Welcome

SUNY, NYSERDA, and DASNY are collaborating in
support of New York State's energy and carbon emission reduction goals.

Upcoming Opportunities
in Zero Net Energy (ZNE) Building

Agenda

Meet the Panel

Recognize the Opportunity
- Purpose of Today's Webinar
- State and Campus Goals
- Deep Energy Retrofits of Existing Buildings

Define the Innovation Needed
- Trends in the Evolving Construction Market

Wrap-Up and Discussion

Meet the Panel

Karren Bee-Donohoe, SUNY
Associate Vice Chancellor
SUNY Office for Capital Facilities

Saul Brown, NYSERDA
RetrofitNY Project Manager

Greg Hale, NYSERDA
Senior Advisor for Energy Efficiency Markets & Finance

Jodi Smits Anderson, DASNY
Director, Sustainability Programs

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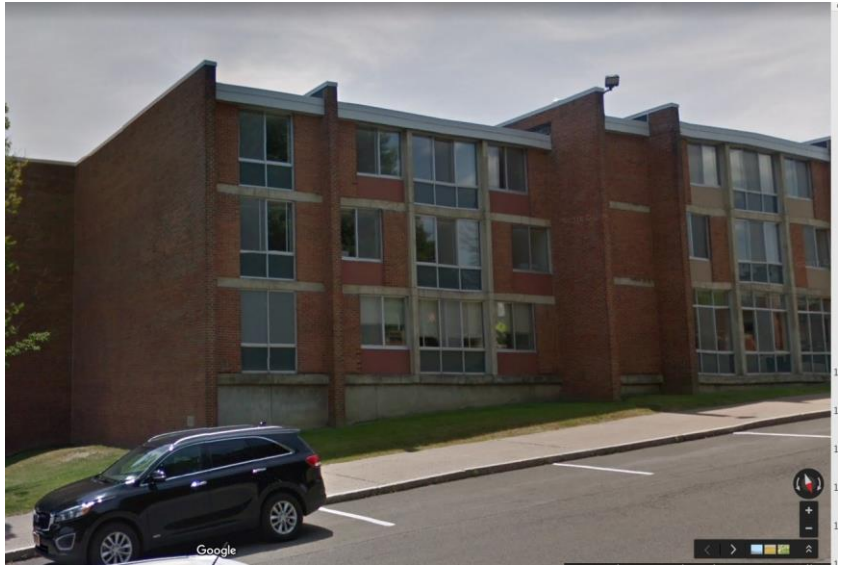
Upcoming RFQ for Net Zero Retrofit

- Residence hall in Mohawk Valley region
- 3-story, 1960's construction
- ~currently 55,000 sf and 213 beds
- Highly representative of SUNY's 500 residence halls
- Gut renovation with ZNE ready solution intended to be replicable with students in-place
- ~$27 million budget



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DASNY Overview

DASNY's construction pipeline is more than **$6 billion**. We are actively managing over **900 projects** with annual construction expenditures totaling approximately **$900 million**.

DASNY is partnering with NYSERDA and SUNY to develop high performance retrofit solutions as part of the overall gut renovation of an existing residence hall at a SUNY College.

This project is intended as a proof-of-concept pilot for possible development throughout the entire SUNY system's **64 campuses** and **500 residence halls**, supporting SUNY residence hall improvement goals and New York State goals for energy efficiency.

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NYSERDA Overview

The New York State Energy Research and Development Authority, known as NYSERDA, promotes energy efficiency and the use of renewable energy sources.

NYSERDA's RetrofitNY program is revolutionizing the way buildings are retrofit to ZNE performance.

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SUNY Overview

Chancellor Johnson's Sustainability Goals:

- 100% Renewable Grid Sourced Electricity
- Deep Energy Retrofits
- New Buildings Net Zero Energy
- Clean Energy Workforce Development

Opportunity – Stock

85% of the buildings that will exist in 2035 already exist today.

These buildings will certainly be renovated.

The work needs to be done well.

A Statewide Policy Direction

- SUNY's goal – Zero Net Carbon (ZNC) for all SUNY campuses
- SUNY, NYSERDA, and DASNY are working together: replicable, cost-effective,
- Zero Net Energy (ZNE) retrofit solutions for improved resident quality of life
- Supported by NYSERDA's RetrofitNY program.

NY State: 80 x 50

40% GHG reduction by 2030

50% Renewable Electricity by 2030

Save 185 Trillion BTUs by 2025

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Transform the Way Buildings Are Renovated

Retrofit projects yielding 50%-70% energy use reduction.

It is imperative to update the building envelope and the energy systems, together.

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The SUNY System: A Large Market Opportunity

Almost 500 Residence Halls and over 70,000 beds

Many built circa 1970s

Revenue-funded projects

Similar building types ➔ similar retrofit solution will be applicable to most halls

Additional Markets Are Being Unlocked

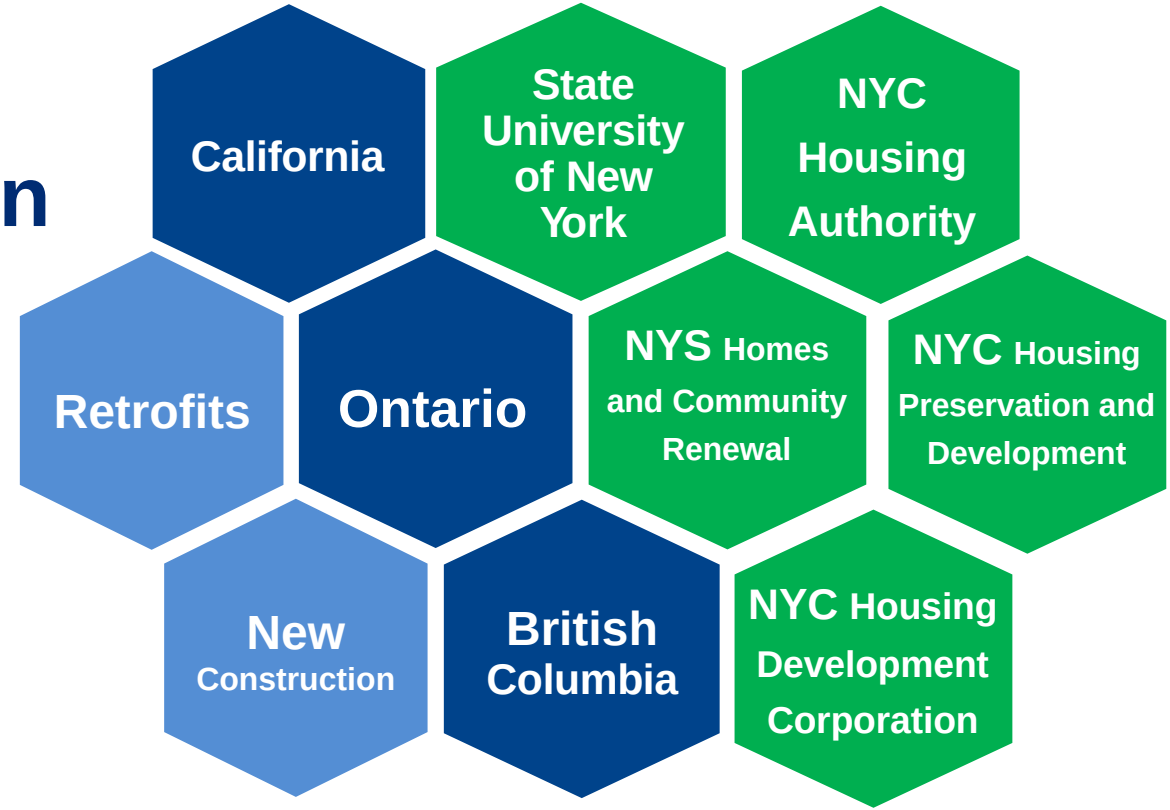
1.7 Million Units of Affordable Housing in NY State

20 year cycle

40,000 units/year

$1.2 billion annual market

A Large Scale North American Market is Emerging



RetrofitNY: Supporting the Creation of Scalable Retrofit Solutions

Industry-designed, cost-effective, standardized solutions to reaching net zero energy.

Implement solutions on a large scale to drive industrialization, reduce cost, and guarantee long-term performance.

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RetrofitNY is inspired by the successful Energiesprong model

Netherlands

United Kingdom

Germany

France

New York

Key Achievements of the Energiesprong program

- Net zero energy buildings at 40% of the cost of initial pilots
- The market is scaling up
  - ✓ 2,500 retrofits completed
  - ✓ 2,500 n/c projects completed
  - ✓ 20,000 projects in the pipeline

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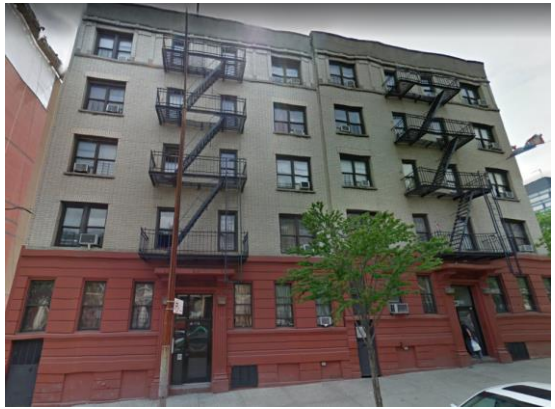
RetrofitNY Is Supporting the Industry to Design Retrofit Solutions

- Achieve or approach net-zero energy performance
- Improve resident quality of life
- Are adaptable to buildings of similar typologies
- Minimize resident disruption during implementation
- Minimize onsite construction period
- Contribute to building resiliency
- Are financeable and scalable

New York City Projects Underway

Location: Bronx, NY
Project: Five-stories (42 Units)
Owner: Volmar
Team: Bright Power



Location: New York, NY
Project: Six-stories (21 units)
Owner: Joe NYC
Team: Levy Partnership

Location: Brooklyn, NY
Project: Four-stories (46 units)
Owner: RiseBoro
Team: Chris Benedict RA

Upstate New York Projects Underway

Location: Troy, NY
Project: Two-stories (18 Units)
Owner: Beacon Communities
Team: ICAST

Location: Phoenix, NY
Project: Two-stories (40 units)
Owner: Rock Property
Team: King + King Architects

Location: Portville, NY
Project: Two-stories (24 units)
Owner: Conifer Reality
Team: SWBR

Energiesprong is Renovating Buildings Similar to SUNY Residence Halls to Net Zero Energy

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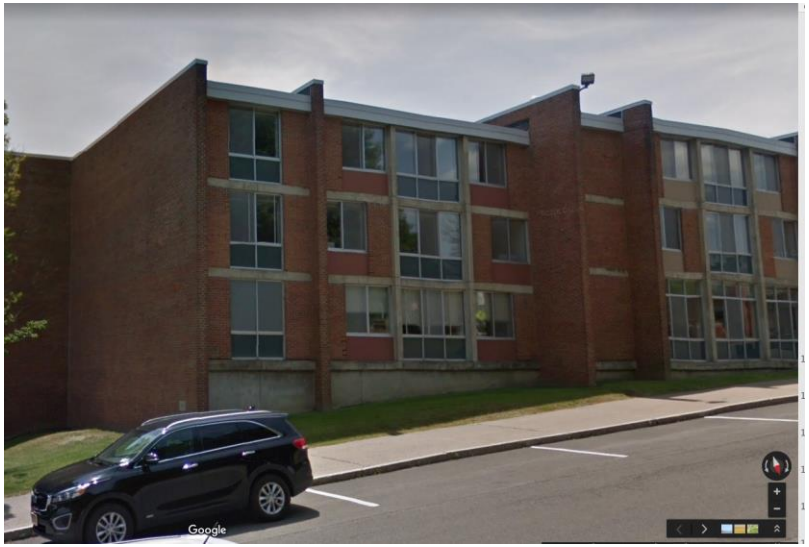

DASNY Is Seeking Strong Teams to Respond

- Innovative Design-Build teams
- Experience with high performance buildings (e.g. net zero, net zero ready, Passive House)
- Integration of manufacturing in construction
- Understanding of total cost of ownership
- Experience with institutional buildings gut renovations
- MWBE and SDVOB partners

Thank you! Questions?