



GREEN SCHOOLS / GREEN CAMPUS UPDATE NEWSLETTER

Using Energy Efficiency to Strengthen Education



MARCH 2008

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**ALLIANCE TO
SAVE ENERGY**

Creating an Energy-Efficient World

WATT'S NEW

Hesperia District Recognized with Student Leadership Award

Hesperia Unified School District Celebrated For Saving \$660,000 through Energy Efficiency



Students at Sultana High School and Desert Trails High School were honored by the Alliance to Save Energy in an event on March 3rd for “thinking and acting green.”

Through the Alliance’s Green Schools Program, students, faculty, and staff lowered energy costs in the Hesperia Unified School District by more than \$660,000 over a five-year period. In addition to saving money, the participating schools’ energy savings

reduced the district’s CO2 emissions more than 2,000 tons. The district also returned half the savings to the schools for further energy-efficiency activities and educational materials such as textbooks and computers. [Sultana High School students pose, above, after receiving their award.]

Through the Green Schools Program, supported by Southern California Edison (SCE), the students led a campaign to involve their schools in participating in energy-efficiency activities such as plugging computers into power strips with timers. Sultana students used their diagnostic tools to sleuth out energy waste, and were able to reduce total lighting use by half.

The Alliance to Save Energy awarded the Hesperia School District, along with two of its “Champion” Green Schools – Sultana High School and Desert Trails High School – for their excellent work in energy conservation education, community outreach, and longstanding support of the Green Schools program. The recognition event focused on the student leadership that achieved the energy savings and included an awards ceremony, displays of energy-efficiency projects at a number of district schools, and a school tour showing the students’ energy-efficiency measures.

Alliance President Kateri Callahan presented an award to each of the two high schools, which she called “shining examples of schools that empower students to lead the way to greater energy efficiency in their schools and in their communities at large.”

[Desert Trails High School students, at right, receive their award.]



During the awards ceremony, California Public Utilities Commission President Michael Peevey addressed the commission's commitment to energy efficiency and its appreciation for Green Schools.

California citizens need to embrace our new energy future," Peevey said. "Schools have the mandate to teach, and young people have the opportunity to learn, in depth, about this critical issue of our time through programs such as Green Schools, which help them grow into more knowledgeable, energy-efficient adults."

SCE President John Fielder recognized the importance of educating our youth about energy and the environment. He noted that today's students will bring about tomorrow's advances in energy efficiency. "We look forward to meeting the tremendous challenge of climate change with a new generation of innovators that can build on Edison's accomplishments and further transform the way our customers save energy, save money and save the environment," he said.

Hesperia Mayor Mike Leonard observed that the Green Schools Program is helping to create a new green economy in the town and that the students are engaging the larger community and acting as role models for Hesperia citizens of all ages on how to save money on energy costs at home and in local businesses.

Thanks to everyone who made this unique event a success!

UT Austin's Solar Feasibility Project

Bringing Solar Energy to Campus

The solar feasibility assessment for the UT campus is charging ahead. A large collaboration across many schools and disciplines, this project is working to assess the potential of solar heating and solar photovoltaic panel integration across the University. This involves a macro-scale analysis, assessing buildings and rooftops campus-wide to get a general sense of solar energy's potential, and a micro-scale approach by focusing on two case studies as possible demonstrations: a parking garage on the main campus and a building in the Pickle Research Center.

The final stage of the project is an examination of the non-technical constraints and opportunities for solar applications on the UT campus. This section will look into existing and future policies for energy production and consumption on Campus, as well as what steps are required to supplement the highly efficient existing power system. This will include, but is not limited to, changes to maintenance and operations, inter-departmental cooperation, and other social issues.

A final report will be submitted to the State Energy Conservation Office in late April followed by a presentation in early May to UT's Sustainability Task Force.

Cal Poly SLO Interns Generate Support for LEED

Recreation Center LEED Certification Project

SLO Interns partnered with the Associated Students Incorporated (ASI) to promote Leadership in Energy and Environmental Design (LEED) certification for the proposed expansion of the Recreation Center. Currently, Campus policy insures that a building "shall develop a CSU Sustainability Measurement System and self-verification standard...based on LEED™ principles," according to the CSU Executive Order 987. This measure supports energy efficiency guidelines, however, it lacks any third party accountability to ensure high-quality performance standards are met.

Interns engaged in an intensive campaign to educate ASI and the student body and bring to ballot a vote on LEED certifying the Recreation Center expansion project. As an Associated Students building, the construction and operation of the Recreation Center is paid for through student fees. Construction plans have included building to LEED equivalency, not certification which is third party verified.

In order to educate the student body and advocate for LEED certification, the Interns engaged in a number of outreach activities, the centerpiece of which was the production of LEED the Way: Cal Poly. This 3:20 minute video, which [can be seen on You Tube](#), describes LEED and its importance for the Recreation Center.

At the end of February, students voted on whether or not to approve the Recreation Center Expansion Project, and whether to require LEED certification or LEED equivalency for the project. As a testament to the effectiveness of Green Campus efforts, a total of 7,309 students voted, and 75% voted yes for the expansion, while 25% voted no. And of the students that voted for LEED, totaling 6,895 votes, 88% voted for certification, and 12% voted no.

In the next month, Interns will work with Associated Students to begin the process of determining the highest standard of LEED certification (e.g, Silver, Gold, or Platinum) that will be economically feasible for the expansion project.

SCHOOL & CAMPUS INNOVATIONS

Green Campus

UC Berkeley Gives Credit for Energy Efficiency

Green Campus Interns initiated the ER 199 Applications of Energy Efficiency and Conservation course this month. Currently 13 students are enrolled in the course this semester, ranging from sophomores to graduate students. The main student assignment includes conducting lighting audits and inhabitant surveys of assigned building on campus to create a sustainability plan that considers both short and long term behavioral, structural, and operational changes.

The students are also planning an energy competition between eight buildings to see who can achieve the greatest reduction in energy use, water use, and waste production, while creating educational programs that target behavior change.

CSU San Bernardino Brings Efficiency to the President's Office

In follow-up to the Administrative Council presentation that CSUSB interns gave to the Council consisting of the University President, Vice President, and Deans from each of the schools departments in January, Green Campus Interns were invited to conduct an energy survey of the Office of the President. University President Albert Karnig; Executive Assistants Risa Dickson and Yolanda Girard; and secretaries, Kim Bartholomew and Barbara Hallack participated in the program.

The Interns discovered that the Office of the President uses only half of the lights in their offices, but found additional saving opportunities, particularly related to behavior changes. By educating the occupants about phantom loads and the use of power strips to shut down unnecessary appliances after hours, Interns are encouraging office occupants to be more aware of their energy usage.

Merced Decommissioning Fume Hoods

UC Merced Green Campus Intern Jessica Zenger worked with UC Merced Energy Manager John Elliott to shut down three inactive fume hoods and set them up with monitoring equipment. UC Merced hoods use energy even when not in use because the valve that directs air flow cannot be closed completely which necessitates such monitoring. The duo is working on calculating the savings from putting the fume hoods in sleep mode.

In the meantime, the Team is identifying additional hoods to include in this project and researching valves that can be completely turned off. Ms. Zenger met with UC Merced Energy Manager John Elliott to discuss the project and plan for their evaluation of results. She is also developing a hood sticker to identify those that are “asleep,” complete with contact information should a lab user want to turn a particular hood on or off.

Campus Power Down at UT

The Campus Power Down over Winter break at University of Texas focused on two phases of energy conservation. First, through general outreach, faculty and staff offices on campus were urged to “Go Dark” for the break. Faculty and staff were reminded the week before the break to turn off unused appliances and other electrical equipment. An email was also distributed to all University of Texas employees containing a “Holiday Power Down Checklist” and other energy conservation tips.

The other phase focused on computer energy conservation. Several academic computer facilities all around campus agreed to power down over the break.

Computer labs in the nursing school, chemical and petroleum engineering building, business school, University Teaching Center building, and academic libraries all participated. Since the computer labs are more isolated, they will be able to quantify the number of kilowatt hours and dollars the university could potentially save by implementing a campus-wide Holiday Power Down of all computer facilities.

Green Schools Innovations

Avaxat Elementary

The Green Schools team has begun a survey to tally how many personal refrigerators were in use in individual classrooms. In addition, a large poster was put up in the staff lounge with suggestions and ideas for energy conservation.

Shivela Middle School

The Shivela Green Team has distributed energy check cards to all school teachers to use in assessing their classroom energy use, as well as vacation check lists to ensure that all appliances are shut down over break.

Desert Trails High School

Members of the Desert Trails High School “Green Team” visited Mesquite Trails Elementary to present on their work with District Energy Management Technician Mike Virden and share energy saving tips with the younger students. Over the course of the school year Green Team students have worked closely with Mr. Virden on an energy audit training project. During the presentation to Mesquite Trails, Desert Trails students shared some of the energy-saving techniques they’ve learned and gave a hands-on demonstration and training of the Green Schools tool kit, which they have used to conduct energy audits at their school. Since meeting with their Desert Trails counterparts, Mesquite Elementary students have been busy monitoring school and classroom energy use as part of their weekly Energy Patrols.

SCHOOL & CAMPUS RESOURCES

Opportunities for Students

Film Your Issue Competition

The global Internet-based, FYI competition encourages high school and college students (ages 14-24) to engage in pressing contemporary issues by creating and uploading two-minute short films on issues that affect their generation. FYI - Film Your Issue encourages young people to add their voices to the public dialogue, and underscores how even an individual voice can influence public debate. [Find out more.](#)

Nominate a Young Environmental Leader for a Barron Prize

The Gloria Barron Prize for Young Heroes seeks nominations for its 2008 awards. The Barron Prize honors young people (ages 8-18) who have made a significant positive difference to people and our planet. Each year, 10 national winners each receive \$2,000 to support their service work or higher education. Half of each year's winners are chosen for their work to protect the environment. Nomination Deadline: April 30, 2008

[More information and/or nominate](#) a young environmental leader for a \$2000 Barron Prize

50 Simple Things You Can Do to Save the Earth

The Alliance to Save Energy is featured in a book - "50 Simple Things You Can Do to Save the Earth." We are also featured on the book's website, 50SimpleThings.com. April 1st, 2008 the revised edition of the #1 New York Times Bestselling Book will hit the shelves at bookstores nationwide. In conjunction with the book we a new online community will be launched at the website to assist readers in finding and taking action on one of these 50 Simple Things anyone can do to help make the planet a better place, now and in the future.