BRIGHT POWER

Transformative Retrofit in the Bronx

River Park Towers

Omni New York LLC

Omni New York, LLC is a prominent real estate developer owning over 4,000 units of affordable housing nationwide. The organization is dedicated to neighborhood revitalization through quality, well-managed affordable housing with a strong focus on sustainability. River Park Towers is a 1,654 unit property providing low-income housing in the Bronx, New York.

Objectives

- Reduce electric costss
- Fix energy-related inefficencies
- Increase occupancy rates
- Upgrade equipment to become more resilient

Challenge

River Park Towers, a two-tower complex, had long standing issues with energy. The problems were severely impacting consumption, cost, and resident comfort on a daily basis – contributing to high tenant turnover, perpetual vacant units, and unsustainable living conditions.

The lack of backup power was a danger to tenants and building operations in scenarios like Hurricane Sandy. From visible problems like mold and broken elevators to extremely high utility costs, Omni New York had their work cut out for them.

One of the biggest challenges was the electric baseboard heating system. Installed in the 1970's when electric prices were cheaper, the technology made economic sense for such a large complex. However, electric prices have continued to rise over the last 40 years, causing electric heating costs to become unaffordable. River Park Towers needed an energy plan that would be economically viable for years to come.

Solution

Omni New York worked with Bright Power to conduct an in-depth energy audit to assess the state of energy and water-related issues and identify areas for improvement. The energy audit revealed opportunities for major savings, from simple common area lighting replacements and low-flow water fixtures to deeper retrofit measures such as the conversion from electric resistance heating to natural gas. The conversion required the construction of an entirely new boiler room to house a hydronic heating loop that could run between both towers. This design proved to be the most cost-effective strategy given the scale of their heating and cooling needs.

Bright Power conducted a feasibility study and provided system commissioning for a 1MW cogeneration plant to provide backup power to the building's critical systems. In working with Omni New York's design engineer, Bright Power identified that the unit would only be able to run at half capacity, and proposed a re-design of the electrical system that would allow the building to fully utilize all of the energy from the system. Bright Power helped implement a comprehensive energy retrofit to address the full scope of energy issues at River Park Towers.

Improvements

- Electric to natural gas conversion
- New boiler plant installation
- 1 MW cogeneration system
- Energy management system installation
- Storage tank and hot water piping insulation
- Air-sealing air-conditioner sleeve installation
- Low-flow water fixture installation

Our Role

- Full Energy Audit
- T8 lighting retrofit
- Cogeneration feasibility study and system commissioning

"Since working with Bright Power, we've measured tremendous improvements in energy performance, in the lives of our tenants, and in the viability of the property."

Lulu Chou
Senior Vice President of Development
Omni New York, LLC

Results

The extensive retrofit has helped transform the River Park Towers community. In addition to higher occupancy, it vastly improved tenant comfort, added reliable backup power, and substantially reduced energy costs. In just the first year, energy use was reduced by 45%, resulting in over $2 million in savings. Savings are being monitored in EnergyScoreCards™ and to date are seeing:

$2,720,800
ANNUAL SAVINGS

45%
ANNUAL UTILITY REDUCTION

$3,500,000
NYSERDA INCENTIVES