

2006-08 Energy Efficiency Portfolio Monthly Report Narrative

Program Implementer Name: Alliance to Save Energy
Program Name: Green Campus Program
(UC/CSU/IOU Energy Efficiency Partnership)
Program Month: July 2008

1. Program description

The Alliance to Save Energy's Green Campus Program is a student-oriented education and outreach program that fosters environmental stewardship by raising awareness about the relationship between energy and the environment on University of California and California State University campuses. Through its activities, the Green Campus Program seeks measurable energy savings on the campuses which it serves.

The Green Campus Program is implemented by the Alliance to Save Energy, its subcontractors (hereafter referred to collectively as "Alliance Green Campus team members"), and paid student interns ("Green Campus interns").

The Alliance to Save Energy operates on nine campuses through the UC/CSU/IOU Energy Efficiency Partnership's Training and Education budget: Humboldt State University, CSU Chico, Cal Poly San Luis Obispo, UC Berkeley, UC Santa Cruz, UC Merced, UC San Diego, and San Diego State University. In addition, funds from the UC/CSU/IOU Energy Efficiency Partnership's Training and Education budget also supplement programs at UC Santa Barbara, CSU San Bernardino, Cal Poly Pomona and UC Irvine. These campuses are located in the SCE, SCG, SDG&E, and PG&E service territories.

Administrative activities (describe)

Green Campus team members conducted weekly check-in conference calls with interns at all Green Campus schools and made site visits to Humboldt in order to discuss ongoing projects, track action items and plan for the summer and fall 2008 terms. During this month, Campus Leads also met with teams during the UC/CSU/CCC Sustainability Conference and Green Campus End-of-Year Meeting (see below for more information on this conference).

This month, Alliance Green Campus staff worked with SCE Program Manager Carlos Hernandez to develop an energy savings chart to include in intern newsletters during the 2008-09 academic year (**see attached**). Use of this chart will be used to compile program-wide savings during this year and in the future. It is still to be determined whether use of this chart in the campus newsletters will take the place of the quarterly reports the Alliance provides on campus energy savings.

On July 10th, the Direct Implementation Team made up Jo Tiffany, Jennifer Alvarez, Peter Jenkins, Renee Lafrenz, Stephen Miller and Morgan King met for a day-long planning meeting for the Green Campus Program (**see attached agenda**). The team plans to take action on the ideas and identified changes in the coming months, such as an enhanced coordination role for the Team Manager and greater emphasis on marketing and metrics tracking.

Peer Exchange with UT Austin

On July 25, Alliance Program Associate Emily Curley moderated a peer exchange conference call between California Green Campus Interns and counterparts at the University of Texas, Austin. The topic was training others to conduct office energy audits, and Interns Sarah Schneider (Humboldt) and Tami Kautz (Chico) served as the prime presenters/facilitators. Interns from Humboldt and San Diego State University, as well as other Green Campus staff also participated.

Green Campus End-of-Year Meeting & UC/CSU/CCC Sustainability Conference

This month, Alliance staff finalized logistical preparation for the annual Green Campus End-of-Year meeting, held in conjunction with the UC/CSU/CCC Sustainability Conference in San Luis Obispo, July 31 – August 2, followed by a Student Convergence on August 3. For more information, see below and Program Achievements section. NOTE: We are reporting on the full event, despite it's continuation into August 2008.

In July, Interns from the Best Practice award winning campuses – Chico, UC Berkeley, and UC Santa Cruz (Honorable Mention) – worked with Alliance staff to prepare a 12-15 minute presentation regarding their achievements in the Student Energy Efficiency category (**see attached**).

In July, Interns from Stanford, Humboldt and UC Berkeley received notification that their poster designs for the UC/CSU/CCC Sustainability Conference were selected to be displayed in the Exhibit Hall at the conference. For more information on their topics, see the June 2008 report.

See June 2008 report for more information and the process agenda for Green Campus involvement during the conference. Alliance staff planned a Green Jobs Luncheon featuring conference keynote speaker Jerome Ringo and PG&E Senior Program Manager Keith Reed; a stakeholder coffee hour to encourage cross-campus networking and project planning; three student presentations during the Best Practices in Student Energy Efficiency conference session (Tami Kautz-Chico; Desirae Early-UC Berkeley; and Rachel Shiozaki-UC Santa Cruz); and the students accepted the Best Practices award at the evening award ceremony.

In addition to the above Green Campus-specific activities as part of the conference, Jennifer Alvarez, Peter Jenkins and Renee Lafrenz respectively moderated conference sessions, and Green Campus Interns Sarah Schneider and Samantha Kao were speakers. Sarah Schneider (Humboldt) covered a dining case study (**see attached presentation**) and Samantha Kao (UC Irvine) covered a fumehood case study (**see attached presentation**).

Finally, for the Student Convergence of the UC/CSU/CCC Sustainability Conference (August 3, 2008), the Alliance Green Campus staff finalized presentations for four sessions, which were well received by the students who attended (**see attached**):

1. Audit Training
2. "Setting the State for Energy Efficiency"- Green Campus Showcase
3. Newsletter Writing
4. Case study on Stanford Green Campus Lighting Efficiency Projects

Direct implementation activities (describe)

NOTE: This month, intern activity on campus was limited due to summer vacations and preparation for the Sustainability Conference. Due to an inability last month to obtain several data attachments from interns who were traveling and/or unavailable, the April – June 2008 Quarterly Audit Report is **attached** to this report.

Intern Implementation Budget

See ***attached July 2008 Intern Implementation Budget Summary*** to gauge the status of the implementation budgets for each Green Campus.

CFL Exchanges

2007-08 Academic Year to Date (i.e., since August 1, 2007), Green Campus has exchanged a total of **13383 CFLs**. During July, Green Campus interns in the SCE, PGE, and SDGE territories exchanged a total of **36 CFLs provided by SCE**. July CFL exchanges break down as follows:

CFLs Provided by SCE

SCE – 36
PGE – 0
SDGE – 0

CFLs Provided by Others

SCE – 0
PGE – 0
SDGE – 0

See ***attached July 2008 CFL Exchange Summary*** for details, including bulb wattage and origin.

CSU Chico

Office Energy Audits

See May and June 2008 Monthly reports for more information on the Sustainability Consultation (i.e., SCOOP) project. This month, Interns focused their efforts on developing tools, pre- and post-surveys, marketing materials, Energy 101 PowerPoint and video training and general program development in order to package SCOOP to make it user friendly for future student projects. Interns will complete development of the package and reporting for offices surveyed by August 6th. On that day, they will present the package to Director of the Institute for Sustainable Development (ISD) Scott McNall, Sustainability Coordinator Jillian Buckholz, adviser Professor Mark Stemen and other stakeholders. ISD will manage SCOOP, for which Green Campus serves as the main energy consultant.

The agenda for the August 6th meeting is as follows:

SCOOP Meeting Agenda for August 6th, 2008

1. CROSS TRAINING

- Tools*
- Supporting documents*
- Recommendation Reviews*

2. CHECK INS- Brief discussion of

- Where we are academically*
- Graduation dates*
- Civic engagements/other responsibilities*
- Green Campus continued role in SCOOP*

- 3. *Summer internships,*
 - *Lessons learned*
 - *Intern certificate presentations*

- 4. *THE FUTURE ROLE OF SCOOP*
 - *Share business plan*
 - *Share recruiting strategies*

Cal Poly San Luis Obispo

Week of Welcome (WOW)

This month, Interns met with WOW coordinators and Energy Manager Dennis Elliot to discuss calculating the carbon footprint (i.e., greenhouse gas inventory) for WOW events (see May 2008 monthly report for more information on this event). Interns and event coordinators agreed that it would be most appropriate and effective to present these calculations on the last day of WOW to educate participants on impacts to the climate and opportunities to minimize those impacts in the future.

During this month, Interns and a student volunteer began work on the inventory, which accounts for transportation of participants, building energy consumption, waste generation and disposal, and other factors. Interns expect to complete the inventory by September.

In July, Interns continued to prepare to facilitate four workshops during WOW and a tabling event during Awareness Day. During the workshops, Interns will introduce participants to the Green Campus Program and its efforts on campus, screen the short film *The Phantom Hunter*, demonstrate dorm energy efficiency and conservation measures, and distribute CFLs and other materials.

Green IT Project (NBPM)

At the end of June, IT completed its baseline computer energy consumption analysis (CECA) of Verdiem Surveyor Power Management, and this month the results were released (see April 2008 Monthly report for more details on this project). Based on the CECA, which started on May 19, 2008, CSU-Cal Poly San Luis Obispo will save **151 kWh or \$19.58 per PC**. Based on a total population of 5,000, this equates to **annual financial savings of \$97,875.00 or \$293,625.00 over 3 years**.

ENERGY SAVINGS STATS:

Annual Baseline Power Consumption/PC: 383 kWh
Annual Energy Savings with SURVEYOR/PC: 151 kWh

COST SAVINGS STATS

Annual Cost Savings/PC with SURVEYOR: \$19.58
Cost Savings: 39.3%

Please see SLO Verdiem Report, attached. The analysis is based on actual data collected from CSU-Cal Poly San Luis Obispo's network for a period of two full weeks (including weekdays and weekends). Verdiem and IT managers agreed the data to be a credible representation of the operating systems, hardware, and user types at CSU-Cal Poly San Luis Obispo.

Also in July, stakeholders continued efforts to pilot the Big Fix power management product (see

June 2008 Monthly report for more details). Below is an update on the status of this project:

- * A total of **92 clients** have been installed on both Mac and Windows in IT and AF departments.
- * The Clients are reporting properly and the focus is on collecting data that can lead to accurate benchmarking. Big Fix recommends a two-week window of data collection for benchmarking energy performance.
- * In July, no performance issues or errata were reported.
- * Other clients have been identified and further installations are in progress.

Stakeholders expect to have their next conference call with Big Fix once more data and feedback are collected. Director of Central IT Craig Schulz has proceeded forward with overseeing a large, comprehensive pilot to test the software efficacy. The pilot testing is ongoing and will continue through August. At this point, Green Campus no longer plays a predominant role in this effort.

Green Washing Campaign

This month, Interns met with Campus Dining Associate Director Alan Cushman to present their findings on energy efficient commercial dishwashing machines to replace the existing equipment (see May 2008 monthly report for more information on this topic). Interns generated a cost and consumption analysis of two models of dishwasher: the Jackson and Stero energy efficient models with an electric powered booster dryer. These models will account for a **decrease of over 300 gallons of water per hour, and an energy reduction of approximately 25%**. Their calculations were based on conversations with sales representatives and product research (**see *Green Wash Calculations, attached***).

Also this month Interns met with Energy Manager Dennis Elliot to request his assistance in acquiring case studies of the two models in question to verify the accuracy of the Interns' calculations. Representatives from Stero and Jackson agreed to provide analyses to the Interns in the first week of August, at which time Interns will be better equipped to make a final recommendation to Mr. Cushman. Mr. Cushman expressed his desire to have the new equipment purchased and installed by the middle of August, and will base his decision on the recommendation of Green Campus. Once Mr. Cushman has made his decision, Interns will begin investigating an opportunity to apply for the UC/CSU/IOU Partnership rebate.

Humboldt State

Stadium Lighting Project

During this month, Interns met with the student energy intern in Plant Operations, Jeffrey Steuben (Mr. Steuben was a Green Campus Intern in 2006-07) to discuss the stadium lighting project and re-submitting a proposal for funding to the Humboldt Energy Independence Fund (HEIF; see February 2008 monthly report for more information on this project). Mr. Steuben agreed to work on acquiring stadium lighting schematics from Plant Operations, information vital to developing a replacement lighting and reflector design and estimating potential energy savings. Once acquired, Interns will forward the schematics to Musco Lighting. Musco has agreed to develop a proposal based on the schematics and Green Campus' prior calculations. Once Musco's proposal is in hand, Interns will be able to finalize a project implementation budget and submit this to HEIF.

Interns also plan to contact the CSU Office of the Chancellor to identify opportunities for accessing the UC/CSU/IOU Partnership rebate for this project. The team expects to expand the student engagement piece of this project by utilizing art students to design interpretive signage, and engineering students to conduct energy audits prior to and following the retrofit. Interns intend to submit the final proposal to HEIF in September or October.

Update on Bundled Projects

See March 2008 monthly report for more information on collaborative efforts of Green Campus and Plant Operations to implement and bundle projects to access the UC/CSU/IOU Partnership rebate. In July, Director of Plant Operations Tim Moxon provided an update to Interns regarding the status of the projects, informing them that Plant Operations had completed and submitted rebate applications for the projects to the Partnership. PG&E received and accepted the applications for both MBCx and computer power management projects, for which Green Campus had provided assistance.

In July, a representative from Emcor (PG&E's third party reviewer) visited the campus to verify baseline information on both projects; by the end of this reporting period, Emcor had yet to complete its final report. Plant Operations expects to be able to conduct the measures prior to the end of December in order to access the rebate, and Green Campus Interns will continue to assist in this effort.

UC Merced

Move-in Week

During this reporting period, Interns continued in their efforts to prepare for Move-In Week (the week of August 18th, 2008). Interns commenced calendar design, which will develop a marketing tool to be hung up in the dorm rooms prior to move-in. The calendars will provide monthly tips on saving energy, information on upcoming events as well as Green Campus contact information.

In July, Interns worked developed content for the calendar and contacted housing coordinators and other student organizations to look at opportunities to share costs and content (i.e., Green Club and Recycling Program for financial support, facts and tips, the Art Club for artistic renderings of the Fairy Shrimp). The Green Club agreed to support the calendar and to provide financial assistance and content for the calendar. In early August, Interns expect to have a final count on the total number of dorm rooms and all content developed in order to order a printing run of the calendars.

In July, Interns contacted housing coordinators to discuss a Green Campus presence during Move-In day (August 22nd, 2008). Interns began to plan out a tabling event similar to the display and activities implemented on Bobcat Day (see April 2008 Monthly report for more information on the table). Interns will continue in August to coordinate logistics and develop the display for the event.

Green Room

This month, Interns investigated opportunities to establish a dorm room dedicated for tours as a 'green' dorm demonstration (i.e., unoccupied), which would include Energy Star appliances and electronics, energy savings measures like CFLs and power-strips, and interpretive displays. Interns contacted Housing Director Delores Wright to discuss opportunities to outfit a room. While Ms. Wright discovered that all rooms will be occupied this coming academic year, she expressed her interest to find other opportunities for Green Campus in the dorms. The Interns will continue to work with Ms. Wright to identify effective outreach efforts in the future.

UC Santa Cruz

Due to inability to reach several stakeholders this month, as well as preparation for the Sustainability Conference, activity at UC Santa Cruz was limited.

Oakes Energy/Water Conservation Educational Outreach

In July, Intern David Chang completed and submitted an evaluation on the Oakes Energy/Water Conservation Educational Outreach project (the project was completed in May – see May 2008 monthly report for more details on the project). **See UCSC Oakes Project Evaluation, attached.**

UC Berkeley

Fall "Shut the Sash" Fume Hood Competition

Intern Lamia Mamoon will take the lead in planning and implementing the fall semester "Shut the Sash" Fume Hood Competition. This summer, Lamia plans to contact Building Manager Inna Massen to plan and publicize the third consecutive semester application of this project in Tan Hall.

The Big Save: Stanford vs. Cal Residence Hall Energy Competition

This fall, Green Campus Interns from Stanford University and UC Berkeley will take their rivalry off the sports field and into the residence halls. During the 2008-09 academic year, the Berkeley Blackout Battles energy competition has not only been extended to a 2-month long competition, but will also feature this inter-campus competition. Interns from both campuses have met and discussed plans to challenge their residents to achieve the most energy savings on their respective campuses. The tentative launch is slated for October/November.

UC San Diego

Office Assessments

As the team continues work this summer on the Price Center audit, they also developed plans for the coming months to include assessments of two major campus facilities - Atkinson Hall (Calit2) and Price Center; assessment follow-ups with EBU II, the Campus Services Complex, the ERC Administration Building, the Career Services Center, and Hillcrest Laboratories; and

dining audits of the four remaining campus dining facilities. To aid in these efforts, they plan to put together an energy assessment “how-to” guide for new interns (including those hired at the end of spring quarter).

LEED Building Project

After working all year, the UCSD Green Campus and Facilities Management interns put together all of the documentation to certify the UCSD Campus Service Complex as LEED Silver. Interns tackled all six categories of the LEED project, focusing specifically on Energy and Atmosphere. The LEED “Performance Period” started officially on July 20th and will last until October 20th.

July proved to be very productive in terms of compiling the documentation and program implementation for the credits. Green Campus Intern Sarah Termond has been working with the Staff Education credit, along with credits involving purchasing and innovation. She has been collecting all training certificates related to building operations and maintenance from the Project Managers in order to prove that the overall average of training received is at least 24 hours. She also held meetings with many of the people involved with purchasing office supplies, furniture, buildings materials, and light bulbs to discuss the LEED requirements and how to meet them. She developed spreadsheets to help facilitate the tracking of all equipment purchased over the performance period and these materials are currently being tracked.

Green Campus worked with Facilities Management Intern Devin Uehling to achieve EA Prerequisite 2: Minimum Energy Performance, using the CBECS Data center and Energy Star Portfolio tool.

The project is projected to be completed by the end of the performance period in late October and will be the campus’ first LEED certified building.

2. Marketing activities (describe)

Green Campuses completed June/July newsletters during this reporting period in order to inform their campus stakeholders about their current projects, except UC Berkeley, which will complete a July/August newsletter next month (*see attached*).

During this reporting period, Interns also prepared for attendance and participation in the UC/CSU/CCC Sustainability Conference and Green Campus End of Year meeting, July 31st – August 3rd, at Cal Poly San Luis Obispo. Teams prepared one-pagers (*see attached*), which were each printed on unique colors and available to the approximately **1,100 conference attendees** on the UC/CSU/IOU Energy Efficiency Partnership table in the Exhibit Hall for two and a half days. Interns also prepared business cards for use at this conference. Interns also prepared business cards for use at this conference and Alliance staff designed and printing a new Green Campus banner (*see attached*).

Conference/End of Year Meeting Videotape

Cal Poly SLO Interns coordinated the logistics for renting a video-camera to film the end of year meeting. Key Green Campus sessions and the entire End of Year meeting was filmed for future reference.

CSU Chico

This month, Interns updated the Chico Green Campus website and the link to the real-time energy meter in Shasta and Lassen Halls; go to <http://www.csuchico.edu/greencampus> to view the updated website.

Interns also designed a magnet to be distributed during Green Campus outreach events (**see Chico Magnet, attached**). The magnet includes general tips on actions students can take to save energy in the residential setting.

Humboldt State

Blog

This month, Interns set up the HSU Green Campus blog; it is now active and can be viewed at <http://hsugreencampus.blogspot.com/>. The blog will be utilized for outreach efforts and as a forum for discussing energy issues on campus and student projects. Interns will encourage students to view the blog during marketing events in the fall semester.

Humboldt Orientation Program (HOP)

In July, Interns prepared materials and planned for tabling during the Humboldt Orientation Program (HOP). Interns hosted three informational tables on the main Quad in the center of campus and spoke with a total of **50 incoming freshmen and 22 parents, and distributed 24 stickers and 13 quarter-page flyers. 16 incoming freshmen signed up** to receive updates on the upcoming energy audit seminar and Green Campus for-credit internships (see Program Achievements below).

UC Merced

Tshirts

This month, Interns, with assistance from Alliance staff, placed an order for Green Campus t-shirts, to be worn by Interns and utilized in outreach and marketing efforts, as well as incentives.

New Student Orientation

In July, Interns hosted a Green Campus table during two orientation events for new students. Interns distributed information on Green Campus and its projects at UC Merced and encouraged students to bring CFLs and Energy Star appliances and electronics for move-in to the dorms. **Interns spoke with a total of 48 students over the course of the two events.** At the beginning of August there will be two additional orientation events.

Sustainability Committee

In July, Interns attended a meeting of the Chancellor's Advisory Committee on Sustainability. At the meeting, Interns discussed opportunities for collaboration with the Committee on furthering sustainability initiatives on campus. The Committee and Interns discussed holding an event on October 6, celebrating UC Merced's campus-wide accomplishments in LEED construction. The event and its agenda is still formative; however, they are planning to invite the USGBC president, selected California elected officials and UCM sustainability partner PG&E. The Committee also wants to use this event to showcase other campus efforts, including the Green Campus Program. Interns' participation in planning for this event will continue through the summer.

Also this month, Interns began developing a brochure highlighting the campus' sustainability initiatives, to be made available to incoming students and their families; Interns expect to complete the brochure in August. The Advisory Committee on Sustainability will print and

distribute the brochures, as well as provide some of the content.

Move-in Week

During this reporting period, Interns continued in their efforts to prepare for Move-In Week (the week of August 18th, 2008). Interns commenced calendar design, which will develop a marketing tool to be hung up in the dorm rooms prior to move-in. The calendars will provide monthly tips on saving energy, information on upcoming events as well as Green Campus contact information.

In July, Interns worked to develop content for the calendar and contacted housing coordinators and other student organizations to look at opportunities to share costs and content (i.e., Green Club and Recycling Program for financial support, facts and tips, the Art Club for artistic renderings of the Fairy Shrimp). The Green Club agreed to support the calendar and to provide financial assistance and content for the calendar. In early August, Interns expect to have a final count on the total number of dorm rooms and all content developed in order to order a printing run of the calendars.

In July, Interns contacted housing coordinators to discuss Green Campus presence during Move-In day (August 22nd, 2008). The team began to plan out a tabling event similar to the display and activities implemented on Bobcat Day (see April 2008 Monthly report for more information on the table). Interns will continue in August to coordinate logistics and develop the display for the event.

UC Santa Cruz

Tshirts

This month, Interns purchased t-shirts to distribute to stakeholders and volunteers, and to be used as incentives and publicity.

Orientation Events

On July 10th, 12th and 19th Green Campus Interns hosted information tables during orientation events for incoming freshmen and transfer students. At these events, Interns distributed information on the Green Campus program, projects on campus, and encouraged incoming students to consider energy efficiency when moving into the dorms (i.e., use CFLs, manage phantom loads, etc.). Interns also distributed copies of the "What to Bring to College" brochure (see June 2008 Monthly Report for more information on this brochure). Over the course of these two events, Interns conducted outreach to a total of **84 incoming freshmen**. Interns distributed **50 shower timers** and **signed up 38 students** interested in volunteering with Green Campus.

UC Berkeley

Residence Advisor (RA) Presentations

This month, the Green Campus team collaborated with Residential Sustainability Education Coordinators (RSECs) to educate Resident Advisors to promote sustainable behavior in the residence halls. Interns and RSECs also met with Resident Directors to provide updates on fall plans. They will institute "Programs In a Box," or student input on ways to save, and review student recommendations.

3. Program performance/program status (describe)

- Program is on target

- X Program is exceeding expectations
- Program is falling short of expectations

Note: The Alliance considers that the Green Campus Program is exceeding performance expectations in that it is meeting, and in many cases, surpassing the program deliverables; in addition, it is consistently producing new, creative and successful program activities.

4. Program achievements (for non-resource programs only)

Task 3: Recruit and support Green Campus Interns at each campus in implementing program activities.

Program-wide Team Manager Meeting

On Saturday, August 2nd, as part of the Sustainability Conference, Alliance staff took the opportunity to meet with the entire group of Intern Team Managers. During this meeting, Senior Program Associate Renee Lafrenz reviewed the updated Team Manager Scope of Work which enhances the coordination responsibilities for this role (*see attached*).

San Diego State

During this month, San Diego State Campus Lead Renee Lafrenz interviewed and hired two new Green Campus Interns: Sarah Campbell and Robert Ellsworth. Ms. Campbell is a fourth year environmental science major and Mr. Ellsworth is a fourth year biology major and pre-law student. Both interns joined Green Campus at the Sustainability Conference and End of Year meeting.

Chico

This month, Interns compiled a draft reference booklet to orient for-credit interns on resources, project descriptions, and strategies for developing and implementing Green Campus projects and events. Once finalized this booklet will be made available to incoming interns and updated as needed. *See Draft Chico Reference Booklet, attached.*

UC Santa Cruz

This month, Interns and Alliance staff initiated a concerted effort to recruit for and hire two new interns to replace two outgoing Interns (after this month intern David Chang will be studying abroad, returning to work with Green Campus in January 2009; Intern Katie Landeros will end her internship in September). Alliance staff and Interns reviewed resumes submitted to UCSC Green Campus in April and contacted the three most promising from that group. Alliance staff also created an internship job description, and Interns circulated the description through the Student Environmental Center, the UCSC Environmental Studies internship coordinator, SOAR and CalPIRG list serves (*see UCSC Job Description, attached*). **Five students** responded to the advertisement. On July 25th Interns and Alliance staff (via conference line) interviewed five candidates and came to a consensus on hiring Lara White and Sean Higbee. Lara White will attend the UC/CSU/CCC Sustainability Conference and Green Campus End of Year meeting. Sean Higbee will begin his internship when he returns to Santa Cruz in September.

Task 5: Hold a fall planning meeting of student organizers and key administrators, facility staff, and faculty at each campus.

UC Berkeley

Green Campus Interns scheduled a fall Residential Sustainability Service Program (RSSP) advisory meeting on August 12. Interns will meet with key housing stakeholders: Sustainability Director Lisa McNielly, Access Control and Services Contact Larry Wong, Housing Operations Director/Residential Sustainability Education Coordinator Manager Jeff Urdahl, Wade Crawford, and Resident Life Director Dan Ocampo. Interns intend to review program successes last year, and discuss plans in 2008-09.

Task 7: Integrate energy efficiency and conservation into course curricula.

This month, **four Green Campus teams integrated energy efficiency into course curricula:** UC Berkeley (two courses), UC Merced, Humboldt and SDSU. The first three campuses structured an entire course (or two in the case of UC Berkeley), and the last one integrated projects into course assignments. Note that the descriptions below are separated into the following two categories: Structured Entire Course and Integrated Course Assignments/Presentations.

- *Structured Entire Course:*

Humboldt State

In July, Interns continued in their efforts to develop a for-credit Green Campus project based internship course in the fall semester. Interns worked with academic sponsor Professor Richard Hansis to develop an outline and catalog description for the internships. Through ENV5 482 Interns will offer the following for credit (i.e., 2-3 unit) intern positions: Outreach Coordinator (2 positions), Events Coordinator (2 positions), and Energy Audit Coordinator (2 positions). Prior to and during the first weeks of school, Interns will market the internships on campus and will interview interested students prior to their enrollment in the course.

This month, Interns developed a flyer advertising the internship positions (***see HSU Internship Flyer, attached***). In August, Interns will begin conducting outreach efforts to recruit students for the internships.

One-day seminar

This month, Interns also worked with advisor and Schatz Energy Research Center Engineer Richard Engel to plan a comprehensive energy audit seminar to prepare more students to work with Green Campus to conduct energy audits. Interns worked through the Office of Extended Education to tentatively schedule the **one-day, 8 hour training** for September 20th. Interns and Mr. Engel developed a training outline (***see HSU Audit Seminar Outline, attached***). Mr. Engel agreed to be the lead instructor for the seminar and in August Interns will request other experienced auditors in the community to contribute. In August, Interns will work on identifying a facility for the walk-through exercise and develop marketing materials as needed; the Office of Extended Education will also advertise the seminar.

UC Merced

During this reporting period, Interns continued planning for a for-credit course (ES 199) to begin in the fall semester. Interns recruited for the course and successfully reached **15 students**; recruitment will continue during freshmen orientation events in July and August. Also during this month, Interns met with prospective guest lecturers to discuss a course outline and to request their commitment to speak in a class. Interns also conducted initial research into finding a new faculty sponsor for the course, as the previously arranged sponsor will now be out during the fall semester on maternity leave; Interns expect that there should be no problem in finding a new sponsor.

Also this month, Interns began developing a course syllabus, which they expect to complete before the end of August.

UC Berkeley

Building Sustainability at Cal

Green Campus interns spent a bulk of their time coordinating and preparing for the fall semester of the Building Sustainability at Cal course ER199 and ES84: Building Sustainability. Interns, Shawn Orgel-Olson and Lamia Mamoon plan work closely with ES84 Coordinators, Laura Moreno and Irene Seliverstov to facilitate the course in the fall semester.

This month, the Building Sustainability at Cal team reserved the classrooms, developed course curricula and structure, and sent out a job descriptions for two Assistant Program Coordinators and eight Building Coordinators to oversee students in outreach and implementation of last semester's recommendations. The **3 unit courses** will focus on continuing education and awareness of sustainable practices in the buildings, review previous assessments and provide additional feedback, and advocate for implementation of recommendations. Class meeting times will overlap for one hour, in which the classes will converge for speakers and allow collaborative discussion across courses.

➤ *Integrated Course Assignments/Presentations:*

San Diego State

American Language Institute

On 29th July, 2008 Green Campus Program successfully screened "The Phantom Hunter" for English for Academic Proficiency (EAP) Academic Speaking D2 class at the American Languages Institute (ALI). The class was attended by **16 foreign students from Japan, Turkey, Thailand, Taiwan, Italy, France and Saudi Arabia**. All students were provided with a GCSDSU brochure and a copy of The Phantom Hunter booklet.

The relationship with the ALI is a new endeavor; Intern Simarjeet Sahota worked with instructor Mr. Martin Gardella for a month prior to discuss how best to include sustainability and energy efficiency in the tightly packed curriculum. The learning goal for the class was to acquire new vocabulary and sustainability.

The students were given a list of vocabulary with words like "CFL," "phantom loads," "wall warts," "refrigerator," "faucet," "aerators," etc. Common words like refrigerator and faucet were used because in some countries people use less formal words like fridge or tap. This helped not only build their vocabulary and meet the goals of the class, but also to give them important information about energy efficiency.

Students enjoyed the movie and one student videotaped the presentation. It was interesting to see how students with different levels of English comprehension responded to Carmen King's Australian English. Mr. Gardella actually asked to borrow "The Phantom Hunter" for a day to view it at home with his sons; he shared their positive reviews with the team.

SDSU Green Campus is invited to screen the movie again on August 6th for the Intermediate English Communication (IEC) class. This relationship between GCP and ALI will continue through fall 2008.

Task 8: Convene end-of-year meeting of all Green Campuses

Alliance staff finalized planning for the Green Campus End-of-Year meeting, held Saturday, August 2nd in San Luis Obispo in conjunction with the UC/CSU/CCC Sustainability Conference (***see attached participant agenda***). This meeting featured the following:

- Award Ceremony
See June 2008 report for winners.
- Goals & Responsibilities / Green Campus Town Hall Meeting
During this time, Alliance staff discussed programmatic changes, which were included in a FAQ document (***see attached***). This session culminated in an open forum for interns to ask questions.
- Climate Action Planning Panel
 - *Matt St. Clair, UC Office of the President*
 - *Marlene Nang, CSU Chancellor's Office*
 - *Fahmida Ahmed, Stanford University*As part of this panel, the speakers presented on long-term climate initiatives for their organization, as well as the personal journey they took to reach their current profession. More specifically, the panelists spoke to skills and projects that would be most effective for the interns to focus on during this year and beyond.
- Project Brainstorm BONANZA
Interns were divided into cross-campus brainstorm groups facilitated by members of the Direct Implementation Team (***see planning worksheet***).
- Team Meetings & 2008-09 Commitments
In an effort to more strategically plan projects program-wide, interns met in their campus teams and made preliminary project commitments for this year and signified this by signing up on a large matrix (to be attached to the August 2008 report).
- Projects Workshop
The projects workshop wrapped up the meeting with a peer exchange on the following:
 - *Dining Halls: More Than Just a Place to Eat*
 - *Noel Crisostomo (Stanford)*
 - *June Reyes (UCSD)*
 - *I Audit, You Audit, We All Audit!*
 - *Tami Kautz (Chico)*

- Rachel Shiozaki (UCSC)
- o Making Tabling Work For You
 - Tami Kautz (Chico)
 - Rachel Shiozaki (UCSC)

- 5. Changes in program emphasis, if any, from previous quarter** (e.g., new program elements, less or more emphasis on a particular delivery strategy, program elements discontinued, measure discontinued, budget changes, etc.).

None to report this month.

- 6. Changes to staffing and staff responsibilities, if any**

New Interns joined the San Diego State and UC Santa Cruz teams this month: Sarah Campbell (SDSU), Robert Ellsworth (SDSU), Lara White (UCSC), and Sean Higbee (UCSC).

- 7. Changes to contracts, if any**

None to report this month.

- 8. Changes to contractors and contractor responsibilities, if any**

None to report this month.

- 9. Number of customer complaints received**

There are no complaints to report.

- 10. Revisions to program theory and logic model, if any**

No revision to program theory and logic model to report at this time.

Supporting Documentation:

1. Metrics Chart
2. DIT planning meeting agenda
3. Best Practices in Student Energy Efficiency presentations
4. Humboldt Food Services presentation
5. UC Irvine Fumehood presentation
6. Student Convergence presentations
7. Quarterly Audit Report Apr – July 2008
8. July 2008 Implementation Budget Summary
9. July 2008 CFL Exchange Summary
10. SLO Verdiem report
11. SLO Green Wash Calculations
12. UCSC Oakes Project Evaluation
13. Campus Newsletters July 2008
14. End of Year One-pagers
15. Green Campus Banner
16. Chico magnet
17. Team Manager SOW
18. Chico reference booklet

19. UCSC Job Description
20. HSU Internship flyer
21. HSU Audit Seminar Outline
22. End of Year Meeting Participant Agenda
23. End of Year FAQ
24. End of Year Planning worksheet