



NYSERDA

Quality performance with an On-site Energy Manager

Case Study

Company Name:
Lincoln Center for the Performing Arts

Industry:
Entertainment

Location:
New York, NY

Number of Building Complexes:
6

Total Square Feet:
2,541,500

Annual Electric Savings:
5,083,976 kWh

Annual Steam Savings:
30,847 MMBtu

Annual Cost Savings:
\$1,299,321

Overview

Lincoln Center for the Performing Arts consists of a 16-acre complex located in New York City. Initial planning was finalized in the 1950s and construction was completed in the 1960s. Lincoln Center is known for its major performing arts organizations, including the New York Philharmonic, Metropolitan Opera, and the New York City Ballet.

The complex of buildings totals approximately 2,500,000 square feet with multiple space types including concert halls, amphitheaters, theaters, rehearsal rooms, studios, dressing rooms, locker rooms, offices, storage spaces, libraries, museums, lounges, lobbies, lecture rooms, dormitories, kitchens, cafeterias, gift shops, control rooms, computer rooms, parking garages and several equipment rooms that provide facility services to each building. Electricity and steam are provided by Con Edison. A central chilled water plant supplies chilled water to many of the buildings, while some contain their own cooling equipment.

Through the New York State Energy Research and Development Authority's (NYSERDA) On-site Energy Manager (OsEM) program, Lincoln Center hired a full-time OsEM, who identified capital equipment upgrades and operational improvements.

Energy Reduction Goals

At the onset of the engagement, the OsEM and the team developed project goals. This included the identification of energy conservation measures that will reduce annual electrical consumption by 5 percent (1,000,000 kWh) and district steam consumption by 2 percent (2,000 MMBTU). As part of this goal, the OsEM was to provide reports to the LCPA team for the purpose of planning campus wide capital upgrades and in preparation to comply with the Climate Mobilization Act (New York City's Local Law 97).

*The implementation of the Fountain and Parking Garage LED Lighting upgrades identified by the OsEM program **reduce annual energy costs by over 960,000 kWh resulting in \$43,900 annual energy savings***

Results

A total of 73 energy conservation measures were identified that had the potential to reduce electric consumption by over 5,000,000 kWh and district steam consumption by over 30,000 MMBtu. This equates to a 10 percent reduction in electric consumption and a 24 percent reduction in district steam consumption over the baseline.

Energy conservation measures focused primarily on upgrading older vintage constant volume HVAC equipment to variable air volume systems with modern controls and energy saving sequences of operation.

Moving Forward

Lincoln Center is using the identified energy savings projects for their facility master planning in the next decade. The effort help bring to light the available energy savings as well as ancillary benefits such as replacing/upgrading equipment that is past its lifespan, preparation to comply with the Climate Mobilization Act, and improving comfort within the facilities.

The NYSERDA On-site Energy Manager Program

Through the On-site Energy Manager (OsEM) Pilot Program, NYSERDA cost-shares up to 75% of the cost to hire an OsEM. OsEMs work with companies to develop and implement successful energy and productivity projects. Projects may include operation and maintenance improvements, behavioral changes, energy efficiency upgrades, process improvements, throughput and scrap reduction improvements, and cost management.

Discover how to bring energy costs under control and maximize profitability with NYSERDA.

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