



Strategies to Identify Low-cost Energy Improvements for Your Multifamily Property

September 17, 2020

Craig Haglund, U.S. EPA

Lexie Goldberg, Greystar Real Estate Partners

Pete Zadoretzky, Bozzuto Management Company

Speakers



Craig Haglund, *Program Manager, Commercial Buildings Program, U.S. EPA - Moderator*



Lexie Goldberg, *Director, Global Sustainability Greystar Real Estate Partners*



Peter Zadoretzky, *Vice President, Sustainability Bozzuto Management Company*

Agenda

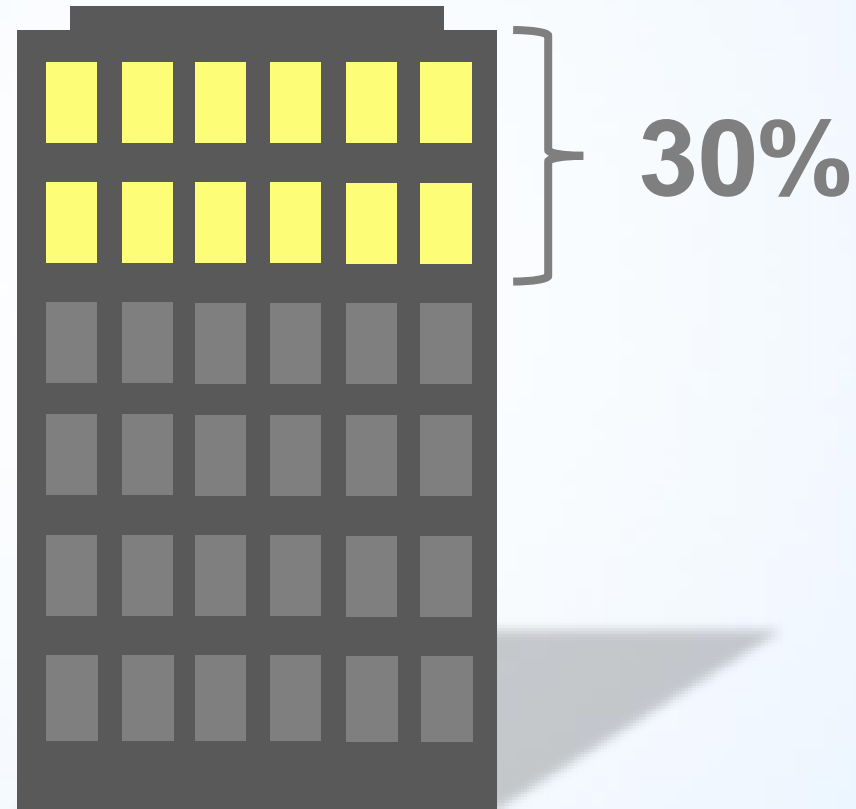
- Overview of the ENERGY STAR for Existing Multifamily Housing Program
- Lexie Goldberg, Greystar
- Pete Zadoretzky, Bozzuto Management Company
- Discussion and Audience Q&A



Overview of the ENERGY STAR for Existing Multifamily Housing Program

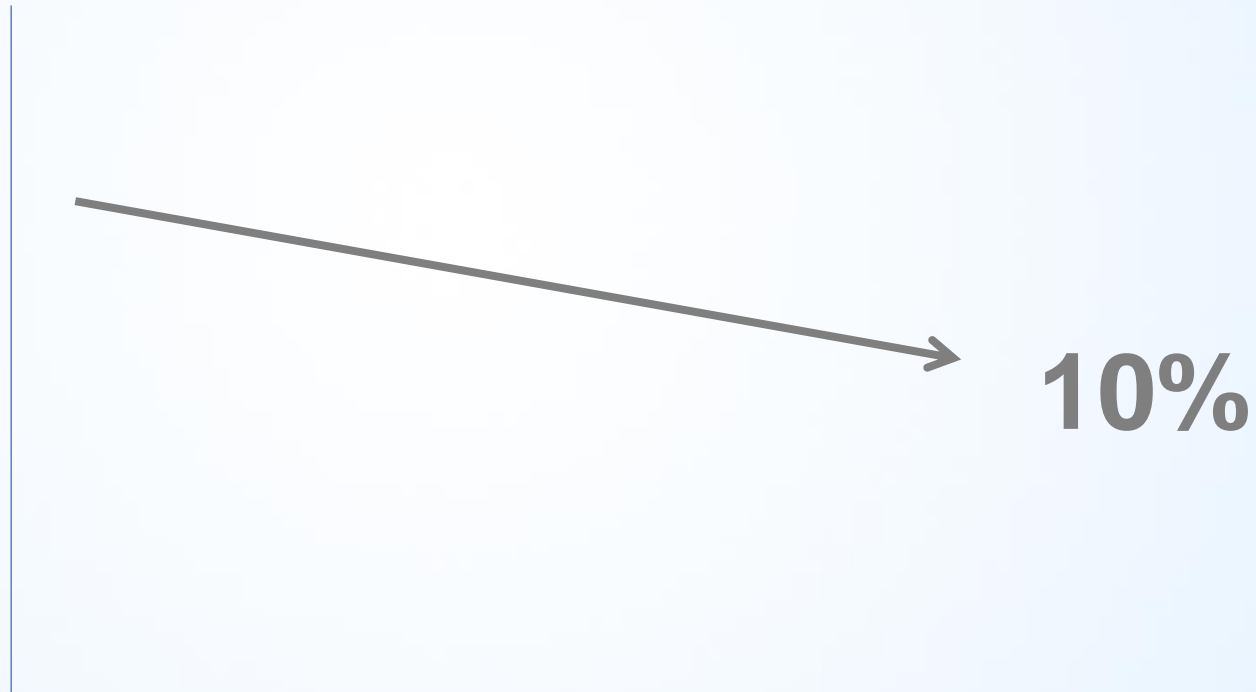
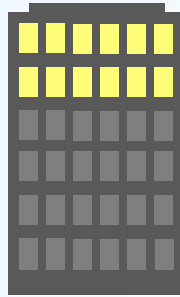
Why focus on buildings and plants?

Energy waste in commercial buildings



Why focus on buildings and plants?

Low- to no-cost reduction potential



ENERGY STAR for Buildings and Plants

Voluntary EPA program that delivers environmental benefits and financial value through superior energy efficiency.



The image is a composite of two photographs. The top photograph shows a modern building with a glass facade and a curved structure, partially obscured by green trees. The bottom photograph shows a courtyard with a paved walkway made of light-colored rectangular tiles, several wooden benches, and rectangular planters containing green plants. A semi-transparent blue banner is overlaid across the middle of the image, containing the title text in white.

Finding Low-cost Energy Improvements

Guidelines for Energy Management

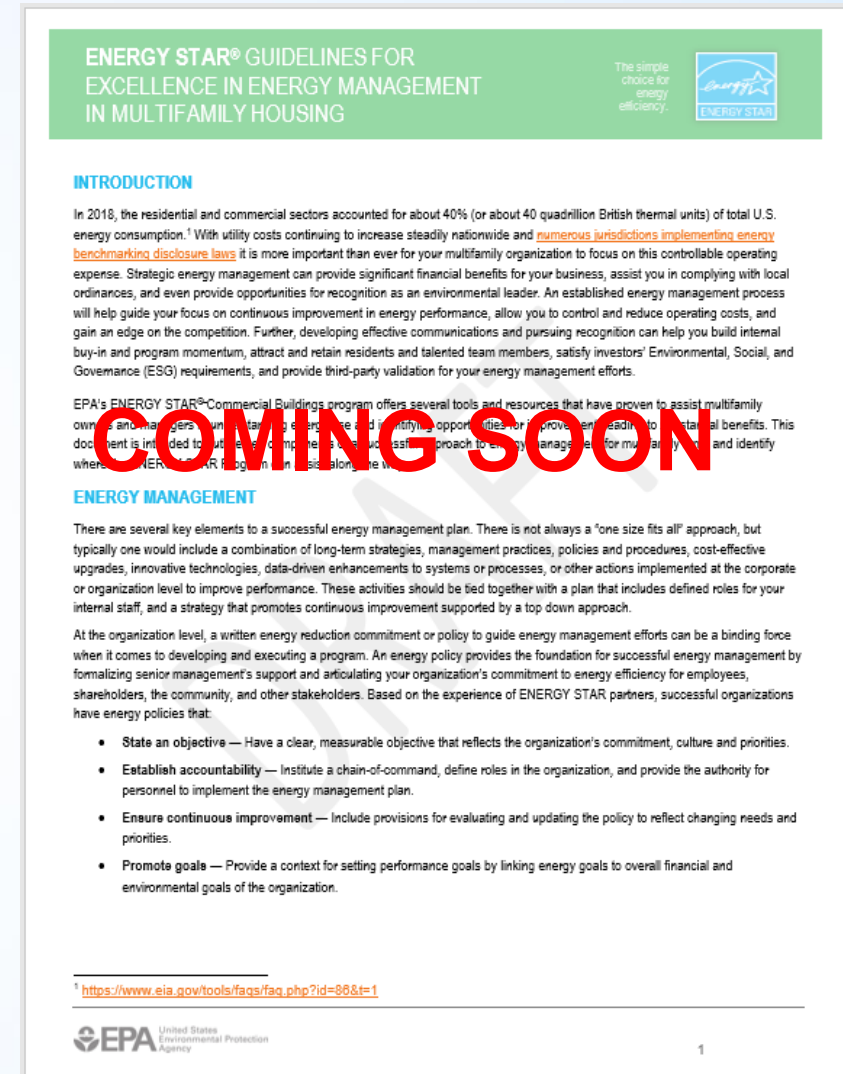
energystar.gov/guidelines



Guidelines For Excellence In Energy Management In Multifamily Housing

Coming Soon!

This resource is intended to outline key components of a successful approach to energy management for multifamily firms and identify where the ENERGY STAR Program can assist along the way.

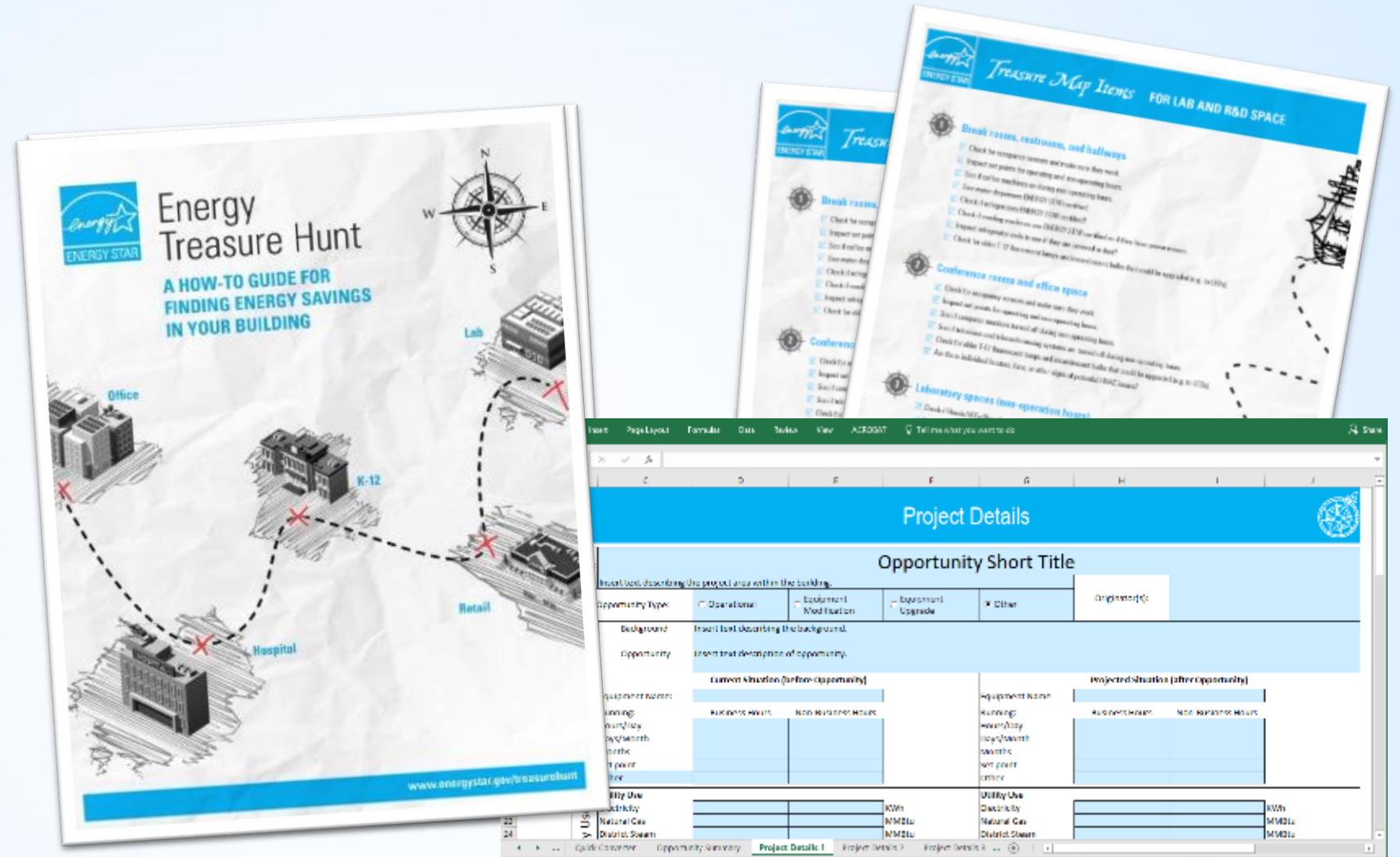


Low- and No-cost Energy-efficiency Measures

- [Operations and maintenance](#)
- [Lighting](#)
- [Plug Loads](#)
- [Heating and cooling](#)
- [Communication and education](#)
- [Outside help](#)

Learn more about these low- and no-cost measures

Treasure Hunt Kit



www.energystar.gov/TreasureHunt

Additional Resources

- [ENERGY STAR for Existing Multifamily Housing Homepage](#)
- [Launch your own energy or water competition!](#)
- [ENERGY STAR Bootcamp](#)
- [Cash Flow Opportunity Calculator](#)
- [Building Upgrade Value Calculator](#)



IDENTIFYING LOW COST ENERGY IMPROVEMENTS AT PROPERTIES

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01.
GREYSTAR OVERVIEW

02.
SUSTAINABILITY AT
GREYSTAR

03.
EFFICIENCY
OPPORTUNITIES

04.
ENERGY STAR TREASURE
HUNT

GREYSTAR

BY THE NUMBERS

42

STATES

13

COUNTRIES

2,500

COMMUNITIES

693K+

UNITS

~1.5MM

RESIDENTS

~19K

TEAM
MEMBERS

GREYSTAR SUSTAINABILITY

Greystar is fundamentally committed to minimizing its environmental impacts through continuous improvement of its energy performance and through sustainable operating practices.

Global sustainable
development and design
standards

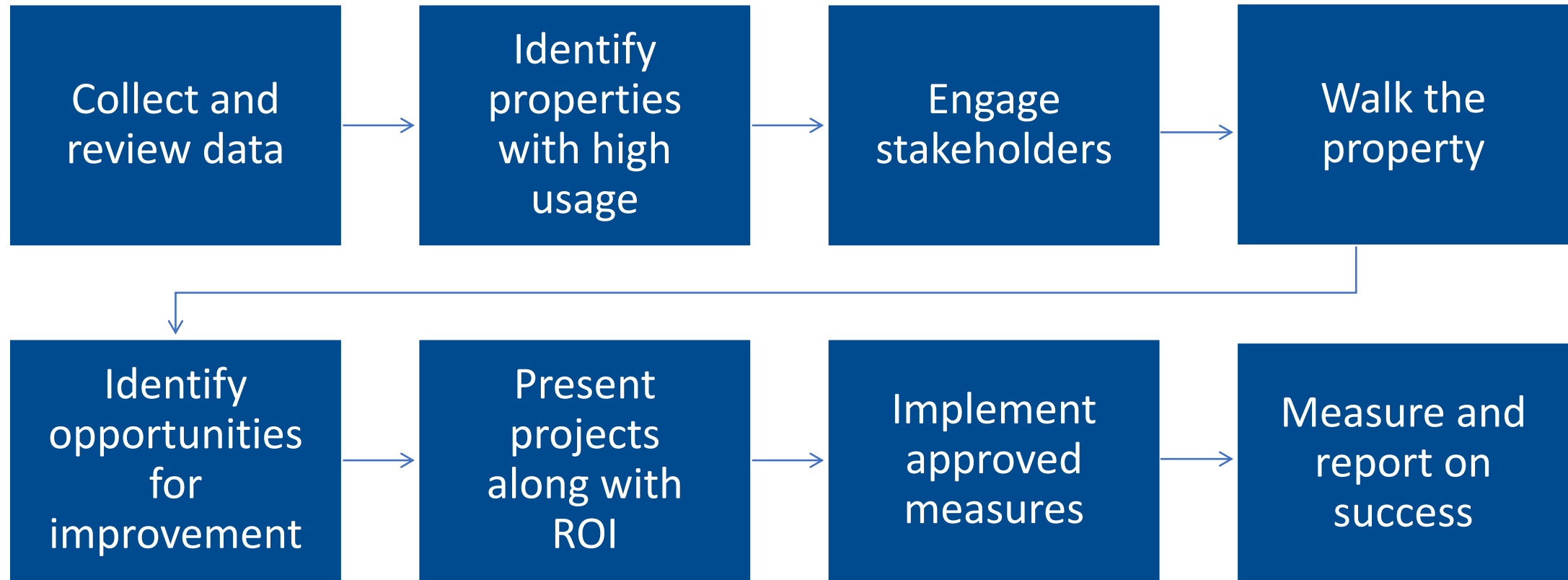
Sustainable operating
procedures for operational
efficiency

Innovation strategy feedback

Focus on measurable efforts
for improved efficiency

Partnering and engaging with
stakeholders

EFFICIENCY OPPORTUNITIES




ENERGY STAR TREASURE HUNT

Prep

Meet

Treasure Hunt


Follow up



Treasure Map FOR MULTIFAMILY PROPERTIES


Grab a clipboard and take this map along on your treasure hunt. Focus on uncovering opportunities to save. When you find something, make notes about location; tools, materials, or expertise needed; or further research required. Feel free to add to or modify this list to suit your own needs.

Facility Name _____ Floor _____ Date _____ Team _____



Property Management and Maintenance Teams

- ☐ Note your EUI and ENERGY STAR score in Portfolio Manager.
- ☐ Ensure that your facility energy management plan and operations & maintenance plan are up to date, and that appropriate staff has reviewed the latest versions.




COMMON AREAS

Lighting

- ☐ In preparation for the Treasure Hunt, explore utility incentive programs for lighting upgrades and lamp replacements, for both common areas and particularly for upgrades in resident units.
- ☐ Identify where lights may have been left on unnecessarily in unoccupied spaces, such as activity rooms, offices, and vacant units. Record your observations.
- ☐ Observe exterior areas such as parking lot lights and decorative exterior lighting during the day to determine if lighting has been left on in the daylight. Record your observations.
- ☐ Identify and assess opportunities to use automated lighting controls:
 - ☐ Occupancy/motion sensors for low-traffic areas.
 - ☐ Timers or daylight sensors to dim or turn off exterior and parking lot lights during the day.
 - ☐ Timers to turn off decorative lighting.
 - ☐ Dimming controls in locations where there is natural lighting (e.g., near windows, skylights, and light tubes).
- ☐ Confirm that installed lighting controls are operating as intended.
- ☐ Identify where reflectors can be practically added to existing lighting.
- ☐ Consider working with a lighting expert to identify whether any areas are over-lit compared to requirements or design levels; consider opportunities for de-lamping.
- ☐ Identify and de-energize and/or remove ballasts that are not in use.

NOTES:



www.energystar.gov/treasurehunt TREASURE MAP FOR MULTIFAMILY PROPERTIES | PAGE 1 OF 4

THANK YOU!

Lexie Goldberg
lgoldberg@greystar.com

GREYSTARTM



BOZZUTO MANAGEMENT COMPANY

**ENERGY STAR® TREASURE
HUNT as BUILDING INSPECTION**

BOZZUTO AT A GLANCE

263 COMMUNITIES | 79,600 UNITS | 2.7M SF RETAIL

MIDWEST

Chicago, Milwaukee

17 communities | 6,500 units | 111,153 SF retail

NEW ENGLAND

Boston Metro

25 communities | 7,100 units | 239,500 SF retail

TRI-STATE

NJ, NY, CT

50 communities | 13,900 units | 393,800 SF retail

MID-ATLANTIC

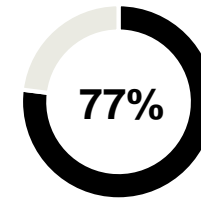
VA, DC, MD, PA

157 communities | 47,000 units | 1,638,200 SF retail

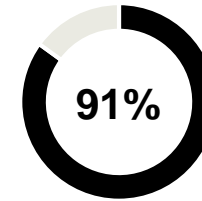
SOUTHEAST

South Florida

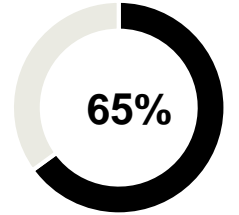
14 communities | 5,000 units | 357,700 SF retail



MIXED-USE



THIRD-PARTY
OWNED



HIGH-RISE & MID-RISE

2,700+
ON-SITE EMPLOYEES

5X

CEO **ACT!ON** FOR
DIVERSITY & INCLUSION

2X



6X

#1 Property Management Company for
**ONLINE
REPUTATION**

ORA Power Rankings, J Turner Research

4X

Property Management
**COMPANY OF
THE YEAR**

4X



PARTNER OF THE YEAR
Sustained Excellence

COMMITMENTS

3% ENERGY REDUCTION YEAR over YEAR

- *Over 90 Energy Star Certifications since 2015*
- *Resident engagement & education*

5% INCREASED DIVERSION RATE YEAR over YEAR

RE100: 100% Renewable Electricity for entire global operations by 2040

DOE BETTER BUILDINGS: 20% Reduction in managed portfolio energy intensity by 2025, with a goal of 3% reduction annually from a 2015 baseline

Aggressively pursue opportunities for recognition at national and local level.



OUR APPROACH

- **ADAPT TO OUR BUSINESS**
- **AUTOMATE & REPLICATE**
- **EASY to USE, EASY to UNDERSTAND**
- **SOLUTION: QUARTERLY INSPECTION**
 - *Backed up in more frequent task requirements*
 - *Senior Maintenance Team involved – coaching opportunity*



ONLINE INSPECTION PLATFORM

CUSTOMIZED WORKFLOW

LEONARDO^{24/7}

PERFORMANCE MANAGEMENT SOFTWARE

Dashboard

Property - TEST Property BozzutoLINK

Unit Workflow

Workflow

- Workflows In Progress
- Launch Workflow
- Define Workflows

My Portfolios

Templates

Users

Contacts

Document Manager

Reports

On Demand Instructions

Filter By...

Due Diligence Interior Inspection -

Energy Star Audit

Hurricane Procedures

Quarterly Inspection - Garden & Mid-Rise

Quarterly Inspection - High-Rise

Quarterly Regional Community Inspection

Refrigerant Log

Snow Removal Log

3:47

TASK FORM

Energy Star Treasure Hunt Audit

Dynamic Form

User Name:
Jonathan Lane

Date completed *
2019-12-10

Enter the date the audit was completed

Energy Star score
49

Record the site's current Energy Star score from Portfolio Manager.

Common Areas: Lighting

Are lights left on unnecessarily in unoccupied spaces, such as activity rooms, offices, and vacant units? *

☐ Yes

SKIP

SAVE PROGRESS

FINISH

Launch WorkFlow

Launch WorkFlow

Launch WorkFlow

Launch WorkFlow

Launch WorkFlow

Launch WorkFlow

Launch WorkFlow

Launch WorkFlow



ONLINE INSPECTION PLATFORM

CUSTOMIZED WORKFLOW



Yale West

Energy Star Treasure Hunt Audit

Energy Star Treasure Hunt Audit

Yale West

Created on Thu, 12 Dec 2019
Jonathan Lane <jonathan.lane@bozuto.com>

Report Rules applied: None

Energy Star Audit

Fields	Values	Notes
Completed By	Jonathan Lane	
Date Completed	2019-12-11	
Energy Star Score	46	

Common Areas: Lighting

Fields	Values	Notes
Are lights left on unnecessarily in unoccupied spaces, such as activity rooms, offices, and vacant units?	Yes	Note: Model minder is installed to turn off power when not in unit. Common area lighting in clubroom and yoga room not on motion sensor. Motion sensors not on electrical rooms / storage. Jed units not in place. Trash chute rooms non led lighting and sensor from motion overridden. Stairwell Bi-level motion sensors possible option. Roof bathroom needs motion sensor. Mail room and gym needs motion sensor. Check with vendor on vending machine lighting cut off. Bike room needs motion sensor. Bathrooms need sensors.
Is lighting in exterior areas such as parking lot lights and decorative exterior lighting on during daylight hours?	Yes	Note: Court yard lighting is on, front entrance exterior lighting is on.
Are automated lighting controls needed?	Yes	Note: There are currently no lighting controls. Add timers to exterior lights in shaded areas.
Are installed lighting controls defective or improperly programmed?	Yes	Note: Trash area sensor blocked.
Is it practical to add reflectors to existing lighting?	No	
Are any areas are over-lit compared to requirements or design levels for tasks; are there opportunities for de-lamping?	Yes	Note: Common areas/clubroom/hallway are over-lit. Opportunity to remove lights or add dimmers.
Are there areas where ballasts can be de-energized or removed?	N/A	
Can existing lighting be upgraded?	Yes	Note: Model unit lighting should all be led. Fluorescent and incandescent bulbs in place. Led needed in bike room, mechanical rooms not retrofitted with led. Electrical rooms / storage. Jed units not in place. Trash chute rooms non led lighting. LEDs in units at turn.

Common Areas: Building Envelope



IN PRACTICE

RECOGNITION



During an Energy Treasure Hunt, teams walk around a facility looking for quick ways to save energy. Those quick fixes can add up to big savings. Hundreds of organizations have used Energy Treasure Hunts to reduce their facilities' energy use by up to 15 percent. Are you and your crew ready to find the treasure buried within your facilities?

[Resources](#) | [Find the Treasure Campaign](#) | [What others have done](#) | [Share your treasure](#)

Bozzuto Management Company

[< Back to Results](#)

Company Name: Bozzuto Management Company

Type of Company: Real estate

Number of Treasure Hunts: 1

Size of Treasure Hunt Team: 10

Top O+M Savings Opportunities Identified:

- Implement LED retrofits
- Install lighting controls and sensors
- Establish thermostat setting standardization

Potential Annual Savings Identified from the Treasure Hunt: \$10,190



@Bozzuto thanks for inviting our DCSEU Account Manager, Leigh Harrold to come and speak during your @ENERGYSTAR Treasure Hunt at @YaleWestApts.



Bozzuto and 4 others

11:43 AM · Dec 13, 2019 · Twitter Web App



LESSONS LEARNED

PLAN of ATTACK

- *By system, or space type?*
- *“Divide and conquer,” or “all for one?”*

DELIVERABLES & FOLLOW-UP

- *Capital improvements or behavioral changes*
- *Teeing up for approvals*

HAVE A GOAL IN MIND

- *Energy ordinance*
- *Owner/operator ESG commitments/goals?*
- *Resident experience*
- *Bottom Line*

COVID-19 IMPACT...



Thank You

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Moderated Discussion

The background of the slide features a low-angle shot of several modern skyscrapers. The buildings are characterized by their glass and steel facades, with many windows visible. A semi-transparent red horizontal band is superimposed across the middle of the image, serving as a backdrop for the title text.

Audience Q & A