurant, or other general facilities located in ComEd's service territory. The program achieves savings through a kit of self-install energy efficiency measures delivered directly to customer facilities. A customer survey is used to determine installation rates for each measure.

- 2,410 MWh savings achieved (53% of forecast) based on 3,674 kits
- ° 50% of program (kit deliveries) completed; Assessment Leads in progress
- Leads for small business assessments continue to trend upwards.

Food Banks LED Distribution

Overview: The Food Banks Distribution Program provides ENERGY STAR® LEDs to food banks affiliated with Feeding America. The food banks then use their network of local food pantries to distribute the bulbs to utility customers in need, who may elect to receive a free 4-bulb pack.

 18,835 MWh savings achieved (38% of forecast) based on 776,256 LEDs

- Continued efforts and research resulted in an in-service rate increase from 0.59 to 0.803. This will ultimately lead to an additional 15 million kWh savings for the 2019 program year.
- The program volunteered and distributed LED 4-packs at food pantries in Rockford and Elgin reaching a total of over 400 ComEd customers.
- The program conducted outreach to food pantries at Chicago City Colleges to identify potential challenges and opportunities of serving this unique segment of ComEd's customer base.

Income Eligible Kits

Overview: The Income Eligible Kits Program delivers energy efficiency kits to single family income eligible homes. The kits include (4) 9-watt LED bulbs, (2) 15-watt LED bulbs, (1) tier 1 advanced power strip, and general guidelines for energy savings. A portion of the kits will also contain (1) low-flow kitchen aerator, (1) low-flow bathroom aerator, and (1) low-flow showerhead.

- 5,345 MWh savings achieved (32% of forecast) based on 15,925 kits
- The program continues to work with our Green Home Experts and Helping Hand Center to employ people with disabilities to construct boxes, assemble kits, and checking the kits for accuracy before distribution.
- The program has met the targeted goal of the forecast every month throughout Q2 and is on track to meet the overall goal to deliver 50,000 kits.

New Manufactured Homes

Overview: ComEd's New Manufactured Home offering is designed to provide Income Eligible residents with the opportunity to lower electric bills by purchasing new manufactured homes that are upgraded with energy-efficient measures such as Energy Star® appliances, air source heat pumps, heat pump water heaters and low flow showerheads. The energy efficient measure upgrades are eligible for instant discounts that are applied to the customer's bill of sale for the home purchase.

Third Party Programs

Rebates will also be provided to the customer, dealer, and manufacturer when a ComEd customer purchases an ENERGY STAR® Certified New Manufactured Home.

- 0 MWh savings achieved (0% of forecast) based on 0 projects
- Q1 and Q2 focused on startup activities, including outreach to manufactured home dealers, manufacturers and associations.

Existing Manufactured Homes

Overview: The ComEd Manufactured Homes offering is available to income eligible residents of manufactured homes at no cost to the customer. If the customer is approved to participate in via a screening over the phone or during an onsite visit at the community park, an appointment will be scheduled with a program technician. Customers may receive an energy assessment, duct sealing and insulation, air sealing, belly insulation, installation of free energy-savings devices such as LED bulbs, faucet aerators, smart power strips, advanced thermostats, and some health and safety measures; and educational tips to save energy

- 115 MWh savings achieved (5% of forecast) based on 83 projects
- Began working in five new manufactured home communities in addition to continuing to complete projects within the two communities engaged with in Q1.
- Substantially increased marketing efforts by participating in five outreach events, added outreach specialists for door-to-door canvassing, and issued postcard mailings to 471 homes in three communities.

Grocery Program

Overview: The Grocery Program provides free customized assessments to identify energy-saving opportunities for lighting and commercial refrigeration system retrofits and upgrades, along with financial incentives and implementation assistance.

° 0 MWh savings achieved (0% of forecast) based on 0 projects

- The Grocery offer overlaps with existing portfolio offers (Standard and Small Business), which provide incentives for the same energy efficiency projects.
- To address the overlap and maintain continuity for customers with active projects in 2019, three large customers (Jewel, Target, Walmart) and small customers (< 100 kW peak demand) are being excluded from the grocery program in 2019. This decision will be re-visited for 2020.
- Program got a late start in 2019 due to delays with RFP process and contracting, but first projects will be completed, and savings realized in July.

Non-Profit Offering (NPO)

Overview: The Nonprofit Organizations Offering is a new program designed for nonprofit, 501(c)3 organizations with a maximum peak demand of 400 kW and that provide direct services to at-risk populations. The Program provides free energy assessments, procurement assistance, project oversight and a comprehensive list of incentives. Direct install is available for LED lamps and vending machine misers.

- 370 MWh savings achieved (9% of forecast) based on 9 projects
- As this is a new program, launch activities took longer than expected and the program is currently behind in progress towards year end goals. The team has put together a Condition Report and implemented an Action Plan to get back on track.
- The implementation team has deployed several strategies such as adding staff capacity, engaging high-volume service providers, adjusting incentive levels based on initial feedback, and executing a direct mail marketing campaign to ensure the program is on track to ramp-up quickly and meet YE goals.

Agriculture

Overview: The Agricultural offering is a specialized offering that targets the full vertical market including farms (dairy, poultry, hogs, cash crops, etc.), greenhouses, indoor agriculture facilities, supply houses, and on-site processing facilities. It serves both existing facilities and new construction and offers Standard and Custom type of incentives. Once a customer is engaged, the program will offer customers a free walk through assessment appropriate for their

Third Party Programs

facility to identify energy efficiency opportunities and assist the customer with prioritizing projects and through the application process.

- ° 0 MWh savings achieved (0% of forecast) based on 0 projects
- The agriculture program has an estimated 38,000 kWh savings of projects awaiting completion for August 2019, these projects include residential and commercial accounts.
- Through outreach activities in Q2 we have engaged over 7,000 prospects with face to face contact, print, and county events. Gaining success in untapped markets, will strengthen these efforts through local Farm Bureaus.
- Dedicated staffing in Northwest Illinois to focus on farming opportunities near Wisconsin, utilizing network contacts and EESP's.

Telecommunications

Overview: The Telecommunication program offers incentives for telecommunication and internet service providers and associated systems such as rectifiers, soft switches, air flow management, HVAC solutions, economization and lighting. This is a market that has been underserved by other programs due to the specialized technology and access to the facilities. Customer engagements are supported from the national and local levels with dedicated energy advisors and engineers providing individual customized assessments and reports on energy efficiency opportunities throughout the network infrastructures and facilities within ComEd's territory.

- 101 MWh savings achieved (2% of forecast) based on 40 assessments
- Program pipeline has seven assessments scheduled for July. Awaiting customer responses and probability information for nine AT&T assessments and four CenturyLink assessments.
- Program has made significant progress with AT&T and the network combing efforts. It is expected to have upwards of sixteen (16) completed by September and are working on identifying additional sites to complete before the end of the year.

Overview: Public Building in Distressed Communities provides LED light kits for self-install, and the top 6 HVAC measures, to provide energy efficiency and safety to public buildings that do not have extra capital for these upgrades.

- 0 MWh savings achieved (0% of forecast) based on 0 projects
- Delay in program launch due to contract issues. Expect program to fully launch in August 2019.

Public Building in Distressed Communities

Voltage Optimization & Market Transformation Programs

Voltage Optimization

Overview: The Voltage Optimization Program deploys circuit voltage detectors and control equipment that will effectively assess and adapt the amount of voltage traveling across a power line at any given time. Once in place, these devices will allow ComEd to more precisely monitor, manage and deliver the voltage customers need. No additional effort by consumers will be required as the control equipment will automatically adjust to consistently deliver only the voltage each customer requires while providing energy savings.

 41,908 MWh savings (22% of forecast) based on 29 commissioned substations

Building Operator Certification (BOC)

Overview: This training and certification program for large commercial building managers is operated by the MEEA Team. Energy savings are attributed to both increased awareness of energy efficiency opportunities from the training and from participation in utility programs.

BOC has 5 trainings scheduled for 2019 (Grayslake, Chicago Level I, Springfield, Algonquin, Chicago Level 2) with an additional 1-2 available as needed, based on demand. 6 veterans' scholarships have been reserved, which is an increase from last year. 185 renewal scholarships were given out to IL graduates. Continuing education webinars will be taking place Spring – Fall. More information on training options and schedules is available at http://www.boccentral.org/training/illinois

Illinois Home Performance (IHP)

Overview: The Illinois Home Performance with ENERGY STAR® Program consists of processing ENERGY STAR® certificates for homeowners, training realtors and appraisers, and conducting a building science training series.

The CY2019 IHP program is operating in Northern Illinois with funding from ComEd, Nicor Gas, and Peoples/North Shore Gas. Thus far through the program, 27 contractors have been trained through the Building Science Training Series, 44 realtors have been educated on IHP and 414 Home Performance with ENERGY STAR certificates of completion have been issued The program is currently scheduling realtor and appraiser training courses and continues to offer building science training courses to local contractors. More information on training options and schedules is available at http://www.illinoishomeperformance.org

Emerging Technology

The mission of the Emerging Technologies team is to identify, test, validate, and integrate new energy-saving technologies and program delivery strategies into the ComEd Energy Efficiency Program so that it continues to meet customers' needs and its energy savings goals cost-effectively.

 Please refer to the attached PDF for a catalog of all Emerging Technology completed and active projects.



ComEd. Energy Efficiency Program

Emerging Technologies

Project Catalogue





Updated August 2019

Photos: Ductless heat pump outdoor unit installation in progress (Waukegan, II. QI 2019), en/verid HVAC Load Reduction Module installation in progress (Chicago, II. Q2 2019), LUCHA Passive House completed building (Chicago, II. Q4 2018).

Marketing Education & Awareness

General Outreach

- Participated in 165 events
- Interacted with approximately 19,777 customers

E&A Residential – Lazy Susan

Overview: The campaign was to promote awareness of the ComEd Energy Efficiency Program offerings with a call to action of ComEd.com/HomeSavings

- In-market February 4 December 22, 2019
- Included TV, Cinema, Radio, OOH, Social and Print
- ° Generated 136,248,039 digital impressions through March 31st.
- Drove 175,000 page visits to ComEd.com/HomeSavings

E&A Business — Saving Energy

Overview: The campaign was created to promote awareness of the ComEd Energy Efficiency Program offerings with a call to action to learn more.

- In-market February 4 December 22, 2019
- Included TV, Digital, Social and Print
- ° Generated 19,687,652 impressions to date
- Drove 13,800 + page visits to ComEd.com/SavingEnergy

Facility Assessment Campaign - Moving Up

Overview: The campaign was to promote awareness of our facility assessment offerings with a call to action of ComEd.com/FacilityAssessments.

- ° In-market April December 2019
- ° Includes TV, cable, digital, radio, social and print
- Generated 12,016,865 impressions to date
- Drove 14,630 + visits to ComEd.com/FacilityAssessments

Rebates Campaign - Neighbors

Overview: The campaign was created to promote awareness of the rebate offerings with a call to action of ComEd.com/Rebates.

- In-market through November 31st, 2018
- Included cable, digital, radio, social and print
- Generated 20,390,536 digital impressions to date
- ° Drove 111,945 + page visits to ComEd.Com/Rebates

Fridge Recycling Campaign – Find Joy

Overview: The campaign was created to promote awareness of the fridge recycling through the ComEd Energy Efficiency program with a call to action to recycle your old, working fridge.

- In-market March December 2019
- Included digital, radio and billboard
- Has generated 49,190,482 impressions to date
- Drove 166,950 + page visits to ComEd.com/FridgeRecycling

IE Single Family Campaign

Overview: The campaign was created to promote awareness of the offerings for income eligible single-family customers through the ComEd Energy Efficiency program with a call to action to learn more.

- In-market June September 2019
- ° Included Print, Digital, OOH, and Social
- Has generated 1,095,093 digital and print impressions to date
- Drove 69,800 + page visits to ComEd.com/EnergyUpgrades

Public Sector Campaign - Kid Powered

Overview: The campaign was created to promote awareness of our public sector offerings for K-12 schools with a call to action to look at incentives available on ComEd.com/Schools.

- In-market April December 2019
- Includes TV, digital, social and print
- Generated 28,651,278 impressions to date
- Drove 25,049 + page visits to ComEd.com/Schools

Marketing Education & Awareness

New Mover – Lazy Susan

- Included TV, Cinema, Radio, Digital and Social
- ° In-market April– July 2019
- ° Generated 29,782,940 digital impressions to date
- Drove 7,194+ page visits to ComEd.com/NewMover

Home Energy Assessments - Savings Advice

Overview: Create awareness and drive participation of free home energy assessments with a call to action to schedule at ComEd.com/HomeAssessment

- Included Print, Digital and Social
- ° In-market April– September 2019
- ° Generated 5,023,175 impressions to date
- Drove 41,745 + page visits to ComEd.com/HomeAssessment

Lighting Discounts – IE Lighting Discounts

Overview: The campaign was created to create awareness of lighting discounts among income eligible customers in targeted zip codes and drive purchase at local retailers.

- Included TV, print, OOH, social and radio
- In-market February November 2019
- Generated 8,806,941 impressions to date
- ° Drove 14,219+ page visits to ComEd.com/LightingForAll

Lighting Discounts Campaign – Saved by Savings

Overview: The campaign was created to create awareness of lighting discounts and drive purchase at local retailers.

- In-market March December 2019
- Included digital, radio and transit
- Has generated 6,672,412 impressions to date
- Drove 14,219+ page visits to ComEd.com/LightingForAll

Lighting Discounts Campaign – Business Lighting Discounts

Overview: The campaign was created to create awareness of lighting discounts for business customers and how to find lighting distributors.

- In-market March December 2019
- Included radio, print, digital and OOH
- Has generated xxxxx digital impressions to date
- Drove 14,219+ page visits to ComEd.com/LightingforAll

C&I Campaign - Like a Boss

Overview: The campaign was to promoted awareness of offerings for custom projects, IT optimization, industrial systems and retro-commissioning through the ComEd Energy Efficiency program with a call to action.

- In-market November -December 2018
- Included Cable, radio, OOH, print and digital
- Has generated 18,970,105 digital impressions to date.
- Drove 15,700+ page visits to ComEd.com/LikeABoss

Stipulations

Commitments Regarding Interactions with the Income-Qualified Advisory Committee (Settlement Stipulation § IV(D)(1))

ComEd agrees to report on a quarterly basis to both the Income-Qualified Energy Efficiency Advisory Committee and the SAG on the development of reporting metrics on the following topics:

- Identification of budget, savings, and number of participants served through Income-Qualified Plan funding, separately tracking by single-family and multi-family programs:
 - For budget and savings, please refer to the Income Qualified Programs section on the "Ex Ante Results" tab of the statewide quarterly report template. Total Income Qualified homes served is captured on the "Other" tab of the statewide quarterly report template.
 - The Single-Family Retrofits program has completed projects in 1,087 income-qualified homes through Q2.
 - The Multi-Family Retrofits program has completed direct install work in 15,419 tenant units through Q2.
 - The Public Housing Retrofits program has completed direct install work in 9,845 tenant units through Q2.
 - The Affordable Housing New Construction program has completed 4 projects through Q2.
 - The Income Eligible Kits program has distributed 15,925 kits to incomequalified single-family homes through Q2.
 - The Food Banks Distributions program has distributed 776,256 products though Q2.
- o Income-Qualified pilot program results:
 - The Emerging Technology program has several projects specific to income eligible and public housing customers: High Efficiency Public Housing Retrofit, Affordable Multifamily Passive House, Low E Interior Storm Windows, Chicago Income Eligible Multifamily Benchmarking, EcoAdvocates, Healthy Homes, Income Eligible High User Customer Needs Assessment, Income Eligible Program Design and Testbed, Public Housing Authority Energy Efficiency Needs Assessment, Savings for Income Eligible Seniors.

- Please refer to the Emerging Technology section on page 18 of this report for additional information
- Identification of implementation vendors who receive funding designated for Income-Qualified programs, indicating whether each vendor is an independent third party that has demonstrated capabilities to serve such households, including not-for-profit entities and government agencies that have existing relationships with or experience serving Low-Income communities in the State:
 - Single-Family Retrofits Chicago Bungalow Association (not-for-profit), Chicagoland Vintage Home Association (not-for-profit), Franklin Energy (for-profit), Illinois Association of Community Action Agencies (not-for-profit), Resource Innovations (WBE for-profit), 15 community action agencies in the ComEd territory (not-for-profits)
 - Multi-Family Retrofits Elevate Energy (not-for profit), Franklin Energy (for-profit), Resource Innovations (WBE for-profit), Shelton Solutions (WMBE for-profit), 15 community action agencies in the ComEd territory (not-for-profits)
 - Public Housing Retrofits Elevate Energy (not-for-profit), Franklin Energy (for-profit), University of Illinois at Chicago Energy Resources Center (not-for-profit)
 - Affordable Housing New Construction Seventhwave (not-for-profit)
 - Income Eligible Lighting Discounts CLEAResult (for-profit)
 - Low Income Kits University of Illinois at Chicago Energy Resources Center (not-for-profit), 15 community action agencies in the ComEd territory (not-for-profits)
 - Food Bank CLEAResult (for-profit), Greater Chicago Food Bank (nonfor-profit), Northern Illinois Food Bank (non-for-profit), Riverbend Food Bank (non-for-profit)
 - Outreach & Marketing Eire (WBE for-profit), Franklin Energy (for-profit), Ignition (for-profit), PACO (MBE for-profit), Surge Solutions (MBE for-profit)
- Obb training in economically disadvantaged and diverse communities within its service territory that is supported by ComEd's efficiency program portfolio funding, including training offered through the IHWAP program necessary to increase capacity to deliver services in ComEd's territory
 - ComEd intends to develop metrics for this area in coordination with the Income Eligible Advisory Committee. There have been preliminary

Stipulations

conversations on this topic at 4 of the 5 meetings in 2018. A new Workforce & Business Development Working Group will be established in 2019 to finalize these metrics

- ° ComEd agrees to work with the Income-Qualified Advisory Committee in the development of a metric to be added to quarterly energy efficiency reports filed with the Commission that reports the number of businesses and employees based in economically disadvantaged communities hired to assist in the delivery of energy efficiency programs
 - ComEd intends to develop metrics for this area in coordination with the Income Eligible Advisory Committee. There have been preliminary conversations on this topic at 4 of the 5 meetings in 2018. A new Workforce & Business Development Working Group will be established in 2019 to finalize these metrics

CY2019 New Measures

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All measures in the table below were launched in CY2019.

MEASURE TOTAL RESOURCE COST (TRC)		
	Sector	TRC
Ground Source Heat Pump	Business	5.47
Rooftop Units	Business	2.74
Q-Sync Motors	Business	1.69
Energy Recovery Ventilators	Business	1.50
Adsorbent Air Cleaner	Business	1.19