

Cardinal Green

The Sustainable Stanford Quarterly Newsletter

VOLUME 14
WINTER 2011



In this issue	1
Turn Off for Break: \$2500 in Prizes	1
Keys to Sustainability Event Attracts Hundreds of Students	2
CEE/ES 109 Class Set for Third Annual Offering	2
AASHE Conference Presentations Showcase Sustainability Programs	3
Stanford's First Customized Building Dashboard Launched at Y2E2	3
Sustainable Stanford Helps Launch Billion Dollar Green Challenge	4
New Interactive Map Catalogs Water Conservation Projects	4
Stanford Dining Commits to 100% Organic Apples	5
Student Story: Stanford Celebrates Food Day(s)	5
New Programs Offered to Incentivize Server Virtualization	6
2011-2012 Green Fund Winners Announced	6
Office of Sustainability Attends International Information Exchange	7

Primary author and submissions:

Jiffy Vermeylen -
jiffy.vermeylen@stanford.edu

Design:

Terri Fitzmaurice -
terri.fitzmaurice@stanford.edu
<http://sustainable.stanford.edu>

In This Issue

This fall, the Office of Sustainability completed one full cycle of its Cardinal Green outreach campaign series. We thank you for participating, saving resources and helping us better understand how to make conservation opportunities more transparent. For your holiday read, we bring you [Sustainable Stanford: A Year in Review 2010-11](#), which highlights the performance and aspirations of our program and those of our partners across campus. Year 2012 will begin with a deeper presence of sustainability and resource efficiency in all aspects of campus life. We hope you enjoy this winter 2011 issue and connect to the growing momentum. Happy holidays.

[Fahmida Ahmed](#), Office of Sustainability



Turn Off for Break: \$2500 in Participation Prizes

Previously voluntary, winter closure became mandatory in 2003 through a program administered jointly by the Department of Sustainability and Energy Management and Zone Management. The energy saving outreach program, Turn Off for Break targets the two-week winter holiday shutdown of building heating and ventilation systems, as well as custodial services. Through this program, Stanford's cumulative net energy cost savings since 2001 total \$2.2 million!

Aimed at beating last year's energy savings by 10%, Sustainable Stanford continues this annual campaign to increase awareness and participation while offering \$2500 in group and individual prizes. A recorded webinar presentation, list of participating buildings, individual action guides, and information on recognition and awards is available online at http://sustainable.stanford.edu/be_cardinal_green_winter_closure.



Keys to Sustainability Event Attracts Hundreds of Students

On October 17th, 2011, hundreds of students gathered in the Y2E2 courtyard to learn about sustainability-related majors and departments, sustainability student groups, and sustainability grants, internships, and research opportunities. The



Office of Sustainability staff passed out t-shirts and fielded questions related to the Student Green Fund

exciting event was designed by the Office of Sustainability, the Woods Institute for the Environment, and the Precourt Institute for Energy to unlock the mystery of sustainability at Stanford and introduce students to the multitude of ways to pursue environmental interests on campus and beyond. The successful event featured speakers, raffle prizes, giveaway items, music, and eco-friendly local food.

CEE/ES 109 Class Set for Third Annual Offering

Are you curious about how an institution like Stanford integrates sustainability into its operations and culture? If so, sign-up for CEE/ES 109: Greening Buildings and Behavior this winter quarter. Co-sponsored by the Office of Sustainability and the Woods Institute, the course features an overview of operations-based sustainability via presentations from faculty and staff experts on energy, water, buildings, waste, and food systems, as well as hands-on, practical training to enable



Students perform a water audit with SEM staff during the CEE/ES 109 course.

students to become sustainability coordinators for their dorms or departments. The final class project requires students to complete building-level audits and create recommendations for behavior-based program implementation within a case-study building. Class participants have the opportunity to capitalize on the final project momentum and join the Office of Sustainability as interns to help transform their proposals into action.

Please visit the [student page](#) of the Sustainable Stanford website for more information and to review past syllabi and final projects.

Building Heroes Help Stanford Departments

Thank you to all of those who pledged to be Building Heroes during the fall campaign. The Office of Sustainability will continue to work with each volunteer through the key steps of the Building Level Sustainability Program. It is now easier than ever for anyone to be a Building Hero — to see how, please visit the [Be Your Building's Hero webpage](#).



Caretakers Go Green! Bonair Buildings Pilot Office Composting

With voluntary delamping complete, and Smart Strips and timers deployed throughout Bonair Siding, LBRE continues to improve its building-level sustainability. A pilot office composting program formally launched on December 5th, 2011 in all Bonair kitchenettes. A poster display created to educate users about compostable and non-compostable break room supplies will rotate through each department to help encourage correct waste sorting.



AASHE Conference Presentations Showcase Stanford's Unique Sustainability Programs

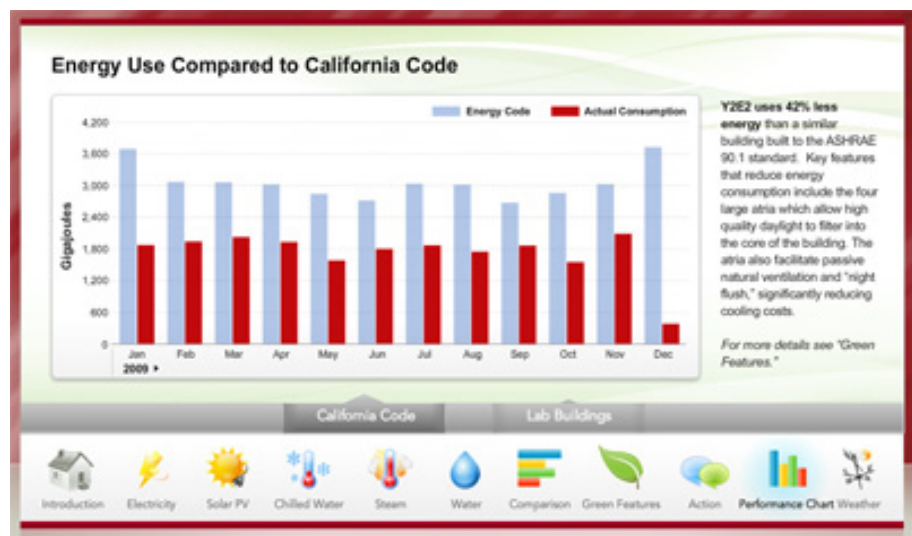
Stanford representatives joined the record-setting 2,500 attendees at the annual Association for Advancement of Sustainability in Higher Education (AASHE) conference in October. The event provided an opportunity for Stanford to showcase the sustainability programs that make it unique, including the CEE/ES 109: Greening Buildings and Behavior course, campus-wide [Cardinal Green conservation campaigns](#), and the business case for behavior-change programs. All materials presented during these well-attended sessions are now available on AASHE's Resource Center.



Office of Sustainability staff at the poster presentation for campus-wide conservation campaigns

Stanford's First Customized Building Dashboard Launched at Y2E2

Y2E2 is now home to the university's first [customized dashboard](#) pilot. The interactive display, accessible online and via lobby kiosks, reports real-time consumption data from all campus utility services, includes electricity, steam, chilled water, and domestic water, as well as real-time electricity production from the building's solar photovoltaic installation. Comparative by design, the dashboard separates out load types and building areas to zero in on specific resource uses, as well as documenting Y2E2's performance relative to other campus buildings with equivalent functions. The customized dashboard goes beyond data reporting and serves as an educational tool to call attention to Y2E2's sustainability features and invite active participation in Stanford's wide range of sustainability programs. Many buildings are expected to have similarly customized dashboards installed in the coming years.



Sustainable Stanford Joins Founder's Circle for Billion Dollar Green Challenge

Sustainable Stanford joined 32 other institutions to launch the Billion Dollar Green Challenge. The goal is to invest a cumulative total of one billion dollars in self-managed green revolving funds that finance energy efficiency upgrades on campus.



The Challenge is inspired by the exceptional performance of existing green revolving funds, which have a median annual return on investment of 32%, as documented by [Greening The Bottom Line](#), a report published by the Sustainable Endowments Institute. “We’re transforming energy efficiency upgrades from perceived expenses to high-return investment opportunities,” said Mark Orłowski, executive director of the Sustainable Endowments Institute, which

is coordinating The Challenge along with 13 partner organizations. “Stanford University should be commended for rising to The Challenge and investing in energy efficiency improvements on campus.” The Billion Dollar Green Challenge launched publicly on October 11 at the Association for the Advancement of Sustainability in Higher Education conference in Pittsburgh. Please visit the [Billion Dollar Green Challenge website](#) for more information.

New Interactive Map Catalogs Water Conservation Projects

Stanford’s water conservation program recently unveiled an interactive map that details conservation projects from 2002 to the present. A variety of sorting parameters allow users to quickly search more than 300 projects linked to the map. In the months ahead, the map will expand to include water profiles for Stanford’s high performance buildings. The map is now publically available and accessible online. Please visit http://lbre-apps.stanford.edu/wc_map/index.cfm.



Coming Soon — RecycleMania 2012

For the sixth consecutive year, Stanford will participate in the national RecycleMania competition. Bolstered by the [campus-wide campaign](#), Stanford achieved personal best scores in seven of eight categories in 2011. In addition, Stanford reclaimed the 2nd place Gorilla Prize for the highest total recycling tonnage. Stay tuned in winter quarter for more information on Recyclemania 2012. Go Stanford!



Bike Clinic Teaches Basic Do-It-Yourself Skills

More than a dozen students and staff stopped by White Plaza for a hands-on bike maintenance and repair clinic. After a successful initial offering last spring, Parking & Transportation Services, the Campus Bike Shop, and Students for a Sustainable Stanford partnered to host the fall event. Clinic participants learned how to change a flat and complete a pre-ride safety check. For more information, and to be notified of future clinic dates, please email bike-information@stanford.edu.



Stanford Dining Commits to 100% Organic Apples

Story contributed by Matt Rothe, Sustainable Food Program Manager, Stanford Dining

Concerned by recent testing reports regarding apples, Stanford Dining has chosen to purchase only USDA certified organic whole apples, grown without pesticides. Apples were at the top of this year's USDA pesticide residue testing list, and apples contained as many as 48 different pesticide residues! One explanation of why apples consistently top the contamination list lies in how they are propagated. Most commercial apples are propagated by grafting, which ensures a genetically identical (and identically tasting) offspring. Most of the today's apple trees are genetically similar, if not identical to one another. When natural selection from the propagation of apples is removed, apple pests have discovered ever-more effective ways of infesting apples. This, in turn, means that it takes an ever increasing number and quantity of pesticides to control them. By choosing to purchase only USDA-certified organic whole apples, Stanford Dining provides pesticide-free produce to the community.



Student Story: Stanford Celebrates Food Day(s)

Story contributed by Janani Balasubramanian '12, Sustainability Intern, Stanford Dining



This year, the Center for Science in the Public Interest organized the first national Food Day. Food Day was celebrated on campuses and in communities all across the country. Stanford's own Food Day took the form of 8 days: a week of events leading up to a final celebration in October. The intention of Stanford's Food Day(s), a partnership of the ASSU Food Cabinet and Stanford Dining, was to galvanize and celebrate student organizers, community organizations, and administrators/faculty working around food systems change. Students from the Farm Project, the GSB Farm Club, the Stanford NAACP, Stanford Glean, Students for a Sustainable Stanford, and other groups collaboratively organized around four themes: wellness, ecology, community, and farmers and workers. Events included food documentary screenings, nutritionist office hours, a dinner with community food access advocates, a socially responsible food business seminar, a cheese-making session, a solar oven workshop, and a gleaning tour of campus fruit trees. Looking forward, as Stanford's food community continues to grow, the hope is Food Day will grow proportionately and engage more of Stanford in issues around food systems change.



New Programs Offered to Incentivize Server Virtualization

Story contributed by Joyce Dickerson, Director, Sustainable IT

Two months into its 3-year enterprise license agreement, Software Licensing has distributed over \$2.4 million in new VMware licenses across campus, including 640 vSphere, 4 vCloud Director, and 20 vCenter server licenses. In addition to making virtualization software available to campus, the Energy Retrofit Program (ERP) has been customized to make it easier for groups on campus to apply for incentive funds for removing hardware and virtualizing their environments. The rebate program will fund approximately \$650/server removed, and will be in place for two years.

The online ERP application and further information can be found on the new [VMware @ Stanford](#) webpage. The outcome of Stanford's program resulted from collaboration between six campus organizations: School of Medicine, IT Services, Admin Systems, LBRE, SULAIR, and HighWire.

2011-2012 Green Fund Winners Announced

Many excellent projects were submitted to the Office of Sustainability's Green Fund this year. An initial round of winners has been selected (congratulations!), and further awards will be given throughout the year. This year's winning projects include:

Sustainability & Energy Dashboard Initiatives (SEDI) aims to increase visibility and awareness of on-campus energy consumption, transform individual interaction with electricity consumption, and increase building occupants' ownership of energy use. **Storey House Water Metering** should inform and inspire water conservation among Storey House residents. **Synergy Rainwater Harvesting** will install a rain catchment container that will in turn feed water to house gardens and composting bins. **Farm to Fork Dinner Series** will host dinners, workshops, and speaking events to build awareness of environmental, social, and health concerns tied to our current food system. Green Roof Project will continue



their investigation into the feasibility of Green roofs on Stanford campus, and the **Student Focus Groups** aim to collect and quantify student opinion around sustainability issues from Stanford students.

The Stanford Student Green Fund provides grants for innovative student-driven projects designed to create a more sustainable campus. A total of \$30,000 per academic year is available to fund projects. Visit the Green Fund site in January, for a full list of approved projects at http://sustainable.stanford.edu/green_fund.

Clothes Loop Thrift Store Reopens in Union Underground

After a successful pilot period at the end of last academic year, the Clothes Loop thrift store reopened as part of Union Underground this fall. The organization, funded in part by a 2010-2011 Green Fund grant, facilitates the exchange of free items within the Stanford community.

The free store, located in the basement of Old Union, is open from 12 pm to 2 pm every Friday, Saturday, and Sunday.



Office of Sustainability Attends International Information Exchange

The Office for a Sustainable Campus at Japan's Hokkaido University invited representatives from Stanford and several PAC-12 schools to present at the International Symposium on Creation of Sustainable Campuses. The international exchange provided an opportunity to discuss Sustainable Stanford's work to integrate sustainability on campus and make it a tangible part of the Stanford experience. Japanese universities shared sustainability perspectives, including the motivation for conservation resulting from the East-Japan Earthquake and Tsunami in March 2011.



Jiffy Vermeylen (center, back row) poses with delegates from Hokkaido University, and other PAC-12 schools.

