ComEd. **Energy Efficiency** Program

ComEd Energy Efficiency Program Overview

Terms and conditions apply. Actual savings will vary by customer's energy usage and rate. © Commonwealth Edison Company, 2020 The ComEd Energy Efficiency Program is funded in compliance with state law. with state law.

Instructions

- **Please post questions to the Q&A feature in the tool bar**
- **Answer the poll question using the Q&A feature in the tool bar**
- $\gg \mbox{The deck will be provided to all attendees}$

What We're Covering Today:

Safety Message

Case Studies

>> Challenges faced by medium-sized facilities (100,000-500,000 ft²)

- Small maintenance staff
- Insufficient resources for long-term sustainability planning
- Insufficient capital/tighter budgets
- Longer payback periods with higher capital projects
- Operating with outdated energy management systems

»Solutions available

How the ComEd Energy Efficiency Program can help solve these issues

COVID-19 Safety Message

The health and safety of our customers, employees, and contractors are our top priority. As part of this commitment, we're closely monitoring developments related to the coronavirus (COVID-19) pandemic and taking appropriate precautions

- Applications and supporting documents submitted electronically
- Virtual Meetings
- Virtual Facility Assessments



550 W. Adams

» Energy-saving improvements

- Installed VSD on chiller
- » Estimated annual energy savings
 - 400,447 kWh
- » ComEd Energy Efficiency Program Incentive
 - \$39,200
- » Estimated annual electric cost saving
 - \$28,031
- >> Recognition
 - Izzie Leonard, General Manager





55 E. Monroe

- » Energy-saving improvements
 - Updated Energy Management System (EMS)
- » Estimated annual energy savings
 - 159,865 kWh
- » ComEd Energy Efficiency Program Incentive
 - \$20,496
- » Estimated annual electric cost saving
 - \$11,191
- >> Recognition
 - Chuck Fendrich, Vice President and General Manager



Poll Question

>> How many of you are experiencing these challenges?

- A. Small maintenance staff
- B. Insufficient resources for long-term sustainability planning
- C. Insufficient capital/tighter budgets
- D. Longer payback periods with higher capital projects
- E. Operating with outdated EMS/BAS

>> What other challenges do you face?

• Please add additional challenges to the Q&A feature in the tool bar and we can address them at the end of the presentation



Challenge #1

>>Small maintenance staff

Solutions through the ComEd Energy Efficiency Program:

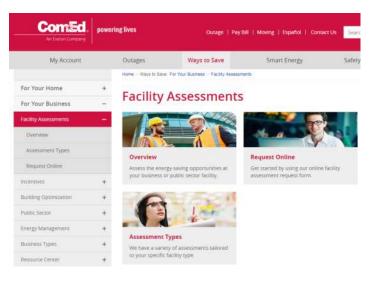
- Free facility assessments conducted
- Using the easy online application portal option
- Outreach teams to help with paperwork



Facility Assessments

$\gg\! A$ great first step for any facility

- Facility assessments identify opportunities eligible for energy efficiency incentives
- >> Virtual facility assessment available
- >> Assessment benefits:
 - FREE to customer
 - Performed by ComEd Energy Engineer
 - Detailed report with estimated energy savings



Contact your LCS Manager, Outreach Professional, or Request online at: ComEd.com/FacilityAssessment

Online Application Portal and Outreach Service Providers (OSP)

- >> Easy online application portal for standard incentives
 - Visit: <u>ComEd.com/StandardOnlineApp</u>
- >>> Teams to help with paperwork
 - Outreach Service Providers for every customer segment
 - Resources for all of your energy efficiency needs
 - Your energy efficiency advocate
 - Online application assistance
 - Estimating project energy savings
 - Determining eligible incentives

ComEd. Energy Efficiency Program



CHECK PROJECT AND EQUIPMENT ELIGIBILITY

All installed equipment must meet or exceed specifications as outlined in the incentive worksheets available at ComEd.com/Worksheets.

How to apply?

SUBMIT A PRE-APPLICATION

A pre-application is required for all projects. Projects less than \$10,000 apply as an Express Reservation, which is a new, quicker process to get your project reserved. Projects \$10,000 or more are considered traditional reservations and will go through the existing review process before being reserved. You must wait until your application (Express or Traditional) is approved before removing old equipment, purchasing new equipment, and starting your project. For the application process for the standard pre-application, <u>click here</u>.

INSTALL EQUIPMENT OR PERFORM PROJECT WORK

The incentive reservation allows 90 days to complete your project and submit the final application. Contact the program team if you think your project will require more than 90 days.

SUBMIT A FINAL APPLICATION

Submit a final application as soon as your project is completed and any required measurement and verification (M&V) data is collected.

RECEIVE INCENTIVE PAYMENT

When your final application is approved by the program team, an incentive check will be mailed to you or your Energy Efficiency Service Provider. Only designated Energy Efficiency Service Providers in good standing may receive incentive payments.

ComEd cannot issue certain incentives or rebates unless it is provided with:

- 1) Certification that measures were self-installed by the ComEd customer, or
- 2) Evidence that the measures were installed by an installer certified with the Illinois Commerce Commission.

Challenge #2

Insufficient resources for long-term sustainability planning

- Solutions through the ComEd Energy Efficiency Program:
 - Near-term project identification from Facility
 Assessment reports
 - Fine-tune of building systems with RCx and MBCx offerings
 - Beneficial new construction incentives through design
 phase engagement



Facility Assessment Reports

- >> Identifies energy saving opportunities both short and long-term
- >> Helps you build the business case to justify energy efficiency projects
- » Identifies offerings that are the best fit
- >> Helpful road map for future planning and cadence of those best-fit opportunities

ComEd. Energy Efficiency Program

Standard and Instant Discounts Incentives

Financial Benefit by Simple Payback

Measure	Annual Cost Savings	Project Cost	Incentive	Simple Payback (Years)
Install Lighting Controls	\$1,020	\$1,260	\$440	0.8
Relamp T8 Lighting	\$3,430	\$6,470	\$1,140	1.6
Relamp Compact Fluorescent Lighting	\$320	\$1,100	\$500	1.9
Subtotal	\$4,770	\$8,830	\$2,080	1.4

Estimated 2-5 Year Payback Opportunities

Measure	Annual Cost Savings	Project Cost	Incentive	Simple Payback (Years)
Retrofit HVAC Fans	\$1,720	\$5,800	\$800	2.9
Subtotal	\$1,720	\$5,800	\$800	2.9

Retro Commissioning (RCx)

>Engineering study of building systems

- ComEd funds the study, customer funds implementation
- Identify low-cost improvements to building operations with simple paybacks of <18 months
- Control of building systems such as HVAC and lighting
- Opportunities may include natural gas (therm) savings
- Identify retrofit opportunities and available incentives beyond RCx



Retro Commissioning (RCx)

What makes a good project?

- Customer buy-in and ability to commit necessary resources
- An existing building automation system (BAS) not required for smaller facilities
- No near-term major retrofits planned
- Great next step after equipment or BAS upgrades



RCx Options: Solutions for Every Building

Offering Name	Target Building Size	Incentive	Duration
Retro-Commissioning (RCx)	Greater than 500,000 ft ²	Study worth up to \$100,000	12 months
Monitoring-Based Commissioning (MBCx)	Greater than 150,000 ft ²	Fully funded MBCx study covering the costs of monitoring software and engineering services, with no cap	15+ months
Retro-Commissioning Express (RCxpress)	150,000 to 500,000 ft ²	Study worth up to \$60,000	9 months
RCx Building Tune-Up	Less than 150,000 ft ²	Study worth up to \$35,000, also \$0.04 per verified kWh	3-6 months
Virtual Commissioning (VCx)	Smaller buildings	Free identification of energy-saving measures and technical assistance for implementation	1 month

New Construction

- Must get ComEd involved at least 6 weeks prior to designs being finalized for projects to qualify
- Provides technical assistance and incentives for new construction or major renovation
- Design must exceed current Illinois Energy Conservation Code requirements
- Must implement significant beyond-code energy conservation measures for at least two of these primary building systems:
 - Lighting
 - Primary HVAC
 - Envelope
 - Qualified refrigeration



Challenge #3

>Insufficient capital/tighter budgets

Solutions through the ComEd Energy Efficiency Program:

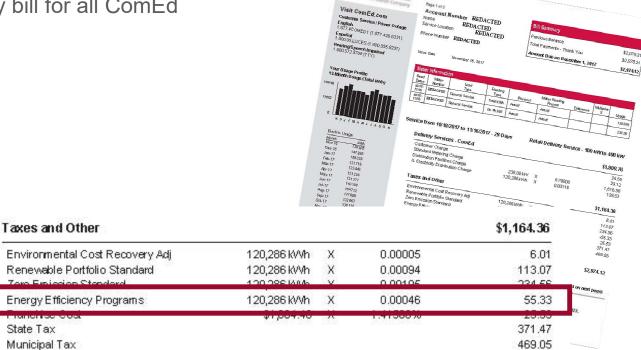
- Taking advantage of the available incentives
- Energy engineers identify operational savings while conducting facility assessments
- Standard and Instant Discount incentives help with the "low hanging fruit" projects
- VCx focuses on low-cost/no-cost measures



This Program is Funded by You!

>> Charge on the monthly bill for all ComEd customers

»Based on kWh usage



ComEd

Standard Offering

- >> Standard offering provides incentives on a per-unit or per-fixture basis
 - Most projects require a pre-application
 - Wait for reservation letter before starting a project (Do not sign PO or buy equipment)

Measure Categories				
Commercial appliances	Laboratory			
Compressed air	Lighting and controls			
Energy management systems	Network desktop power management			
ENERGY STAR® kitchen equipment	Networked lighting			
HVAC, tune-up and controls	Refrigeration			
Industrial incentives	Variable speed drives			

Lighting Upgrades

>> Upgrade your lighting system to save money easily

- LEDs can reduce energy use by as much as half compared to metal halide or high-pressure sodium lamps
- Commercial-grade LEDs have a long life expectancy that can help reduce maintenance costs
- Can save even more energy with lighting controls, such as occupancy sensors and zone controls



Heating and Cooling Improvements

- Improve heating and cooling systems to increase customer comfort and reduce operating costs by:
 - Tuning-up, optimizing or replacing your split system or rooftop units
 - Improving your current system's performance with VSDs
 - Replacing existing chillers with high-efficiency units
 - Learn more by visiting ComEd.com/HVAC and ComEd.com/BizHVAC



Instant Discounts

Instant savings on energy-efficient products sold through distributors

- Screw-in, linear, HID and pin-base LED lamps
- TLED signage
- Outdoor LED wall pack fixtures
- HVAC rooftop units

>> No application required

>>Find participating distributors at ComEd.com/BizLights and ComEd.com/BizHVAC

ComEd. Energy Efficiency Program INSTANT DISCOUNTS LIGHTING PRODUCT CATEGORIES & ELIGIBILITY SAVE ComEd commercial, industrial and public sector customers are eligible for instant incentives at the time of purchase on qualifying AT THE TIME commercial-grade lighting and exit sign products through **OF PURCHASE** participating distributors No paperwork necessary. Find a participating distributor at ComEd.com/BizLights SCREW-IN / PIN-BASE / OTHER INCENTIVES шстя ENERGY DLC[®] LISTED UL[®] NON-LISTED LISTED[®] CATEGORY STAR® Х **Directional MR lamps** \$3 / Lamp Directional PAR 16 & 20 lamps \$6 / Lamp Х \$8 / Lamp Х Directional PAR 30 Jamps Х Directional PAR 38 Jamps \$10 / Lamp Directional reflector lamps \$4 / Lamp Х ENERGY STAR (Ixtures ≤ 40W) \$10 / Fixture Х ENERGY STAR (Ixtures > 40W* \$25 / Fixture Х Х Decorative lamps \$3 / Lamp Screw-In HID LED - mogul base ≤ 100 watts \$25 / Lamp Х Screw-In HID LED - mogul base > 100 watts \$55 / Lamp Х Screw-In HID LED - medium base \$20 / Lamp Х 4 Pin-base LED \$5 / Lamp Х

\$5 / Lamp

\$5 / Lamp

Valid January I through December 31, 2020

Х

* Must be UL listed in addition to other specifications noted above ** Except for residential fixture categories.

4 Pin-base LED (G24q/GX24q > I8W)

2 Pin-base LED

Virtual Commissioning (VCx)

» No site visit required and no cost to customer

- Remote analysis of interval electric usage identifies customers with high potential for operational energy efficiency savings
 - Energy advisor reviews smart meter data
 - Energy advisor presents custom savings recommendations
 - Customer implements low-cost and no-cost changes to building operations
 - Energy advisor calculates savings using smart meter data
- Sood fit for smaller CRE customers and customers with multiple locations



Challenge #4

>>Longer payback periods with higher capital projects

- Solutions through the ComEd Energy Efficiency Program:
 - Numerous offerings with incentives for all energy saving needs
 - Incentives reduce the initial project cost and decrease the payback period
 - Custom incentives for unique projects
 - Non-energy impacts improve overall payback



Custom Offering

>> Provides incentives for complex projects

>> Retrofits, replacements and upgrades

- Install regenerative drives to efficiently power your building's elevator banks
- Procedural / operational changes for optimum energy use in building spaces
- Projects require a pre-application (Do not sign PO or buy equipment)

>> Outreach assistance to help you get started

Sensitive to help estimate potential savings and incentives

>> Savings are measured and verified

ComEd. **Energy Efficiency** Program ComEd. Energy Efficiency Program

Custom Incentive Ideas

Go beyond common retrofits and earn incentives through the ComEd[®] Energy Efficiency Program for facility and process improvements that save energy.

Custom incentives are based on actual energy savings, and options include everything from custom lighting to installing a cogeneration plant. Whether you're installing new light fixtures, adding variable speed drives (VSDs) to equipment motors or making process system enhancements, ComEd can help make your project more cost effective.

Take advantage of incentives that range from 7 to 12 cents per kWh saved depending on your project. Certain upgrades to water and wastewater treatment facilities can earn up to 21 cents per kWh saved. Measurement and verification may be required, but is typically waived for projects with incentives of \$25,000 or less. ComEd offers FREE tools to help you estimate your project's potential energy savings and incentive. It's easier than ever to turn your energy-saving ideas into reality!

Need ideas to get started? Below are completed projects from actual ComEd customers.

Project Cost: \$39,560 Incentive Received: \$22,150 Estimated Annual Cost Savings: \$22,150 Estimated Annual Cost Savings: \$22,150 Estimated Annual Cost Savings: \$22,150 Estimated Payhack Period: 0.8 years

one year!

stand-alone process chiller units with a more efficient

150-ton central chiller system. In addition to the

incentives they received from ComEd, they saved

more than 180,000 kWh with a payback of less than

Elevator Regenerative Drive

Project Cost: \$141,758 Incentive Received: \$29,556 Estimated Annual Energy Saving 246,302 kWh Estimated Annual Cost Savings: \$22,044 Estimated Payback Period: 5.1 years



This customer installed regenerative drives to power their nine-story building's six elevator banks efficiently. Instead of wasting the energy generated by an elevator's counterbalance and dispersing it into heat within the machine room, regenerative drives store and use that energy later. That translates to lower cooling, operating and maintenance costs.



CASE STUDY

Challenge #5

Operating with outdated Energy Management Systems

Solutions through the ComEd Energy Efficiency Program:

- BAS and EMS upgrade or replacement
 - There's an incentive for that!
- 55 E. Monroe is a great example



Energy Management Solutions

>> Refine your HVAC and lighting system usage with an energy management system

- Review system settings periodically to check accuracy over time
- Energy savings through low cost measures
- Incentives for programmable thermostats are also available
- Incentives range between \$0.10 and \$0.35 per ft² of conditioned space depending on existing equipment and project scope



Get Started Today!

CRE Inquiries and Consultation

Brian Keller, CEM, LEED AP BD+C[®] Outreach Professional <u>briankeller@waypoint-energy.com</u> (630) 484-6507

RCx Inquiries and Consultation

Wayne Bollinger, CEM, LEED GA Outreach Professional <u>wbollinger@nexant.com</u> (630) 480-8146

Schedule a Facility Assessment ComEd.com/FacilityAssessment Visit Us Online ComEd.com/BusinessSavings

Send Us an Email BusinessEE@ComEd.com

Get Started with Business Energy Analyzer ComEd.com/BEA

Access the Energy Usage Data Tool EnergyUsageData.com



ComEd. **Energy Efficiency** Program

Thank You!

Terms and conditions apply. Actual savings will vary by customer's energy usage and rate. © Commonwealth Edison Company, 2020 The ComEd Energy Efficiency Program is funded in compliance with state law. With state law.