GREEN SCHOOLS / GREEN CAMPUS UPDATE NEWSLETTER

Using Energy Efficiency to Strengthen Education

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30 years
ALLIANCE TO SAVE ENERGY
Creating an Energy-Efficient World

WATT'S NEW

Green Campus "Core Portfolio"

Projects that Work

Green Campus Team Members have developed a new program element called the Core Portfolio, a set of projects that team members believe will be successful at the majority of Green Campus universities. Green Campus Team Members have assembled resources and background information on several of these projects and have created brief "dossiers" describing key features of each project, including its rationale, objectives, and likely cost.

Many of these projects have been successfully piloted on one or more campuses; others are new to Green Campus but have proven effective elsewhere. The Green Campus Energy Efficiency Summit also featured in depth training sessions on several of these projects. Green Campus team members are currently developing resource libraries and brief "dossiers" on each Core Portfolio project and will provide guidance to the campus intern teams as the interns undertake these projects.

The goal of the Core Portfolio is to create a framework of common program elements that will facilitate cross campus evaluation and better program progress tracking while streamlining the planning process.

The seven projects that the Green Campus Team Members have developed so far will deal with campus computers, technology implementation, food service, laboratories, and many other areas on and around campus.

GREEN SCHOOLS & GREEN CAMPUS INNOVATIONS

University of California Joins Climate Commitment

American College and University Presidents Climate Commitment

Thanks in large part to the efforts of student activists, including Green Campus Interns at UC Santa Barbara, the Chancellors of all ten University of California Schools and UC President Robert Dynes agreed to sign the American College and University Presidents' Climate Commitment (ACUPCC), a non-binding resolution declaring institutional commitment to climate change mitigation and ultimately to carbon neutrality.

Green Campus interns partnered with other campus and state-wide student groups to urge all University of California Chancellors and UC President Robert Dynes to ratify the ACUPCC. During February, Green Campus interns and three other student activists met with UC Santa Barbara Chancellor, Henry Yang, and other top administrators to ask him to ratify the ACUPCC and to urge his fellow UC Chancellors to do the same. Interns helped to garner endorsements of the ACUPCC from the UC Santa Barbara Associated Students, the UC-wide Associated Students President, and the student representative to the UC Board of Regents.

With the agreement, the UC joins 116 schools across the country in a pledge to present a plan for climate neutrality - the reduction of greenhouse gas emissions - within two years.

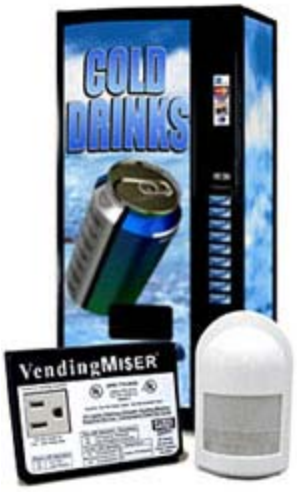
UCSB already has numerous policies in place designed to reduce greenhouse gas emissions and increase energy efficiency. The school has begun tracking its greenhouse gas emissions and has committed to following the guidelines of California state law AB 32, which aims to reduce greenhouse gas emissions to year 2000 levels by 2020, and 1990 levels by 2050. In addition, by 2008, the campus will release its plan for attaining climate neutrality, one year earlier than required by the ACUPCC agreement. Campus policy mandates that all new buildings meet the Leadership in Energy and Environmental Design (LEED) silver certification. UCSB is also working to renovate 25 existing buildings to meet the basic LEED certification within five years. In addition to more efficient lighting, this process involves purchasing Energy Star appliances and increasing recycling programs.

Fact:

1. **Americans use nearly *100 billion plastic bags annually*, 99% are never recycled.**
2. **Americans use *3.3 million plastic bottles every hour* and only recycle one in five.**

Vending Miser Implementation

CSU Chico



During March Interns at CSU Chico conducted research and created a verbal presentation on the benefits of the Vending Miser. When equipped with the Vending Miser, refrigerated beverage vending machines use less energy and are comparable in daily energy performance to new ENERGY STAR qualified machines. The Misers work by using a passive infrared sensor to power down the vending machine when the surrounding area is vacant, monitor the room's temperature, automatically re-power the cooling system at one- to three-hour intervals, independent of sales, all while ensuring the food or drinks inside stay cold.

Interns delivered their presentation during a meeting with the Campus Food Service Director. They learned that Food Service manages the vending machines on campus, but does not pay for the electricity. One concern that arose from the meeting was that Food Service would have to pay for the Vending Misers but would not see the energy cost savings resulting from their installation.

The Interns are exploring options to significantly reduce or even eliminate the upfront cost required to purchase Vending Misers. These options include PG&E rebates, a rebate from the CSU Office of the Chancellor, and/or an agreement with the Campus Energy Manager to transfer energy cost savings to Food Service. The Interns are gathering more information on these opportunities and will report back to Food Service with their findings.

Food Service is also interested in another technology known as the Cooler Miser, a device suitable for glass-front coolers. The Cooler Miser works much like the Vending Miser, analyzing the cooler's performance on a cycle-by-cycle basis, constantly responding to changes in load, sales and environment. It then modifies its behavior accordingly, ensuring proper operation and temperature controls.

Food Service does pay for the electricity required for the glass-front coolers in the dining services area so the department would realize the energy cost savings associated with any installation. The Interns are gathering more information on the Cooler Miser and will report back to Food Service shortly.

Rebates for installing these energy controls on vending machines are available in many states. Check here to see if your area is offering rebates.

Green Schools Activities

CFL Exchange Continues Strongly

A "bright idea" for saving consumers energy and money - coincidentally involving light bulbs, that well-known symbol of inspiration - has led to substantial monetary and energy savings for the families of students in the Alliance to Save Energy's Green Schools program in Southern California.

The immediate goal of the exchange program was to substitute some 4,000 CFLs for incandescent bulbs during the 2006-2007 school year. The program's long-range goal was to swap 12,000 bulbs over three years.

But the energy- and money-saving idea caught on so well that in just four months - and with just nine schools initially participating - schools had to scramble to keep up with the demand for CFLs. When the dust had settled, more than 8,000 bulbs had been swapped in the fall semester alone.

Now, 25 schools are participating in bulb exchanges during this spring semester, with the potential of exchanging several thousand more CFLs and surpassing the 12,000 three-year goal in only one year.

"The CFL exchange has become an energy-efficiency rallying point for students, teachers, and the community at large," said Jo Tiffany, program manager for the Alliance's Green Schools California program. "The CFLs, with their twisty, high-tech design, are the perfect symbol for energy-efficiency technologies and environmental sustainability, and the parents and communities are definitely responding to the student-teacher initiative."

To date, 10,242 CFLs have been exchanged.

Based on these numbers, students in the nine schools that participated in the fall have already saved more than $400,000 in overall energy costs for their families and about 3 million kWh over the lifetime of the CFLs. Given the projections for spring, **the Green Schools program anticipates that the schools will save more than $700,000 and 5.2 million kWh by the end of the school year in June** .

"With each compact fluorescent bulb lasting nine or 10 years, about $50 worth of electricity is saved over the lifetime of each CFL that is used instead of an incandescent bulb," noted Grant Cooke, vice president of Intergy Corporation, which works with the Alliance to administer the program. "In terms of energy use, you can save about 700 kilowatt-hours (kWh) over the life of each energy-efficient bulb."

"The CFL exchange has been popular with teachers and school administrators, not only because it promotes energy efficiency and saves families money, but also because it provides an interactive educational and outreach opportunity for many different schools," Tiffany said. "For example, bulb exchanges have been conducted not only during classroom science projects, but also as part of school-community activities like parent nights, science fairs, and PTA events. To keep tabs on how many bulbs are exchanged, parents complete a tracking form that lists the number of CFLs they have installed in place of incandescent bulbs in their homes."

The schools that are now participating in the light bulb exchange are: Deer Canyon Elementary, Alessandro Elementary, Urbita Elementary, Alta Loma Elementary, Jasper Elementary, Alta Loma Junior High, Blythe Middle, Ruth Brown Elementary, Margaret White Elementary, Appleby Elementary, Palm Desert Middle, Gerald Ford Elementary, Washington Charter, Stork Elementary, Mountain View Middle, San Gorgonio Middle, El Paseo Middle, Glen View High, Carter Elementary, Lincoln Elementary, Carnelian Elementary, San Bernardino High, Victoria Grove Elementary, Vineyard Junior HS, and Hermosa Elementary.

Along with Intergy Corporation, the State Environmental Education Roundtable administers the Green Schools Program in Southern California.

SCHOOL & CAMPUS RESOURCES

Target ReDESIGN Your School Contest

What Would You Do to Green Your School?

Retailer Target, Inc. and the American Architectural Foundation recently announced a $10,000 scholarship contest, the 2007 Redesign Your School Contest for students in grades 9-12. The goal is to design the "ideal 21st century learning space." Refurbished buildings? High-tech performance? Environmentally friendly materials?

The goal of this contest is to encourage fresh thinking and novel ideas and the scope is as wide as the student's imagination. But like any good visionary knows, knowledge is the best place to start, so students are encouraged to familiarize themselves with current school design trends using books and magazines, field trips and the Internet. Incorporating energy efficient design technologies would be a great way to set a design apart from the rest of the pack.

Students are required to incorporate at least one of the 8 Principles for Design from the American Architectural Foundation's Report from the National Summit on School Design. Registration is required by **June 15, 2007** and can be done online. The presentation of your submission must be in the form of a single media. This could be a book, a PowerPoint presentation, a collage, etc. For example, if you chose to submit a book, you could take pictures of a model and incorporate sketches and photographs, but you can't submit both a book and a CD. The jurors will only look at one form of media in your presentation. Enter soon and good luck. Be as green as you can be!

For registration, rules, and resources:
http://www.redesignyourschool.org/

For information on the 8 Principles for Design:
http://www.archfoundation.org/aaf/documents/nssd.report.pdf.

Brower Youth Awards

Honoring Environmental Advocacy

The annual Brower Youth Awards, put on by the Earth Island Institute's "New Leaders Initiative," honor six young people (ages of 13-22) for their outstanding activism and achievements in the fields of environmental and social justice advocacy. Each winner is awarded $3000 and brought to San Francisco for the award week and a backcountry camping trip.

The Brower Youth Awards, enacted to commemorate environmentalist, community activist, and founder of Earth Island Institute David Brower, not only promote the accomplishments of these young leaders but also invest in their continued success by providing ongoing access to resources, mentors, and opportunities to develop their leadership skills through Earth Island Institute's New Leaders Initiative.

The committee defines "outstanding leadership" as the playing the major leadership role in creating, organizing and implementing a project; the person with the vision, motivation, and leadership skills that made the project work.

They are also looking for project impact in terms of how the project benefited the environment and community with measurable results (e.g. acres of wildlife habitat protected or restored, kilowatt hours saved, etc).

Completed Application must be postmarked or e-mailed by **May 15, 2007**.See www.broweryouthawards.org for all of the contest details.

Earth Day Photo Contest for Students

Capturing Change in Your Community

Our planet is constantly changing. Of all the seasons, changes are especially noticeable during spring. As the day grows longer and temperature increases, flowers bloom and birds migrate across the sky. Creek waters rise as melted snow trickles down from distant mountains. Forests come alive with plants and wildlife. And thunderstorms and tornadoes are spawned as warm and cold air converges.

Anytime from Sunday April 22 through Sunday April 29, take a photograph of something that is changing in your local environment. It could be a change occurring in your backyard, outside your school, in a local park, or off in the distance toward the horizon. Then, research and write a scientific explanation (400 words or less) that answers the following questions: What is the change taking place in your photograph?, What may be causing the change?, Was the change expected?, How might the change impact surrounding areas, including people?, How might this picture look different in the future?

The top three winners will receive cash prizes in the amount of $100, $75 and $50, respectively. The top 10 winners will receive their photograph in a special frame commemorating Earth Day 2007. The top 50 photographs and accompanying descriptions will be published on the IGES Web site, www.strategies.org .

This contest is open to all U.S. students in grades 5-8. Entries must be received by email or postmarked by **May 9, 2007**.

STUDENT CORNER

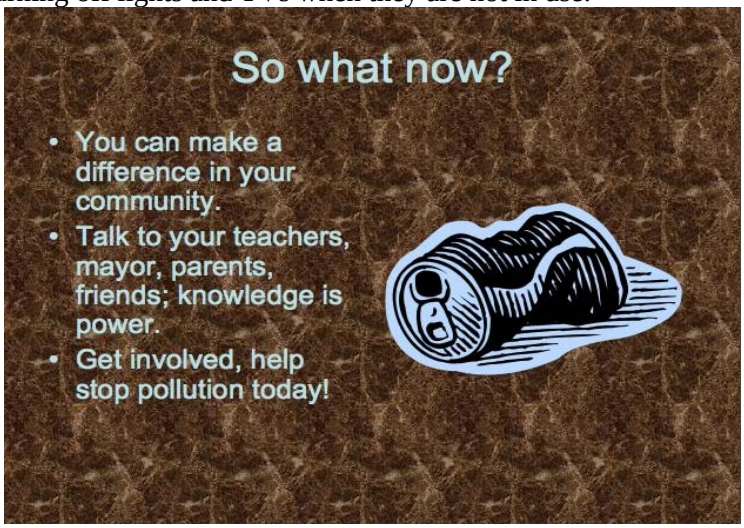
Greening the Hill: The Murray Hill Middle School Green Team

By: Jimmy Rager - Murray Hill MS, Laurel, MD

Over the past few months the Murray Hill Middle School Green Team has been working to make their school a "Green School". Some of the things that they have done are started a recycling program, assessed energy use, and created public service announcements to promote environmental awareness to the students about the Green Team's plans to help MHMS.

To promote recycling, we have put recycling bins in every room that didn't have one. We also have put posters on the bins saying, "For Paper Recycling only" on all the bins. We have joined our elementary school neighbors as partners with the Paper Retriever Program. Believe it or not--many students will put things in the recycling bin other than paper. The students and teachers have been very cautious of the signs, and we have had to increase our recycling pickup to two times a week to keep up with it.

The MHMS Green Team is also doing a lot of things to help conserve energy in our school. We did an audit of how many classrooms had their lights and TV on when no one was in the room. We surveyed 27 rooms, 17 or 63% of them had left their TVs on, and 21 or 78% of them had left their lights on. We are putting together Power Points and iMovies to try and promote conserving energy by turning off lights and TVs when they are not in use.



We are working on many things to promote all the things that the Green Team is doing. There are about 20 students working on iMovies and Power Points to try to encourage the students and teachers to start recycling and saving energy. We are planning to show all of the Power Points and iMovies within then next few weeks on our daily television broadcast.

We are sure that our principal, Mrs. Jamison, and the many of the teachers are proud of us. Not only are the teachers happy, but all the members of the Green Team are very excited about making our school a "Green School." Riya, a member of the 6th grade Green Team said, "I am really excited about this experience. It's really fun and educational, but what I like the most is that I am helping my school." We also asked a 6th grade science teacher, Shelly Heinz, and she said, "This is a great start to making our school a Green School." She also said that she was happy that there were kids that actually cared about the environment. The Green Team hopes to take on more challenges in the months to come including an erosion project and organizing the first Murray Hill Middle School Earth Day celebration.

Please send **student-written articles** to 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.

Remedies:

1. **Remember to bring a reusable bag with you to the grocery store. You will save the petroleum that goes into making plastic, the energy to produce the bags, and animals and habitats from struggling with plastic bag pollution.**
2. **Carry a water bottle that you can refill periodically during the day. In most cases tap water is just as clean as bottled, but if you must buy a bottle, hold onto it until you can recycle.**