



Lockheed Martin

Case Study

The Challenge

To meet aggressive enterprise-wide sustainability goals, global aerospace and defense provider Lockheed Martin Corporation sought an energy savings LED lighting retrofit to replace aging and inefficient high bays and fluorescent troffers for its Marion, MA location.

At close to 700,000 square feet, the Marion campus includes five buildings that house administrative offices, warehouses, production and laboratory facilities for the company's Rotary Mission Systems operations.

The Solution

On its own, a LED lighting retrofit would deliver the significant energy savings to satisfy Lockheed Martin's "Go Green" corporate lighting strategy. But as the company worked with turnkey energy services partner EMC to audit and plan the project, an opportunity to significantly increase energy and bottom-line results emerged.

Among the utility incentives available for the project was one for a lighting controls system. These costly systems often are not considered for projects because they may adversely impact return on investment (ROI). However, this controls incentive made it possible to introduce monitoring, dimming, load shedding, daylight harvesting and analytics capabilities to the facilities without significantly driving up project cost.

The ability to dim alone added another 20 percent of energy savings to what was already being saved by the more efficient LED lighting technologies. As local facilities managers became familiar with the controls system they implemented and adjusted other lighting settings to further extend energy savings. The analytics generated are used to make business decisions that further enhance Lockheed Martin's sustainability goals.

The Savings

The new LED fixtures and controls reduced energy consumption by 1.5 million kWh and delivers \$210,000 in savings each year. Incentives saved 37 percent of the project cost and reduced project payback to 2.18 years.

Investment Summary

Project Cost

\$728,000

Incentives

\$270,000

Annual Energy Savings

\$210,000

Payback

2.18 years