

CASE STUDY: RIVER PARK TOWERS

TRANSFORMATIVE RETROFIT IN THE BRONX



Omni New York LLC

Omni New York is a prominent real estate developer, owning over 7,000 units of affordable housing throughout the U.S. 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.

THE CHALLENGE

River Park Towers was in need of a major overhaul. The two-tower complex was notorious for its untenable living conditions. The energy problems were severely impacting consumption, comfort and cost on a daily basis. In extreme scenarios like Hurricane Sandy, the lack of backup power was dangerous to tenants and building operations. From visible problems like mold and broken elevators to financial issues like exorbitant utility costs, Omni had their work cut out for them.

"This was a massive project. We knew from the start that new appliances and fresh paint wasn't going to cut it," said Courtney Horwitz, Omni New York Direct of Asset Management. "We really needed a partner with deep multifamily expertise to develop an all-inclusive strategy."

One of the biggest challenges was the electric baseboard heating system. Installed in the 1970's when electric prices were low, the technology made economic sense for such a large complex. However, drastic changes in utility pricing over the last 40 years put River Park Towers at a significant disadvantage. Omni needed an energy plan that would be economically viable for years to come.

THE SOLUTION

Omni engaged Bright Power to implement a comprehensive energy retrofit at River Park Towers to address the full scope of energy issues. Bright Power began the retrofit process by conducting an in-depth energy audit to assess the state of energy-and water-related systems and identify areas for improvements.

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.

Additionally, Bright Power conducted a feasibility study and system commissioning for a 1MW on-site cogeneration plant to provide backup power to the building's critical systems. In working with Omni'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.



THE RESULTS

The extensive retrofit has helped transform the River Park Towers community. In addition to higher occupancy, vastly improved tenant comfort, and reliable backup power, the energy and cost savings have been substantial. In just the first year, energy use has been reduced by 41%, resulting in over \$2 million in savings.

"We've made tremendous strides in energy performance at River Park Towers thanks to Bright Power. The investment has made a huge difference in the lives of our tenants and in the viability of the property."

**Courtney Horwitz,
Director of Asset Management**

\$2,726,800 Annual Cost Savings

45% Annual Utility Savings

\$3,500,000 NYSERDA Incentives

Project Scope Included:

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

Bright Power's Role:

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