Zink Imaging LED Upgrade: Saves 82% in Operational Costs, $35,035 Annually

The Challenge

ZINK Imaging is an independent company that is pioneering ink-free printing for consumer and business needs. Zink, which stands for Zero Ink®, is the inventor of the ZINK® Technology and the manufacturer of the award-winning ZINK Paper®. The company's manufacturing plant is located in Whitsett, North Carolina.

Zink revolutionized printing by eliminating the need for ink cartridges, ribbons, or toners. Zink offers a value proposition that is economical and environmentally friendly. With more than 180 patents and patents pending supporting the technology, upgrading to LED lighting was a natural progression for a company on the leading edge of its industry.

Zink Senior Manager of Engineering and Utilities Bill Neiland was looking to **upgrade the plant to more eco-friendly lighting to better fit with the mission of Zink Imaging** and to save on rising operational costs incurred from outdated fluorescent lighting. Neiland looked to GreenTech Solutions Group to address the needs of the large facility that sits on 85 acres. It was necessary to have little disruption to the workflow as the lighting upgrade was conducted.

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>
> **Bill Neiland**
> **Zink Senior Manager of Engineering and Utilities**

The Solution

GreenTech conducted a comprehensive lighting audit of Zink's existing system, provided analysis and forecasted the energy and maintenance savings that result from an upgrade to energy-efficient LED lighting.

GreenTech's upgrade within Zink's facility resulted in an impressive 79% reduction in annual lighting energy use. The new LED lighting significantly improved light levels over the previous, outdated system that was in need of being replaced. Dimmable panels and controls contributed to more energy savings and gave employees control over various lighting environments.

Metal halide and T12 fixtures throughout the facility, including the exterior, were retrofitted with Philips LED high bays, dimmable panel lights, wall packs, and flood lights.

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The Results

The outcome was brighter lighting and enhanced color temperatures in work areas, which greatly improved employee productivity, safety, and helped Zink's commitment to deliver a more superior end product. **Zink also experienced a significant 82% savings in annual operational costs,** which will add up to **more than $360,000** over the next 10 years.

A summary of benefits was as follows:

- 79% reduction in annual lighting energy use
- 1.3 payback period
- 82% savings in annual operational costs
- 68% of project funded with energy incentives
- $36,035 annual operational savings
- 441,659 kWh reduction in annual lighting energy use

GreenTech helped Zink secure **more than $70,000 in Duke Energy rebates**, as well as a generous **USDA REAP grant of nearly $40,000**, which brought the payback period down to a quick 1.3 years.

Dimmable panels and controls helped contribute to **$36,035 savings in annual operational costs**. Since LED lighting is long lasting and nearly maintenance free, the upgrade saved in countless man hours and replacement parts for the company.

"Zink is known for delivering an amazing product and as a company that is constantly innovating, so it made perfect sense for them to upgrade to energy-efficient LED lighting," said GreenTech VP of Business Development Scott Jernigan. "Bill and the crew at Zink were wonderful to work with and show how the company is a true vanguard in technology and the environment."

Zink Imaging made huge strides in reducing its ecological footprint. The completed projected will save 441,659 kWh per year, which is the equivalent of planting 256 acres of forest or taking 66 cars off the road. As a company with a standard of innovation, Zink Imaging showed the type of strategic investments essential to ensure a clean energy and eco-friendly future for generations to come.

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