

GreenTech Delivers 62 Percent Energy Savings for Charter Medical with LED Lighting Upgrade

Greentech secured nearly \$50,000 in energy rebates to pay for the project, resulting in a quick two-year payback period for Charter Medical

Winston-Salem, NC – May 24, 2017: GreenTech Solutions Group delivered a 62 percent reduction in annual lighting energy usage for Charter Medical, Ltd. after an extensive LED lighting upgrade of its Winston-Salem, NC facility.

Charter Medical, Ltd. has a 25-year history of developing and providing specialty single-use products to the blood transfusion, cell therapy, biotechnology, and pharmaceutical markets. Charter Medical prides itself on exceeding customers' expectations through a commitment to continuous improvement, and to that end, sought out the expertise of GreenTech Solutions Group to upgrade the lighting in its 72,000 square-foot facility.



GreenTech carefully assessed the current lighting configuration in Charter

Medical's warehouse and office areas, and worked closely with Charter Medical to plan a strategy to replace the lighting in two cleanrooms and warehouse space. GreenTech provided photometrics on fixture allocation with light levels needed for compliance with federal regulations. Instrumentation was utilized throughout the process to monitor particle counts insuring that the cleanroom remained within compliance throughout installation.

GreenTech's recommendations resulted in substantial energy and cost savings. The summary of benefits were the following:

- 62% reduction in annual lighting energy usage
- \$22,022 savings in annual lighting energy costs
- 2-year payback period
- \$48,383 savings in energy rebates
- 275,286 kWh reduction in annual lighting energy use
- 62% reduction in greenhouse gas emissions

GreenTech upgraded existing legacy T12 and T8 fluorescent troffers with high-efficiency LED panel fixtures in all office areas. **Light level dimming controls further increased energy efficiency** in these areas throughout the facility. The office lighting upgrade not only improved the overall quality of light, integrated dimming controls allowed each employee to customize light levels to a particular task or mood.

"We always strive to do more than just upgrade the lighting in a facility. We seek to make the resulting environment more conducive to productive work, and allowing employees to control the lighting in their individual spaces to their own needs is a great benefit," said GreenTech VP of Business Development Scott Jernigan. "This project, especially concerning the strict regulations on the cleanroom areas, demonstrates our commitment to keeping operations going smoothly during the installation process and ultimately delivering superior lighting products to our clients."

After installation, subsequent cleaning and verification, the cleanroom areas were returned to service with minimal impact to production. The cleanroom areas saw an increase in light levels, improving acuity and task performance.

Philips LED highbays were utilized throughout the warehouse for lighting. With proper fixture configuration, warehouse lighting quality was dramatically increased, enhancing safety and efficiency.

"All the employees noticed an immediate improvement," said Casey Vestal, Charter Medical's purchasing agent. "Charter Medical is focused on exceeding our client's expectations, meeting quality requirements and providing best possible service and products. GreenTech shares the same goals and from start to finish, we were very pleased with the performance of their team on this project."

GreenTech assisted in securing more than 50 percent of the project's total cost in rebates from Duke Energy: Smart \$aver Incentive Program. The generous rebates combined with remarkable energy savings resulted in a quick two-year payback period for Charter Medical.

The lighting retrofit not only saved the company \$22,022 in operational costs yearly, it also delivered a 62 percent reduction in greenhouse gas emissions, the equivalent of taking 41 cars off the road or planting acres of forests.

The LED upgrade provided Charter Medical with a better quality light, brighter and more efficient spaces, while reducing their overall carbon footprint.

"Charter Medical has proven to not only deliver products that help improve the quality of life, but by upgrading its facility to energy-efficient LED lighting, it is also making an environmental impact that will have long lasting effects on generations to come," Jernigan said.

About GreenTech Solutions Group:

GreenTech Solutions Group was founded in 2009, designed as a full-service consulting firm to deliver proven energy-efficiency solutions that reduce clients' consumption, help protect our environment, conserve resources, and ultimately generate timely return on investment. They specialize in cutting-edge energy-efficient lighting, energy management, mechanical efficiency, alternative energy production, and more, planning and implementing projects for businesses of all sizes in every industry nationwide. GreenTech's team is composed of dedicated industry experts, each bringing extensive backgrounds and unique perspectives to every project. Their process has been designed to offer turnkey project delivery for each of its clients. They apply their experience and knowledge to assess and analyze each clients' current situations thoroughly, identify cost-effective strategies for improving efficiency, develop a detailed plan, and oversee the implementation of the plan for optimal results. For more information, please visit www.greentechNC.com.