

Record-breaking Solar Pays the Bills Dumont Green



Hudson Companies is a leading real estate development firm based in the New York area. Hudson Companies is known for its commitment to high-quality urban housing across luxury, affordable, and institutional markets.

Objectives

- Mitigate climbing operational costs
- Incorporate sustainability and renewable energy
- Minimize project costs to fit the budget

Challenge

Dumont Green, a 176-unit, 172,000 sqft, low-income rental building located in Brooklyn, was developed by Hudson Companies and designed by MHG Architects, PC. Hudson Companies sought alternative methods for mitigating climbing operational costs, and strengthening long-term viability early in the planning stages.

“Rising energy costs are significant drivers of rising rents in New York City and we needed to strategically tackle that reality early on in the development process,” said **Aaron Koffman, Principal at Hudson Companies.**

While Hudson Companies was interested in implementing cutting edge energy efficiency measures, the budget was not originally equipped to handle the upfront cost, making solar photovoltaic (PV) a seemingly unaffordable endeavor.

Solution

Bright Power worked with Hudson Companies in designing a building that achieved ENERGY STAR certification, which resulted in a 26% improvement from code. Dumont Green was one of the first city-subsidized affordable housing

developments to voluntarily attain Enterprise Green Communities (EGC) Certification. By building to EGC standards, Dumont Green can boast lower utility costs, a healthier living environment for its residents, and increased sustainability.

To assess solar PV viability, Bright Power began by comparing modeled and projected energy usage between the code-minimum designs and Bright Power’s recommendations, allowing Hudson Companies to accurately assess the value of energy investments. They decided the more ambitious route and as a result, the project features an 80kW solar PV system that was the largest solar PV array on a residential building in New York state at the time of construction.

Initially a large installation did not seem feasible; however Bright Power was able to leverage the projected financial gains into an energy plan that made the installation economically attractive. Bright Power was able to achieve the highest level of savings possible (26%+) through NYSERDA’s Multifamily Performance Program (MPP), earning Dumont Green over \$240,000 incentive money used to help cover the cost of the installation.

“Incorporating energy efficient elements and renewable technology was key to creating and maintaining affordability at Dumont Green,” said **Aaron Koffman.**



"Bright Power developed a long-term strategy to help us achieve our sustainability goals...We really wanted Dumont Green to set the standard for the City's evolving affordable housing stock."

Aaron Koffman
Principal
Hudson Companies

Results

The ample roof space allowed for the large scale solar PV system that powers over half of the laundry facilities, elevators, and common areas all while reducing electricity demand by 40%. Dumont Green was the winner of the **National Grid Energy Efficiency Award in 2011**. Solar PV system highlights:

80.5 kW
SOLAR PV SYSTEM

117,000 lbs
CARBON OFFSET PER YER

40 year
SYSTEM LIFETIME

40%
ELECTRIC DEMAND REDUCTION

Improvements

- Installed 80.5 kW solar PV system
- Received Enterprise Green Communities (EGC) certification
- Received ENERGY STAR certification

Our Role

- Energy modeling
- ENERGY STAR certification
- EGC certification
- Solar PV feasibility, design consulting, and installation
- Incentive procurement and administrative services for NYSERDA Multifamily Performance Program (MPP) New Construction received in partnership with AEA — \$240,000 received
- Construction implementation oversight