

Empire Building Challenge

Low Carbon Retrofit Project Summary



Empire Building Challenge
PARTNER
Reimagining Low-carbon Buildings

601 Lexington Avenue
New York City

- 1.5 million square feet
- 59 stories
- Built in 1977
- Energy grade: B
- 2019 Site EUI: 86.3
- Façade: curtain wall with anodized aluminum panels and reflective double-pane horizontal glazing
- Heating: district steam
- Cooling: central plant with electric chillers and rooftop cooling tower

\$1.1 MILLION
NYSERDA investment

\$3.65 MILLION
total project to install
Empire Building
Challenge retrofits



Iconic midtown tower modernizes by recycling heat

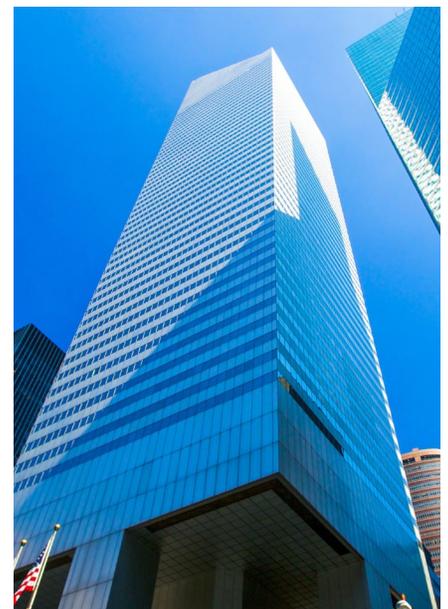
As a partner of the Empire Building Challenge program, BXP will complete a decarbonization pilot project at 601 Lexington Avenue. The 1.52 million square foot, 59-story, multi-tenant premier workplace in midtown Manhattan was constructed in 1977 and features building systems typical among commercial high rises of a similar vintage. The innovative measure planned for implementation demonstrates a scalable decarbonization opportunity within a difficult-to-decarbonize building type.

As part of their demonstration project, BXP will install water-to-water heat pumps to transfer heat from the condenser water loop to secondary water systems. Recovered heat will then be used to offset perimeter heating loads.

Through the capture and utilization of wasted heat from the building's cooling system, BXP will reduce the building's annual steam consumption by over 30%.

About BXP

BXP is a fully integrated real estate investment trust and is the largest publicly traded developer, owner, and manager of premier workplaces in the U.S. with a portfolio spanning 54.5 million square feet.



NYSERDA

PROJECT TEAM:

- BXP
- Norges Bank Investment Management (NBIM)
- JB&B

LOW CARBON RETROFIT MEASURES INCLUDE:

- Installation of water-to-water heat pumps will allow recovery of condenser water waste heat for re-use in the building's perimeter heating system

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 expansive real estate portfolios 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 nyserdera.ny.gov/EBC or email ebc@nyserdera.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.

