



GREEN SCHOOLS / GREEN CAMPUS UPDATE NEWSLETTER

Using Energy Efficiency to Strengthen Education



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IN THIS ISSUE:

WATT'S NEW

[Spotlight on Rochester](#)

GREEN SCHOOLS & GREEN CAMPUS INNOVATIONS

[The Power of the Internet
Improving Campuses
Educating Communities](#)

SCHOOL & CAMPUS RESOURCES

[Energy Awareness Month
Creative Sustainability](#)

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ALLIANCE TO
SAVE ENERGY

Creating an Energy-Efficient World

WATT'S NEW

Spotlight on Rochester

Rochester Green Schools Professional Development Workshop

The Rochester City School District (RCSD) Green Schools Program is continuing as strong as ever this year as teachers gathered on October 24th and 25th to cement their positions as Green Schools leaders or to become involved for the first time and carry on the torch. Energy Manager John Songer, Local Project Leader Maurice Bell, Alliance consultant Karen Anderson, and Alliance associate Emily Curley were on hand to train the teachers.

About 15 returning teachers from 6 schools gathered on the 24th to collect new resources and ideas and will provide valuable leadership and experience to the program.

On the 25th, new teachers gathered for an all day workshop. Mr. Bell walked them through the history and context of the Rochester Green Schools program which has won awards from EPA, NYSERDA, and others and is being considered a viable statewide model for all of New York. Most recently, the RCSD was honored in 2006 by the NY Department of Environmental Conservation with an Environmental Excellence Award for its commitment to improve energy efficiency and advance the education of sustainability, energy efficiency, and renewable energy to K-12 students and teachers throughout the district.



The teachers were also given hands on lessons about how to use the Green Schools tool kit and take readings on lighting, temperatures, and energy use of various appliances in order to identify energy savings opportunities. Concurrently, John Songer gave tours of the school to show teachers exactly where to look for some of the energy savings that their school may be able to achieve.

New teachers were also introduced to their mentors. This innovative aspect of the Rochester program recruits corporate engineers and professionals within the community to mentor the green school clubs. These professionals from the architecture, HVAC, engineering, and energy consultation fields were able to help teachers further refine their plans and pinpoint areas that will give them the highest energy savings.

In all about 50 people were present on the second day of training and 21 schools will be participating in the Green Schools program.

Hats off to all of the teachers, organizers, administrators, and facilitators that made the workshop fun and informative - and who will make this school year great!

Rochester's Past Successes

As mentioned above, RCSD was awarded an Environmental Excellence Award from the New York Department of Environmental Conservation. Here's why!

Throughout the past few years, the district has advanced energy and sustainability education to K-12 students and teachers throughout the district. Schools have also focused on performing energy-saving activities. As an incentive to participating schools, the district provided a 50% return of documented annual energy savings to fund energy-related educational expenditures.



The RCSD also made a commitment to expand its energy efficiency efforts into the classroom at 17 of the district's schools. At each school, green school clubs were formed to perform service-based learning projects. Clubs got staff, students, mentors and the community involved in activities such as: energy patrols in the school, energy art projects, pledges to conserve energy at home, sign-up cards for parents to purchase renewable energy and the grading of teachers on their efforts to reduce energy use at the school.

Students conduct energy patrols at their schools equipped with tool kits for measuring and recording lighting lumens, temperature, air velocity and energy consumption of appliances. Teachers are graded for compliance with green club initiatives and are rewarded for good energy conservation practices in their classrooms. **The clubs have documented over \$200,000 of energy cost savings.**

The green school clubs have also increased the recycling rate in their schools through more stringent classroom recycling. This effort has resulted in the district considering a minimal waste program which potentially could save the district over \$94,000 annually in waste management costs and increase the percentage of usable recyclables to over 95 %.

Finally, the RCSD also partnered with Monroe County for electricity procurement on the NY Independent System Operator Day Ahead Market and with Rochester Gas and Electric and Community Energy to purchase 24,000,000 kWh of reduced rate electricity, including 8,960,000 kWh of wind energy annually. The RCSD committed to **purchasing over 8 million kWh of renewable energy annually, making them the second largest school building purchaser of renewable power nationally.** This commitment has offset 15.9 tons of SO_x, 5.3 tons of NO_x and 5,750 tons of CO₂ annually.

Congratulations on a job well done so far. This year proves to be even better!

GREEN SCHOOLS & GREEN CAMPUS INNOVATIONS

The Power of the Internet

The Phantom Hunter

Humboldt University Green Campus created a short film titled "The Phantom Hunter" which is a fun and educational film about how to do a home energy audit. The 16-minute video premiered in August on the University's campus and has since drawn national attention. In September, the video made Grist.org's 'Grist List' which is "a weekly list of environmental websites and goings-on in the environmental world." The Phantom Hunter was one of the five selections on that week's list. Also, in the last few months the video has been viewed thousands of times on Google Video. To watch the video, visit <http://www.humboldt.edu/~greenhsu/cms>



Bringing CFL Exchanges to a New Level



To make Compact Fluorescent Light (CFL) Bulb exchanges easier for people in the community, the UC Santa Barbara Green Campus Interns have setup an e-mail account so that Isla Vista residents can make appointments to exchange their incandescent light bulbs for energy saving CFLs. This brings the exchanges to a whole new personal level and it caters to the residents of the community by working around their schedules. Interns are confident that residents will be more responsive to these exchanges now that they can be done whenever they want.

Did You Know?

- **More than 41 billion glass containers are made each year; recycling only one of those saves enough energy to light a traditional 100-watt bulb for 4 hours. Imagine how long a CFL would last with that much energy!**

Improving Campuses

Office Energy Surveys

CSU San Bernardino Green Campus has been conducting Office Energy Surveys which evaluate office occupant use of lighting and typical office appliances.

To get people to participate, emails are sent out through the campus-wide list serve to find offices interested in becoming more energy conscious, and as an additional incentive, all of the offices that are surveyed are entered into a drawing to win a free lunch.

Green Campus interns then go to the offices and measure the amount of energy consumed by all the appliances and lighting. For each office that the interns visit, data is collected, the energy consumption of the office is calculated, and lastly, energy saving recommendations are provided to the office occupants. Then after completing the surveys, interns continue to follow-up with the offices on a regular basis to check on their adherence to the recommendations.

After the first round of surveys, students found potential energy savings ranging from 15% to 63% in the different locations. If all of the departments and offices that were evaluated adopted the changes proposed by the interns, 11,677 KWh and over \$1,400 would be saved annually. The interns are continuing this program, and have already sent out the Office Energy Survey email to a whole new set of offices to encourage more staff and faculty to become green.

-- From CSUSB's GC Oct. Newsletter

Educating Communities

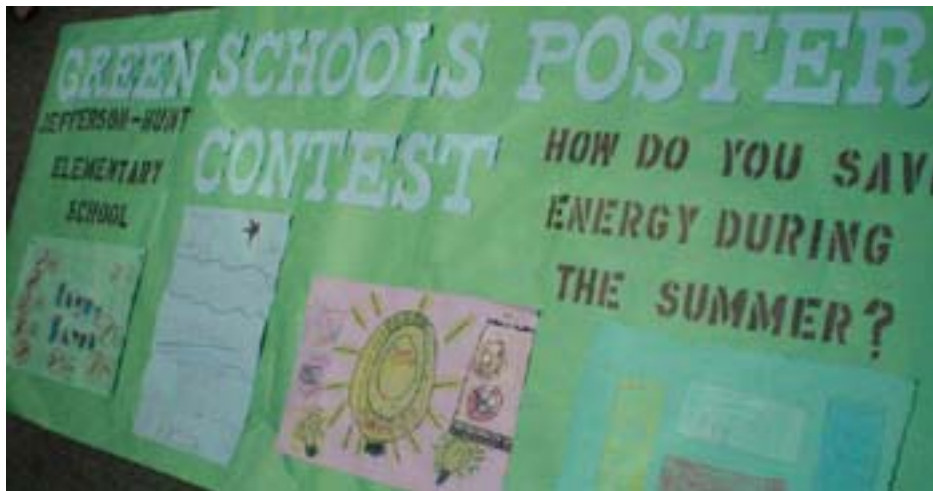
Kiwanis Club Presentation

The Alliance team has been working with Barbara Ward-Lawe, the team leader from Desert Trails High School, to instruct and prepare her alternative education students to make a presentation on energy efficiency and the Green Schools program to the Hesperia Kiwanis Club. In September, the students made a presentation to 35 members at the Kiwanis club, where they received an enthusiastic reception. While there, the students also distributed information on Southern California Edison's energy efficiency incentives programs. In addition to the Kiwanis members, several school and district officials were in attendance including the principals from Desert Trails High School, Mojave High School, and Maple Ave Elementary School. Following the presentation, the principal from Desert Trails announced that the students' presentation would also be given to the school board later in the school year.



Poster Contest

In August, Jefferson-Hunt Elementary School held a poster contest on "how to save energy during the summer." Green Schools Local Project Leader Lorraine Gutierrez collected the entries and delivered them to Desert Trails High School where the participating Green School students served as contest judges. The winning posters were then taken to the Highland Environmental Learning Center, which is located within the San Bernardino County Library, and put on display with the following energy conservation message: "It is important to save energy during the summer when it is hot, and all year through."



SCHOOL & CAMPUS RESOURCES

Energy Awareness Month

EE Global

The Alliance to Save Energy will host the inaugural Energy Efficiency Global Forum & Exposition (EE Global) on November 11 - 14, 2007 at the Washington, D.C. Convention Center. EE Global will serve as the premier gathering and showcase for the energy-efficiency industry, attracting industry professionals, academics and policy makers from around the world, not only to exchange the latest technical, commercial and policy information, but to forge partnerships and develop "best practices" policies and strategies for global implementation.



EE Global is the only energy efficiency event that delivers 200 executive level speakers addressing a variety of topics including policy, power generation, market drivers, buildings, transportation, industry and finance, in addition to having over 60 confirmed exhibitors from leading businesses, government agencies and academic institution displaying the latest energy-efficiency technologies.

College students are encouraged to attend. The event begins with the EE Global Public Day on Sunday, November 11, where visitors will be able to view the exhibits and get a preview of the rest of the event. Tickets for Public Day are normally \$10, but you can gain free admission by printing out the coupon below and bringing it on Sunday. Then on Thursday through Saturday, visitors will be able to listen to discussions and interact with various leaders of the energy efficiency industry. The cost for students is \$100 per day (with I.D.). To register, please visit this website: <http://www.registerone.com/eeglobalforum/reg/register.asp>



Change a Light, Change the World

October 3rd was the ENERGY STAR Change a Light Day, which encourages everyone to replace their old light bulbs with ENERGY STAR approved lights. The Change a Light Day is part of the ongoing ENERGY STAR Change a Light, Change the World Campaign which is now entering its eighth year. The campaign is designed to connect individuals and organizations and replace inefficient light bulbs in an effort to save energy and combat global warming.

Both Green Schools and Green Campus have their own active CFL exchange programs. Since the beginning of the '06-'07 school year, Green Schools have exchanged 15,734 bulbs and hope to reach 22,5000 by June. On Green Campuses, 1577 bulbs have been exchanged so far this semester.

Additional information about the Change a Light campaign as well as CFL resources can be found on the following websites:

Change a Light, Change the World Campaign:

http://www.energystar.gov/index.cfm?c=change_light.changealight_index

18seconds.org

<http://www.18seconds.org/>



Creative Sustainability

Keen Footwear Contests

Keen footwear is sponsoring three contests to support projects that promote sustainability, positive environmental change, or raise environmental awareness. The separate competitions titled Stand Up, Stand Out, and Stand For, each offer \$25,000 to the grand prize winner and \$5,000 to each of the five second place winners - totaling \$150,000 in cash prizes.

The Stand Up contest is looking for creative and original works of either film, art, photography, or journalism. The other two contests are aimed at directly supporting environmental ideas and only require short statements to describe how the prize money would be used to support sustainable or environmental activities. The Stand Out contest is geared towards outdoor activities and the Stand For contest is meant to support environmental research or non-profit projects.

The deadline for all submissions is December 31,2007. For more information and additional contest guidelines, vist <http://www.keenfootwear.com/stand/default.aspx>

Did You Know?

- **Making one ton of recycled paper uses 64 percent less energy and 50 percent less water; reduces air pollution by 74 percent; saves 17 trees; and creates five times more jobs than manufacturing one ton of paper products from virgin wood pulp.**