



**AIA**  
Baltimore



Baltimore

# The ROI of Net Zero and High Performance Buildings

## **Panel Discussion + Workshop**

December 9 | 1:00 - 2:00 PM | Free for Members / \$20

Sponsored by the AIA Baltimore Committee on the Environment and Resiliency  
and ULI Baltimore

Please sign in for the 1 AIA/CES LU using the link in the chat box



# *The Ultimate Gingerbread Design Competition*



**December 10th @ 4pm**

**Find Your Tickets at: [aiabaltimore.org/events](https://aiabaltimore.org/events)**





Sponsored by the AIA Baltimore Practice Management Committee and Society  
for Marketing Professional Services (SMPS) Maryland

# Meet The Press: **How to Connect with Media**

December 15 | 8:30 - 9:30 PM | Free for Members / \$20



**AIA**  
Baltimore

**smps**  
Maryland



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Baltimore



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PATH TO ZERO ENERGY



# Who We Are...

- Brightview Senior Living is a Developer / Owner-Operator of Senior Living Communities
- Brightview owns and operates 45 Communities from Massachusetts to Virginia
- Developing 3-5 new communities per year in existing and new markets

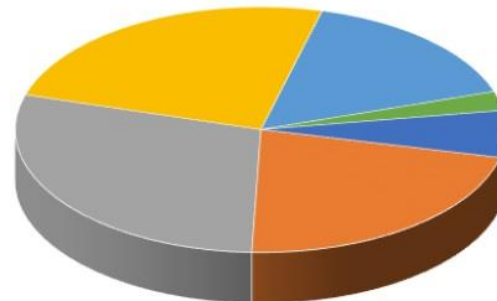


# Brightview's Path to Zero Energy

- Brightview Green Building Design Standards
  - Energy Modeling & Commissioning
  - Site Selection and Building Orientation
  - Building Layout and Envelope
  - Building Infrastructure / Systems / Controls / Operation
  - On-Site Green Power
- Energy Performance & Utility Tracking
  - Electric / Gas / Water
  - Model Verification

# Brightview's Path to Zero Energy

- Analysis and Selection of Energy Conservation Measures (ECM)
  - Informs Energy Model and vice versa
  - Simple Payback Period
  - Return on Investment
- Available Incentives
  - Fed/State/Local/Utility



- Lighting
- Lighting units
- HVAC
- Plug
- Water Heating
- Exterior Lighting

NO.	MEASURE NAME	DESCRIPTION	ANNUAL ENERGY SAVINGS (CODE: IECC 2018)			ADDED COST > CODE BASE	SIMPLE PAYBACK (YRS)	ANNUAL ENERGY SAVINGS (LEED: v4 ASHRAE 90.1-2010)		
			USE (%)	COST (%)	COST (\$)			USE (%)	COST (%)	POINTS
ENVELOPE										
A	Glazing Values	Code Baseline: U-0.32, SHGC-0.4								
A1	10% > code	U-0.28, SHGC-0.31								
A2	20% > code	U-0.28, SHGC-0.29								
A3	30% > code	U-0.27, SHGC-0.28								
B	Wall Insulation	Code Baseline: U-0.06								
B1	10% > code	U-0.054, (4" batt + 2" rigid)								
B2	20% > code	U-0.048, (3.5" batt + 2.5" rigid)								
B3	30% > code	U-0.042, (~3.5" batt + 3" rigid)								
C	Roof Insulation	Code Baseline: U-0.026								
C1	10% > code	U-0.0026, (~6" batt + 3.5" rigid)								
C2	20% > code	U-0.0234, (~ 3.5" + 6" batt + 3.5"								
C3	30% > code	U-0.018, (~ 6" + 6" batt + 4" rigid)								
SYSTEMS										
D	HVAC	Code Baseline:								
D1	Option 1									
D2	Option 2									
D3	Option 3									
E	Lighting: Common	Code Baseline:								
E1	20% reduction									
E2	35% reduction									
E3	50% reduction									
F	Lighting: Units	Code Baseline:0.6 W/sq ft								
F1	5% reduction									
F2	10% reduction									
F3	15% reduction									
G	Lighting: Site	Code Baseline:								
G1	20% reduction									
G2	35% reduction									
G3	50% reduction									
H	Hot Water	Code Baseline:								
H1	Option 1									
H2	Option 2									
CONTROLS										
I	Controls	Code Baseline:								
I1	Energy Recovery									
I2	Occ. Sensors-Units									
I3	Kitchen Controls									
RENEWABLES										
J	Photovoltaics	Code Baseline: None								
G1	20% roof area									
G2	40% roof area									
G3	60% roof area									
COMBINATIONS										
K	Code Baseline	A+B+C+D+E+F+G+H+I								
K1	Best Performer									
K2	Best Payback									
K3	Option TBD									



# Challenges

- Costs
  - Increasing Labor / Materials Costs
  - Return on Investment – does increased energy efficiency offset premium cost
  - Payback Period – does it fit underwriting pro forma
- Available Incentives
  - Need for additional / updated / innovative incentives
  - Green Building Standard ➡ Energy Efficiency, 'Green' Power, Carbon
- Technology Investment and Innovation

# Next Steps in Design

- On-Site Renewable Energy
  - Solar PV / Wind / Ground Source / GeoThermal / Etc.
  - Cogeneration / Combined Heat and Power (CHP)
- Net-Zero Communities
- Carbon Accounting
  - Zero Embodied Carbon
  - Zero Carbon Operation



BOZZUTO MANAGEMENT COMPANY

# The ROI of Net Zero + High Performance Buildings



# 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

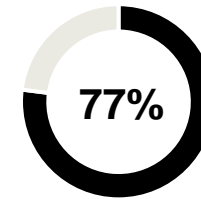
### VA, DC, MD, PA

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

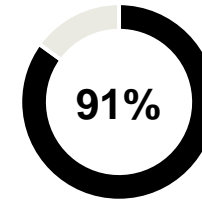
## SOUTHEAST

### South Florida

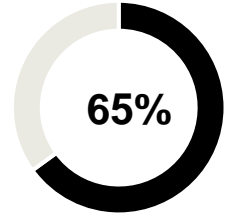
14 communities | 5,000 units | 357,700 SF retail



MIXED-USE



THIRD-PARTY  
OWNED



HIGH-RISE & MID-RISE

**2,700+**  
ON-SITE EMPLOYEES

**5X**

CEO **[ACTION]** 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

2,700 EMPLOYEES

# Four Divisions. One Bozzuto.



## BOZZUTO MANAGEMENT

76,000+  
units managed

2.3 M  
sq. ft. of retail

5-time  
Top Property Management Company  
for Online Reputation



## BOZZUTO DEVELOPMENT

17,000  
units developed

6,500  
units acquired and repositioned

800,000  
sq. ft. of retail developed

\$3.5 B built in value



## BOZZUTO CONSTRUCTION

36,000+  
dwelling units built to-date

3 M sq. ft. of retail built to-date

82% third party projects

\$450 M  
annual revenue



## BOZZUTO HOMES

5,600  
homes built

\$1.7 B  
total sales value

220  
homes settled annually

# COMMITMENTS

- **3% ENERGY REDUCTION YEAR over YEAR**
- *Achieved 2 out of last 3 years; Data access biggest issue with missed year*
- **5% INCREASED DIVERSION RATE YEAR over YEAR**
- *Data access/quality issues*
- *Adding resources for more waste streams each year, from textiles to electronics, batteries, light bulbs, and more*
- **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.





# ACCOMPLISHMENTS

- **ENERGY STAR® Partner of the Year – 4 Years Running**

- 2017, 2018, 2019 (Sustained Excellence), 2020 (Sustained Excellence)
- First and only third-party multifamily management company to achieve

- **ENERGY STAR Certifications – 90, *and counting...***

- One of first multifamily operators to achieve in 2015 when certification made available
- Most by any third-party multifamily operator

- **Green & Healthy Building Certifications**

- Over 1/3 of managed portfolio carries LEED designation
- BMC is a Fitwel Champion and oversaw some of the 1<sup>st</sup> multifamily properties to achieve certification
- Well-versed in NGBS, Green Globes, IREM, BREEAM, and more

- **EARTH MONTH**

- Massive, portfolio-wide campaign to engage & educate residents
- Toolkit that any property can participate, regardless of budget, location, building type, resident demographics, etc.



# CURRENT LANDSCAPE

## •JURISDICTIONAL MANDATES

- **41%** of City/state benchmarking, audit, and/or public energy disclosure ordinances
- Many, many more in the works or adding more (i.e. NYC LL84, 87, and 97)

## •GRESB

- **45%** of portfolio currently responding as of 2020
- Growing exponentially last three years

## •ESG COMMITMENTS

- **25%** Owner/minority owner publicly stated sustainability/ESG commitments

## •80% of BMC Portfolio – Have either city or ownership reporting (or both)



# Thank You

[peterz@bozzuto.com](mailto:peterz@bozzuto.com) | 301.486.1331



6406 Ivy Lane, Suite 700 | Greenbelt, MD 20770 | 301.623.1550



## Ryan Schwabenbauer

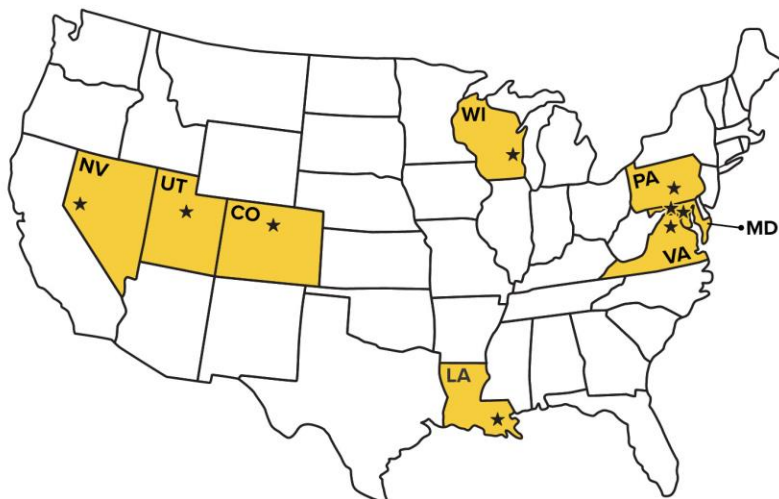
Director of Sustainability, St. John Properties

- LEED AP
- Four Years leading St. John Properties Sustainability efforts
- 15 years of LEED and Sustainability experience
- Background in Finance and Business Management



## About St. John Properties

### LOCATIONS



- Founded in 1971 by Edward St. John
- Locally owned and headquartered in Baltimore, MD
- One of the Mid-Atlantic's largest privately held commercial real estate firms
- Named 2018 National Developer of the Year by NAIOP
- Named #1 2020 Best Place to Work by the Baltimore Business Journal
- Named #1 LEED developer in Maryland, 4.8 mil. SF nationwide

### Company Quick Facts



**49**

YEARS IN BUSINESS



**20+  
MILLION**

SQUARE FEET  
OWNED & MANAGED



**2,200+**

CLIENTS ACROSS  
THE COUNTRY



**167**

BUSINESS  
COMMUNITIES



**ZERO**

LOAN DEFAULTS



**195+**

EMPLOYEES ACROSS  
THE COUNTRY

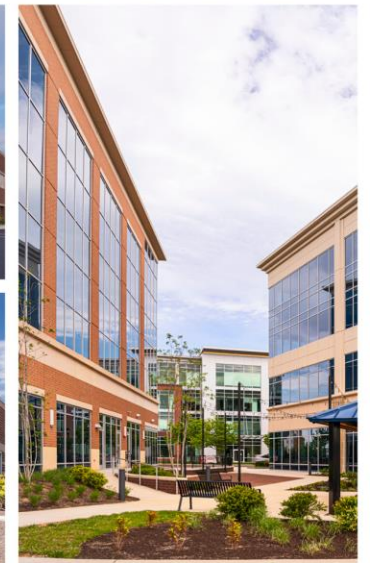


**\$3.5+  
BILLION**

IN REAL ESTATE  
INVESTMENTS

## St. John Properties Sustainability Program

- National Sustainability Program launched in 2009
- 50 LEED Certification milestone reached in 2019
- 80 LEED Certification milestone reached in 2020
- All certifications managed in-house
- Sustainability efforts in addition to LEED
- Project / Process / Purpose





# The ROI of Net Zero and High- Performance Buildings

MARTA SCHANTZ, ULI GREENPRINT

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WEDS DEC 9, 2020

# ULI Greenprint: Reducing Carbon, Building Value

Global alliance of owners and developers committed to improving the environmental performance of buildings, and sharing the business case with the broader real estate market

2030  
DISTRICTS  
NETWORK

Allianz

AXA Investment  
Managers

BLACKROCK®

bxp Boston  
Properties

Brookfield  
Properties

CalPERS

CenterPoint

CITY  
DEVELOPMENTS  
LIMITED

CLARION PARTNERS

CommonWealth  
partners

CRESCENT  
COMMUNITIES

DWS

FCP™

FPA MULTIFAMILY  
SEARCHING FOR OPPORTUNITY

GERDING EDLEN

G I D

GLL REAL  
ESTATE  
PARTNERS  
A member of Macquarie Group

Granite

GROSVENOR

HEITMAN  
A REAL ESTATE INVESTMENT MANAGEMENT FIRM

Howard Hughes  
THE HOWARD HUGHES CORPORATION

HUDSON  
PACIFIC  
PROPERTIES

Jamestown

JBG SMITH

JONES LANG  
LASALLE

KILROY

LaSalle  
INVESTMENT MANAGEMENT®

lendlease

MULTIGREEN

MORGAN CREEK | VENTURES

NEO nuveen

PARKWAY

PGIM

PROLOGIS®

Rudín

SAVANNA

SL GREEN  
REALTY CORP.

TISHMAN SPEYER

THE  
TOWER  
COMPANIES

UDR

ZURICH



# The Business Case for High-Performance Buildings



REDUCE  
RISK



REDUCE COSTS/  
EXPENSES



MAXIMIZE  
REVENUE



SAVE TIME  
AND MONEY



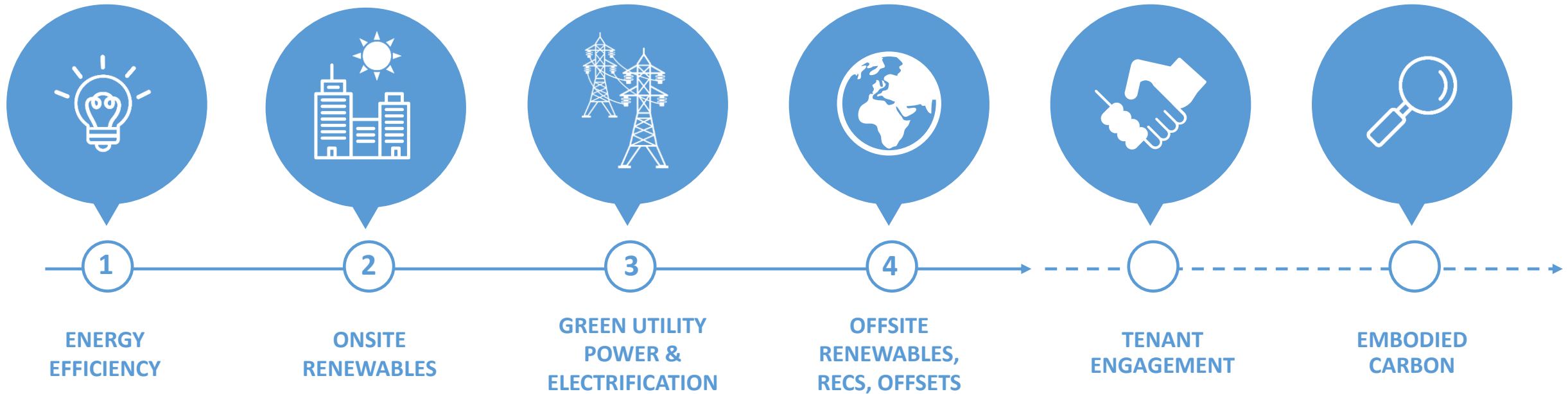
**ULI GREENPRINT**

NET ZERO CARBON OPERATIONS GOAL

**#NETZEROGx2050**

# New Net Zero Goal

Portfolio-Wide Net Zero Carbon Operations by 2050





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