



RECREATIONAL FACILITY

 **BIG SHINE
ENERGY**
LED LIGHTING CASE STUDY

YMCA OF METRO NORTH

NORTH OF BOSTON, MASSACHUSETTS

PERFECT OPPORTUNITY FOR A CHANGE

As a beloved community and fitness center that has brought neighborhoods and families together for generations, the YMCA is a staple of American society. And in 2017, YMCA of Metro North, which includes eight facilities north of Boston, Massachusetts, made the switch to quality LED lighting from Big Shine Energy, bringing valued sustainability to their part of the country. In this Case Study, we're highlighting three combined projects in Melrose and Saugus.

Ms. Kathleen Walsh, COO of the YMCA of Metro North, was concerned about safety in the gymnastics and aerobics areas at Saugus, as well as swimmer safety under the old lighting setup at the Melrose pool. The facilities were already in the process of undergoing major renovations, so it was the perfect timing to replace their outdated lighting.

In addition to increased safety, as a charitable community-based organization, saving money was also important, as major renovations can be tough to facilitate without a positive cash flow.

TIMING WAS OF THE ESSENCE

One lighting company proposed changing out the lights for the YMCA of Metro North facilities, but the lead time was at least three months. Big Shine Energy came in and had a clear understanding of the serious safety concerns and time sensitive nature of the project. The entire process—from conducting the lighting audit to the installation—was completed in less than one month.

When asked about the installation, Ms. Walsh said "This was done overnight with no disruption to the members. It's great! Nobody would have accommodated us in such a way."

USING ENERGY-EFFICIENT PRODUCTS

The Saugus facilities housed wrap-around fixtures with T5 fluorescent tubes. We proposed T5 Type B tubes to keep in step with safety regulations and concerns. We installed the Arcelia, which was the application recommended by their insurance company. We replaced inefficient T8 tube fixtures with our Big Shine LED panels for the interior. In the exterior, we installed the Big Shine LED Alioth wall packs and Sagitta area lights.

SAVINGS

The project became even more urgent once Ms. Walsh learned of the significant savings that would be lost by not switching to LED lighting. Now the Saugus facility is saving approximately \$26,275 every year in energy costs, and the Melrose facility is saving about \$17,509.

Their maintenance costs combined used to be \$50,000 every year but LED fixtures required little to no maintenance. Plus, all of Big Shine LED's products are backed by a five-year warranty and labor has a one-year warranty. Through National Grid, Saugus YMCA gained \$50,047 in incentives and Melrose gained \$26,369 in incentives. This brought their ROI to an average of two years for both facilities.

Check out the major savings they're bringing to the environment as well. YMCA Metro North is really making a huge step toward Approaching Zero carbon emissions. Thank you, YMCA. We're proud to help continue a valued legacy of American culture.

THE LIGHTS



2x4
LED Panel



Arcelia
40W



Alioth
60W



Sagitta
150W



T5 4ft
LED Tube

THE NUMBERS

ANNUAL SAVINGS



\$43,784

SAVED IN
ENERGY COSTS



277,032

KWH SAVED

ENVIRONMENTAL IMPACT



206

TONS OF
CO₂ EMISSIONS
REMOVED



44

CARS REMOVED
FROM THE
ROAD



243

ACRES OF
U.S. FORESTS
PLANTED