Energy Project: 4010
Main Campus Buildings – 4000 light bulb replacements
Incandescent light bulbs upgraded to Compact Fluorescent Light bulbs
Project Completion Date: December, 2006

Project Overview:

The objective of this project was to perform a lighting retrofit across campus,replacing incandescent light bulbs (interior and exterior) with compact fluorescent light (CFL) bulbs. 4000 light bulbs (and fixture upgrades, where appropriate) were completed.

Pre-Project Considerations:

- Numerous other campus buildings were exchanging their incandescent lamps for CFLs. Savings are large and well documented.
- Lights in common spaces are on much more often then lights in individual rooms, increasing the efficiency of common space lights greatly reduces energy consumption
- Exterior and Interior lights are good candidates for upgrades.

The Project Process

- Southern Company was offering reduced electricity rates, if Georgia Tech reduced its energy consumption via replacement of incandescent lighting with CFL.
- The Utilities Committee asked each Area Manager to identify candidates for incandescent lamp replacements

Lessons Learned

- As lights were replaced the number and wattage was reported to the Utilities Committee for tallying into the campus wide energy conservation program
- Tracking individual lamps was labor intensive. Doing a building wide upgrade was much more efficient.
- Savings are ongoing with minimal upfront cost and labor.

PROJECT SNAPSHOT

Description: Incandescent light bulbs replaced by compact fluorescent light bulbs across campus

Operations and Maintenance Manager: Warren Page

Finances (estimated):
Cost per Light: $50
Total Project Cost: $200,000
Rebate $: discounted price on electricity use across campus was part of this program but is not included in this case study
Annual Savings: $54,000
Payback: 3.7 years
KWH savings/year: 1,200,000

Environmental Impact Reduction:
815 tons CO2 / yr

Lessons Learned:

1. If possible, upgrade all the lights in and around the building at once.
2. Upgrade lighting to save energy and money

For More Information:
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