



Energy Efficiency

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ICCCFO Conference – Empowering Community Colleges Through Energy Efficiency: A Path to Sustainability and Cost Savings

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Agenda

- Introductions
- Intro to Energy Efficiency and Why it Matters
- Energy Efficiency Solutions for Your Campus
- The ComEd Energy Efficiency Program Overview
- Next Steps Plus Q&A



What is Energy Efficiency and Why Does it Matter for Your Institution?

Energy efficiency refers to products or systems using less energy to do the same or better job than conventional products or systems.

Source: U.S Environmental Protection Agency

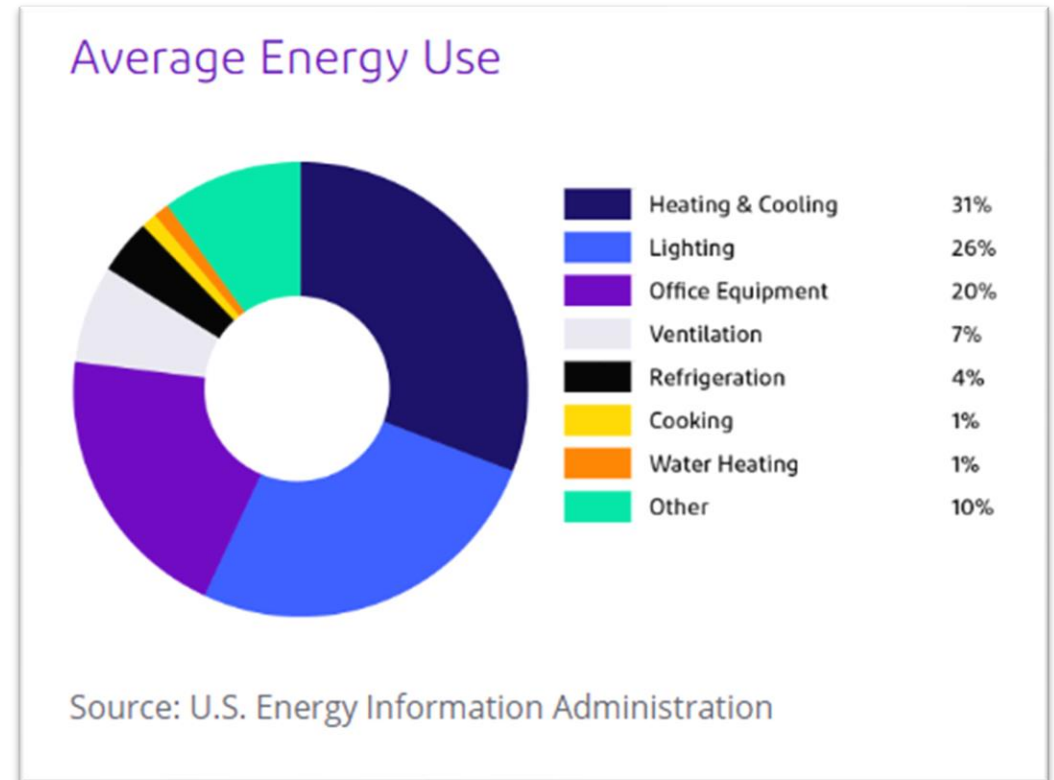
Investing in energy efficiency on your campus can lead to:

- Cost Savings
 - Lower energy bills and reduce operating costs
- Increased safety and comfort on campus
 - Upgrade indoor/outdoor lighting
 - Upgrade facility heating and cooling
- Reduced carbon footprint
 - Align with campus-wide sustainability initiatives



Common Energy- Efficiency Project Hurdles for Your Institution

- Not knowing where to start
- Lack of funding and/or high upfront costs
- Difficulty navigating utility program/offering details
- Uncertainty with project savings
- Project timelines and ROI
- Lack of staff time, bandwidth, and/or expertise
- Internal decision-making process
- Prioritizing energy efficiency amongst competing needs



Energy Efficiency Solutions for Your Institution

Energy Assessments/Audits

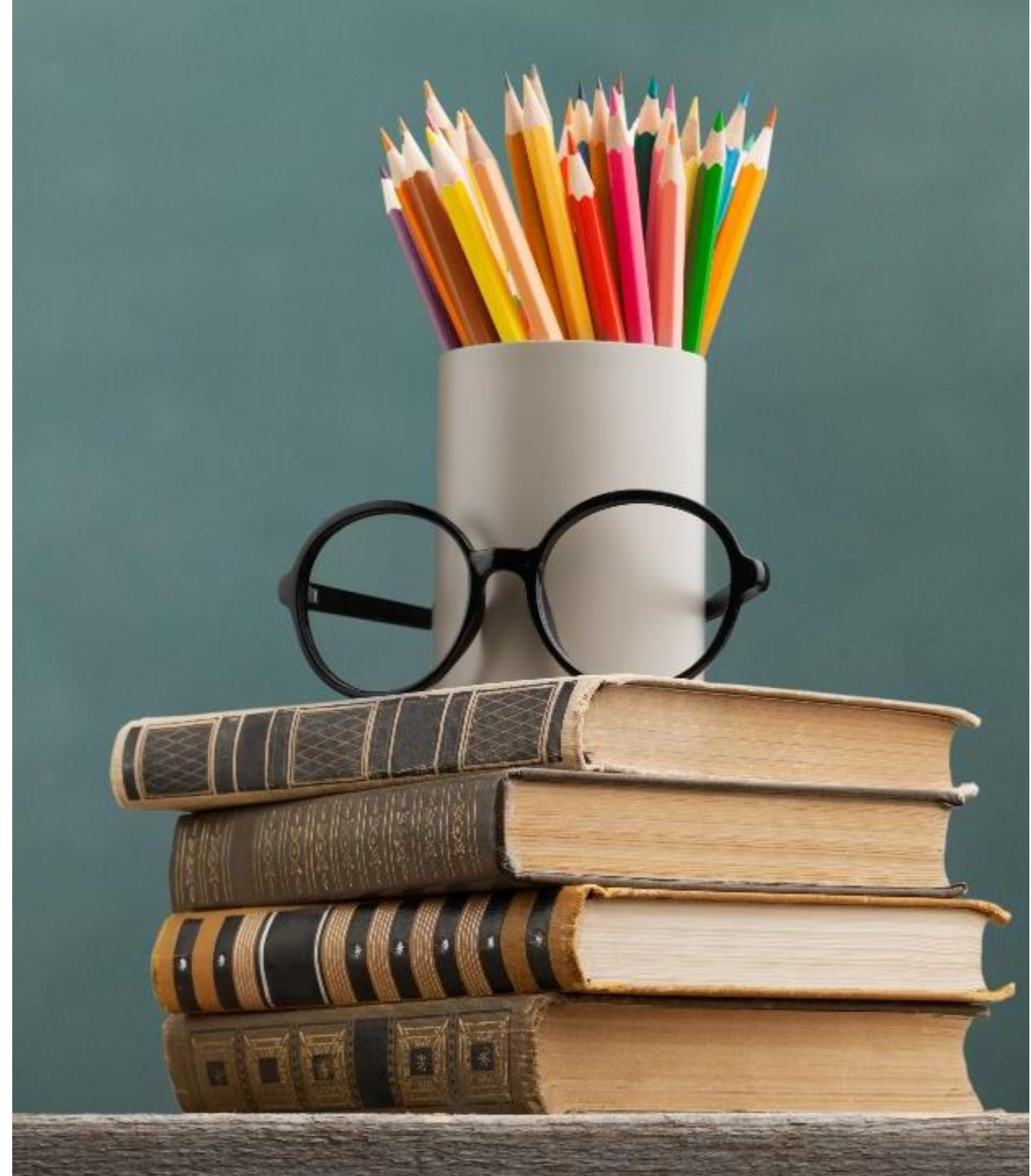
- Identify areas where energy efficiency opportunities exist and provide recommendations for reducing energy consumption and costs

State and Federal Grants

- Identify essential funding that can significantly offset the costs associated with implementing energy-efficient technologies and practices
- Savings can be reallocated towards enhancing and improving overall student services

Utility Incentive Programs

- Many utility companies in Illinois offer incentives and rebates to institutions that undertake energy efficiency projects. These programs are designed to encourage the adoption of energy-saving measures by providing financial support for audits, retrofits, and installations



ComEd Energy Efficiency Program Overview

Energy Efficiency is Funded by ComEd Customers!

- ComEd customers fund the program with charge on every monthly bill
- Rate is based on customer kWh usage
- \$9 billion in energy costs saved since 2008
- Nearly 70 billion pounds of carbon emissions reduced



Environmental Cost Recovery Adj	371 kWh X 0.00052	\$0.19
Renewable Portfolio Standard	371 kWh X 0.00502	\$1.86
Zero Emission Standard	371 kWh X 0.00195	\$0.72
Carbon-Free Energy Resource Adj	371 kWh X 0.01092	\$4.06
Energy Efficiency Programs	371 kWh X 0.00461	\$1.71
Energy Transition Assistance	371 kWh X 0.00072	\$0.27

Rates will vary based on customer demand category and monthly kWh usage. Customers should ask their Account Manager or Energy Efficiency point of contact for their specific cost estimates.

ComEd Energy Efficiency Program - How Can We Help?



Facility Assessments

- Find areas of opportunity to reduce energy use
- It's FREE!
- Whole facilities
- Virtual walk-thru option
- Fleet Electrification Assessments



Incentives

- Financial benefit to help reduce the cost of your project
- Customer covers project costs, then receives incentive to help offset those costs (may authorize payment to service provider/EESP)
- Often, the more energy you save, the more you earn in incentives



Instant Discounts

Point-of-sale discounts on:

- Lighting
- HVAC
- High efficiency fork truck battery chargers
- Lithium-ion electric fork trucks



Optimization

- Whole-building retro-commissioning
- Rooftop HVAC units
- Refrigeration and cooling
- Compressed air
- Strategic Energy Management (SEM)

Facility Assessments

A Great First Step for Any Facility

Facility assessments identify energy-savings opportunities along with their simple payback on investment

Assessment benefits:

- FREE to customers
- Performed by an ComEd Energy Engineer
- Provides detailed report with estimated energy savings
- Identifies capital energy efficiency opportunities as well as low-cost / no-cost operational measures
- Report serves as helpful road map for future planning and cadence of those applicable opportunities
- Virtual facility assessments also available

Fleet Electrification Assessments are also available to identify vehicles and charging infrastructure to meet your fleet's needs.

Standard and Instant Discounts Incentives

Financial Benefit by Simple Payback

Estimated <2 Year Payback Opportunities

Measure	Annual Cost Savings	Project Cost	Incentive	Simple Payback (Years)
Replace Metal Halide Lighting	\$4,500	\$17,200	\$9,700	1.7
Subtotal	\$4,500	\$17,200	\$9,700	1.7

Estimated 2-5 Year Payback Opportunities

Measure	Annual Cost Savings	Project Cost	Incentive	Simple Payback (Years)
Replace Chiller	\$21,300	\$158,200	\$106,500	2.4
Subtotal	\$21,300	\$158,200	\$106,500	2.4

Estimated >5 Year Payback Opportunities

Measure	Annual Cost Savings	Project Cost	Incentive	Simple Payback (Years)
Install Building Energy Management System	\$177,900	\$1,315,800	\$303,600	5.7
Replace T8 Lighting	\$40,300	\$400,000	\$117,500	7.0
Retrofit HVAC Fans	\$2,400	\$27,000	\$4,500	9.4
Retrofit Existing Chiller	\$15,000	\$500,000	\$97,000	10.1

Standard Offering

Standard Offering Provides Incentives on a Per-Unit or Per-Fixture Basis

- Incentives for upgrades
- Most projects require a pre-application
- Most projects require the use of an Illinois Commerce Commission (ICC) certified Service Provider

Measure Categories include:

- Indoor/Outdoor Lighting Upgrades
- Networked Indoor/Outdoor Lighting Controls
- HVAC, including Variable Speed Drives
- Energy Management Systems, and more



Standard Offering - Additional Project Incentives

Additional Incentive	Percent	Pre-Application Submittal Timeframe	Final Application Submittal Timeframe	Eligibility
Fall Pre-Application Promotion	20%	Submit now through January 31, 2025	By October 31, 2025	Open to all customers that qualify for the Standard offering.*
Additional Incentive for Early Final Applications	40%	Any time	By November 15, 2024	Open to all customers that qualify for the Standard offering.*
<u>15% Additional Incentive for Select Communities</u>	15%	N/A	By October 31, 2024	Applies to customers in Select Communities and Zip Codes , subject to pre-approval.*
Made in Illinois	10%	Any time	By December 31, 2024	All private and public customers installing equipment that is at least 50% manufactured or assembled in Illinois.*

****All promotions can be stacked***

LED Fixtures and Networked Lighting Controls

Energy-efficient LED lighting uses about 90 percent less energy and last about 35-50 times longer than incandescent lighting, reducing maintenance costs. Lights can go from dark to full brightness instantly, for improved safety and security across your campus. You can also upgrade your lighting fixtures to include control strategies.

- Zoning / Scheduling
 - Link lighting to operate on the same schedule and use similar occupancy/dimming setpoints
- Dimming
 - Provide unnoticeable dimming functionality to reduce energy use
- Occupancy Sensors
 - With an infrared or ultrasonic motion sensor, your lights are activated only when occupants are present



Heating and Cooling Improvements

Heating, ventilation and cooling typically account for more than a third of all energy use on campus. Upgrades to HVAC systems can improve comfort in classrooms. Consider reducing operating costs by:

- Tuning-up, optimizing or replacing your split system or rooftop units
- Improving your current system's performance with variable speed drives (VSD)
- Replacing existing chillers with high-efficiency units

For more information visit [ComEd.com/HVAC](https://www.comed.com/HVAC)



Energy Management Systems

Refine Your HVAC and Lighting System Usage with an Energy Management System (EMS)

You can monitor equipment, schedule changes, customize programming and receive usage alerts, all to optimize your HVAC and lighting for comfort, energy efficiency and savings.

- Review system settings periodically to check accuracy over time
- Earn incentives for upgrades to existing EMS systems including non-programmable pneumatic and electronic thermostats, programmable thermostats and more
- If you have an existing EMS in your facility that is older than 15 years, it may be eligible for a replacement system



Case Study: South Suburban College

South Suburban College implemented indoor and outdoor LED lighting retrofits with occupancy sensors to their facilities, as well as installed new LED lighting and control systems in their campus parking lots and gymnasium.

Project Snapshot

- **Total project cost:** \$73,500
- **ComEd Energy Efficiency Program incentive:** \$41,400
- **Project cost after incentive:** \$32,000
- **Estimated annual electric savings cost:** \$22,900
- **Estimated payback after incentive:** 1.5 months



Custom Offering

Custom provides incentives with a defined scope and timeline that can't be addressed by other offerings, including retrofits, replacements, upgrades and more.

Measure categories include everything that is non-standard:

- Specialty/New Construction Lighting
- VFD motors > 200 Hp
- HVAC Upgrades
- IT Equipment Upgrades, and more

For additional program information, [click here.](#)

Promotion Name	Percent	Pre-Application Submittal Timeframe	Final Application Submittal Timeframe	Eligibility
15% for Select Communities	15%	Before December 31, 2024	By December 31, 2024	All customers in Select Communities and Zip Codes
Final App Bonus	15% (capped at project cost)	Any time	Between September 9, 2024 and December 13, 2024	Open to all customers that qualify for the Custom offering. Can be stacked with the 15% Incentive for Select Communities

Privileged and Confidential



Instant Discounts

Instant price reduction provided by the distributor – no incentive applications necessary.

- Incentives only available to customers via Participating Distributors (over 110 participating distributors)
- Includes point-of-sale discounts on qualified lighting, HVAC, lithium-ion electric fork trucks, and high efficiency battery charger products
- Download the program guides from [ComEd.com/BizLights](https://www.comed.com/BizLights) and [ComEd.com/BizHVAC](https://www.comed.com/BizHVAC)



Strategic Energy Management (SEM)

SEM is a holistic program that focuses on behavioral approaches to energy management and operational measures.

- Customers work with an Energy Coach to manage their energy management practices and identify/implement energy efficiency opportunities
- Customers participate in an energy scan to identify projects, and the SEM team builds an energy model to measure and track energy savings over the program period
- Energy savings are based on **operational** and **behavior** changes
 - Increased savings incentive structure up to \$0.06/kWh and \$2,000 for participant engagement

Program website: ComEd.com/SEM



Retro-Commissioning (RCx)

Engineering study of building systems to identify low-cost improvements to building operations with simple paybacks of <18 months

- Study-based approach:
 - Fully funded engineering
 - Expected savings 5-10% of annual usage
 - Calibrate and optimize building systems such as HVAC and lighting
 - Three types of studies:
 - RCx Flex
 - Monitoring-Based Commissioning (MBCx)
 - Virtual Commissioning (VCx)

RCx offering website: [ComEd.com/RCx](https://www.comed.com/RCx)



RCx Options: Solutions for Every Building

Offering Name	Target Building Size	Building Annual Energy Usage	Incentive	Duration
Retro-Commissioning (RCx) Flex	Any	>0.5 GWh	Fully-funded study covering the costs of engineering services – \$0.03/kWh implementation Incentive	6-15 months
Monitoring-Based Commissioning (MBCx)	Greater than 150,000 ft ²	>3 GWh	Fully-funded study covering the costs of monitoring software and engineering services – \$0.03/kWh implementation Incentive	18+ months
Virtual Commissioning (VCx)	Any, but generally target smaller businesses	Any	Fully-funded remote analysis of energy usage and technical assistance	3 months

New Construction

Provides technical assistance and incentives for new construction, addition/ expansion or major renovation

- For projects to qualify, ComEd must be engaged during the design phase and prior to designs being submitted for permits
- Projects should be over 5,000 square feet
- Design must exceed current Illinois Energy Conservation Code requirements
- The building must be a commercial building as defined by state and local building codes
- Must implement significant beyond-code energy conservation measures for **at least two** of these primary building systems:
 - Lighting
 - Primary HVAC
 - Envelope
 - Qualified refrigeration

Program website: [ComEd.com/NewConstruction](https://www.comed.com/NewConstruction)

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Building Operator Certification

A nationally recognized training and certification program focused on energy-efficient building operations and preventative maintenance procedures

- Facilities with BOC graduates are proven to save energy, have lower energy bills, and offer improved comfort for occupants
- ComEd customers who earn the Training Certificate of Completion will receive a **full reimbursement** of the **\$1,400** course tuition
- Go to BOCCentral.org/ComEd for information on Illinois tuition and training schedules



Other Clean Energy Solutions Offerings

Beneficial Electrification: EV Rebates and Customer Tools

Considering electrifying your campus fleet or adding EV charging stations for your faculty and students?

The ComEd Business and Public Sector EV Program provides customers with a simple and cost-effective path to fleet electrification—including rebates for purchasing EV's and installing charging infrastructure.

- For additional information visit [ComEd.com/CleanEnergy](https://www.comed.com/CleanEnergy)
- Explore the [Commercial EV toolkit](#)
- Generate a customized Fuel Cost Savings and Carbon Reduction estimate when considering Fleet Electrification with the [ComEd Fleet Electrification Calculator](#)
- Contact your LCS representative or the EV team at EVsmart@ComEd.com
- [ComEd EV Brochure](#)



Solar Incentives and Customer Tools

Federal and state incentives are offered to ComEd customers who choose to go solar:

- For additional information visit [ComEd.com/Solar](https://www.comed.com/solar)
- To learn about any incentives your business may qualify for, launch the [solar calculator](#)
- Contact your LCS representative or the Green Power Connection team at GPCTeam@ComEd.com or (800) 825-5436
- Additional information can be found here:
 - [Getting Started With Solar](#)
 - [Guide to Going Solar for Businesses](#)



ComEd Resources



**For more information,
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- Visit us online at [ComEd.com/BusinessSavings](https://www.comed.com/BusinessSavings) or send us an email at BusinessEE@ComEd.com
- Request a FREE Facility Assessment
[ComEd.com/FacilityAssessment](https://www.comed.com/FacilityAssessment)
- Get Started With Business Energy Analyzer, a free online tool to help you manage energy use
[ComEd.com/BEA](https://www.comed.com/BEA)
- Learn What Qualifies for Point-of-Sale Instant Discounts
[ComEd.com/InstantDiscounts](https://www.comed.com/InstantDiscounts)
- Enroll in the ComEd Energy Usage Data System
[ComEd.com/EnergyUsageData](https://www.comed.com/EnergyUsageData)
- Earn Financial Rewards for Reducing Electricity Use During Peak Usage Periods and [Enroll In Smart Returns Voluntary Load Reduction \(VLR\) Program](#)



Energy Efficiency
PROGRAM

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Wednesday, Oct. 16, 2024



ENERGY EFFICIENCY
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Register at
AmerenIllinoisSavings.com/Symposium

Q&A



Energy Efficiency

Thank you