



# GREEN SCHOOLS / GREEN CAMPUS UPDATE NEWSLETTER

Using Energy Efficiency to Strengthen Education



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## In this issue:

### Watt's New

[Alliance to Save Energy to Launch Youth Campaign](#)  
[CSU Chico Wins Grand Prize for Fighting Global Warming](#)  
[Green Schools Teachers Recognized](#)

### Green Schools & Green Campus Innovations

[CSU San Bernardino](#)  
[Other Exciting Green Campus Innovations](#)  
[Green Schools Activities](#)

### School & Campus Resources

[Summer Reading and Essay Contest](#)  
[Teach Teens Eco-Friendly Driving](#)  
[AASHE Campus Sustainability Leadership Awards](#)

### STUDENT CORNER

[Green Savers - Desert Trails High School, Hesperia, CA](#)

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ALLIANCE TO  
**SAVE ENERGY**  
*Creating an Energy-Efficient World*

## WATT'S NEW

### **Alliance to Save Energy to Launch Youth Campaign**

#### **"Generation E" Will Use Energy Efficiency as a Solution to Climate Change**

The Alliance to Save Energy is in the process of developing what will be a nationwide, three-year effort at tackling climate change by using energy efficiency as the quickest, cleanest, cheapest, and easiest method. Read on to hear about our plans, and feel free to weigh in.

#### **THE PROBLEM**

Climate change has become a national concern, as the majority (82%) of Americans believe that global warming exists and is a serious problem. Greenhouse gasses (GHG) are on a trajectory to increase and the majority of these emissions are related to energy use, including gasoline consumption by automobiles, power plants, industrial and commercial uses, and residential energy use. Evidence indicates that the window of opportunity for turning this trend around, and re-shaping our pattern of energy use to reverse the course of climate change is about 10 years - an enormous challenge to the world's peoples and in particular to Americans. Our demand for energy is threatening our quality of life and leaving future generations with enormous challenges. Consider these facts:

- Energy production and use accounts for nearly 80 percent of air pollution, more than 88 percent of greenhouse gas emissions, and more environmental damage than any other human activity.
- Money spent on energy means less money for families and schools. Today's schools spend more than \$6 billion a year on energy, more than the cost of textbooks and computers combined.
- Growing demand, higher prices, and wasted resources - all reasons that necessitate a national campaign to improve energy efficiency.

#### **THE NEXT GENERATION - GENERATION E**

Young people can be effective advocates, both in their homes and in their communities. For example, children are widely recognized as being the motivating force for making recycling a common practice in homes. Young people have the time to learn about the issues, the idealism to think that people can make fundamental changes in how they use energy, and the moral authority to challenge decision-makers to look at the longer term and to do the right thing. Unlike adults, who tend to be harried, focused on the practical aspects of life and fixed in their habits and worldview, children and young people are willing to "take on" a new paradigm and new ways of living in the world. They will, if supported, make climate change the issue of their generation.

At the college level, students are already involved in proposing and advocating for clean energy policies for their campuses -- and often winning. Young people are involved in a variety of organizations that can support them in undertaking these activities. At this age, young people are accustomed to working independently as well as in groups. At younger ages, adult support is more important. Leaders of youth groups such as girl and boy scouts, 4-H, YMCA, and church groups are looking for constructive and educational activities with which to engage the members of their organization. We will provide them with easy access to ready-made plans and activities as well as resources to assist young people in developing their own activities.

### **THE STRATEGY**

The campaign will ask kids to form and register an "Energy Club" at the campaign website. The website will support them in the technical and practical realms by offering activities, resources, guidance, and recognition for a job well done. Among media events, conferences, and a fun kick-off contest, the campaign will include:

1. An interactive website: Action-oriented, will serve as the "home base" for kids across America coming together. It will offer guidance and support for community outreach efforts; suggested club activities; resources for contacting their city officials; competition with other groups and the feeling of being part of a larger movement; recognition for good work; access to information; ideas and directions for club activities; energy career information; energy savings tracking.
2. "Energy Clubs", consisting of two or more kids and one adult. By forming a club kids will create a movement, as they'll be able to see that there are many other peers working with them across America. Each club will have their own semi-customizable web page showing their club's energy savings and the cumulative energy savings of all other clubs.

*Check back regularly for information about how you, your school, and your community can get involved. We want to help youth and adults actively find ways to combat climate change, overcome CCID (Climate Change Induced Depression), and take action!*

## **CSU Chico Wins Grand Prize for Fighting Global Warming**

### **National Wildlife Federation's Nationwide "Chill Out" Contest**



California State University, Chico has been awarded the grand prize in the National Wildlife Federation's Campus Ecology Chill Out contest.

The competition recognizes colleges and universities around the country that are implementing innovative programs to reduce global warming pollution, the biggest environmental threat facing the nation. CSU, Chico was selected as the grand prize winner from over 100 competition entries received from colleges nationwide for their efforts to save energy through and beyond the Green Campus program.

"Colleges and universities are key places for demonstrating how to reduce emissions of carbon dioxide, the major culprit of global warming," said Julian Keniry, Director of Campus and Community Leadership for the National Wildlife Federation. "If every campus, business and organization in the country followed Chico's example, we would quickly lick the global warming problem. The students and faculty there have demonstrated leadership in promoting renewable energy options both on campus and throughout the surrounding community."

"We are honored to be selected by the National Wildlife Federation for a prize in this competition," said CSU, Chico President Paul Zingg. "Reducing climate impact is a day-to-day, person-to-person priority at Chico State. On many fronts, students, faculty, staff and community members are collaborating on projects that effectively move us towards a healthier, more sustainable environment."

CSU, Chico received the top prize for its overall "lead by example" model of doing business. In December 2006, CSU, Chico President Paul Zingg signed the American College and University President Climate Commitment (ACUPCC), which calls on campuses to work towards climate neutrality. In addition, the University has committed to focusing on institutionalizing sustainability into the education of students. Two buildings on campus are registered with the U.S. Green Building Council, and all new buildings constructed will meet the Council's standards for environmentally sustainable construction. A 300 kilowatt solar panel was installed on two campus rooftops.

Students have taken the lead to promote sustainability on campus by promoting and implementing projects through the Green Campus program such as creating a student fee to fund sustainability projects, retrofitting a residence hall, networking with the Chico community to create sustainability service-learning programs, and installing energy-saving software on computers.

For these impressive efforts, CSU, Chico was featured in an Earth Day Chill Out webcast by the National Wildlife Federation on April 18, broadcast from George Washington University in Washington DC. The webcast was part of global warming events scheduled on over 100 college campuses throughout the nation and included videos of each winning school's project, along with a taped address from Al Gore.

Chico will also receive a \$1,000 grant from the National Wildlife Federation to continue innovating global warming solutions and a special screening of An Inconvenient Truth in their campus theater.

## **UC Santa Barbara also Recognized**

The University of California, Santa Barbara was also recognized in the competition for its efforts to reduce global warming by implementing a "Campus Climate Neutral" project which promotes energy conservation.

The National Wildlife Federation's Campus Ecology Program has been an integral part of the campus greening movement since 1989. The nation's 4,100 colleges and universities educate more than 15 million students in any given year, making these schools important laboratories for creativity and innovation - keys to tackling a monumental crisis like global warming.

## **Green Schools Teachers Recognized**

### **Teacher of the Year and Flex Your Power Awards**

Three of our very own Green Schools champions have received recognition for their great work as educators and their ongoing commitment to energy efficiency and education.

The Mojave Environmental Education Consortium (MEEC) offered its third annual MEEC "Teacher of the Year" Award this year. To that end, MEEC sought to find educators who make continuous and enduring contributions to environmental education, demonstrate the capacity for creating and implementing successful environmental activities, show creative approaches, promote individual and societal environmental responsibility, and encourage youth to make informed decisions about environmental issues.

In the High Desert region, Barbara Ward-Lawe, counselor at Desert Trails High School, and a Sultana High School student, Morwenna Rowe, nominated by Green Schools teacher Mark Ziesmer, were given Teacher of the Year awards.

In another contest, Urbita Elementary School, led by teacher Linda Gregory, was awarded an Honorable Mention in the Education and Leadership category of the 2007 Flex Your Power Awards. The Education and Leadership category rewards educational efforts or outstanding leadership activities that have had a significant impact in the areas of energy efficiency or energy conservation/demand response. Cumulatively, winners of the Flex Your Power Awards over the last two years have saved more than \$172 million, one billion kilowatt hours and reduced greenhouse gas emissions equivalent to removing more than 80,000 cars from the road.

Congratulations Barbara, Morwenna, and Linda!

# GREEN SCHOOLS & GREEN CAMPUS INNOVATIONS

## CSU San Bernardino

### Green Apartment Battles

Because a lack of accurate energy use baselines in campus housing makes it difficult to measure results of dorm energy-saving competitions, the CSU San Bernardino Green Campus Interns are trying a new type of energy competition, the "Green Apartment Battle." Interns are piloting the Green Apartment Battle in the Arrowhead Apartments, a series of suite-style units each with a kitchen, bathroom, common area and four bedrooms. Interns have posted flyers asking interested Arrowhead residents to call the Green Campus Program and schedule an energy audit at a time when all or most suitemates are present.

The Green Campus Interns will then visit the apartment, switch out incandescent light bulbs with CFLs, give out power strips, enable each computer's energy saving modes, and encourage other energy saving behaviors. Interns plan to have residents sign pledges to adopt energy saving behaviors, such as refraining from doing laundry during peak-load times, and purchasing CFLs in the future. Interns plan to publicly display these signed pledges to further reinforce the commitment.

Suites will receive a point for each resident who commits to change. If Interns find that residents already had energy efficient equipment installed before the audit, those residents will get extra points. For every point the suitemates get a raffle ticket and will be entered into a drawing for prizes such as a gift card to a local restaurant, movie tickets, or gift cards to Cold Stone Creamery.

Interns spoke with their Associate Director of Residential Education, to explain the Green Apartment Battle concept and to seek his approval for engaging Arrowhead Apartments residents in the competition, and created and posted flyers about the Green Apartment Battle. The flyer describes the event and encourages interested residents to contact Green Campus in order to receive an energy audit of their suite.

### Fun Facts!

- 1. If 10,000 schools turned off their lights for one minute they would save \$81,885.**
- 2. The average home contributes more air pollution than does the average car!**

## **Other Exciting Campus Innovations**

### **UC Santa Cruz Hot Water Conservation Pilot**

UC Santa Cruz Green Campus Interns spent last month coordinating a pilot project with Green Campus Housing and Residence Life personnel to install water-saving shower heads within a single residence hall building in Stevenson College. In all, Green Campus Interns purchased 50 high-efficiency shower heads through this pilot. Green Campus will continue to work with campus staff to install the shower heads and monitor the water savings as a result of this pilot. With seven residence halls with three to four stories each and one or two common bathrooms with multiple showers on each floor, adopting this pilot on a broader basis, could yield the university significant hot water savings.

### **Vending Misers at UC Berkeley**

Green Campus Interns installed seven vending misers on vending machines in Wheeler, Sproul, Corey, Haviland, and University Halls this month. All of the machines have shown significant energy savings: the low-use machine in University Hall has a 53% reduction in energy usage, while all other machines are saving an average of 27%. Based on these results, Berkeley Green Campus Interns estimate that the seven misers they installed this month will result in a potential savings of \$800 per year for the university. Green Campus will continue to test the vending misers throughout May in preparation for implementation on all campus vending machines this summer.

### **Green Campus Reference Library and Energy Audit Tools at Chico**

Interns at CSU Chico began researching and acquiring books, DVD's and reference materials for a Green Campus Reference Library, to be housed at the Campus Center for Appropriate Technology (CCAT) and available to the campus community. The reference library will include books such as Paul Sheckel's *The Home Energy Diet*, as well as DVD's on energy conservation. The campus community will be able to view the library catalog on the Green Campus website, the CCAT website, and in hard copy form at Green Campus tabling events. In the next month, Interns will finish purchasing materials for the library.

Also during April, Interns developed materials, and began purchasing equipment for three energy auditing tool kits. The kits will include watt meters, light meters and other energy measurement devices. Kits will also include templates for organizing data and developing recommendations (in hardcopy and on a CD to download onto a computer). Starting in fall 2007, the campus community will be able to check out the tool kits from Green Campus after they receive training on energy auditing from the Interns.

## **Green Schools Activities**

### **CFL Exchange Continues to Exceed Expectations**

To date Green Schools in Southern California have exchanged **nearly 12,000 CFLs** during the 2006-07 school year! Through the exchange, participating schools have saved \$600,000 in overall energy costs for students' families and the community, and about 5 million kWh over the lifetime of the CFLs.

As part of their CFL exchange, Palm Elementary asked students to conduct an energy use survey with their parents. The survey included 13 questions about the families' energy use, type of home, etc. and was written in both English and Spanish. Over 200 surveys were collected in exchange for low-energy compact fluorescents.

Another highlight of the CFL exchange program came on April 21 when California State University, San Bernardino held its annual environmental event. Students from the Green Schools program at Urbita Elementary School attended and tabled in two booths. This is an event which draws educators, students, and environmentalists from the surrounding areas of San Bernardino, Highland, San Jacinto, Colton, Rialto, Fontana, Hesperia, Victorville, and Redlands. At one of the booths, the students from Urbita's Earth Savers Club exchanged CFLs for pledges while continuously running a run PowerPoint presentation they had created, comparing the efficiency of an incandescent light bulb to a CFL. It drew quite a crowd. This was an all-day event, and 300 CFLs were exchanged during the first two hours. The students told the attendees about their involvement with the Green Schools Program - its benefits for them, their school, their community, and for the environment.

### **SEAT Trainings**

The SEAT program, which gives students a first-hand experience analyzing how energy is used at their schools, was successfully conducted with students from three schools during March and April. The program consists of a PowerPoint presentation and a set of activities that give teachers and students the tools necessary to conduct and understand energy audits.

Under the guidance of SEAT trainer "extraordinaire" Elric Boardman, students from Desert Trails, San Geronio, and Glenview High Schools learned about energy efficiency and energy auditing and conducted audits of select areas in their own facilities. They will next use the data they gathered to generate reports to present that they will present to district administrators and, if where possible, school boards. Before making these presentations, Intergy Corporation will review the reports to add more detailed information and to include information on Southern California Edison's incentives programs as appropriate.

## SCHOOL & CAMPUS RESOURCES

### Summer Reading and Essay Contest

#### Read "Solix Resettles Blue Mountain"

Learning about the environment shouldn't stop for summer. Edgenics is sponsoring an essay contest for elementary and middle school students. Students should read the novel "Solix Resettles Blue Mountain" by Robert E. Dansby, and write an essay or short story that connects with the storyline of the book and conveys thoughts concerning global warming.

"Solix Resettles Blue Mountain" is a fictional piece about environmental changes that are affecting the ecological balance of nature. The story is based largely on actual natural phenomena and facts, and the characters are birds, animals and humans who are directly affected by the changing climatic conditions on the planet.

The central character is Solix, a great grey owl, who is given a voice interpreted by the author, in order to convey the messages of this environmental "canary." Other characters help to bring attention to the warning signs of environmental and ecological damage. Told from the perspective of the birds and animals who are first affected by adverse climate changes, this story is intended to make people realize how important it is to heed the warning signs.

Win Scholarships and other prizes. For entry form and instructions contact [solixessay@edgenics.com](mailto:solixessay@edgenics.com).

### Teach Teens Eco-Friendly Driving

#### Complementary Student-Produced Video

Eco-friendly driving choices should be one of the first things that teenagers learn when they get behind the wheel for the first time. This video, produced by "The Easy Breathers" high school students, investigates air pollution problems and teaches new teen drivers the importance of making environmentally wise driving choices. It could be used in conjunction with lessons dealing with science, driver's education, or environmental sciences. The Wisconsin Department of Natural Resources is in the process of distributing as many as possible to the environmental education community. To receive single, multiple, or bulk copies of the video contact Elisabeth Olson at [Elisabeth.Olson@wisconsin.gov](mailto:Elisabeth.Olson@wisconsin.gov) or (608)-264-9258.

# **AASHE Campus Sustainability Leadership Awards**

## **Great Chance for Green Campuses and Students**

The Association for the Advancement of Sustainability in Higher Education (AASHE) presents four Campus Sustainability Leadership Awards and one Student Sustainability Leadership Award annually. Judging criteria and application procedures for each award type are described below and on the AASHE website at <http://www.aashe.org/programs/awards.php>. The 2007 awards will be presented in September at Ball State University's Greening of the Campus Conference VII.

### **Campus Sustainability Leadership Award**

Four Campus Sustainability Leadership Awards will be given to institutions that have made the greatest overall commitment to sustainability as demonstrated in their governance & administration, curriculum & research, operations, campus culture, and community outreach. One award will be given in each of the following categories:

- Community colleges and other two-year institutions
- Four-year and graduate institutions under 1,000 student FTE
- Four-year and graduate institutions 1,000 - 7,500 student FTE
- Four-year and graduate institutions over 7,500 student FTE

Submissions will be judged on the following criteria: Overall impact of an institution's efforts, relative to institution size and wealth; Breadth of sustainability initiatives, especially the integration of social aspects of sustainability; Extent of student involvement in sustainability activities; Level of support from campus administration; Extent to which institution serves as a model for others

Campuses that have won an AASHE Campus Sustainability Leadership Award in the past 5 years are not eligible. Applications are due by **July 1**, and only one application per institution is allowed.

### **Student Sustainability Leadership Award**

This award honors an undergraduate student from an AASHE member institution who has demonstrated outstanding leadership in promoting campus sustainability. The Student Sustainability Leadership Award includes a \$750 prize.

Eligibility: Any undergraduate student enrolled at an AASHE member institution who has played a leadership role in implementing campus sustainability is eligible for this award.

To apply, submit an electronic application with a letter of recommendation to [awards@ashe.org](mailto:awards@ashe.org) by July 1, 2007. Applicants will receive notice of the award decisions by early August.

## STUDENT CORNER

### Green Savers

By: The Green Savers - Desert Trails High School, Hesperia, CA

During the course of the 2006/2007 school year, our "Green Savers Team" has performed many tasks related to Green Schools activities.

#### **You Light Up My Life:**

In September, at Desert Trails High School's Open House, our "Green Savers" passed out over 1,000 compact fluorescent bulbs to parents and staff for those wanting to "get green."

#### **Have Message, Will Travel:**

Our "Green Savers" presented at two Green Schools conferences in the Inland Empire. One conference was held in La Quinta and the other was presented in the city of Alta Loma. Our "Green Savers" gave a demonstration utilizing the PowerPoint disk that they created in their Regional Occupational Program (ROP) computer class and then they showed the attendees how the energy audit toolkit is used to determine energy consumption.

These conferences were attended by educators who are interested in their schools joining the Alliance to become Green Schools. It should be noted that our students are Special Ed. and are in our school for their learning and behavior issues. All kids can learn and in the case, these kids can teach.

#### **Save the Earth:**

Although not an official Green Schools activity, the "Green Savers" continue to recycle cans, plastics, paper and cardboard. However we are most proud of our book recycling project. We have collected over 32,000 books that would have gone into the landfill but instead these books are being sent to rural Liberia in Africa to help rebuild schools and libraries in that war-torn country. We are committed to educating our students about the benefits of recycling and energy conservation.



*\*\*Please send student-written articles to [ecurley@ase.org](mailto:ecurley@ase.org) for consideration for publication in upcoming Update Newsletters. The authors of selected articles will receive a \$25 Barnes and Noble gift certificate. Encouraged are perspective and editorial pieces, in addition to informational articles. Please send pictures if available and applicable. Thank you.\*\**

**More Facts:**

- 1. An overwhelming majority of consumers—92 percent—agree that business, government, and consumers have an equal responsibility to reduce energy use.**
- 2. The difference between a car that gets 20 MPG (miles per gallon) and one that gets 30 MPG amounts to \$3,000 over 5 years, assuming gas costs \$3.00 per gallon and one drives 12,000 miles a year.**