

BRONX APARTMENTS INCREASE ENERGY EFFICIENCY AND REDUCE COSTS

Building upgrades improve comfort and eliminate pest issues



Project Overview

Built in 1923, Roosevelt Gardens in the South Bronx consists of 14 affordable housing buildings that share a common roof and are serviced by the same central electrical and mechanical systems. The properties faced pest infestation and impending penalties related to New York City's Local Law 97 (LL97), which caps carbon emissions for buildings over 25,000 gross square feet.

Property manager Kraus Management enlisted help from Atlas Builders to improve operating performance and lower costs while reducing carbon emissions and enhancing conditions for residents. With support from NYC Accelerator, the properties made upgrades to achieve LL97 compliance through 2030.



- **\$8.2 million:** Net project cost (after incentives)
- **\$9.45 million:** Total project cost (before incentives)
- **\$1.25 million:** Incentives received
- **\$155,000/year:** Estimated energy cost savings
- **\$1.76 million:** Estimated LL97 penalties avoided for 2050
- **2 years:** Actual project duration
- **23.9 years:** Payback period*

The Opportunity

Following a comprehensive energy audit, Atlas Builders confirmed that replacing the complex's aging two-pipe steam heating system with a two-pipe hydronic heating system with integrated domestic hot water tanks and modernizing all 14 elevators would reduce energy use, operating costs, and carbon emissions while enhancing resident comfort. Additionally, eliminating underground steam heat pipes would address pest issues, and upgrading the roof with solar panels and insulation would optimize the performance of the heating system.

- **Pre-war buildings** were facing penalties for exceeding carbon emissions limits set by LL97
- **Inadequate insulation** contributed to inconsistent building temperatures and affected resident comfort

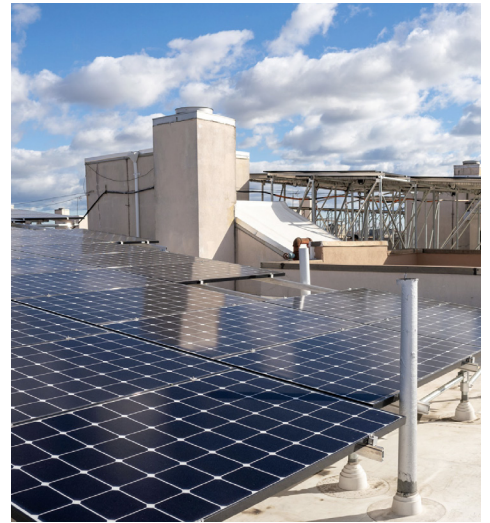
*This current estimate includes only one building subject to LL97, categorized under Section 321. The building owner plans to meet the Prescriptive Energy Conservation Measures, which eliminates all LL97 penalties. This estimate does not include operating expense savings, which, in addition to energy savings, further reduce the payback period.



Replacing an aging boiler will enhance efficiency.



A new two-pipe hydronic heating system transports hot water more efficiently throughout the building.



Newly installed solar panels reduce fossil fuel dependency and optimize indoor heating.

The Solution

Kraus Management and Atlas Builders contacted NYC Accelerator and received:

Free help with project planning and development

Connection to trusted partners for help with building design, technology, and incentives

Assistance with local, state, and federal incentives, including New York State Energy Research and Development Authority (NYSERDA) funding for a Federal Trade Commission energy study

The Benefits

- NYSERDA incentives to offset the costs of an energy study
- NY-Sun incentives to install solar panels
- Reduced operation and maintenance costs
- Improved air quality and comfort for residents
- Lower utility costs
- Enhanced property value
- LL97 compliance through 2030

“NYC Accelerator has been a great partner in helping us understand the incentive process and pushing our applications through. Their knowledge of grant programs has helped us understand what our buildings can qualify for and how we can help our buildings comply with LL97.”

Zarifet Maqelara, Project Manager, Atlas Builders

Want to help your building improve comfort, lower costs, and comply with local building energy laws?



Contact NYC Accelerator today to get started.

accelerator.nyc | 212.656.9202

info@accelerator.nyc | [linkedin.com/company/nycaccelerator](https://www.linkedin.com/company/nycaccelerator)

NYC Accelerator is a program of the NYC Mayor's Office of Climate & Environmental Justice.

NYC

Mayor's Office of Climate & Environmental Justice