

# Net Zero Exchange Series: Energy Efficiency

KARA KOKERNAK, ULI & BECCA TIMMS, JAMESTOWN LP

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FEBRUARY 23, 2023



# Agenda

- Introduction to ULI Greenprint and Net Zero Exchange Series – 5 min
- Guest Speaker Presentation: Becca Timms, Jamestown LP – 30 min
- Q&A for Becca – 10 min
- Breakout Groups – 20 min
- Open Discussion – 20 min
- Next Net Zero Exchange Date & Topic - 5 min

ULI Net Zero Mission Priority  
*Decarbonizing the real estate sector and accelerating our progress to net zero*



# ULI Decarbonization Program

Reduce Carbon, Build Value



Research &  
Thought  
Leadership

Content on climate mitigation, making the **business case for green buildings** and the journey to net zero for the global real estate industry



Greenprint  
Community of  
Practice

Collaborative of 74+ **real estate owners** committed to improving the **environmental performance** of buildings and achieving net zero by 2050



Local  
Technical  
Assistance

Convene **public and private sector** at the local level to **overcome barriers to decarbonization** and accelerate real estate's journey to net zero

# ULI Net Zero Energy Exchange

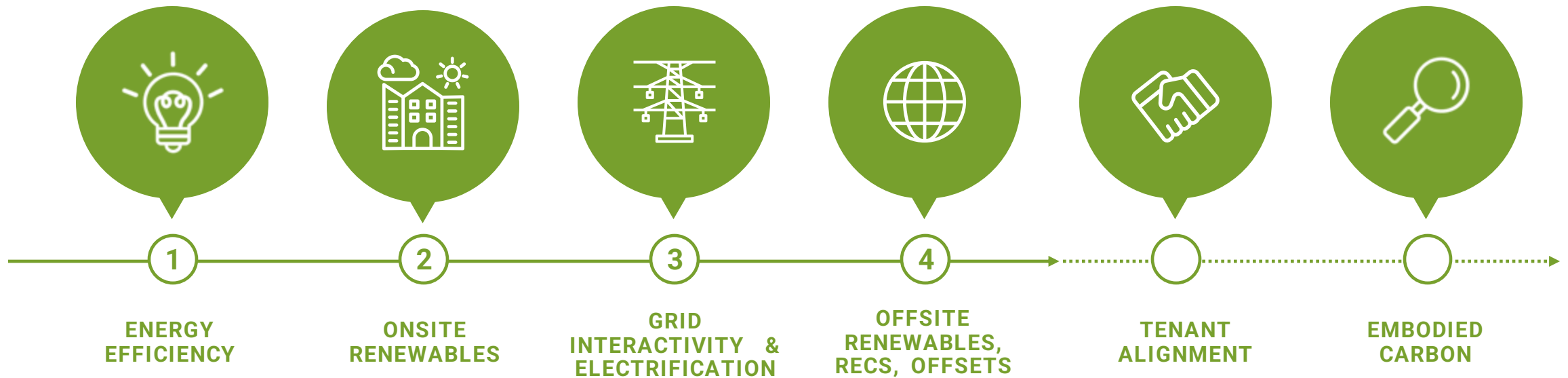
Programming for all Members to engage on Net Zero in a meaningful way

- Regularly scheduled series of meetings to facilitate conversations between ULI members, District Council staff, other global experts, and HQ staff
- Intended to help promote the most innovative and/or effective best practices for Net Zero
- Serve as an opportunity to share and exchange ideas with a presentation on a Net Zero topic, project/program updates from District Councils leadership, and a conversation between attendees
- Aims to foster increased ULI member collaboration, program and research ideas, and help facilitate the right types of Net Zero investment

Register for the series:  
[https://americas.uli.org/  
events/detail/76583669-  
8C9D-4087-BC9B-  
88447199A573/](https://americas.uli.org/events/detail/76583669-8C9D-4087-BC9B-88447199A573/)

# Defining Net Zero

A net zero building portfolio is highly efficient and fully powered by on-site and off-site renewable energy sources and offsets



# 2023 Schedule – ULI Net Zero Exchange

Date, 1-2:30p ET	Topic	Suggested Speakers/District Council Projects
February 23 <sup>rd</sup>	Energy Efficiency	Becca Timms, Jamestown LP
April 20 <sup>th</sup>	Renewable Energy	Marina Badoian-Kriticos, HARC
June 22 <sup>nd</sup>	Grid Interactivity	TBD
August 24 <sup>th</sup>	Electrification	TBD
Oct 30 <sup>th</sup> – IN PERSON	Net Zero Exchange at ULI Fall Meeting	Open networking/engagement
Dec 14 <sup>th</sup>	Tenant Alignment	TBD

# Becca Timms

Jamestown, LP



Becca Timms is the Director of ESG at Jamestown. She leads environmental, social and governance (ESG) initiatives through the Jamestown Green program and the Jamestown Charitable Foundation. Prior to joining Jamestown in 2012, Ms. Timms worked as a local government consultant for Clark Patterson Lee, where she served as Community Development Coordinator and Sustainability Commission Staff Liaison for the City of Dunwoody. She is a Certified Energy Manager (CEM) and holds a LEED AP O+M credential. Ms. Timms is an active volunteer with the ULI, the US Green Building Council, and Community Farmers Markets. She holds a Bachelor of Arts in Spanish and Environmental Policy from Sewanee: the University of the South and a Master of Science in Sustainable Development: Environmental Policy and Management from Utrecht University.





# Firm Overview

40-year track record



Design-focused  
real estate firm



\$13.2 billion of  
assets under  
management<sup>1</sup>

<sup>1</sup> As of December 31, 2022



Transforming spaces  
into innovation hubs and  
community centers



Value creation driven  
by consistent focus  
on NOI growth



# Value Creation

Jamestown possesses internal expertise beyond a traditional operator, applying its diversity of views to maximize value



## Engaging Spaces

Site activation, tenant curation, and thoughtful public spaces are a hallmark of Jamestown



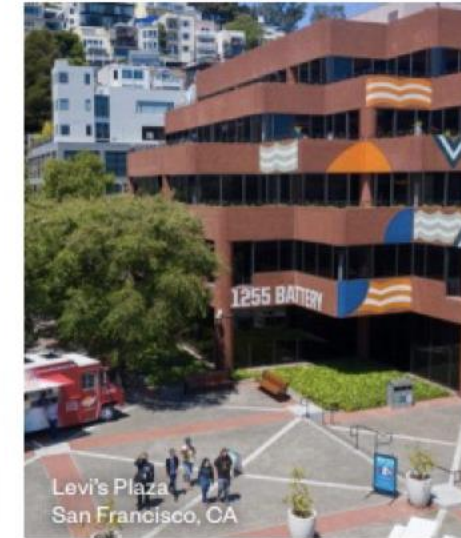
## Inclusive Environments

Accessible and welcoming environments are designed to engage the people who use our properties



## Food & Beverage

We work with local purveyors to create interesting food and beverage concepts and diverse offerings



## Distinctive Assets

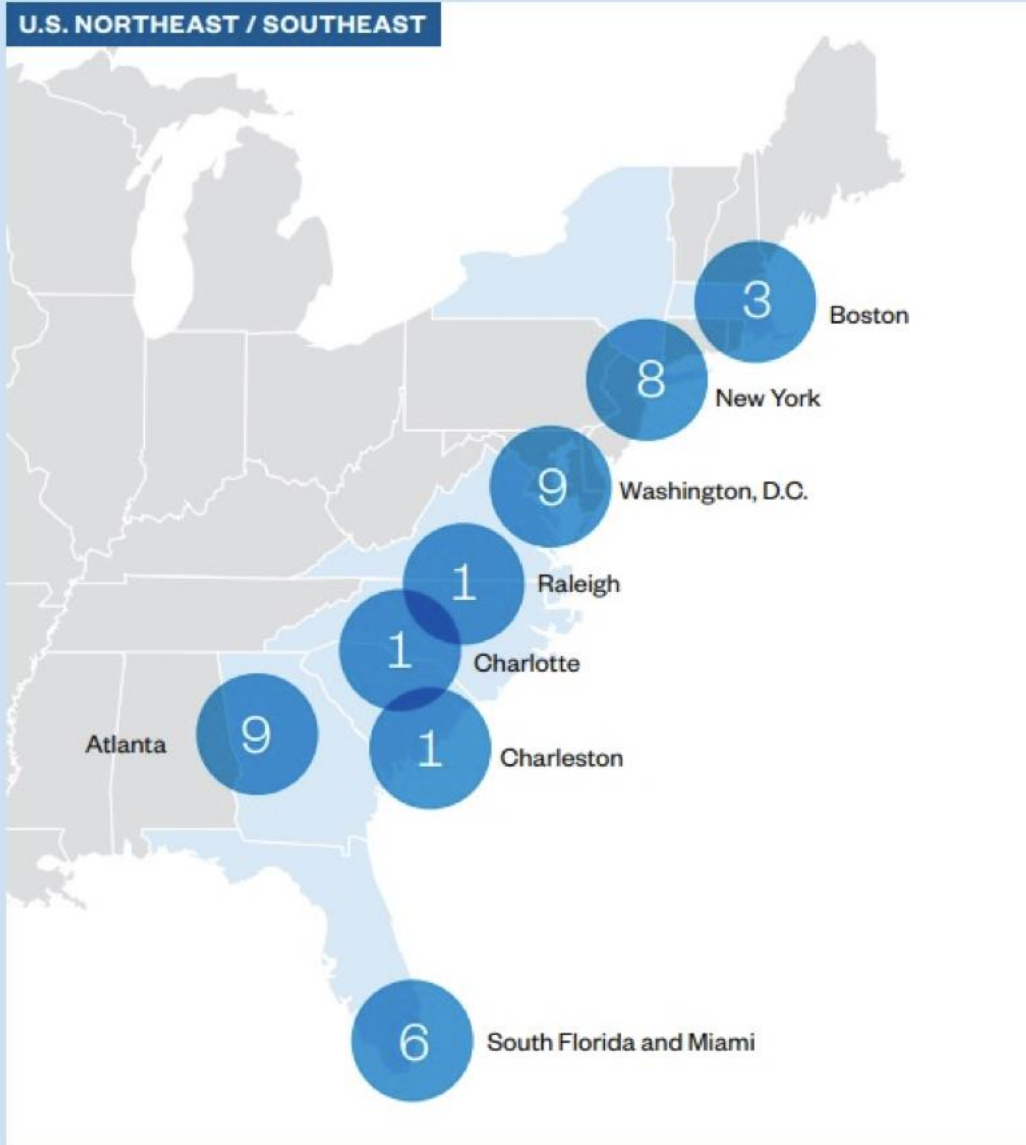
Our properties are designed for the communities in which they are built and feature digital engagement through property apps and social media



*The value of physical space is created by the experiences people have in it. Spaces can elevate, transport, and inspire. Our goal is to create places that add value to people's lives on a daily basis and are relevant in a rapidly changing professional environment.*

# PORTFOLIO SUMMARY<sup>1</sup>

# Assets per market



<sup>1</sup> Asset count excludes Latin America, land, and timber, and includes separate account managed on behalf of a German pension fund.



# Sustainability Highlights

# Sustainability



Proprietary ESG program established in 2008



8 consecutive years of earning a 5 star rating for the Premier Property Fund

Signatory of:



Principles for Responsible Investment

Earned "A" in 2019 & 2020 Assessments



14 buildings with 2021 ENERGY STAR ratings



Targets in place to support all 17 goals



Premier Property Fund was the Recipient of the 2022 PREA ESG Momentum Award



1. Rating received on 9/01/2022 for the period of 1/1/2021 to 12/31/2021 by GRESB. Jamestown pays an annual fee to be a GRESB Member and participates in GRESB's Annual Real Estate Assessment for certain Jamestown fund vehicles.
2. Rating received on 6/01/2021 for the period of 1/1/2020 to 12/31/2020 and 06/01/2020 for the period of 1/1/2019 to 12/31/2019 by PRI. Jamestown pays an annual fee to be a UNPRI signatory. There was not an assessment in 2022 (covering 2021) due to scoring modifications.
3. Given on 3/23/2022 for the period of 1/1/2021 to 12/15/2021 by the Pension Real Estate Association. Jamestown pays to be a member of PREA.

The above information is for the Jamestown Portfolio, which includes the Premier Property Fund.

An aerial photograph of a park area. A paved path winds through a large green lawn. In the upper right, a stream flows through a landscaped area with rocks and small trees. Several people are visible walking on the path. The overall scene is bright and green, suggesting a sunny day.

# Sustainability & Social Responsibility Report

2021 Performance Update

 Jamestown Green



# Impact Areas and Targets



# ESG Impact Areas

## ESG GOALS & IMPACT AREAS

As an owner and operator of commercial real estate, Jamestown must help address environmental issues and improve sustainability in many interrelated areas. These efforts are a core part of our fiduciary responsibility, allowing Jamestown to minimize risk and capitalize on opportunities. Jamestown has memorialized short-, medium- and long-term targets, as well as more general objectives, to guide our strategy. Together, these targets support all 17 United Nations Sustainable Development Goals (SDGs).

Jamestown has organized Jamestown's impact areas and the corresponding targets by the ESG pillar to strengthen the consistency and transparency of our ESG reporting to our investors and the public. We are excited to share our progress and achievements of our short-term targets and anticipate additional revisions to our medium- and long-term targets over time to sustain and lead the industry's best practices.

### ENVIRONMENTAL



Emissions



Energy Efficiency



Water Efficiency



Waste Management



Resilient Site Selection and Design



Materials and Supply Chain

### SOCIAL



Health and Wellbeing



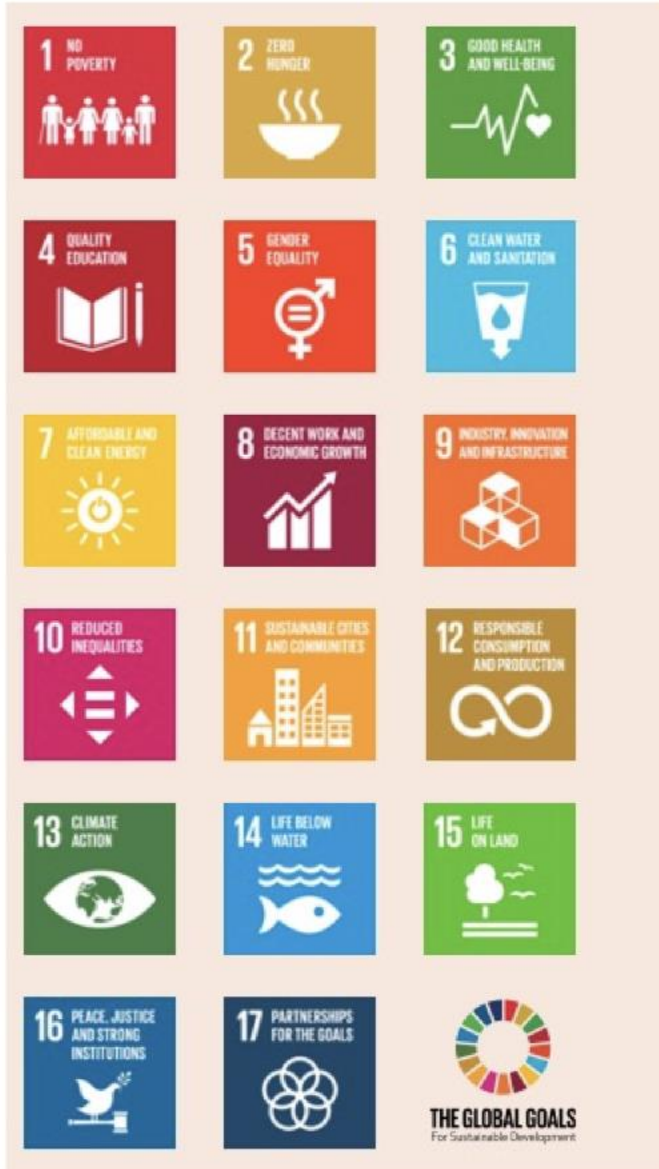
Social and Community Impact



Transparency and Disclosure

### GOVERNANCE

# U.N. Sustainable Development Goals



## SUSTAINABLE DEVELOPMENT GOALS

Stakeholders are increasingly demanding investments that drive financial returns through creating social and environmental value. To this end, the SDGs were established as a powerful framework to guide structured investments towards long-term financial value and social and environmental impact. The SDGs were established in 2015 under the United Nations adoption of the 2030 Agenda for Sustainable Development with the intention of ending all forms of poverty, inequalities, and negative climate impacts. While the SDGs are predominately focused on government entities, many commercial firms have also recognized their value and are promoting and aligning their operations with these goals.

In previous reports, Jamestown shared examples of how our business operations impact each SDG. In 2020, Jamestown formally adopted all 17 SDGs, and aligned our targets with the applicable UN SDG targets.

For a full list of how Jamestown's targets are aligned with the SDGs, please refer to section IX of the reference document.



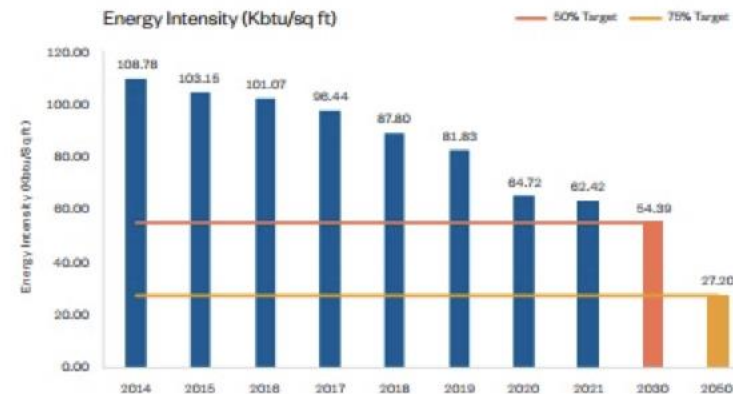
# ESG Impact Area: Energy Efficiency



SHORT-TERM TARGETS (PRESENT-2024)	STATUS	PROGRESS
Drive energy efficiency improvements of approximately 3% per year	● ● ● ●	3.56% reduction in energy use intensity (Kbtu/sf) from 2020-2021
Pilot three energy-saving technologies for Jamestown's innovation program	● ● ● ●	Piloted three energy-saving technologies for Jamestown's innovation program, with plans for expansion in 2022
Install building-level energy management software in 100% of eligible office properties	● ● ● ●	Utilizing pilot results to identify opportunities to increase coverage across all office assets
Complete a portfolio-wide solar assessment and increase renewable energy production by 2% annually	● ● ● ●	Partnered with Wunder Capital on first, on-site solar project at Levi's Plaza, followed by a portfolio wide assessment in 2022
Conduct energy audits for 100% of properties and establish an emissions/energy reduction plan for 100% of properties	● ● ● ●	Strategically phased energy audits across the portfolio to ensure that 100% of properties will have an audit-informed emissions/energy reduction plan by 2024

## EFFICIENCY INVESTMENT TO ALIGN WITH PERFORMANCE STANDARDS

In 2021, Jamestown conducted an energy audit of America's Square, its largest asset in Washington, D.C., to identify deep retrofit compliance pathways for the district's Building Energy Performance Standards (BEPS) requirement. This project heavily relied on ENERGY STAR Portfolio Manager to analyze historical performance, set targets, and ultimately determine if implementing the audit recommendations would generate enough savings to meet the BEPS target. Over \$2 million was invested to embark on a major VAV Box Replacement project to bring the property into BEPS compliance within the next 24 months. This was the largest projected energy savings measure and is estimated to save over 1 million kWh and \$130,000 on an annual basis, in addition to supporting occupant comfort through better controllability of individual offices.



# ESG Impact Area: Energy Efficiency

## JAMESTOWN INVESTS IN ENERGY EFFICIENCY

A number of Jamestown properties have undertaken projects to improve energy efficiency and reduce operating costs and GHG emissions. The following examples highlight some of our recent energy projects.

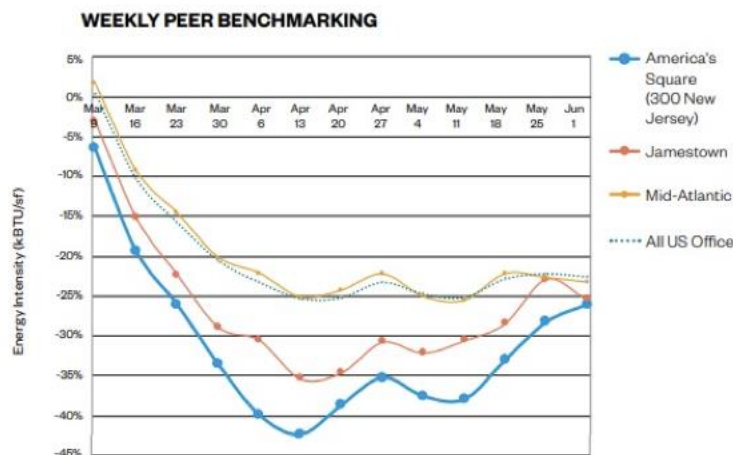
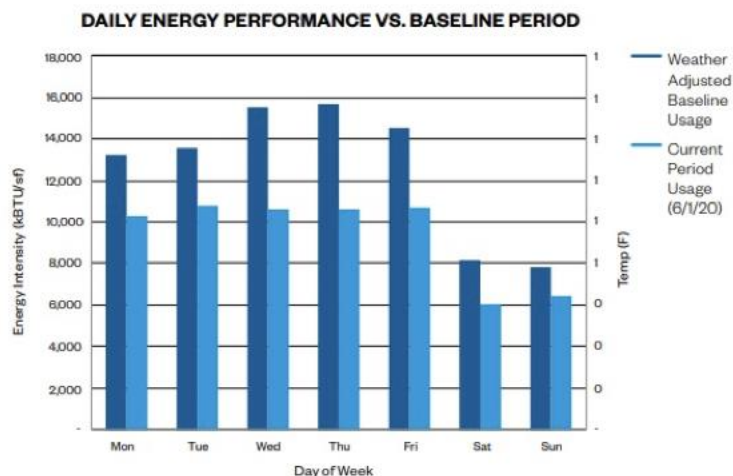
## NEW YORK ASSETS REALIZE EFFICIENCY IMPROVEMENTS

New York's aggressive energy use and emissions reduction policies are a motivator for landlords to prioritize investments in energy efficiency. Between 2018 and 2019, the 5.4 million sf Industry City Campus realized a 20% reduction in energy intensity. This improvement was a result of strategic energy efficiency projects including boiler upgrades and MEP operational adjustments, as well as upgrades and repairs to energy infrastructure. Additionally, One Times Square realized an 11% energy improvement during the same period as a result of upgrading the iconic north-facing building signage to a unified LED sign.

## AQUICORE TRACKS COVID ENERGY IMPACTS

Jamestown utilizes real time energy management to inform operations at a number of properties. As COVID-19 began to impact property operations, Jamestown worked with Aquicore to analyze the impact that changes in occupancy had on energy performance. An analysis was completed for all properties that utilize the software, and an aggregated report demonstrated over \$232,000 in energy cost savings through the end of May.

The following sample charts from Jamestown's America's Square demonstrate the energy performance metrics that are tracked at a majority of Jamestown's office properties.



## 88 LEONARD DEPLOYS ENERGY MANAGEMENT PLATFORM

In March of 2020, 88 Leonard, a multifamily property in Tribeca, deployed and onboarded an easy-to-use energy management software platform called SmartKit AI. The deployment was done 100% remotely with zero upfront costs during COVID-19, using breakthrough software built by Logical Buildings that is based on a secure cloud-to-cloud integration into the utility smart meter network. The platform quickly identified strategies to reduce electricity costs at 88 Leonard by ~10% (with simple actions – such as more efficient scheduling of the rooftop pool electric heater). In addition, the software also includes an app that creates transparency in energy usage and building operations. It uses predictive analytics to guide and reward building operators as they manage their properties more efficiently.

## SAN FRANCISCO PROPERTIES LEVERAGE FREE RETRO-COMMISSIONING

In early 2020, Levi's Plaza, Waterfront Plaza, and 55 Francisco partnered with PG&E to take advantage of a free Retro-commissioning (Rx) program. The goal of the program is to provide property teams with a list of actionable energy efficiency measures that have quick returns. The studies consider both optimizing existing systems and identifying where equipment can be added to leverage more energy savings. In addition to the free energy efficiency study, the savings identified through the study can produce an incentive payment based on the achieved annual energy savings through the Commercial Custom Incentives Program, once implemented.

## INNOVATION AND DESIGN BUILDING'S CLEAN ENERGY IMPACT

In 2019, over 651 mWh of electricity was produced from the solar array at the Innovation and Design Building. That is the equivalent of reducing the greenhouse gas emissions of 1,142,571 miles driven by an average passenger vehicle, over 45 trips around the world, or driving from Atlanta to San Francisco and back 230 times.

# ESG Impact Area: Energy Efficiency



## DATA + INSIGHTS

In 2021, Jamestown partnered with Prescriptive Data to implement their Nantum OS technology at Waterfront Plaza as a pilot. This technology uses data from IoT occupancy sensors to prescribe operational adjustments in real-time that improve building performance and tenant comfort. The pilot is modeled to payback in under 7 months with an ROI of 659% and an IRR of 167%. After the pilot, additional properties across the portfolio will be evaluated as part of Jamestown's commitment to reach net zero carbon operations by 2050.



## TECHNOLOGY NETWORK

In 2021, Jamestown launched a new innovation partnership with Camber Creek, a leading venture capital firm focused on real estate technology. Jamestown's in-house Tech & Innovation team will work closely with the Camber team to evaluate new ideas and tackle key priorities in Jamestown's innovation pipeline, with a focus on ESG projects.



## PILOTS + DEPLOYMENT

Jamestown is partnering with Carbon Lighthouse to pilot a program at LEED Gold certified One Metro Center in Washington, D.C. to reduce emissions by a projected 437 tons each year and save \$132,000 annually. Carbon Lighthouse's CLUES AI platform will assist Jamestown with profitable, data-backed carbon reductions.



# Property-level Leadership

# Net Zero Carbon

Levi's Plaza is committed to becoming a net zero operational carbon campus by 2025, a first in the Jamestown portfolio:

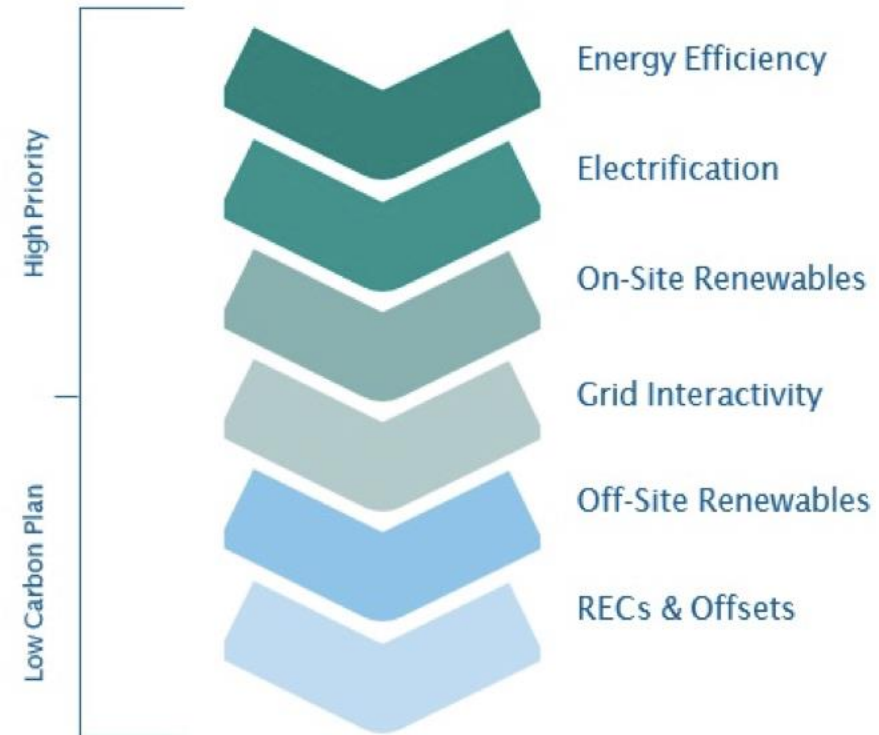
- Serving as a model for other existing buildings to reach Jamestown's portfolio-wide target of net zero operational carbon by 2050
- Meeting or exceeding the ESG requirements of large tenants in California
- Driving innovation through sourcing of materials and energy, waste, and water management
- Effectively eliminating the use of fossil fuels and utilizing on-site renewables and 100% clean power to meet remaining energy needs
- Executing green leases for shared alignment between Jamestown and tenants in achieving sustainability goals
- Pursuing LEED O+M Certifications and annual ENERGY STAR ratings



# Strategic Decarbonization

As a Department of Energy Low Carbon Pilot participant, Jamestown's decarbonization plans follow the net zero carbon priority waterfall:

- **Energy Efficiency** – utilizing Aquicore as a real-time Energy Management Information System (EMIS) and partnered with PG&E to take advantage of a free Retro-commissioning (Rx) program
- **Electrification** – converting central plant equipment from natural gas to all-electric
- **On-site Renewables** – installing photovoltaic (PV) system on the 1160 Battery rooftop
- **Grid Interactivity** – participated in the CleanPowerSF's 2021 Peak Day Pricing Pilot, helping to curb carbon emissions and keep the lights on for all Californians
- **Off-Site Renewables** – purchasing 100% carbon free electricity from the grid via the CleanPowerSF SuperGreen program
- **Renewable Energy Credits (RECs) & Offsets** – considering RECs and offsets for any remaining energy consumption once renovations are completed







# Scaling Efficiency

# Advice for Portfolio Strategy

- **Start early**
  - ESG integration into due diligence
- **Find your people and deepen your bench**
  - Internal and external collaboration
- **Use your data**
  - You can't manage what you don't measure
- **Find alignment**
  - Energy/carbon performance standards, tenant/investor demands
- **Connect the dots on cost**
  - ESG reporting and financial reporting can be disconnected
- **Embrace technology**
  - Alternative financing models
- **Get creative**
  - Alternative financing models
- **Positive peer pressure**
  - Tap into our competitive nature
- **Celebrate all wins and share widely**
  - Who doesn't love positive recognition?
- **Start with a home run**
  - Begin where you have some momentum
- **Stay resilient**
  - If it were easy, everyone would be doing it 😊

# Q&A

# Breakout Room Questions

- Discussion #1
  - Introduce yourself and your experience with Net Zero in terms of current projects or programs
    - How are you tracking your energy use data?
    - What are your successful methods of increasing energy efficiency?
    - Are you familiar with your local net zero energy or carbon building code or reporting requirements?

# From Energy Benchmarking to Carbon Caps & Beyond

Local climate policies are accelerating building decarbonization

Benchmarking Ordinances

Tune-Ups, Audits, Equipment Upgrades

Building Performance Grades

Emissions Caps, Performance Standards

All-Electric, Net Zero Building Code

Portfolio Reporting Regs

*30+ localities, varying public/private disclosures*

*Seattle & Philly Tune-Ups, NYC Audit & RCx Mandates, Lighting Upgrades & Submeters*

*Chicago Energy Rating System, NYC Energy Letter Grades*

*NYC LL97, DC & St Louis & Boston & White House Coalition Building Performance Standards, Europe EPCs*

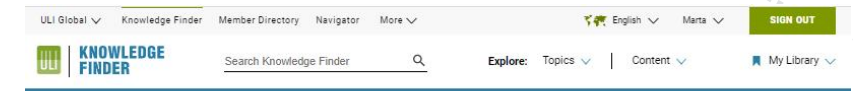
*Colorado 2030, CA resi 2020 & comm 2030, DC comm 2026, Berkeley all-electric new construction, NYC LL154 in 2024*

*Europe SFDR, United States SEC*

# ULI Global Green Building Policy Dashboard

Serves as a quick reference allowing real estate practitioners to filter by location and see a summary of key requirements related to building certifications, greenhouse gas emissions, embodied carbon, energy, electric vehicles, renewable energy, and resilience

Global Green Building Policy Dashboard			
Select Location: Austin, TX			
Greenhouse Gas Emissions Austin, TX			
Jurisdictional Policy Overview	Relevant?	Summary	More Information (Copy / Paste into Browser)
Jurisdictional commitment	✓	Net-zero community-wide greenhouse gas emissions by 2050 Carbon neutrality for City of Austin operations by 2020.	<a href="https://www.austintexas.gov/sites/default/files/files/Sustainability/FINAL_-_OOS_AustinClimatePlan_061015.pdf">https://www.austintexas.gov/sites/default/files/files/Sustainability/FINAL_-_OOS_AustinClimatePlan_061015.pdf</a>
Current climate action plan	✓	Austin's Community Climate Plan has a 35 year timeline with progress reports published annually until 2026.	<a href="https://www.austintexas.gov/sites/default/files/files/Sustainability/FINAL_-_OOS_AustinClimatePlan_061015.pdf">https://www.austintexas.gov/sites/default/files/files/Sustainability/FINAL_-_OOS_AustinClimatePlan_061015.pdf</a>
Year published	2015		



## ULI Global Green Building Policy Dashboard

December 16, 2022 | Global



<https://knowledge.uli.org/en/reports/research-reports/2022/uli-global-green-building-policy-dashboard>

# Breakout Room Questions

- Discussion #2
  - Are you facing any technical obstacles to achieving a net zero building or project?
  - What support do you need from the industry to achieve net zero on your projects?

# Research, Tools and Training, Convenings and Cultivating Leaders

**URBANLAND** Topics ▾ Industry Sectors ▾ Inside ULI ▾ 🔍

Urban Land • Sustainability • How a Real Estate Portfolio Achieves Net Zero

## How a Real Estate Portfolio Achieves Net Zero

By Marta Schantz  
May 24, 2021

Print Email Share Facebook LinkedIn Twitter

A rooftop solar installation by Kilroy Realty Corporation in Los Angeles

**A mix of technologies helps energy-saving pioneers do it.**

When ULI Greenprint set a goal of net zero carbon by 2050 for its portfolio, a real estate portfolio would need to employ a mix of technologies.

Two ULI Greenprint members have already met the net-zero-carbon goal: a real estate investment trust (REIT) with over 19 million square feet (1.7 million sq m) of office and life science space. This is how they did it.

**ULI LEARNING** About For Individuals For Universities Certificates 🔍

Overview Topics Experience Level Career Stage Format Instructor Pricing Assignments (17)

### Online: On Demand Course

## Net Zero Real Estate: Renovating and Building for Profitability

### Overview

Developed for the general real estate practitioner, this course will teach you the process of renovating existing commercial buildings, as well as greenfield developments, to a Zero Net Energy and Operational Carbon neutrality, with a very strong emphasis on the health and wellness of its occupants.

In this course, you will learn how to complete this process in a way that quantifies its profitability over renovating a building to meet minimum code. This course will provide you with the resources, methods, and materials needed to apply this methodology to your own projects, and you will learn how to assess the economic value of driving your renovations in this direction.

All Full members may access this course free of charge.

### Learning Objectives

Upon completion of this course, students will be able to:

- Understand the importance and value of the Integrative Design Process which brings all of the important project team members together at the beginning of the design process to collaborate cooperatively with all of the various design disciplines.
- Convey the components that contribute to the energy use of a building's operation, what building methods and materials are utilized to reduce it, and how these are implemented to maximize value.
- Understand the aspects of a building that affect the health and wellness of its occupants, how to design in a manner that enhances these aspects cost-effectively, and how that brings value to the building.

**KNOWLEDGE FINDER** Search Knowledge Finder 🔍 Explore Topics ▾ Content ▾ My Library ▾

## Electrify: The Movement to All-Electric Real Estate

2021 | Analysis

**R**eport Summary: *Electrify: The Movement to All-Electric Real Estate*, a report by the Greenprint Center for Building Performance highlights the path towards electrification and what that means for commercial real estate. As more cities pass "gas bans" or carbon emissions reductions goals, and as tenants and residents demand healthy and sustainable spaces, the move to all-electric real estate is becoming a reality. Action is all

**FALL MEETING** CONNECT WITH THE WORLD OF REAL ESTATE

October 11 - 14, 2021 | Chicago | In Person + Digital

## Operationalizing Net Zero for Real Estate: From Goals to Action

October 12, 2021  
1:00 PM - 2:00 PM (GMT-06:00) Central Time  
Concurrent Session  
Open to All Attendees  
Adaptive Use and Building Reuse, Conservation Development, Sustainable Development

Real estate firms across the globe are recognizing the opportunity and responsibility to address the climate crisis. Once a real estate firm commits to decarbonization and net zero goals, it must start operationalizing those goals into action across its portfolio. Net zero isn't reached in a vacuum: from development to acquisitions, asset management to leasing, every team supports action to collectively support the firm's journey to zero. This panel brings together leaders from real estate firms that have set net zero goals—and are taking concrete action to achieve them—to talk through their holistic strategy and the business case behind operationalizing these efforts.

### Speakers

- Dan Caughan**  
Director  
Capital Markets
- Mrs. Jessica Long**  
Panelist  
Nuveen Investments







# Open Discussion

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