SAVING ENERGY On Campus



UC Police Department Office

1 Sproul Hall October, 2013



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Background

The UC Police Department office is located in the basement of Sproul Hall. The building, built in 1941, houses many important campus administrative offices: Financial Aid, Admissions, Registrar, and Visitor Services. The UCPD office received Green Department Certification from the UC Berkeley Office of Sustainability in 2009.

The office houses approximately 160 employees. However, due to the responsibilities of the UCPD, much of the office's operations and technology are active all 24 hours of the day.

Michael Erazo has been very active in promoting sustainable behavior in the UCPD office. As a volunteer Power Agent, Erazo helped to organize an office power load survey with the myPower team in Fall of 2012. Additionally, he has been vocal in encouraging other employees to be more cognizant of their energy use. Erazo contacted the myPower team to analyze the energy complications arising from the basement location of the office.

Lighting

The basement location of the UCPD office creates issues with lighting. Windows are limited in the office, and when there are aboveground windows, they are often impeded by bushes

or the blinds are closed for privacy reasons. This severely limits the amount of natural light entering the office, creating a large need for overhead lighting.

Many of the rooms and offices possess task lights, however there are still rooms that have overhead lighting when task

lighting would suffice. Additionally, some rooms are lit at all times, even when unoccupied. Many of the task lights still use incandescent lightbulbs, but Mr. Erazo indicated that the office is slowly transitioning to more efficient CFLs and LED lighting.



The 24 hour demands of the UCPD require that some lights remain on at all times, but lighting in the office after hours is reduced. Outside of the offices, many of the lights in Sproul Hall are left on after business hours.

Recommendations

- Open blinds to utillize natural light when not dealing with sensitive information
- Identify the locations of light switches in different rooms
- Look into methods to change to LED lighting without changing fixtures
- Encourage employees to replace incandescent lightbulbs with more efficient CFLs
- □ Contact building manager to look into:
 - Installing more efficient hallway lights
 - Utilizing "night mode" lighting after hours

Thermal Comfort

The basement location of the office also creates many issues with the temperature inside the office. Due to the antiquated ventilation systems, the temperature inside the office is generally very warm and uncomfortable. Additionally, UCPD employees are required to wear thick uniforms which add to the discomfort.



The windows are rarely opened in place of air conditioning due to the obstructions blocking the windows outside. For



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this reason, every room has at least one fan; some have an air conditioning unit or fan for each occupant. Additionally, some rooms require cooling 24/7 for the preservation of servers and evidence.

Building occupants have no access to the thermostat for the office. Thermostats in rooms are not functional, so employees have no control over the heat and steam that create the hot environment.

Recommendations

- □ Consider reducing the amount of clothing employees are required to wear in the office
- □ Clear obstructions so windows replace use of air conditioning units
- □ Talk to building manager regarding:
 - o Ventilation issues

□ Limit the use of air conditioners & fans

Replacing thermostats

as much as warm environment allows



Computers/Printers

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The computer policies in effect around the office are incredibly efficient in their ability to save energy. It has become office practice throughout the level to turn off monitors and shut off or put the computer in sleep mode when it is not in use. Furthermore, the printers seem to be networked across the UCPD employees, minimizing the amount of energy that is being consumed.

However, due to the nature of the department functioning 24/7/365 the monitors may burn out quickly. Only one of the monitors in the main operating room was an energy efficient

monitor, and this may cause a source of energy drain. Furthermore, due to the design and the age of the building, nothing can be done about the small server room—due to the inability to transfer



servers for legal and security reasons.

Recommendations

- □ Clean vents & fans regularly
- Replace all monitors with energy efficient monitors including the control room.

Continue to practice computer maintenance i.e. no screensaver use, applying sleep mode and shut down to the computers, turning off power strips

Kitchenette

The kitchenette is another area of the building that seems to have fairly constant use. The kitchenette has motion sensor lighting. This unit in particular has many fans that may be able to be consolidated down into one unit, and a multitude of appliances that seem to be consistently left on. There is no

one in charge of turning off the power strips or unplugging devices. This leads to them being left on for a long periods. The refrigerator is consolidated down into one unit in which everyone stores their food supplies. The fridge is never unplugged due to the fact that there are always be officers



working, and thereby there are always supplies in the fridge and freezer. The fridge is an energy star model optimizing energy efficiency.

Recommendations

- □ Clean coils & fans regularly
- Unplug appliances after use, or put them on a power strip and turn off the entire strip when done.
- □ Continue defrosting freezer regularly.
- Place reminder stickers conspicuously to remind occupants to unplug appliances when not in use.
- Consolidate fans in the room
- A vending machine miser for the snack machine would reduce energy cost

Further Resources

- Keep stocked with stickers to prompt energy conservation. Visit the myPower Resource Center in 192 Barrows.
- Become a Power Agent: bit.ly/PowerAgents
- Physical Plant Campus Services (PPCS) (510) 642-1032
- myPower office tips available at: mypower.berkeley.edu/takeaction/office.html
- Get rid of old or underutilized electronics at Berkeley Overstock and Surplus:
 <u>businessservices.berkeley.edu/overstock</u>

