

**UNIVERSITY HALL
ENERGY SURVEYS
SUMMER 2012**



UNIVERSITY HALL 1st FLOOR ENERGY SURVEY



Survey Date: July ??, 2012

Contact: Denise Cronin

Currently large portions of the first floor of University Hall is under construction. We surveyed the Immediate Office of Business Administrative Services (BAS). Although a small office, it is making good energy-saving decisions already.

GENERAL APPLIANCES

- HP Printer in Main Room
- Dell computers
- Microwave-Emmerson: MW8W09W (9/1999)
- Fridge - GE model: TAX4SNYBWH
- Tea Kettle
- Fax machine in main room
- Sharpener/stapler/puncher all on power strip (turned off regularly)
- One personal fan

Recommendations:

- Turn off fax machine when not in use or assign someone to turn it off at the end of the day.

HEATING & VENTILATION

We were informed that there is no control of the thermostat in the office. Occupants tend to open windows and air out room when it gets uncomfortably warm.

Recommendations:

- Call Building Manager, Janice Honda, for heat regulation.
- Adjust for outside temperatures when hot.
- Remove fan and dress in layers to adjust for changing temperatures.

LIGHTING

Two offices with windows had no problems using natural light for the work day. However there are 3 workspaces without natural lighting. For these spaces there is overhead lighting and also task lighting. Every night the lights are turned off, according to Denise, using the manual light switches. There were a few task lamps in the office, though not in use.

Recommendations:

- Use natural light as much as possible.
- Consider purchasing task lamps as a substitute to overhead lighting; ensure that task lamps are equipped with compact fluorescent bulbs.
- Assign an occupant to turn off lights at the end of the day.
- Turn off lights when leaving a room.
- Use task lamps when working late and office is empty.

FURTHER RESOURCES

- Check your dashboard at: us.pulseenergy.com/UniCalBerkeley/dashboard#/location/1694
- Contact myPower for more monitor and light switch stickers.
- Become a Power Agent! Go to: mypower.berkeley.edu/about/power_agents.html
- myPower Office tips available at: mypower.berkeley.edu/takeaction/office.html
- Recycle old computers and appliances! For more information, go to the Berkeley Overstock and Surplus website: businessservices.berkeley.edu/overstock

UNIVERSITY HALL 3rd FLOOR ENERGY SURVEY



Survey Date: July 25, 2012

Contact: David Scrimger, EH&S

INTRODUCTION

This survey was conducted in the Office of Environment, Health & Safety (EH&S). According to David Scrimger, "The EH&S is involved in industrial hygiene of buildings and workers, construction sites and impacts on campus, building new facilities, emergency response and chemical spill clean up, disposal of waste from campus labs, radiation safety surveys, and disaster recovery." Mr. Scrimger, who has been working on this floor for two years, gave the myPower Energy Team a tour of the offices, wings, kitchenette, copy room, conference room, student intern room, and hallways. About 65 people occupy this floor, and most occupants work in this building Monday through Friday, 9am-5pm.

PAST PROJECTS

This floor benefitted from an ENERGY STAR refrigerator replacement program and a task lighting project, both of which were successful in promoting energy efficiency. A \$10,000 Appliance Replacement Grant through The Green Initiative Fund (TGIF) funded these projects. Also, several occupants on this floor placed window film on their office windows to provide natural cooling, but some occupants do not use them because they are difficult to install on windowpanes.

EXISTING PRACTICES

- Many floor residents use CFL lamps instead of overhead lights.
- Most people turn off their computer monitors and power strips at night.
- This floor received green department certification from the Office of Sustainability, and is making conscious efforts to strive for sustainability.
- Numerous appliances are ENERGY STAR.
- Overhead lighting has been retrofitted with energy- efficient bulbs.
- Appliances and overhead lights in the conference room are turned off when not in use.

Lighting:

- The fire marshal keeps the hall light on for safety reasons.
- Most occupants turn off lights at the end of the day.
- The internal corridor has hardly any natural light and thus requires overhead lights.

HVAC:

- Heating shuts down on weekends.
- Some occupants use space heaters during Winter Break, when the building receives no heat.

Appliances:

- Some occupants have personal fridges. One resident told the myPower Energy Team that food can get stolen and cleanliness can be an issue when sharing large fridges with coworkers.
- The kitchenette contained an energy-efficient one-year-old refrigerator, coffee maker, microwave, and toaster.
- The copy room has an HP Laser Jet 4250dtn, Super G3 Facsimile, electronic stapler and pencil sharpener, electric hole punch, laminator, copier, computer, printer, and shredder. Several of these appliances were turned on when they were not in use.
- The south wing on the 3rd floor has two

microwaves, one of which is a 25 year old appliance. There is also a large Energy Star refrigerator in this wing.

- The student intern room has a TV that is used for training purposes and a wall fan, both of which are always plugged in.
- The conference room contains fans, a computer, a projector, and a computer station with a DVD player and other appliances. All of these appliances and the overhead lights were turned off.

RECOMMENDATIONS

Kitchenette:

- Consolidate personal fridges into one or two large fridges, and create a map of space allocation so as to lessen the chance of food theft.
- Consider rotating the task of cleaning the fridge monthly among co-workers to avoid food spoilage and grime.
- Clean the coils on the back of the kitchenette fridge regularly.
- Defrost the kitchenette refrigerator and freezer, as well as personal fridges, when occupants are not in the building during Winter Break.

Copy Room:

- Place the power strip in view and remember to turn off when not in use.
- Remember to turn off the computer at the end of the day and put appliances that cannot be shut off in sleep mode.

South Wing:

- Consolidate the two microwaves into one and remember to turn off the power strip when the microwaves are not in use.



Student Intern Room:

- Remember to unplug the TV and wall fan when not in use or connect to a power strip that is

turned off regularly.

- Consider purchasing task lamps to offset the use of overhead lighting and increase energy efficiency.

Offices:

- Remember to turn off computers at the end of the day and save your files to the server, and not the actual computer, to ensure backups.
- Ask IT Staff if backups and updates can be regularly done on the same day of the week, so that computers could be turned off the other days and at night.
- Consider having the administrator of the department, Guy Seltzer, adjust an auto shutoff for computers everyday at 7:30 pm.
- Consider wearing warmer clothes, as opposed to using a space heater, to save energy on heating.



myPower Associates, Ashley & Vaishi, Survey the Kitchenette

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UNIVERSITY HALL 6th FLOOR ENERGY SURVEY



Survey Date: July 24, 2012

Contact: Ron Holmstrom, 655 University Hall

INTRODUCTION

An energy survey was conducted on part of the 6th floor of University Hall, covering the workspace of approximately 70 occupants in the Finance office.

PAST PROJECTS

Through projects sponsored by EH&S, the office has received new refrigerators and other energy-saving appliances. A lighting project was also implemented by campus where lights in the hallways were replaced with more efficient light bulbs.

EXISTING PRACTICES

Overall, occupants are very conscious about their energy consumption. The following energy-saving and sustainable practices are in place:

- Lights have been upgraded to energy-efficient lighting in the survey areas.
- Most occupants had their lights switched off and relied on natural lighting.
- Composting bins are present in the kitchenette.
- Aerators are used in most bathroom sinks and flow restrictors are used in toilets.
- Recycling of paper, batteries, pens, light bulbs,

printer and copier cartridges.

RM. 655 (remodeled 6/2012)

Appliances:

- Many occupants have personal fans, especially on the east side of the building. At the time the survey was conducted (in the morning), the east side of the building was warmer than the rest of the suite. Most fans were off at the time, but were still connected to the power supply. New blinds are being ordered to help keep the area cooler.
- The new suite has two shared printers and a fax machine, with very few printers for individual use.
- Many occupants use two monitors for their work, and, some were switched on when not in use.
- The New Suite was fitted with more energy-efficient fire exit signs.
- Power strips were being used at each workstation, but were not switched off when not in use.

Lighting:

- In accordance with new lighting codes, new lights have been installed, which are sensor operated. The suite is divided into four areas, allowing only certain lights to be switched on as needed.
- Although a few workstations had task lighting, most occupants rely on natural lighting or overhead lighting.

Heating and ventilation:

- The recently remodeled ceiling provides airflow, which is controlled by the physical plant in the basement.
- The airflow is turned on at the following times:
Summer: 6/6:30am - 6pm
Winter: 5:30/6am - 6 pm

Recommendations:

- Turn off monitors when not in use
- Turn off power strips when not in use

HALLWAY

Lighting:

- Only one in three lights were turned on in the hallway to save energy.

COPY ROOM

Appliances:

- There are two energy-saving, multi-purpose network printers, a shredder, and a fax machine, which are shared by all the occupants in the area surveyed. Very few occupants have personal printers.

Lighting:

- There is a motion sensor to automatically turn off the lights in the copy room.

Recommendation:

- Move ahead with plans to consolidate the fax machine with the copy machine.

KITCHENETTE

Appliances:

- There is a refrigerator and a microwave in the kitchen area, but the area is going to undergo renovations soon.

OTHER OFFICES

Appliances:

- Many occupants use two monitors for their work, which can be turned off to save energy when not in use.
- Most offices have fans, but occupants keep the windows open and the blinds lowered to keep their offices cooler.

Lighting:

- Most occupants rely on natural lighting and generally do not use overhead lights.

Heating and Ventilation:

- Some of the occupants noted that the heating is on full blast in the winter, making it too hot and necessitating the use of fans.

Recommendations:

- Turn off monitors when not in use.

SUMMARY

Overall, occupants are very conscious of their energy consumption and most turn off their lights while working.

Further Resources:

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myPower Monitor & Lightswitch Plate Stickers