SAVING ENERGY On Campus



LEAD Center/ASUC Auxiliary

102 Hearst



Consultation Date: October 19th, 2012

Building Contact:

Katherine Walsh: kwalsh@berkeley.edu Jeff Woods: jeff.woods@berkeley.edu

myPower Associates: Ashley Dimas

Joe Martorana

Introduction

The LEAD Center supports and assists students in their involvement on campus and provides leadership development programs to all students of UC Berkeley. The center aids in the formation of student groups, helps plan on-campus events, and offers extensive advising to groups such as the Student Government, The Green Initiative Fund (TGIF), as well as Fraternities and Sororities. The LEAD Center team moved to this office in August while construction is underway on their previous residence in Eshelman Hall.

On October 19th, a myPower Team conducted an energy survey in the LEAD Center's headquarters in 102 Hearst Gym following concerns with the overall climate of the office as well as its lighting. Hearst Gym was designed by Julia Morgan and was constructed in 1927. The LEAD office in Hearst is made up of a large space (mostly cubicles) and a few enclosed rooms housing individuals and a debate team. This specific office in Hearst uses a steam heating system and contains single-paned windows that are covered by a semi-opaque film for security purposes. Lights were retrofitted in the past year and motion sensors installed; however, they have been deemed ineffective by the office occupants.

Observations

Existing Practices

- Monitors are turned off when not in use.
- Power strips are used effectively.
- Incorporated overhead half-lighting.
- Overhead lighting automatically turned off at 7pm.
- Use windows and doors to control temperature of office.
- However, temperature is still uncomfortable for inhabitants.

Lighting

- Building has access to natural light.
- However, film over windows reduces brightness, forcing extra lighting to be incorporated.
- Both task lighting and overhead lighting used concurrently.
- Overhead lights are turned off automatically at 7pm every day.
- Occupancy sensors are installed.
- Most sensors do not operate correctly.
- Areas near Northern windows are over lit due to task and/or overhead lighting used concurrently with natural light.
 - o 631 to 345 LUX



Thermal Comfort

- Temperature of building is uncomfortable during summer and winter months.
- Occupants have no control over thermostats.
- Kitchenette temperature sensor is broken.



SAVING ENERGY On Campus



- Doors and windows are used to help control temperature of office.
- Occupants adapt to temperature by wearing appropriate clothing.
- Fans and space heaters are used.
- However, they are not turned off or unplugged when not in use.

Computers

- Information Systems & Technology (IST) keeps computers on power saver mode at all times
- Power strips are used effectively in office spaces.
- Computer fans and vents are not cleaned regularly.
- Occupants turn off monitors when not in use and do not use screen savers. Avoiding screensavers is an energy-saver for LCD screens!

Kitchenette

- Occupants do not unplug appliances or turn off power strips when appliances are not in use.
- Refrigerator's fans and coils are not cleaned regularly.
- Refrigerator is not defrosted regularly.
- Items on top of refrigerator prevent heat from escaping easily.



Recommendations

- Create an office check list for closing to turn off lights, printers, monitors, and other electronic equipment.
- In the student debate room, unplug fans when not in use and unplug refrigerator when no items are in it.
- □ Consider purchasing ENERGY STAR appliances.
- Use task lamps instead of overhead lights when possible.
- Remove items on top of refrigerators, this can reduce energy usage and the temperature of the room.
- □ Clean coils and defrost the refrigerator annually.

Further Resources

- Become a Power Agent! <u>mypower.berkeley.edu/about/power_agents.html</u>
- myPower Office tips available at: <u>mypower.berkeley.edu</u>
- Recycle e-waste with the Berkeley Overstock and Surplus: <u>businessservices.berkeley.edu/disposal-unwanted-items</u>

Follow Up from myPower

- □ Talk to Capital Projects about lighting sensors that do not operate correctly.
 - Or Facility Services or The Energy Office and their mechanics.
- Determine which IT service is being used (IST or SAIT) to determine exact power settings.
- Contact PP-CS, Energy Manager, and/or Energy Analyst about HVAC issues and control over thermostat.

