



SECURING GOVERNMENT & UTILITY INCENTIVES ENERGY EFFICIENCY & SUSTAINABILITY LIGHTING & HVAC | LEED® V.3 CERTIFICATION

620 Mamaroneck Avenue #244 White Plains, NY 10605 | 347-470-7090 | BrightEnergyServices.com

THE BEDFORD-STUYVESANT YMCA OF GREATER NEW YORK ENERGY SAVINGS VIA LED LIGHTING JULY 2013

CHALLENGE

The Bedford-Stuyvesant YMCA was founded in 1888 to cater to a then fast-growing community. It has since steadily expanded into today's 65,000 square-foot facility, providing a multitude of programs committed to promoting healthy living for its members ranging from toddlers to seniors.

Determined to maintain operational sustainability, the Bedford-Stuyvesant YMCA recognized the need to upgrade its lighting in the pool and surrounding areas. Situated in the lower level, the space receives minimal natural daylight and thus requires a significant amount of artificial lighting power. Upgrading to more energy efficient equipment was the logical step to take.

The Property Manager, Felix Gonzalez, decided to contact Bright Energy Services, a leader in Sustainability and Energy Efficiency industry to help him meet the challenge. Bright Energy Services (BES) is no stranger to the YMCA of Greater New York. BES successfully upgraded the lighting in two major sections of the McBurney YMCA facility last year, and is currently in the process of retrofitting six more branches around the city.

SOLUTION

Bright Energy Services, a division of All HVAC Service Co., Inc. performed a lighting audit and presented an energy analysis and a financial analysis to Gonzalez. Bonnie Hagen, COO of Bright Energy Services, recommended replacing the existing fluorescent, high-pressure sodium, and incandescent lamps with LED (light emitting diodes) lamps. Hagen explained, "LED lighting has come a long way technologically and significantly reduces energy load, and therefore, energy expenses." Gonzalez reviewed the analysis and determined that, "With better light quality and a longer life cycle than traditional fluorescents, it just makes good financial sense to upgrade to LEDs." Dordy Jourdain, the branch Executive Director, agreed. "This energy savings project is aligned with our mission to improve health and well-being. Reducing our energy load helps to reduce emissions, creating a better environment globally", Jourdain explains. He gave the go-ahead for the proposed retrofit, and the project was commenced.

Bright Energy Services selected the best LED products to use for the facility as well as the installation team. The LED T8 light tubes are becoming a more viable lighting alternative for projects that require energy savings and proper lighting level. "We are pleased that the Aledra LED T8 met the requirements set by Bright Energy for the YMCA project" stated R.B. Evans, National Sales Manager at Aledra, "more facilities, like the YMCA are asking about the LED T8. Having a partner such as Bright Energy Services, locally to make the proper evaluation



LED LIGHTS IN POOL AREA, BEDFORD STUYVESANT YMCA

and balance the needs of the occupant between energy saving and lighting level is why this project is as successful as it is. The staff at Bright Energy have done an excellent job for the Bedford-Stuyvesant YMCA." Bright Energy Services managed the project from start to finish, coming in on time and on budget.

BENEFITS / \$ SAVINGS

The Pool Area:

14 high-pressure sodium lamp fixtures which were 480 watts each were changed to 1X8 LED lamp fixtures which are 102 watts each. 3 wall mounted 180 watt wall pack fixtures were changed to 50 watt LED wall pack fixtures. The fluorescent T8 77 watt fixtures and the fluorescent T12 96 watt fixtures were changed to LED 68 watt LED fixtures. The yearly savings is approximately 50,000 kWh and \$10,100, or 78%.

Reduced Operational Expenses

There are many benefits to moving to LEDs that are hard to quantify. LEDs burn cooler, so the heat load is reduced, also reducing cooling costs. LEDs do not use ballasts, so ballast replacement costs (ballast and labor) now become zero. Life expectancy of LEDs are 5-10 years, so replacement product and labor costs are also reduced.

Financial Rebate:

Because of the significant kWh savings, Bright Energy Services applied to Con Edison and NYSEDERA for an energy efficiency financial rebate which is expected to come in at approximately \$6,000. With the rebate and energy savings (not to mention the reduced operational expenses), the payback period is just over one year.