Empire Building Challenge

Low Carbon Retrofit Project Summary







Whitney Young Manor 354 and 358 Nepperhan Avenue, Yonkers, NY

- Two affordable multifamily buildings
- 195 apartments
- 234,000 square feet
- 12 stories
- Built in 1973
- 2019 EUI: 96.0
- Façade: steel frame with concrete structure and brick veneer
- Heating: electric resistance baseboards
- Cooling: electric window sleeve AC

\$5 MILLION NYSERDA investment

\$12 MILLION

of total investment to bring Whitney Young Manor to carbon neutrality by 2035

POTENTIAL REPLICATION

across 11.6 million square feet, including 47 existing affordable housing developments with nearly 13,000 units



A radical transformation for Yonkers' affordable housing

Omni New York LLC is a privately held, vertically integrated company comprised of six operating businesses. Founded in 2004 by former baseball All-Star Mo Vaughn and Eugene Schneur, Omni has developed a reputation as one of New York's most trusted affordable housing developers and has acquired, rehabilitated, or built approximately 84 projects across the United States, totaling more than 17,000 units, with a transaction value of nearly \$4 billion.

Omni currently owns 51 properties nationwide, totaling 12,764 units. Of those 51 properties, 37 properties totaling more than 10,000 units are located in New York State, with most in the New York City metro area.

As part of a major property recapitalization, Whitney Young Manor will undergo a major \$22 million renovation, with nearly \$12 million allocated to the project's decarbonization effort, inclusive of all energy efficiency measures.

The retrofit project will showcase how to leverage a recapitalization opportunity to comprehensively retrofit energy systems and modernize an affordable housing complex.

"The Empire Building Challenge will enable Omni to continue to pioneer decarbonization strategies that are crucial for reducing emissions and combatting climate change."

Eugene Schneur, Managing Director,
Omni New York LLC





PROJECT TEAM:

- Omni New York LLC
- Bright Power
- Curtis + Ginsburg Architects
- Loring Consulting Engineers

LOW CARBON RETROFIT MEASURES INCLUDE:

- Major building envelope upgrade with Exterior Insulating Façade System (EIFS), new windows, and a new roof
- New centralized heat pump system to provide all heating, cooling, and domestic hot water
- Overhaul of property ventilation system to provide improved indoor air quality with state-of-the-art energy recovery ventilation units

The comprehensive project includes major building envelope overcladding that will dramatically improve insulation to reduce heating and cooling loads. This will be combined with a new centralized heat pump system to serve all heating, cooling, and domestic hot water needs.

The project serves as a good demonstration project for residential buildings with electric resistance heating and a natural gas domestic hot water system. The proposed centralized system can also be applied to properties with existing hydronic distribution.

The upgrades at Whitney Young Manor target the largest sources of carbon emissions at the property and include the implementation of the latest technologies in exterior insulation, air source heat pumps, and ventilation. The project will give the property a new aesthetic, reduce operating expenses, provide more comfortable heating and cooling, improve maintenance procedures, increase reliability, and drastically reduce the property's carbon emissions while enabling deeper future decarbonization upgrades.

The Empire Building Challenge

The Empire Building Challenge is a \$50 million investment by New York State to demonstrate different pathways for achieving carbon neutrality in tall buildings.

Through the establishment of a private-public partnership with leading real estate owners and their engineering experts, exciting approaches to cold-climate decarbonization are being tested in the New York market. With the potential to replicate these solutions across the 130 million square feet of real estate controlled by the first cohort of Empire Building Challenge partners and beyond, the impact of each project will accelerate New York's progress toward the Climate Leadership and Community Protection Act's (Climate Act) goal of reducing greenhouse gas emissions 85% by 2050.

Join the challenge

Visit nyserda.ny.gov/EBC or email ebc@nyserda.ny.gov for additional details on the Empire Building Challenge and to learn how to partner with NYSERDA, reduce carbon emissions, and get involved in the clean energy economy.

