SAVING ENERGY On Campus



Operational Excellence Program Office

2222 Piedmont Avenue Berkeley, CA 94704



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2222 Piedmont Avenue was constructed by F.D. Voorhees in 1908 for Charles and Miriam Bancroft, the same Bancrofts of which Bancroft Library is named after. The property was purchased by the university in 1941 and began being used as offices in the late 1950's. 2222 Piedmont was designated as a California Historical Landmark in 1989 for its association with noted landscape architect Frederick Law Olmstead.

Currently, the building is occupied by the university's Operational Excellence Program Office and Shared Service Department. These two departments work to make the campus operations more efficient in order for university resources to be directed toward education and research rather than administrative processes. The building houses approximately fifteen employees and is open year round during the hours of 8:00 A.M. to 5:00 P.M. Through the winter holiday season, the office undergoes curtailment in order to reduce their yearly energy consumption.

The office's biggest concerns are computer and printer energy savings as well as a gas smell possibly coming from the heating system.

Lighting

The OE Program Office has a good deal of natural lighting due to the many large windows in the building. However, in some areas overhead lighting is also used, causing these areas to be overlit. To solve this issue, myPower recommends that occupants use their CFL task lighting more frequently. Incandescent track lighing in the main floor conference room could be switched out for energy saving CFLs or LEDs.



Lights were generally turned off manually by occupants when not in use. However, we did find a few of offices that had lights on with no occupants in them. The foyer and specific offices and halways that were overlit could be delamped or rewired to motion sensors to reduce energy consumed through those lighting fixtures. The office was already outfitted with many lightswitch shut-off reminder stickers and myPower posters. The myPower team placed additional behavior prompting stickers on monitors, printers, and other appliances.

Recommendations

- □ Ensure that all task lamps are equipped with compact fluorescent bulbs (CFLs) or LEDs.
- □ Turn off lights manually when leaving a room.
- □ Utilize natural light as much as possible.

BEYOND BEHAVIOR CHANGE

- □ Consider delamping lighting fixtures in overlit areas (such as the main entryway)
- Install motion sensor light switches in low traffic areas (i.e. kitchenette, bathroom, etc.).

Thermal Comfort

After speaking with the office employees, the myPower team gathered that the building is generally comfortable to work in. However, cold air can come through floor air vents even when thermal settings are at 70 degrees. There is one programmable thermostat for the entire building and is set to 70 degrees during the day and 60 degrees at night. In



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addition, occupants noted a gas like smell coming from the basement.

The myPower team observed various fans and space heaters that were not in use but still plugged into outlets. Space heaters were used sparingly in the office as occupants attempt to wear temperature appropriate clothing. Windows were generally closed when HVAC was running, however a few windows were found open.

A gas smell has been noticed by occupants. This could be due to the heating of the boiler in the basement. A ticket has been created with PP-CS for a night plumber to look into this issue.

Recommendations

- □ Wear temperature appropriate clothing instead of using space heaters.
- □ Unplug space heaters and fans when not in use.
- □ Close doors and windows when HVAC is running.
- □ Evaluate the usage and need of the air conditioning unit in the window of the second floor.

Computers & Printers

The main concern for the OE office centered around the energy settings of computers. Employees do not turn off computers at the end of the work day to allow for backups and patches. Larry Peng, the IT Manager for the department, should be contacted to determine how computer settings can be appropriately changed to reduce energy consumption and where servers are located.

Of all the computers observed, the myPower team did not find any that used screen savers, which is a good thing! Screen savers stop flat screen monitors from going to sleep. To continue saving energy, occupants should reduce the brightness and increase the contrast of their monitors. Additionally, the first and second floor of the building has two networked printers each to choose from instead of individual printers. All printers were energy star and set to energy saving settings as well. Finally, the copy machine on the ground floor can be turned off during the weekend.

Recommendations

- □ Contact Larry Peng about computer settings.
- □ Reduce brightness and increase contrast of computer screen.
- □ Turn off monitors when not in use.

- □ Use proper energy saving modes (i.e. sleep) when equipment is temporarily not in use.
- □ Keep vents and fans on computers clean and unblocked.
- □ Turn off ground floor copier on weekends

General Appliances

Appliances in this department were not observed to be unplugged manually after use. Also, powerstrips are used but not effectively as they are left on at all times. Appliances or other various items are left on top of refrigerators, forcing refrigerators to work harder to keep their contents cool and using more energy in the process. Freezers are not defrosted on a regular basis, although occupants have considered doing so. Due to their participation in curtailment though, refrigerators were unplugged for part of the holiday season

Recommendations

- □ Clear items from top of refrigerators.
- Defrost freezers regularly or when frost has built up to ¼ inch in freezer compartment.
- Unplug appliances after use, or put them on a power strip <u>and</u> turn off the entire strip when done.
- □ Look into partial-shut-off powerstrip devices: <u>tinyurl.com/ye5lml2</u>
- Place reminder stickers conspicuously to prompt unplugging and power down of appliances when not in use.
- □ Consider Energy Star and other energy saving technology when purchasing new appliances.

Further Resources

- □ Keep stocked with efficiency prompting posters, stickers, etc. Visit the myPower Resource Center in 192 Barrows.
- □ Become a Power Agent!: bit.ly/PowerAgents
- □ Contact Physical Plant Campus Services (PP-CS) for maintenance issues: (510) 642-1032
- myPower office tips are available at: mypower.berkeley.edu/takeaction/office.html
- Get rid of old or underutilized electronics at Berkeley Overstock and Surplus: businessservices.berkeley.edu/overstock

