Troxler Electronic Laboratories LED Upgrade: Saves $40,600 a Year in Energy Costs, Nearly 50% of Project Funded by Energy Incentives

The Challenge

Troxler Electronic Laboratories, Inc., a mainstay of the Research Triangle Park in NC, has been dedicated to developing, manufacturing, and servicing precision quality control measurement equipment since 1958. With a goal to be environmentally conscientious, the company sought the expertise of GreenTech Solutions Group to upgrade the existing outdated lighting throughout the facility with energy efficient LED lighting.

Troxler was looking to decrease rising operational costs and improve safety and production throughout the facility, including offices, lab rooms, and common areas.

The Solution

Troxler carried out extensive product and industry research in selecting a partner for their lighting upgrade. **GreenTech worked closely with Troxler staff to provide recommendations on solutions vital to production**, and efficiency upgrade recommendations were confirmed by a third-party audit performed by North Carolina State University.

> **Troxler is a staple in the RTP community and a pioneer in local entrepreneurship that we all strive to emulate. We are priviledged to have been selected as their lighting partner. Their staff was pleasant to work with and integral in making this a successful project.**
>
> **GreenTech VP of Business Development Scott Jernigan**

Legacy T12 strip lights were upgraded with energy-efficient LED tubes in manufacturing and engineering areas, and 2×4 troffers were replaced with dimmable LED panel lights allowing for customization of light levels in offices, labs, and common areas.

The Results

The LED lighting upgraded resulted in a 68% reduction in annual lighting energy usage. The solution was dramatically better lighting quality that greatly helped to improve employee safety and increase productivity as well as producing a brighter atmosphere throughout the building. The lighting upgrade also included the replacement of external area lights with LED pole lights, flood lights, and wall packs to provide increased security around the facility and beautification of the building and grounds.

An impressive summary of benefits includes the following:

- 68% reduction in annual lighting energy usage
- 2.2 year payback period
- $81,900 savings in rebates
- $40,603 savings annual lighting energy usage
- 451,151 kWh reduction in annual lighting energy usage

GreenTech assisted in securing **generous rebates from Duke Energy Progress that paid for nearly half the entire lighting project!** The energy savings combined with rebate incentives resulted in a 2.2 year payback for Troxler. The LED lighting upgrade also resulted in a 318,431 kg decrease in greenhouse gases produced, which is the equivalent of 35,831 gallons of gasoline consumed or planting 261 acres of forest.

Troxler Electronic Laboratories truly represents a company that is environmentally responsible and sets a brilliant example for other industrial businesses to follow.

"Troxler is a staple in the RTP community and a pioneer in local entrepreneurship that we all strive to emulate. We are privileged to have been selected as their lighting partner. Their staff was pleasant to work with and integral in making this a successful project," said GreenTech VP of Business Development Scott Jernigan.

GREENTECH SOLUTIONS GROUP

FORWARD THINKING. TECHNOLOGY DRIVEN.