International House

2299 Piedmont Avenue, Berkeley, CA

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Background

International House is a housing facility for international students. The building, built in 1930, is over 250,000 square feet, and has a large conference facility, a café, as well as offices and student dormitories. The building is occupied year round, day and night, and houses about 600 students. Additionally, the building contains over 70 staff offices, in operation throughout business hours.

Our contact, building manager Greg Rodolari, has been very active in promoting technical improvements to reduce I-House's energy consumption. In 2008, Chevron Energy Solutions peformed a comprehensive energy analysis for the building. This year, the kitchen is undergoing large-scale renovation, and the building has undergone a number of lighting and HVAC improvements. The building has a myPower Pulse Dashboard which tracks its daily electricity consumption, which can be found at: https://us.pulseenergy.com/UniCalBerkeley/dashboard/#/location/1000176.

Lighting

The building has many large windows scattered throughout it, resulting in great access to natural light. The building has worked to install occupancy sensors for lights in various areas with varying success. Additionally, many of the offices have

CFLs in place of traditional incandescent bulbs. However, the architecture and style of the building give rise to a number of classic chandeliers and other light fixtures, many of which use incandescent lightbulbs.

Computers/Printers

Since I-House is split into office settings and residential settings there are two types of computer environments. In the residential side, occupants use centralized printers in their computer room. However, in the office spaces, most occupants have their own printer and the printers cannot be consolidated into a central printer. In the offices, there are networked copying machines for the use of many. In the residential side, screen savers are used. Overall, PC monitors can be turned off when not in use but occupants should be reminded to do so.

Kitchenette

The I-House kitchen is currently under renovation and was not looked into at the time of our visit. However, there was a small kitchenette that was used for occupants. Power strips were not used on appliances with phantom loads and there were items on top of the refrigerator that could be cleared.

Thermal Comfort

One of the large-scale technical projects in the I-House is the chiller, located on the exterior of the building, which handles the cooling loads for the building. The chiller is largely responsible for maintaining thermal comfort, and many of the rooms where the chiller runs have thermostats.

Additionally, steam heat is generally effective at warming the building. Because the building is large and composed primarily of concrete, the temperature remains at a comfortable level for a majority of the time. However, some building occupants do use personal fans and space heaters in order to maintain a comfortable temperature for their living or work space.

International House
ENERGY SAVING RECOMMENDATIONS

Short Term:

Lighting

- ☐ **Continue to utilize natural light** as much as possible.
- ☐ **Turn off lights in office areas** when unoccupied
- ☐ **Create tasklists** for turning on and off lights
- ☐ **Consider purchasing** task lamps as a substitute to overhead lighting; ensure that task lamps are equipped with LED or compact fluorescent bulbs.
- ☐ **Replace** incandescent lights with more efficient CFL or LED technology

Computers/printers

- ☐ **Remember to turn monitors off** at the end of the day or when not in use
- ☐ **Avoid screensavers** – they don't save energy on LCD monitors.
- ☐ **Consider purchasing** sensored powerstrips to turn off monitor energy usage when people are not at their desks.

Kitchenette

- ☐ **Unplug** appliances after use, or **put them on a power strip** and turn off the entire strip when done.
- ☐ **Place reminder stickers** conspicuously to remind occupants to unplug appliances when not in use.
- ☐ **Clear items from top of fridge** (prevents higher energy use to generate cold temperatures).
- ☐ **Consider purchasing** occupancy sensors for the vending machines by the auditorium.

Thermal Comfort
- ☐ **Continue to dress** for the appropriate temperature.
- ☐ **Continue to seek** technical improvements to HVAC chiller system
- ☐ **Open windows** rather than using personal fans

Long Term:

- ☐ **Consider** linking the dashboard to the front desk monitor to keep people aware of the building's energy usage.
- ☐ **Contact** Lin King at Campus Recycling& refuse for details on bringing composting to your building: www.ocf.berkeley.edu/~recycle/index.php

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
- ☐ Report maintenance issues to **Physical Plant Campus Services** (PP-CS): 642-1032