



Whole Foods Market Brooklyn, NY

Energy-efficient Whole Foods Market store reinforces commitment to environmental stewardship while improving the customer's shopping experience.

Background

Whole Foods Market is committed to reducing its environmental impact and supporting the health of its customers and team members, not only through the products it sells, but in how it designs, builds, and operates its stores. The company recently built a new 56,000-square-foot supermarket (Whole Foods Market Third & 3rd) located on just over four acres in the Gowanus neighborhood of Brooklyn. Whole Foods Market Third & 3rd consists of two levels of retail space, a rooftop greenhouse that will grow and supply produce to the store, a second-floor restaurant space overlooking southwest Brooklyn, and a landscaped public walking path along the Gowanus Canal and the 4th Street Basin. The store participated in a number of New York State Energy Research and Development Authority (NYSERDA) programs and is pursuing LEED® Platinum certification.



Recommendations

Whole Foods Market partnered with EME Group, a technical assistance firm under contract with NYSERDA. EME Group identified and evaluated cost-effective energy efficiency measures, drafted a proposal for a combined heat and power system, and performed LEED services. Whole Foods Market also partnered with SunEdison to participate in NY-Sun. Each of the NYSERDA programs helped Whole Foods Market offset the cost of integrating energy efficiency measures into the design and construction of the building. Among the energy efficiency improvements implemented were:

- Cogeneration via a 157-kW CHP plant
- HFC/CFC/synthetic-free all-natural CO₂ refrigeration system
- Demand-control ventilation
- ENERGY STAR® and DLC-approved LED and lighting control technologies



- Daylight harvesting
- A 324-kWp solar electric system covering much of the parking lot
- Off-the-grid self-generating LED parking lot lighting
- Self-generating car charging stations via wind and solar power

Results

Support was provided by NYSERDA for the planning and implementation of many of these features and systems. The combination of these programs and other energy efficiency measures is estimated to result in:

- An annual electric savings of 2,513,868 kWh
- A peak demand savings of 324.3 kW
- An annual energy cost savings of more than \$369,000
- A simple payback (after incentives) of 6.3 years for the project
- The expected whole building design energy savings is more than 60% above the ASHRAE 90.1-2007, Appendix G baseline building

Get Started

Visit nyserdera.ny.gov or call **1-866-NYSERDA** to learn how you can reduce your energy consumption and costs.

“In partnering with NYSERDA and following our core value of practicing environmental stewardship, we have designed one of America’s most sustainably built retail establishments. The new store is approximately 60% more energy efficient than your average grocery store.”

*– Tristram Coffin, LEED, AP, Green Mission Team,
Whole Foods Market*