Energy Project: 4006
College of Architecture West
Incandescent light bulbs upgraded to Compact Fluorescent Light bulbs
Project Completion Date: June, 2005

Project Overview:

The objective of this project was to perform a lighting retrofit in the College of Architecture West building, replacing incandescent light bulbs (interior and exterior) with compact fluorescent light (CFL) bulbs. 892 incandescent lights replaced with CFL, 1 T-12 fluorescent and 1 fluorescent M-V with CFL.

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 in the College of Architecture Building West Wing (Building #075).

Departments: College of Architecture, College of Industrial Design

Area Manager: Ronnie Croy

Finances (estimated):
Cost per Light: $50
Total Project Cost: $44,700
Rebate $: 0
Annual Savings: $9,227
Payback: 4.84 years
KWH savings/year: 192,296

Environmental Impact Reduction:
263,445 lb 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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