



GREEN SCHOOLS / GREEN CAMPUS UPDATE NEWSLETTER

Using Energy Efficiency to Strengthen Education



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ALLIANCE TO
SAVE ENERGY
Creating an Energy-Efficient World

WATT'S NEW

Green Campuses Hire New Interns

Saying Goodbye to Graduating Interns Means Welcoming New Ones

At the end of the school year, Green Campus team members face the tasks of choosing new Interns to replace those who graduated in May. This year was no exception, and Alliance Green Campus team members helped intern teams at UC Irvine, CSU San Bernardino, and UC Santa Barbara through the process during the month of June.

We'd like to welcome to our new Interns: Andrew Sata and Kong Sham at UC Irvine, Peter Connolly and Sara Bresko at UC Santa Barbara, Francesca Bendetti and Tom Fleming at UC of Southern California, and Erika Kociolek, Michelle Kizner, and June Reyes of UC San Diego. They have all been busily training and learning to get up to speed about Green Campus, energy efficiency concepts, and their new roles as interns.

We look forward to an exciting new year with our most recent Green Campus additions. They are already planning a wide range of projects next year: CFL exchanges, completed and expanded Green demonstration suites and rooms, water conservation projects, building, cafeteria, and sorority audits, LED installation projects, and many others.

Green Campus Recognized at Sustainability Conference

Green Campus Teams Receive Best Practice Awards

This year's California Sustainability Conference honored the great ambitions of many University of California, California State University, and California Community College campuses, including the 12 Green Campuses. The event was a chance to celebrate a successful year for Green Campus Interns and Alliance team members. This year, both conference winners of the Student Energy Efficiency Best Practice Award were Green Campuses: UC Irvine and Humboldt State.



Interns from UC Santa Cruz, CSU San Bernardino, and CSU Chico, also received honorable mentions in the Student Energy Efficiency Award category. Interns from all five campuses presented during the Green Campus conference session, and UC Irvine and Humboldt State Green Campus Interns were honored during an awards ceremony immediately following the Green Campus conference session on the first night of the three-day conference.

Among their many achievements, Humboldt State University worked with many segments of their campus, including offices where they performed audits, student centers where they exchanged almost 1,000 compact fluorescent light bulbs, and housing and dining services where they created the position of Energy Management Intern. They also created sustainability signage for several buildings, made a fun and educational video called *The Phantom Hunter*, showed *The Inconvenient Truth* and episodes of *Captain Planet*, and held a December event called The Twelve Days of Saving.

UC Irvine emphasized saving energy in dorms, especially freshman dorms. Interns created laminated posters with new energy-saving tips every week to integrate energy-saving into everyday life, held energy-saving competitions between dorms, and distributed 1,006 Compact Fluorescent Lamps. A Green Tour Dorm Room is underway as well, featuring all Energy Star and organic products. Interns work with labs on campus, using innovative methods to encourage lab users to close 180 fume hoods while not in use, performing lab audits, and holding energy-saving competitions between labs. They have also embarked on bi-level lighting projects, participation in the Campus Sustainability Steering Committee, and a huge event called Green Day that included a visit from the Energy Star bus and a bike raffle. They have made strides with UC Irvine dining services.

Conference Highlights

Green Campus team members organized a special breakfast panel discussion featuring Keith Reed, the Program Manager of Mass market Programs at PG&E, Gene Rodrigues, Director of Energy Efficiency at SCE, and Mark Gaines, Director of Customer Programs at Sempra Energy. Each of the guests spoke about career opportunities available to young people like the present interns in their respective organizations. Green Campus interns were able to ask questions of the energy professionals and network, as many highly skilled and knowledgeable interns will soon be graduating and looking for jobs in the field. The breakfast is part of an ongoing focus of the Alliance to Save Energy to begin to address the need to develop the next generation of energy professionals.



Another highlight, Green Campus team members organized a special Green Campus convergence track that featured team member and intern-led training sessions during the post-conference student convergence.

In addition to trainings on the Energy Star Portfolio Manager system, how to effectively network with campus

administrators, and coordinate with other sustainability campaigns, Morgan King presented an innovative, hands-on training on conducting office energy audits. He demonstrated proper use of watt meters, light meters, flicker checkers, and other auditing equipment. Students in attendance expressed interest in starting auditing offices on their own campuses. For information and resources about how to conduct Office Audits and a range of other Green Campus best practice projects on your own campus, visit [the Green Campus section](#) of the Alliance website.

This year's conference brought other reasons to celebrate as well: It was the largest ever, with over 800 attendees. Approximately 300 of those were students. Of course, many of those students were Green Campus Interns and other participants. Alliance team members consider the events of the week an all-around success, and are looking forward to what next year brings.

Interns and team members also had the opportunity to bid farewell to outgoing Green Campus program manager, Andy Coghlan, and welcome Renee Lafrenz, the newest addition to the Alliance to Save Energy team.

New Lesson Plans Available

Website Offers Lessons by Green Schools Teachers

Many of the lesson plans on the Green Schools website were written by our very own Green Schools teachers. Tools like the Draft-o-Meter, by Linda Gregory of Urbita Elementary School, and lessons like "How Big is Your Footprint?" by David Casey of Analy High School have enriched the Green Schools program as a whole, and inspired Green Schools teachers all over the country.

We have recently added several new lesson plans to our website for teachers to try out on their classes.

- **"How Saving Energy Keeps the Earth a 'Cool' Place to Live,"** by Mark Ziesmer of Sultana High School introduces 9-12 grade physical and environmental science students to electromagnetic radiation, the composition of the Earth's atmosphere, and the Greenhouse effect. It teaches students to identify greenhouse gases released when fossil fuels are burned and how burning influences the concentration of greenhouse gases in the Earth's atmosphere.
- **"Things that Use Electricity,"** by Liz Henkels of Deer Canyon Elementary School enhances young students' awareness of things around their houses that use electricity. It also works to enhance phonemic and writing skills and encourages teachers to use colorful thinking maps and other innovative tools.
- **"What is Energy?"** by Amy J. Whitehead of Sundance Elementary School teaches K-3 and special education children about what electrical energy is and what uses energy. The lesson is geared toward the goal of teaching students how to save electrical energy.

These lesson plans join their predecessors on the [Green Schools website](#). All teachers are invited to take advantage of them and write their own, should they have an idea.

GREEN SCHOOLS & GREEN CAMPUS INNOVATIONS

Students Present Their Work

Students Present to Alta Loma School Board

Green Schools students from all over the Alta Loma Unified School District finished out the school year by taking on a large part of promoting the program by presenting their activities and accomplishments to the District School Board at their June 6 meeting.

Jim Ashton, Alta Loma School District Assistant Superintendent of Administrative Services, reported on the draft of energy savings so far with the representatives from Alta Loma Schools. Alta Loma Junior High School has saved the most energy by far -- a whopping 20%! The students from each school were enthusiastic about their program activities, and their presentations were well received and appreciated by the school board. Here's a run-down of school participation in the meeting:

Alta Loma Elementary School

Students described their participation in the Green Schools Program to Board members, and discussed their tour of SCE's Customer Technology Application Center in Irwindale, CA.

Alta Loma Junior High School

Two students made a presentation on their involvement in the Green Schools Program, using a website created by one of the students. The website includes a colorful calendar of dates for student meetings to coordinate energy conservation efforts, along with energy saving tips to use at school. The students expressed their gratitude for participation in the program and the knowledge they have gained and taken home to share with their families.

Jasper Elementary School

Students presented on their very successful April CFL exchange activities, during which they exchanged 1,000 CFLs. This alone is a quarter of the light bulbs that were predicted to be exchanged all over SCE's territories. The schools instead exchanged a combined total of 13,939 bulbs.

Victoria Groves Elementary School

Students performed a song on energy conservation for the school board members and parents that were present. The song was written by their teacher, Mrs. Jackson, for the Green Schools Program. Mrs. Jackson, a prodigious lyricist, has written several songs for the Green Schools Program. The following is her song "Save a Dime," to the tune of "Coming 'Round the Mountain:"

Save a dime every time (Every time!)
Save a dime every time (Every time!)
Save a dime, every single time,
Turn off the lights when you leave a room (Every time!)

As has been the tradition at the end of each school year, the Alliance to Save Energy is preparing to publish the 2006-2007 edition of STUDENTS LEADING THE WAY.

This year's book is full of success stories from each of our California Green Schools, and includes data explaining energy, financial, and CO2 output savings. Check it out at www.ase.org/greenschl. Also, take a look at former years' editions to see the progress our schools have made.

Green Schools Provide Community Outreach

Teachers Stay Busy this Summer

As the summer moves lazily along and the next school year is still on the horizon, some Green Schools teachers have decided not to rest. Instead, several teachers have embarked on community outreach projects that stem from this year's exceedingly successful CFL exchange. As part of the outreach program, the exchange continued through June and July.

The Green Schools team has taken a three-pronged approach to the community outreach process. First, Desert Trails High School students, under the continuing diligence of their teacher Barbara Ward-Lawe, are in part spending their summer giving presentations for other Green Schools. They have expanded their territory to include local community service organizations such as Veterans of Foreign Wars and the Kiwanis Club of Hesperia. At each presentation they relay information about energy efficiency and Green Schools, and also give out information on Southern California Energy's incentive programs.



Each School's Approach

The students of San Bernardino High School are doing their part for their community as well. They have expanded on the CLF exchange idea and combined it with a larger community service event.

Lastly, Jefferson-Hunt Elementary School teachers Felicity Mendoza and Helen Young have received money to continue their own community outreach through a special grant program. Over the summer, they are visiting their students' homes to talk to parents about what the school is doing to save energy, including the Green Schools program, and the energy-saving initiatives in which their kids are involved. During the meetings, the two teachers share energy efficiency tips and leave parents with a brochure describing the SCE rebate program. When a parent signs a pledge to exchange an incandescent bulb with a CFL, they are also presented with a CFL.

Since schools are often the centers of their community, it is great for the communities to get involved in their kids' activities. With parents participating, and teachers taking the lead over the summer, the Green Schools program in California can look forward to a smooth transition from last year to next.

SCHOOL & CAMPUS RESOURCES

Competitions to Keep Summer Minds Sharp

DoSomething.org's weekly grant awards

http://www.dosomething.org/plum_youth_grant_application

If you've got an idea that will improve your community and the environment, then Do Something! DoSomething.org encourages youth involvement in the issues that affect them and their environment, including the issue of energy efficiency. Each week, GameStop, the video game store, and Plum offer \$500 grants to individuals aged 25 and under who have done something positive for their community and the environment around them.

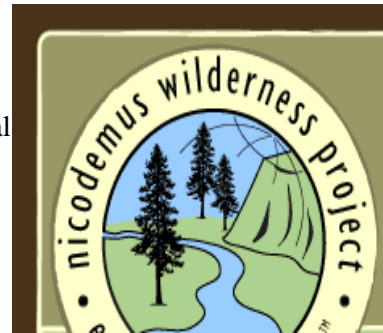


If you have an idea for getting your community more involved in energy efficiency or generally changing energy habits (or anything else), visit the website and tell them about it. One of the winners of one recent week painted murals encouraging Everglades conservation, and the other started a community garden so that she and her neighbors could feed themselves without having to travel to a far-off grocery store. If you're passionate about energy efficiency, log on and fill out an application.

Nicodemus Wilderness Project, Apprentice Ecologist Initiative

http://www.wildernessproject.org/volunteer_apprentice_ecologist.php

Get your hands dirty cleaning up trash to prevent pollution of the environment, or planting native trees to combat global warming! There's also room to come up with your own project of environmental stewardship. Try getting your school more involved in energy efficient practices or get your friends to start an EE club with you to make real change in your community. As the competition invites you to, be creative. Deadline: December 31, 2007.



Computer Energy-Saving Myths Revealed

Even the most energy-conscious are sometimes unsure about when to leave computers on, and keep chargers plugged in. "It takes more energy to turn your computer back on after turning it off than to leave it on all the time, right? And turning it off is bad for it anyway. Not only that, chargers and adaptors don't use any energy when there's nothing plugged into them, even if they're plugged into the wall."

Not so! While it's true that there is a small surge of extra power when you turn your computer on, it is nothing compared to the energy wasted by keeping it on all the time. This is especially true of desktops. So if one computer in a school is used for seven hours during the day, and is left for the remaining 17 hours, a huge amount of waste is created. Not only is power wasted, but heat pollution is created, which brings us to our next myth.

Power it Down

It is better for a computer to turn it off. In former generations of PCs it may have been true that leaving it on was more beneficial, but that technology changed about 17 years ago. Now most

computer break-downs are caused by over-heating and mechanical stress, so turning off your computer can give it a chance to cool down and potentially extend its life.

That way you also cut down on hours of heat production that would otherwise escape into the atmosphere and be trapped by greenhouse gases. So if you know you're going to be away from your computer for more than two hours, power it down. Most computers are now installed with energy-saving devices that put a computer to sleep when it hasn't been used for a certain amount of time, but it's each owner's job to make sure those features are activated. If you have a Windows system, you can do that through the Control Panel function in Windows and following it through the Performance and Maintenance option to Power Options. It goes without saying that Energy Star machines tend to save the most energy.



The monitor alone uses at least half of the power consumed by the entire computer. Contrary to popular belief, screen savers do not save energy. Rather, they were created so that one image sitting for hours on your screen does not become burned into the glass (literally saving your screen). Sometimes, using a screensaver can even be more energy-intensive than not using one. But the best way to save energy and your screen is to shut off the monitor entirely. Shut it off not only every time you turn off the computer, but also if the computer won't be used for more than 20 minutes.

To help your computer save the most energy, use a power strip. Plug everything—hard drive, monitor, etc. into one power strip, and after you've powered everything down, shut the power strip off too. That way, nothing draws a "phantom load" while you're not using your computer.

In the case of laptop computers, watch out for chargers. According to the EPA, chargers and adaptors draw a charge even when there's nothing plugged into the other end. They do not need a "completed" circuit, like the common myth would have us believe. As with all supposedly idle appliances, this is especially true for those with small lights, so unplug laptop chargers when there's no laptop to charge. That goes for cell phone chargers, too.

Considering the prominence of computers in schools, and the ease of saving money and energy from PCs, every school and campus can afford to make powering down a habit. Many Green Schools have already formed teams of students and teachers to make sure computers are off at the end of every day. Keep up the good work!

For more information, visit:

http://www.lbl.gov/ehs/waste/green_team/compenergy.shtml

http://www.eere.energy.gov/consumer/your_home/appliances/index.cfm/mytopic=10070

<http://www.pcmag.com/article2/0,1895,1990673,00.asp>

Studies show that when children study a subject in school, their parents learn the material more thoroughly than adults whose children are not. So teaching energy efficiency in school really *can* affect whole communities.