



COMMERCIAL ASSOCIATION OF REALTORS® WISCONSIN (CARW) July 11, 2023



AGENDA



1. FOCUS ON ENERGY®
Introduction
2. Business Offerings
3. Business New Construction
4. Multifamily Case Study

Presenters:

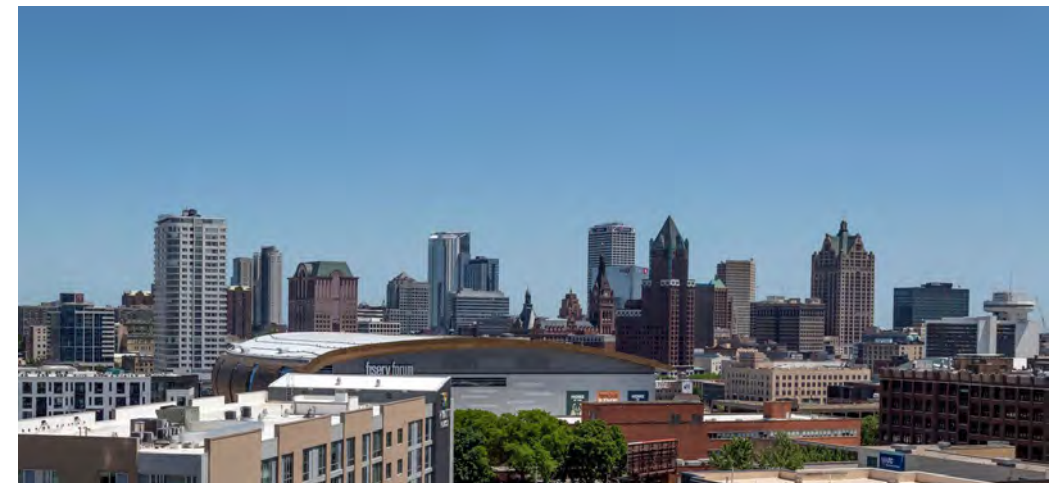
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FOCUS ON ENERGY



Wisconsin utilities' statewide energy efficiency and renewable energy program

- Helps Wisconsin residents and businesses manage rising energy costs
- Provides education, information, and incentives
- Promotes in-state economic development
- Protects our environment
- Controls Wisconsin's growing demand for electricity and natural gas



MISSION STATEMENT



Focus on Energy empowers the people and businesses of Wisconsin to make smart energy decisions with enduring economic benefits.

FOCUS BY THE NUMBERS



Served more than 1.1 million residential participants



Served more than 6,000 business participants



Achieved \$4+ in benefits for every \$1 invested



Wisconsin's official resource for

smart energy solutions

Works with residents and businesses to complete

smart energy projects

Provides rebates, technical assistance, and

smart energy resources

WE SERVE ALL BUSINESS TYPES

Focus helps make energy-efficient improvements more affordable and achievable



SMART ENERGY INCENTIVES

Energy Efficiency Technologies

- Refrigeration
- Process Systems
- HVAC
- Lighting

Renewable Energy Technologies

- Solar Electric
- Solar Thermal
- Biomass & Biogas
- Wind

SMART ENERGY SERVICES

Our services help single-building and large portfolio holders make energy-efficient decisions to save money and energy

- Optimizing building energy use
- Assessing energy-using systems
- Retrocommissioning
- Energy management services
- New construction and renovations design assistance

WE WORK WITH WISCONSIN RESIDENTS

Focus offers homeowners and renters a wide range of rebates and services to support energy efficiency projects



SMART ENERGY REBATES

- FREE Energy Saving Packs
- Heating & Cooling
- Insulation & Air Sealing
- New Homes
- Solar Energy
- Water Heating
- Smart Thermostats

INCOME-QUALIFIED

- Free products available through local food bank and nonprofit partners
- Higher rebates available for HVAC, insulation, air sealing upgrades

2023 BUSINESS PROGRAMS



focus on energy[®]

Partnering with Wisconsin utilities



COMMERCIAL REAL ESTATE



- Energy costs cannot be avoided...but it's possible to control (and reduce) them!
- Taking steps to be more energy efficient does more than just save money:
 - Benefits occupant health and safety
 - Increases a building's market value
 - Supports sustainability efforts
 - Reduces future risk to energy price changes



Including economic impacts, Focus on Energy generated

\$4.44 in benefits for every \$1.00 invested

in its 2019-2022 portfolio.



Residents and businesses that participated in Focus on Energy from 2019 to 2022

will save \$3.5 billion on their energy bills

over the lifetime of their installed measures.

BUSINESS OVERVIEW

Focus on Energy supports all business types



Business Offerings:

- New Construction & Renovations
 - Design Assistance
- Equipment Replacement
 - Prescriptive Rebates
- Operations & Maintenance
 - Building Optimization and Equipment Tune-ups
- Renewables for Businesses
- Special Offerings
 - Rural Business and Propane Offerings



PRESCRIPTIVE INCENTIVES

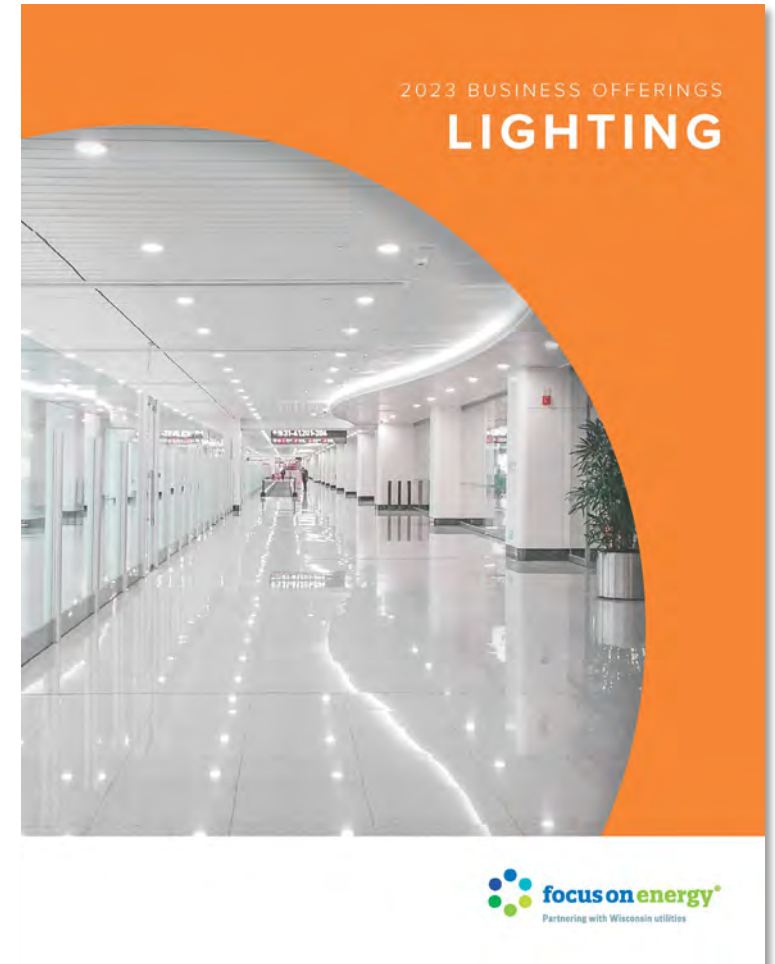


- Standard equipment retrofits
- Generally 1-for-1 replacements
- Fixed incentive rates
- Pre-approval not required unless specified
- Incentives and requirements found in prescriptive incentive catalogs

LIGHTING INCENTIVES



- On average, lighting represents 8% of energy usage at commercial facilities¹
- Replacing interior and exterior lighting with LED can save up to 75% on lighting costs²
- LED light fixtures generally have a much higher useful life, reduced maintenance, and provide better light quality



¹ <https://www.eia.gov/consumption/commercial/data/2012/c&e/cfm/e1.php>
² <https://energy.gov/energysaver/led-lighting>

HVAC & PLUMBING INCENTIVES



- On average, heating, ventilation, and air-conditioning (HVAC) represent over 40% of energy usage at commercial facilities¹
- Energy-efficient technologies can help the average hospital save 28% on HVAC and 20% on water heating energy²
- Prescriptive incentives are available for equipment retrofits and common control strategies



¹ <https://www.eia.gov/consumption/commercial/data/2012/c&e/cfm/e1.php>

² <https://www.aceee.org/sites/default/files/publications/researchreports/a1703.pdf>

MIDSTREAM INCENTIVES



- Instant discounts provided to distributors and contractors for select equipment at the point of sale
- Equipment must be purchased through a participating Trade Ally
- Incentives available for:
 - Commercial kitchen equipment
 - Electric heat pump water heaters
 - Gas tankless water heaters
 - High-performance circulator pumps
 - Commercial-grade water heaters
 - Kitchen hood ventilation controls
 - Commercial hand dryers

RETROCOMMISSIONING



- Optimize performance and efficiency of existing system
- Work with a Registered Service Provider to complete an audit of the facility
- Select energy-saving measures to implement
- Focus on Energy provides an incentive for completing the audit and implementing selected measures



OPERATIONS & MAINTENANCE



- Improving the bottom line depends on equipment and building operations running smoothly
- Energy efficiency saves energy and reduces energy costs
- Tune up a specific piece of equipment or complete a comprehensive review of your building's operations:
 - Building Optimization
 - Equipment Tune-ups & Assessments



SPECIAL OFFERINGS



- Developing your organization's energy-saving priorities and strategic energy goals can have powerful long-term benefits
- Financial support to reduce 2023 energy usage in your buildings
- Enrollment is competitive and limited



RENEWABLE REWARDS



- Prescriptive Solar PV incentives for commercial customers
- Customer incentive is based on system kW (DC) and limited to:
 - \$50,000 for businesses
 - \$60,000 for agricultural producers
 - \$81,000 for special sector groups including nonprofits, schools, governments, and Tribal Nations

BENEFITS FOR COMMERCIAL REAL ESTATE



- Improve the bottom line
- Gain a competitive advantage
- Improve work environments
- Promote a sustainable brand



WORKING WITH AN ENERGY ADVISOR



- Identify energy-saving opportunities
- Create, maintain, and monitor energy management plans
- Verify measure eligibility and assist with paperwork
- Complete energy-saving estimates and apply for custom incentives
- Coordinate media and PR opportunities



WORKING WITH A TRADE ALLY



- Registered Trade Allies provide additional support
- Familiar with qualifying equipment incentives
- Assist with paperwork
- Find a Trade Ally tool at focusonenergy.com/trade-allies

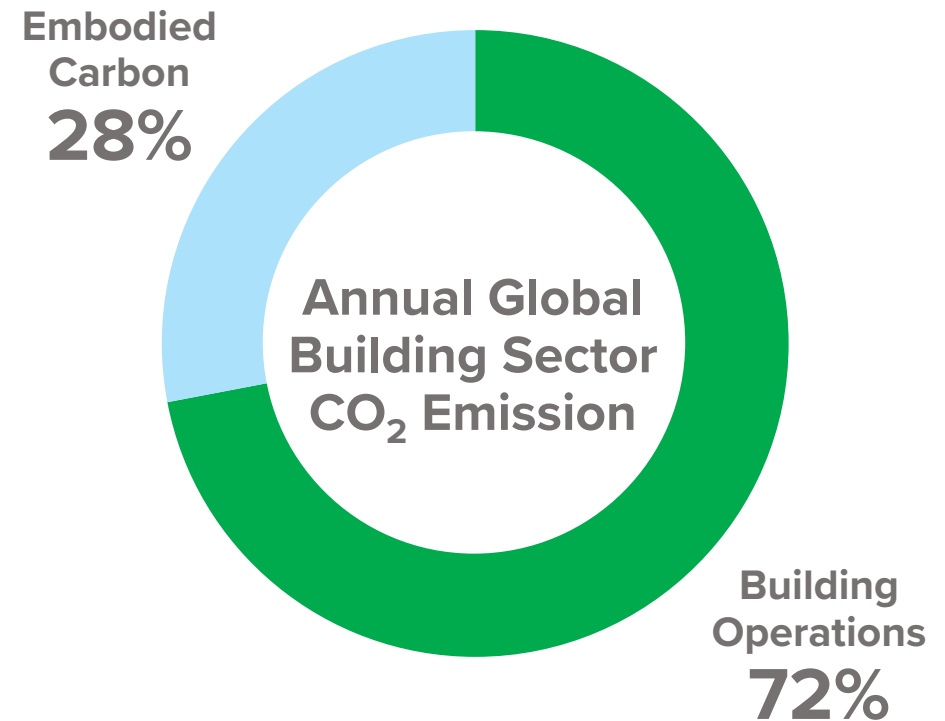
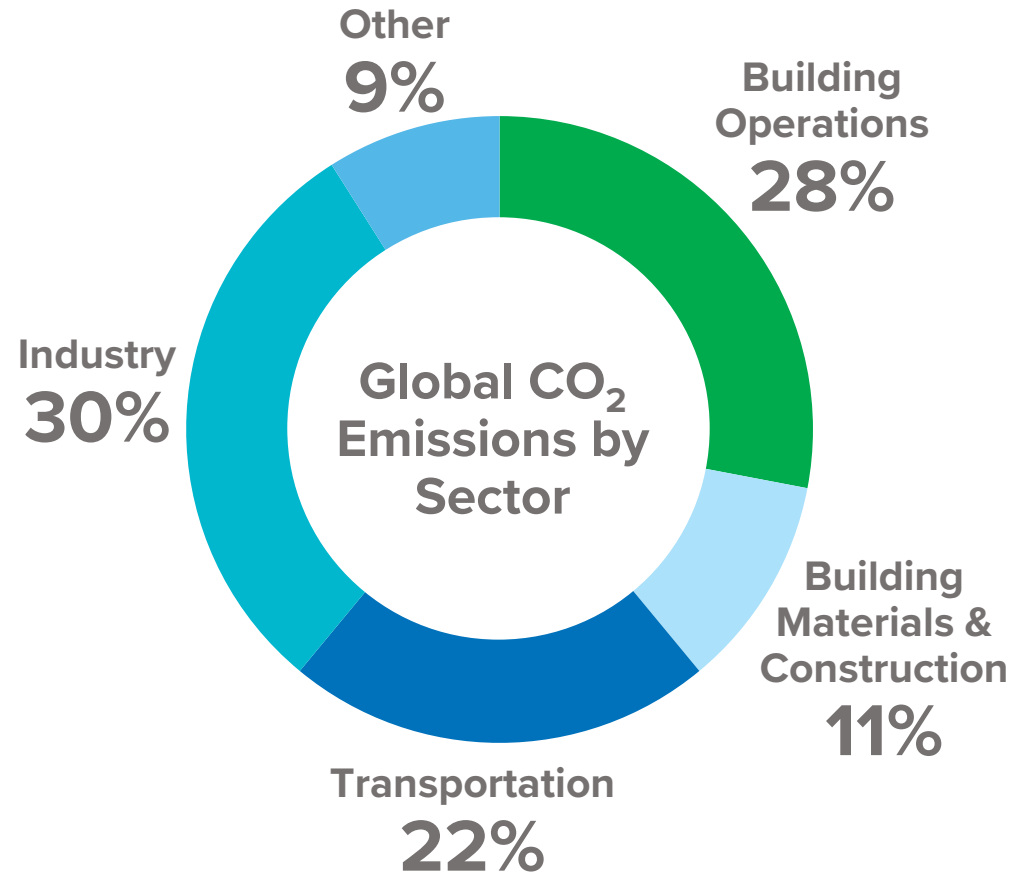
2023 BUSINESS NEW CONSTRUCTION



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Partnering with Wisconsin utilities

ENERGY EFFICIENCY KEY TO BUILDINGS' CARBON EMISSIONS



Source: Architecture 2030, Data Sources: UN Environment Global Status Report 2017; EIA International Energy Outlook 2017

Source: Architecture 2030, EPA International Energy Outlook

WHOLE-BUILDING OFFERINGS



- Energy Design Assistance (EDA) \$\$\$
 - Multiple design options—each progressively more efficient
 - Maximize energy efficiency opportunities while balancing financial considerations
- Energy Design Review (EDR) \$\$
 - Projects further along in the design phase can participate in an abridged process
- Product Equipment and Performance (PEP) \$
 - Limited to multifamily buildings
 - Simplified whole-building analysis

WHOLE-BUILDING OFFERINGS



Project is considered new construction when over 5,000 square feet and meets the following:

- New building: with site preparation, design, and construction
- Major renovation: change of use or adding walls
- Addition: significant extension to an existing facility
- Multifamily: four or more units



ENERGY DESIGN ASSISTANCE WHOLE-BUILDING ANALYSIS



- Initial assessment via Focus on Energy's New Construction Online Tool
- Free whole-building energy analysis through energy modeling
- Customized for building type
- Timely results that can keep pace with design schedule
- Building owner incentive calculated based on the energy savings of the entire facility plus a design team incentive



NEW CONSTRUCTION ONLINE TOOL

- Enrollment made easy: focusonenergync.com

Participants in FOCUS ON ENERGY® can earn anywhere from a few hundred to many thousands of dollars! Answer just a few simple questions and we'll:



Guide you to the nearest
incentive opportunity



Estimate energy savings
and incentives for your
particular situation



Connect you to key
resources

Let's Get Started

NEW CONSTRUCTION ENROLLMENT/APPLICATION



- Basic building information
 - Location
 - Construction type
 - Building size
 - Design and construction schedule
 - Design team contact information
- Anyone on the project team can submit the application
- Focus on Energy Terms and Conditions must be completed



GENERAL TIMELINES



PLANNING AND DESIGN	CONSTRUCTION DOCUMENTS	BIDDING/ ESTIMATING	CONSTRUCTION	MOVE-IN
Perfect timing for incentives	Fewer opportunities available		Prescriptive rebates: Business, Schools and Government, and Large Industrial PEP offering: Multifamily	Too late if beyond 60 days after occupancy
Energy Design Assistance		Energy Design Review		
Multifamily Product and Equipment Performance (PEP)				

ENERGY DESIGN ASSISTANCE (EDA) PROCESS



Application (online)	Intro Meeting (online)	Results Meeting (online)	Verification	Incentives
Follow-up by outreach representative	Initial meeting to review scope of work and goals	Implementation costs, payback periods, and incentive estimates	Bundle Requirements Document provides a guideline	Focus on Energy issues incentive
Energy modeling team assigned	Determine mechanical system options	Interactive energy goal-setting	On-site verification of strategies for selected projects	
	Energy analysis based on building characteristics	Project team selects a bundle	Verification Report	

NEW CONSTRUCTION INCENTIVES



New Construction Owner Incentives	
EDA owner incentive	\$0.075/kWh and \$0.87/therm
EDR owner incentive	\$0.06/kWh and \$0.70/therm
Payback threshold	1-year minimum

- Incentives are based on how much energy is saved compared to a baseline (ASHRAE 90.1 2013 Appendix G)
- Capped at \$300,000 per EDA or EDR project and \$400,000 per customer per calendar year for all Focus on Energy Incentives
- Focus on Energy will verify net savings impact of all measures prior to issuing an incentive payment

DESIGN TEAM INCENTIVE



- EDA participation results in an incentive paid to the design team

Energy Analysis	Program Provided	Design Team Completed
Incentive	\$0.0075/kWh & \$0.035/therm	\$0.01/kWh & \$0.05/therm

- Design Team incentive is capped at \$10,000
- Design Team Completed incentive is capped at \$15,000

PRODUCT AND EQUIPMENT PERFORMANCE (PEP)



- New multifamily building projects not participating in EDA or EDR can take advantage of PEP

Base Incentive Structure	Good	Better	Best
Multifamily with conditioned garage	\$0.03/ft ²	\$0.11/ft ²	\$0.17/ft ²
Multifamily, no conditioned garage	\$0.03/ft ²	\$0.08/ft ²	\$0.15/ft ²

Advanced HVAC system	Bonus incentive
Variable refrigerant flow	\$0.04/ft ²
Ground source heat pumps	\$0.17/ft ²

- PEP workbook available at [focusonenergy.com/business/whole-building](https://www.focusonenergy.com/business/whole-building)

SOLAR READY BUILDINGS



- \$2,500 to offset the additional costs of modifying building plans to accommodate a future roof-mounted solar system
- Customers participating in the EDA or EDR offering are eligible



NEW CONSTRUCTION MULTIFAMILY CASE STUDY



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Partnering with Wisconsin utilities



MULTIFAMILY DEVELOPMENT



- Focus on Energy has supported more than 100 multifamily new construction projects, helping Wisconsin building owners save over \$6.8 million in annual energy costs



Average participant savings
equate to renting an additional
74 units every year*

**based on U.S. Census Average Wisconsin monthly rent of \$867*

MULTIFAMILY DEVELOPMENT



NET INCREMENTAL COST	\$185,825	\$232,280	\$278,740
ANNUAL COST SAVINGS	\$29,195	\$33,030	\$36,865
INCENTIVE	\$13,615	\$17,020	\$20,425
PAYBACK (YEARS)	6.4	7.0	7.6
		+50%	+100%
LOAN POTENTIAL	\$132,900	\$199,345	\$265,790
NET OPERATING INCOME	\$7,675	\$11,510	\$15,345

*Good building design can be the original building design.

**Costs and savings estimates are based on comparing building design to building to code. Incentive amounts will vary depending on building design selections.

CASE STUDY: LOOMIS CROSSING MULTIFAMILY GREENFIELD, WI

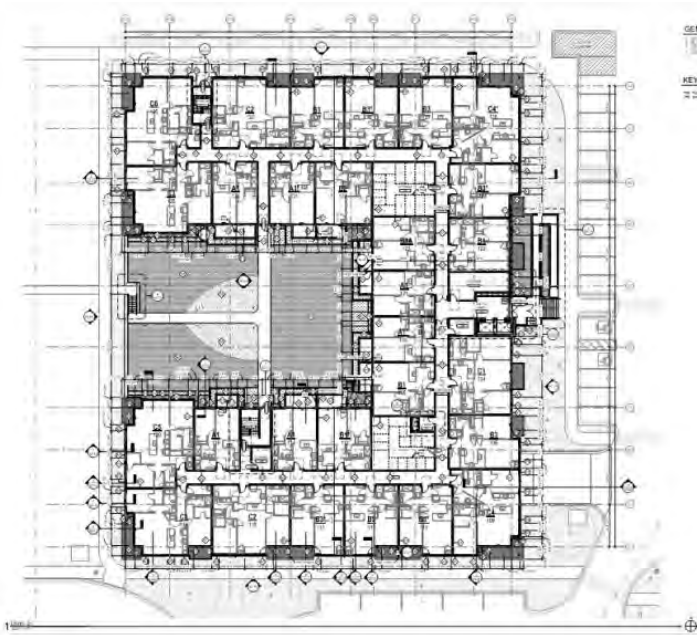


Image courtesy of Cobalt Partners LLC

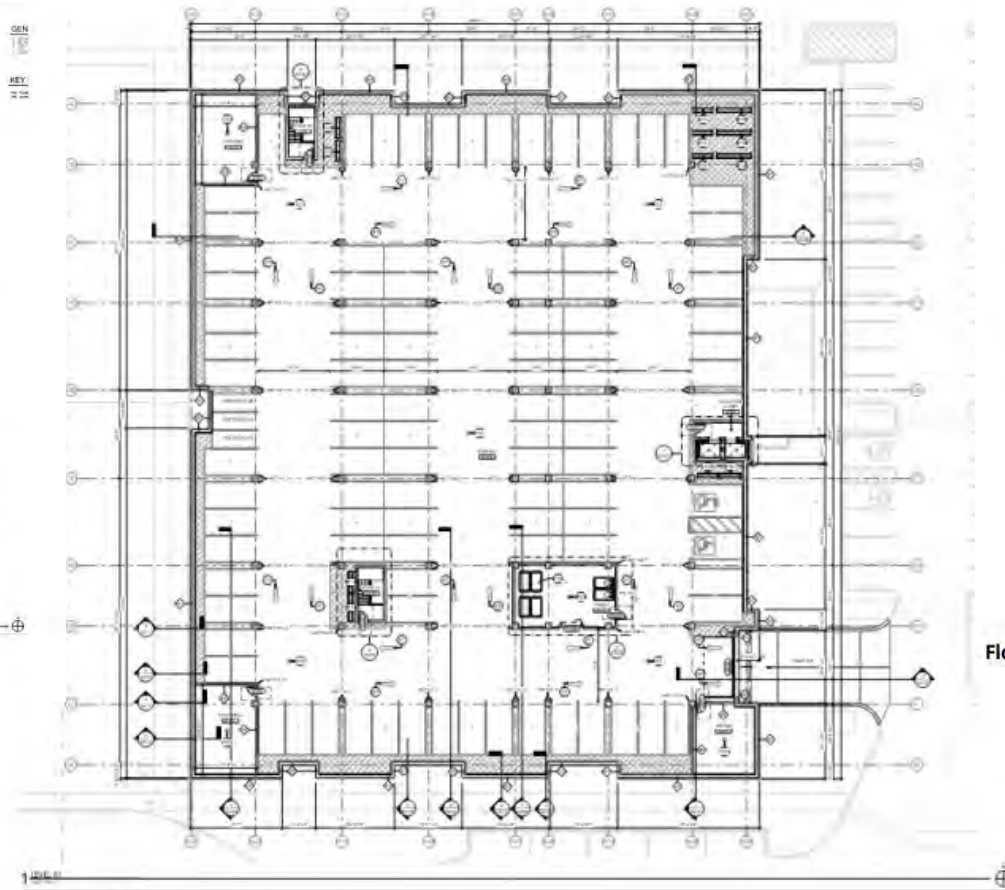
CASE STUDY: LOOMIS CROSSING MULTIFAMILY GREENFIELD, WI

- 139,323 ft² 3-story multifamily building
- Envelope: wall R-19 and roof R-30
- Glazing: high solar gain with argon fill, metal frame; unit U-factor 0.38 and SHGC 0.37
- Lighting: LED throughout, occupancy sensor control in clubhouse
- Service water heating: electric tank
- HVAC: single zone air handler with gas furnace and DX cooling
 - Garage: Single zone air handler with gas furnace and no cooling

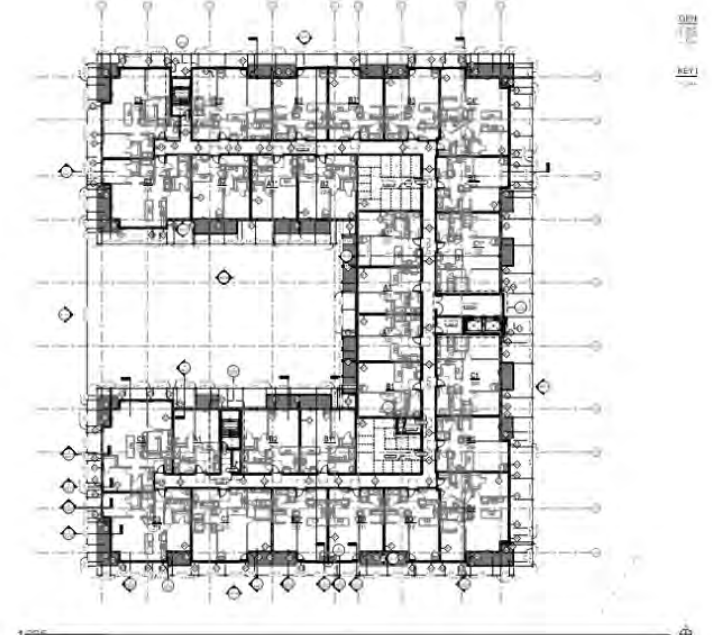
CASE STUDY: LOOMIS CROSSING MULTIFAMILY GREENFIELD, WI



Floor 1



Floor B1



Floors 2-3

CASE STUDY TERMINOLOGY



- Peak kW = customer demand for electricity is at its highest, measured in kilowatts (kW)
- Incremental Cost = the additional cost of adding an energy-saving strategy (strategies) to a project
- EUI (Energy Use Intensity) = energy per square foot per year, calculated by dividing the total energy consumed by the building in one year (measured in kBtu) by the total gross floor area of the building
- 25 EUI is ~50% better than the baseline

CASE STUDY: LOOMIS CROSSING MULTIFAMILY GREENFIELD, WI

Bundled Annual Savings

Bundle Description	Peak kW Savings	% Peak kW Savings	kWh Savings	% kWh Savings	Gas Savings (Therm)	% Gas Savings	Energy Cost Savings
Bundle 1	30	19	219,655	19	12,203	27	\$36,183
Bundle 2	33	21	245,397	21	11,916	26	\$39,131
Bundle 3	42	29	291,100	27	13,892	31	\$47,109

Energy Use Intensity

Bundle Description	Energy Use Intensity (kBTU/sf/yr)
Bundle 1	47.2
Bundle 2	46.8
Bundle 3	41.5

Simple Payback with Incentive

Bundle Description	Energy Cost Savings	Incremental First Cost	Wisconsin Electric Power Company (WE Energies) Electric Incentive	Wisconsin Electric Power Company (WE Energies) Gas Incentive	Total Incentive	Payback in Years (after incentive)
Bundle 1	\$36,183	\$108,830	\$16,474	\$10,617	\$27,091	2.3
Bundle 2	\$39,131	\$117,147	\$18,405	\$10,367	\$28,772	2.3
Bundle 3	\$47,109	\$228,615	\$21,833	\$12,086	\$33,919	4.1

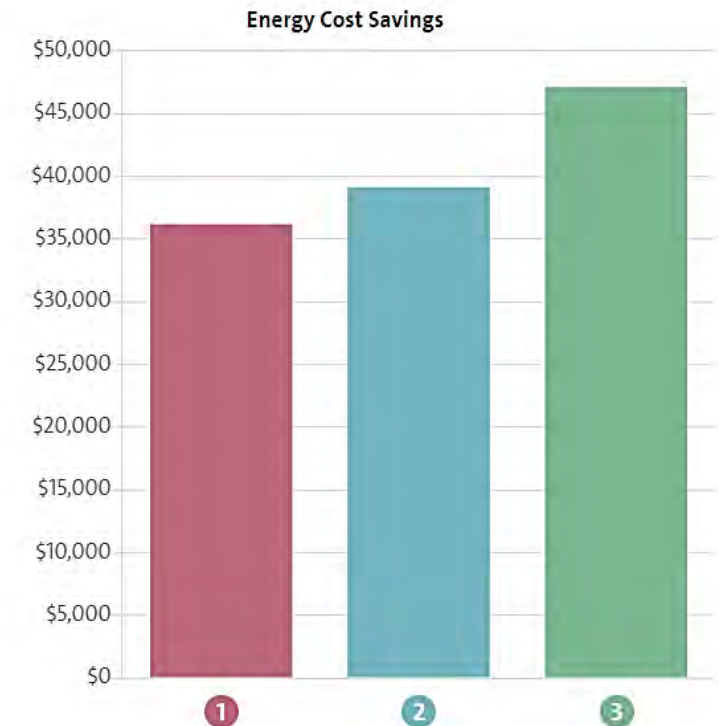
CASE STUDY: LOOMIS CROSSING MULTIFAMILY GREENFIELD, WI

A Scenario A

Calculate



	1 Bundle 1	2 Bundle 2	3 Bundle 3
Savings vs Baseline			
Energy Cost Savings	\$36,183 20%	\$39,131 21%	\$47,109 27%
Peak Electric Savings (kW)	30.3 19%	33.3 21%	41.6 29%
Electric Savings (kWh)	219,655 19%	245,397 21%	291,100 27%
Gas Savings (Therm)	12,203 27%	11,916 26%	13,892 31%
Incremental Cost	\$108,830	\$117,147	\$228,615
Projected Incentive	\$27,091	\$28,772	\$33,919
Net Incremental Cost	\$81,739	\$88,375	\$194,696
Payback with Incentive (yrs)	2.3	2.3	4.1
Energy Use Intensity (kBtu/ft ² /yr)	47.2	46.8	41.5

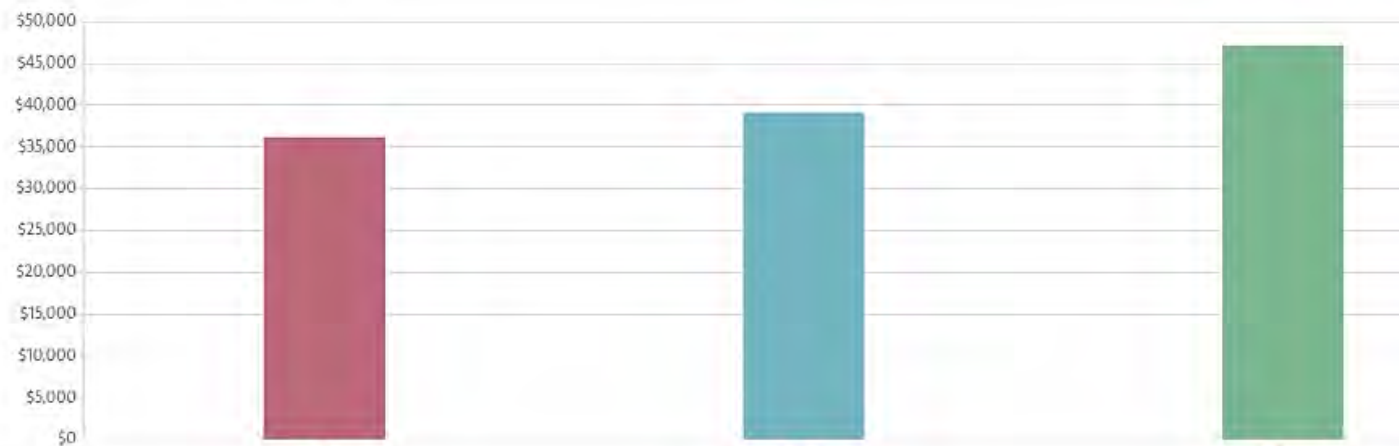


CASE STUDY

COST SAVINGS SUMMARY

Savings Summary, Energy Cost Savings ▾

Chart Type



	1 Bundle 1	2 Bundle 2	3 Bundle 3
Energy Cost Savings	\$36,183 20 %	\$39,131 21 %	\$47,109 27 %
Simple Payback (yrs)	3.0	3.0	4.9
Projected Incentive	\$27,091	\$28,772	\$33,919
Payback with Incentive (yrs)	2.3	2.3	4.1
ROI with Incentive (%)	44.3 %	44.3 %	24.2 %

CASE STUDY

ENERGY SAVINGS

Savings Summary, Energy Cost Savings ▾

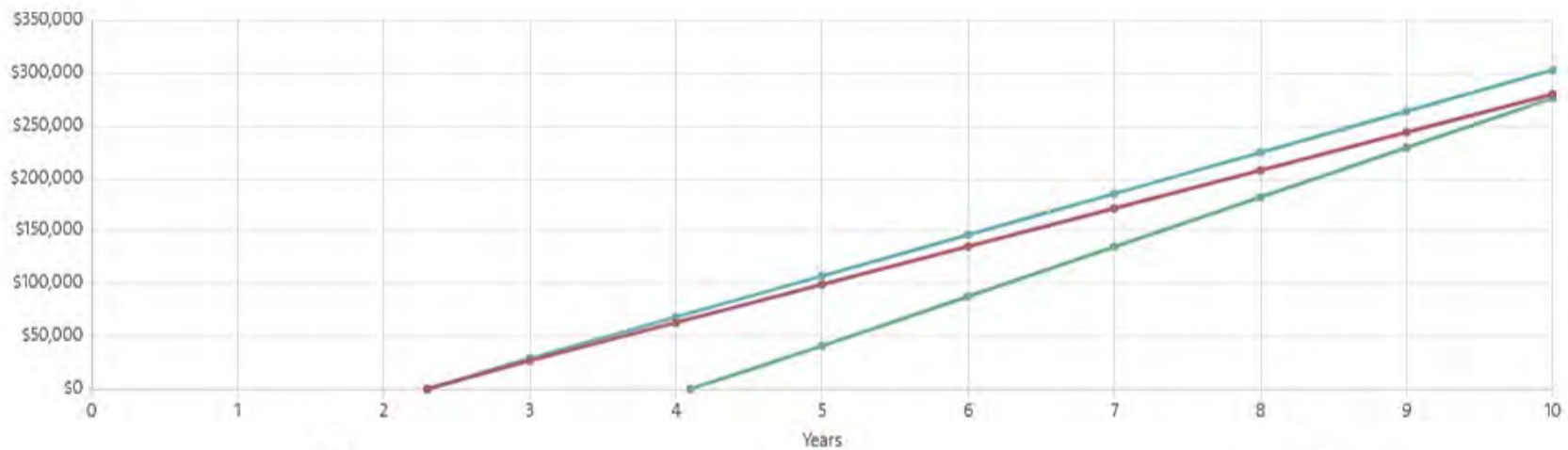
Chart Type



	1	2	3
	Bundle 1	Bundle 2	Bundle 3
Peak Electric Savings (kW)	30.3 19%	33.3 21%	41.6 29%
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Gas Savings (Therm)	12,203 27%	11,916 26%	13,892 31%
Energy Use Intensity (kBtu/ft ² /yr)	47.2	46.8	41.5
CO2e Emissions Savings (t/yr)	203.9	218.7	258.1

CASE STUDY

CUMULATIVE SAVINGS



	1 Bundle 1	2 Bundle 2	3 Bundle 3
Energy Cost Savings	\$36,183 20%	\$39,131 21%	\$47,109 27%
Net Incremental Cost	\$81,739	\$88,375	\$194,696
Payback with Incentive (yrs)	2.3	2.3	4.1

THANK YOU

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