



Emendee Buzz

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Energy & Telecommunications Solutions

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Client Corner



When we began working with Jeff Williams, Executive Director of the Hamden-North Haven YMCA, we quickly realized that we could help to improve the foot candles (light levels) in the pool area, while simultaneously decreasing the cost of running the lights.

Thanks to an incentive through the CT Small Business Energy Advantage program, along with 0% Financing, the solution included replacing the old 250 Watt Metal Halide Lighting with new state-of-the-art 4-Lamp T-5 Fluorescent Fixtures. The result, as seen below, is night and day! The improved lighting, combined with an estimated \$2,500/year savings, with a 2 year return on investment, is the perfect solution!

Before & After the Upgrade:



Next Issue:
Telecom Savings 101

Old Lights Vs. New Lights

- Some Light Bulbs, including 100-Watt Incandescent Bulbs and T-12 Fluorescent Lights, are no longer being manufactured in the U.S. Advances in lighting technology have drastically decreased energy consumption while improving the appearance and level of light.
- Carbon Fluorescent Lights, or CFL's, have been around for years. They use about 75% less energy than the incandescent bulbs. The latest buzz word in lighting is LED's (Light Emitting Diodes). LED's use about 90% less energy than incandescents, look impressive, and have a much longer expected life than CFL's.
- T-12 Fluorescent Lights, which are 1 1/2" wide, are often replaced with T-8 Lights, which are 1" wide. They are much more efficient, and when combined with reflective lenses, are often brighter, cost less to run, and look great.
- U-Tubes are 4' long bulbs, bent to form a "U" shape. For a 2' x 2' ceiling area, two U-Tube bulbs were commonly installed in the past. Our solutions often involve replacing these with (2) 2' 17-Watt T-8's with reflectors. This cuts the energy by about 40%, and often brightens the room.
- Metal Halide and High Pressure Sodium Lights are often replaced with Induction Lights, which use about 50% less energy. The life expectancy of Induction Lights is 100,000 hours (compared to 2,000 hours for incandescent lights!).



From Left to Right
An Incandescent Bulb, High-Pressure Sodium Street Lights, a U-Tube Fixture, & a Comparison of a T-12 & T-8's

Telecom Then & Now

Back in the 1990's, Long Distance rates were often around 20 cents per minute, "high-speed" internet was 56K (56,000 bits of information per second), Voice over Internet Protocol (VoIP) systems and networks were not yet available for the general public, and cell phones...well, they weren't very small, and they certainly were not very smart!

Long distance rates are now often less than 5 cents per minute, or are included in a bundled price. Internet speeds are measured in "M's" (Millions) instead of "K's" (Thousands). Fiber has become more available, pushing for even faster, more reliable connections. VoIP Phone Systems and Networks are being used more and more around the world to connect multiple offices together as if they are located in the same office. And Smart Phones allow us to be just about anywhere, while staying connected to just about everything and everyone!