

# Green Campus Newsletter

## Humboldt State University

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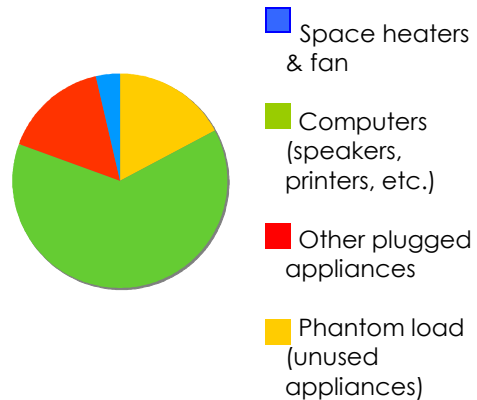
### A SEMESTER OF AUDITS

BY CARMEN KING

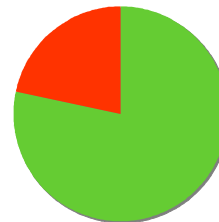
Last semester we performed energy audits on the Office of the President, the school radio station (KRFH), and the Office of the Dean of Professional Studies. We successfully reduced the energy load of each office by at least 35 percent. Since the majority of the offices were already equipped with fluorescent lighting, there was little CFL implementation. Most of our savings occurred from reducing phantom loads, programming proper sleep settings on computers, and keeping space heaters turned off. Laser printers, copy machines, and industrial coffee makers were the most significant source of phantom loads, and in some cases accounted for the majority of the office's energy use. Therefore, it is imperative that the staff be educated on how to eliminate these significant, but wasteful loads. **CONTINUED PAGE 4**

### Dean Susan Higgins' Office

Energy Use by Appliance



Energy Use by Appliance  
(after 40% energy reduction)



### BREAK OUT SESSION RESULTS BY BEN MATTIO

Feeling inspired from the Energy Efficiency Summit's workshops, we were brimming with ideas. Carmen was quick to make GIS Data Analysis the first project idea. The main challenge at HSU for Data Analysis is the lack of individual building metering. We discussed using the three TED meters we just installed as a good starting point.

Energy Monitoring solutions were second on the list. It proves difficult to identify areas of high energy use when multiple buildings are tied into one utility meter. The physical constraint of shared metering at HSU will require planning, investment, and time to overcome. Our first talk with Plant Operations to determine what plans are in place for separating the metering and discuss temporary solutions.

There are plenty of opportunities for energy savings in HSU's food court (Depot). With the skills learned in the Kitchen Audit Workshop, we are confident we can generate savings. Lighting and sink sprayers will be the easy targets.

Our new advisor, Richard Engel, presented a project idea focused on reducing light pollution from stadium lighting in **CONTINUED PAGE 4**

## **EXPLORING NEW TERRITORY: KITCHEN AUDITS**

**BY JEFF STEUBEN**

Up to this point, HSU Green Campus has audited offices, suites, a radio station, a newspaper office, and will even tackle a student home. But we have yet to take on kitchen and food preparation areas.

One of the training sessions at the 2007 Energy Efficiency Summit was led by Richard Young of the Food Service Technology Center; a San Ramon based organization which promotes energy efficient appliances and practices in a commercial kitchen setting.

During the session, we toured one of UC Berkeley's kitchens that had benefited from an FSTC audit. Mr. Young pointed out many changes that his organization had suggested, such as certain models of appliances which out perform competitors, new "smart" fan sensors which allow for periods lower power consumption, and even simple things such as cleaning and servicing refrigeration units and air ducts.

Following in the traditional vein of Green Campus, Mr. Young showed that kitchens switching to CFLs can save hundreds of dollars because of their long hours of use.

Now armed with the knowledge of what we can effect in the kitchen, Green Campus is not going to avoid this area for potentially enormous savings.

We plan on teaming up with Housing's Energy Management Interns to address some of the inefficiency in "The Depot" and move on to "The J" at a later point in time.

Utilizing the Food Service Technology Center's website ([www.fishnick.com](http://www.fishnick.com)) and connections made at the Energy Efficiency Summit, we should have no problem upgrading our dining areas.

### **SHADOW DAY ENLIGHTENS**

An administrator sitting in class is an unusual scene but for students that participated in AS's Shadow Day this was just a piece of the event. For two hours on Wednesday, January 31<sup>st</sup> Jocelyn had the captive audience of Jená Burges, Vice Provost of Academic Programs and Undergraduate Students. Jená is interested in making physical learning spaces, a University where every time you step onto campus you learn something before leaving. Jená came with Jocelyn to her art history class and later the two discussed their ideas and hopes for Humboldt State University. Both were drawn to the University by its former vision of "Learning to Make a Difference."



Jocelyn Orr & Jená Burges, Vice Provost engaged in open dialogue

## DISCUSSIONS PROVOKED AFTER EACH SCREENING

BY JOCELYN ORR

Two showings of the film "An Inconvenient Truth" to over 200 people total prompted much discussion. The first showing took place Wednesday, January 31<sup>st</sup> in the Jolly Giant Commons and dialogue was facilitated by Living Group Advisors, John Wu and Ajay Tallam.

Green Campus arranged a panel of speakers including Arne Jacobson of the Environmental Resources Engineering Dept., Gregg Gold of the Psychology Dept., Jim Zoellick from Schatz Energy Research Lab and the City of Arcata's Energy Committee, Jennifer Berman from the Redwood Alliance's [Climate Action Project](#), and Director of Housing, John Capaccio. The panel answered questions and provided solutions to an audience that was mostly from the residence halls.



The audience on Friday (above) looks on as panelists (below: Aaron, Jennifer) discuss global climate change



### WATCH FOR:

**Thursday, Feb. 22**

#### **Blackout Bash:**

A night of music and energy, featuring live hip-hop, break dancers, and DJs. Free to all. Music starts at 8 pm. Come to the KBR ready to groove.

**Thursday, Feb. 22**

#### **Sculpture Contest featuring incandescent light bulbs:**

The best three pieces will receive \$\$\$ prizes. Pieces will be voted on by the audience. All sculpture pieces submitted will be on display during the Blackout Bash and voted on by the audience.

Artists should register for the competition and get light bulbs by emailing: [greenhsu@humboldt.edu](mailto:greenhsu@humboldt.edu)

On Friday, February 2<sup>nd</sup> the film was shown in Founder's Hall 118 with a more formal panel discussion following. Featured on the panel was Gregg Gold, Jim Zoellick, Jennifer Berman, Steve Hackett of the Economics Dept., graduate student Shannon Brundle representing [Focus the Nation](#), and Humboldt State graduate and [Green Wheels](#) member Aaron Antrim were all present Friday night.

Questions for Friday's panel were fielded by moderator Nancy Marie.

Food was donated from the Arcata Co-op and Wildberries during intermission. A big thanks to the Arcata Co-op for their generous donation. Thanks to Ajay Tallam and John Wu in helping Green Campus make these events a huge success.

### SAVE THE DATE:

**UC/CSU/CCC SUSTAINABILITY  
CONFERENCE @ UC SANTA  
BARBARA, JUNE 24 – 27, 2007**

**An event not to be missed!!!**

<http://www.sustainability.ucsb.edu/conference>

## SEMESTER OF AUDITS CONTINUED

By installing CFLs and other energy efficient appliances Green Campus can ensure that the actual savings will match our calculations; however, the majority of our reductions require behavioral changes. It is up to the members of the office to turn off powerstrips every night and bring a jacket instead of turning on the space heater.

We hope that our certification plaque will keep our presence in the office to remind the staff of the importance of reducing energy usage. Follow-up audits are an excellent way of making sure that our recommendations are fully implemented and are in our plans for this semester.

Carmen is looking into auditing the Economics' Department office.

## BREAKOUT CONTINUED

the Redwood Bowl. There are potential energy savings in de-lamping or improved lamp reflectors. That same night, during our drive back from Berkeley, we saw first hand the light pollution he spoke of over Arcata.

After Chico State did a presentation on Network-Based Power Management we were impressed with all the potential energy and monetary savings a program like that could reap for Humboldt State. We are currently discussing rebate options related to the software called Verdeem, with Aaron Klemm, Energy Program Manager in the Chancellor's Office. We also discussed doing a trial comparison of computers with and without the software using kill-a-watt meters to.

HSU uses disposable batteries in door locks, parking meters, and automatic urinals. We discussed the benefits of switching to rechargeable batteries, even though this project is outside of the scope of Green Campus we brainstormed what the possible solutions could be. No one seemed to know what size batteries were being used in the automatic urinals. Richard Engel got everyone chuckling when he mentioned they must be P-size.

### Spring Green Campus Projects

- GIS Data Analysis
- Energy Monitoring
- Kitchen (Depot) Audit
- Net-based Power Management

## CONTACT US:

[www.humboldt.edu/~greenhsu](http://www.humboldt.edu/~greenhsu)  
[green campus@humboldt.edu](mailto:green campus@humboldt.edu)

### Program Coordinators:

Carmen King

[cgk5@humboldt.edu](mailto:cgk5@humboldt.edu)

Ben Mattio

[bjm48@humboldt.edu](mailto:bjm48@humboldt.edu)

Jocelyn Orr

[jmo32@humboldt.edu](mailto:jmo32@humboldt.edu)

Jeffrey Steuben

[jls125@humboldt.edu](mailto:jls125@humboldt.edu)



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