

PROJECT INFORMATION

Program Participant

- 70 Columbus Urban Renewal, LLC

Location

- 70 Christopher Columbus Dr Jersey City, NJ 07302

Project Contact

- James Ronga
 Vice President of Development
 Ironstate Development

Technology

- LED lighting
- Packaged terminal heat pumps
- High-efficiency HVAC units
- ENERGY STAR® refrigerators and dishwashers
- Insulation and energy-efficient windows

Total Project Cost

- \$1,050,000

NJCEP Incentives

- \$775,446 through the Pay for Performance program

Estimated Annual Savings

- 1.095 MWh
- 1,780 MMBtu
- \$192,216

Project Payback

- 1.5 years

Pay for Performance Partner

- Minno & Wasko Architects and Planners

Project information, savings and environmental benefits were provided by the project contact.

Jersey City high-rise building sets itself apart through energy efficiency

Background

Jersey City, the second largest city in New Jersey, is in the midst of an unprecedented construction boom, with 6,000 new residential units and 200,000 square feet of additional retail space under construction in 2015. Many expect it to become the state's most populous city in 2016.

Such growth could place stress on a densely populated city's infrastructure. To help provide some relief, the developers of 70 Columbus Tower, a new 50-story residential building in downtown Jersey City, have made it a priority to incorporate "green building" practices into the project.

70 Columbus Tower contains 550 luxury apartments atop 12,000 square feet of retail space. The tower, developed by a group led by Ironstate Development and Panepinto Properties, is part of a 1.2 million square foot, \$350 million project of four new buildings designed to include apartments, hotels, parking and retail.

Many of the energy-efficient upgrades included within 70 Columbus Tower were made possible due to the developers' participation in *New Jersey's Clean Energy Program™* (NJCEP).

Solution

The NJCEP Pay for Performance program incentivizes developers who take a comprehensive, whole-building approach to saving energy. Incentives are directly linked to reducing energy use by at least



Energy-efficiency improvements at 70 Columbus Tower will save more than 1 MWh of electricity and nearly 1,800 MMBtu of natural gas per year. Developers anticipate those savings will differentiate it from other high-rise buildings in Jersey City.

15 percent below the state's current energy code.

James Ronga, Vice President of Development for Ironstate, learned of the Pay for Performance Program through the application process for an urban transit credit from New Jersey's Economic Development Authority (EDA). The EDA tax credit requires that qualifying projects receive certification by a green building standard such as Leadership in Energy and Environmental Design (LEED) or participate in the Pay for Performance program.

The developers of 70 Columbus Tower found that participation in Pay for Performance would both satisfy the EDA

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 Vice President of
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 Ironstate

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requirements and assist them in obtaining LEED certification. Ever since, "it's become a standard practice that our buildings be built with energy efficiency in mind and in compliance with a green building standard," Ronga said.

70 Columbus Tower exceeds building requirements on energy efficiency and water conservation. Electricity savings are achieved through high-efficiency lighting as well as packaged terminal heat pumps and air conditioners. Hot water is provided through a centralized, 96 percent efficient gas-fired condensing boiler. Further gas savings are achieved by reducing demand through low-flow water faucets and ENERGY STAR® appliances. The building envelope's efficiency was improved by adding insulation within the wall space and by installing more efficient glass panels.

Minno & Wasko Architects and Planners, a Pay for Performance approved partner, provided design suggestions to help 70 Columbus Tower reach the 15 percent performance target. Their recommendations included approaches to improve the efficiency of the glass panels that cover 40 percent of the building's exterior.

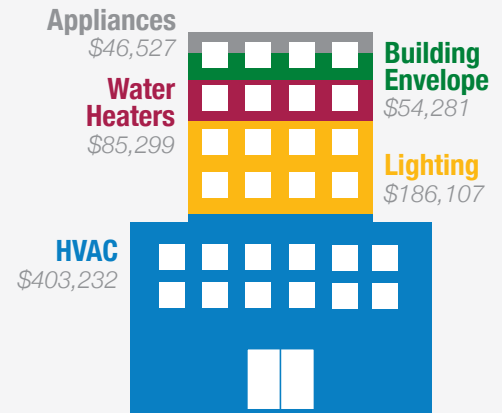
"In a high-rise apartment building on the river across from New York, having lots of windows and a great view is of huge importance," said Glenn Haydu, an architect with Minno & Wasko. "We improved the efficiency of 40 percent of the building's glass facade by 10 percent. Even small improvements can result in significant savings."

The Pay for Performance program is estimated to provide the developers of 70 Columbus Tower with \$775,446 in

incentives, covering about 74 percent of the \$1.05 million cost of installing the new energy-efficient equipment. The upgrades are expected to result in energy savings of 1.095 MWh of electricity and 1,780 MMBtu of natural gas per year.

Energy efficiency improvements at 70 Columbus Tower will benefit residents as well by lowering their utility costs. Ronga expects those energy savings will help differentiate the building from other high-rise buildings coming onto the market.

Project Incentives: \$775,446



"There's a definite benefit to building green. It should help us attract new residents and retain the residents in our buildings," Ronga said. "We are focused on our portfolio of residences becoming the go-to buildings for residents concerned about their energy costs."

For Ronga and his team of developers, 70 Columbus Tower is just the beginning. 90 Columbus Tower, a 50-story tower that will be erected on the same block, is expected to participate in the Pay for Performance program in 2016.