

# Green Pastures

## CAL POLY POMONA

### Solar Nexus

*Sustainability on Campus*

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*A Publication of the Green Campus Program at Cal Poly Pomona*



# Green Pastures

CAL POLY POMONA



## What is the Green Campus Program?

The Alliance to Save Energy's Green Campus Program empowers college students to be tomorrow's energy efficiency leaders. Currently on 19 universities and colleges and employing nearly 100 interns each year, the program engages students in building pathways to green careers, realizing measurable energysavings, infusing energy and energy efficiency concepts into academic curricula, and promoting energy efficiency awareness. Green Campus interns work closely with faculty, staff, administrators, and other students to engage them in energy efficiency projects.

For more information please visit our website:

[www.GreenCampusCPP.org](http://www.GreenCampusCPP.org)

For general inquiries contact us at:

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## WHAT'S NEW?

The Green Campus Program is now hiring, see page 7 for more info!

Go Green & take the "Buck the Juice" Sustainability Pledge TODAY!

Visit our website for details:  
[www.GreenCampusCPP.org](http://www.GreenCampusCPP.org)



### On the Cover

New Amonix Solar Panels at the Lyle Center for Regenerative Studies.

### Above

One of the housing suites that will be participating in this fall's Campus Conservation Nationals energy competition (see page 7).

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SAVE ENERGY

Creating an Energy-Efficient World



The Alliance to Save Energy's Green Campus Program is funded by the ratepayers of California under the auspices of SCE, SDGE, PG&E, and Sempra Energy





*Photo Above: Students gather around the Green Campus table at Bronco Fusion to receive giveaway items and sign up for the Green Pastures newsletter.*

## Ramping Up the Green at Bronco Fusion

By Andrew Coyne

Summer is over and the Cal Poly Pomona campus has come back to life! That was the overriding feeling during Bronco Fusion, held on September 22nd. Throughout the day, new and returning students had the opportunity to locate their classes, buy books, and find out how they could get involved in campus life. A resource fair was held from 11am to 1pm on the walkway beside the University Library. Green Campus was on hand, as were many clubs, organizations, and department programs seeking to draw attention to their organization and attract new members. In Green Campus' case, there was more to this event than recruitment.

At every tabling event in which Green Campus participates, the primary goal is to heighten student awareness about energy issues. Even if a student feels as though he or she has no means to make drastic changes to the campus' energy consumption or to the efficiency of their house or apartment, it is Green Campus goal to convince all students of the great importance of sustainability, and the

impact they *can* make through small, low-cost solutions. In short, Green Campus' mission is to *engage* the culture. One way of doing this is by promoting the Sustainability Pledge- offering students, faculty, and staff a chance to pledge their commitment to sustainability through everyday actions. Of course, the responsibility is with the signers - they know for sure that they are fulfilling their pledge. Nevertheless, if Green Campus can raise the consciousness of these issues in people's minds, and get them thinking, then tabling events like Bronco Fusion are well worth the effort.

By the conclusion of Bronco Fusion, interns Cynthia Joe and Andrew Coyne (with the help of advisor George Lwin) had distributed close to 150 CFLs, 50 magnets with savings tips, 115 "Buck the Juice" t-shirts, and 400 flyers about the program. As soon as students heard the words "free light bulbs" they would scramble over to the table to receive one. As they waited eagerly to add their name to the sign-up sheet, Cynthia and Andrew answered questions about the program goals, recent projects, and ways to get involved. Some faculty and administrators also paused to say "hello" or "keep up the good work." Bronco Fusion was an exhilarating event; the interns were able to tap into the excitement and anticipation of the new year, bringing attention to energy efficiency and sustainability.



*A group of students play on the athletic field adjacent to the Kellogg Gym. The new solar towers at the Lyle Center can be seen in the background.*



## Solar Nexus: Sustainability on Campus

By Brandon Ro

What is a resource that humans will never be able to deplete? That is right you guessed it - the sun. Cal Poly Pomona has been getting a lot of attention in the past few months due to some significant renewable energy projects. The sustainability efforts on campus are starting to reconnect with the sun. According to PolyCentric's article "New Solar Panels to Power Campus," over 4,500 new solar panels are being installed on the roof of the Kellogg Gymnasium and on top of the new covered parking canopies in parking lot M. This will produce enough energy to power "161 homes for a year."

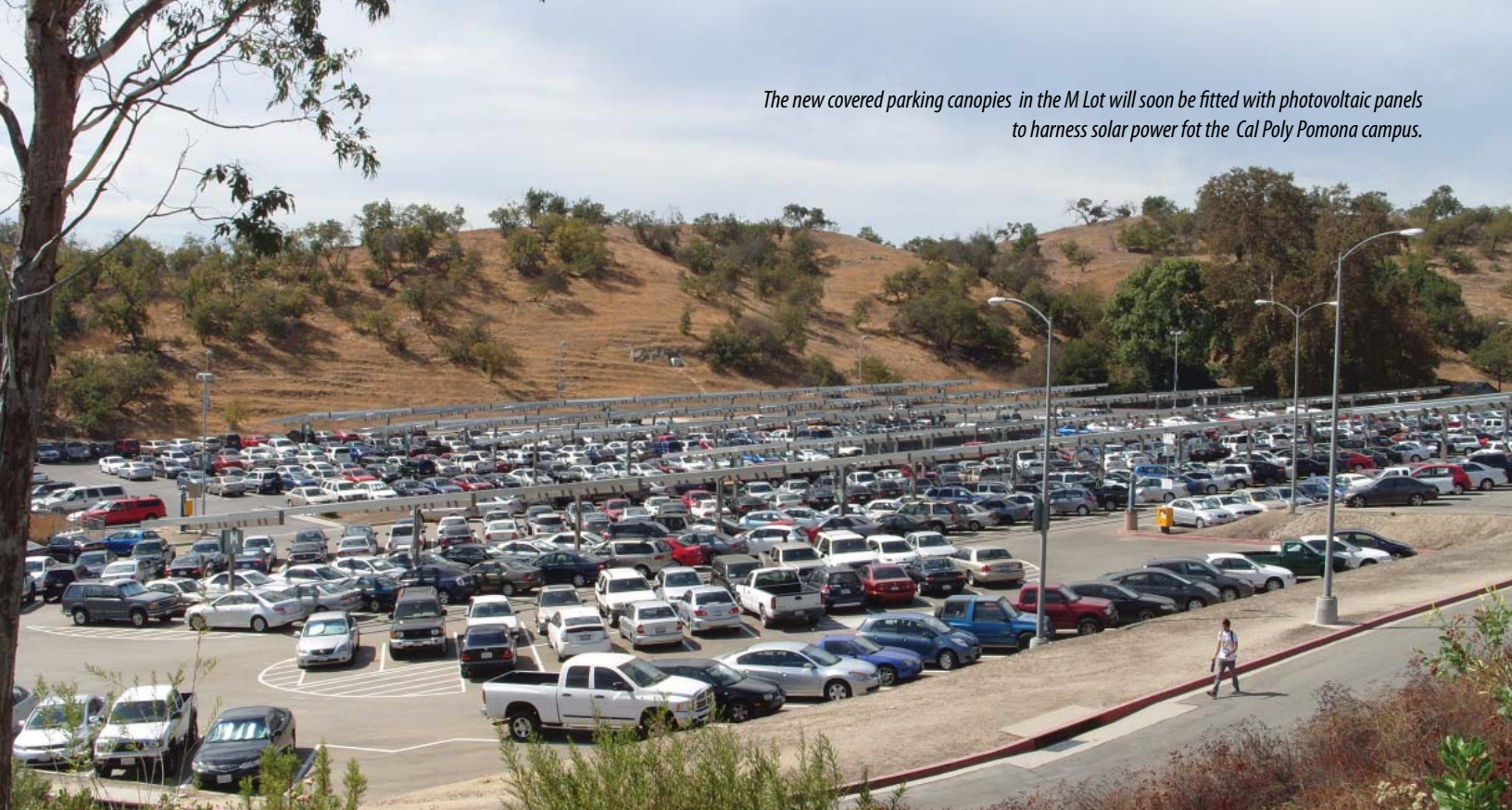
Solar power has long been present in the Cal Poly Pomona community. Looking back in time the residence halls located along Kellogg drive were originally built with passive solar hot water heating systems. This and other solar technologies were also used at the Lyle Center for Regenerative Studies (LRS). Although the campus has had early beginnings harnessing solar energy, it was not until this last year that major solar projects have been actually built. This progress is seen in both of the new installations mentioned above but also in the two new solar towers at the LRS.

Last month Green Pastures published an article titled "Lyle Center goes Net Zero." The article described the incredible impact these two solar towers are making. Not only is this



*Solar energy is also being harnessed to power automated crosswalk lights. This panel is located at the intersection of University Drive and Olive Lane.*





*The new covered parking canopies in the M Lot will soon be fitted with photovoltaic panels to harness solar power for the Cal Poly Pomona campus.*

new installation helping the LRS become a net zero facility, but it is also being distinguished as one of the very first buildings in the state of California to achieve such a benchmark. In this issue, however, Green Pastures tells readers how this great accomplishment actually came about.

One of the main reasons that the LRS is going net zero is because of George Lwin, Cal Poly Pomona's Energy Services Manager. Over the holiday break in December of 2009, Lwin received a phone call from Amonix, the solar tower manufacturer. They told Lwin that they were looking into donating a new solar tower to the LRS. Lwin commented that the idea was nice, but

that what would be better is if they could help the LRS meet all of its energy needs and thus become net zero. After Lwin explained the energy consumption demand, the Amonix representative said that most likely two of their solar towers could produce enough energy to meet those demands. From there, the rest is history. We all owe a special thanks our Energy Manager (and Green Campus advisor!) George Lwin, for first making these suggestions to Amonix to help make the LRS net zero through the solar nexus.

*Bottom left: Green Campus interns, Brandon Ro and Andrew Coyne (left and right) pose with Energy Manager George Lwin (center) in front of the Amonix solar towers. Bottom right: The newly installed solar panels atop the Kellogg Gym.*





# Green Campus By the Numbers- September 2010

EVENT	QUANTITY	ENERGY	WATER	CO2 EMISSIONS	\$\$\$
Bronco Fusion CFL Distribution	150	7,560 kWh	n/a	7,560 lbs	\$982.80
Buck the Juice Sustainability Pledge*	22 pledges	70,965 kWh	232,980 gal	332,667 lbs	\$21,064
<b>Projected Savings Subtotal</b>	<b>n/a</b>	<b>78,525 kWh</b>	<b>232,980 gal</b>	<b>340,227 lbs</b>	<b>\$22,046.80</b>
<b>Grand Total of Projected Savings since 2007**</b>	<b>n/a</b>	<b>1,090,265 kWh</b>	<b>1,105,710 gal</b>	<b>2,547,327 lbs</b>	<b>\$203,576</b>

NOTES: \*Comprises projected yearly savings. \*\*Grand Total Projected Savings include both actual and estimated savings

## Learning About Dining Efficiency at CTAC

By Cynthia Joe

Did you know that cooking can account for up to 40% of a restaurant's energy consumption (<http://www.sce.com/business/ems/hospitality/learn>)? Well, neither did we! Looking to glean some energy-saving knowledge from Southern California Edison's (SCE) "Hot Rebates and Cool Savings" seminar class, Green Campus interns, Andrew Coyne and Cynthia Joe represented Cal Poly Pomona at the Customer Technology Application Center's (CTAC) Foodservice Technology Center. Located in Irwindale, CTAC exists as a satellite office as well as a research and training center for SCE.

For three hours on, Wednesday, September 15th, speaker Carlos Haiad, an SCE engineer specializing in foodservice, highlighted numerous ways kitchens and restaurants can save energy. Most notably, Haiad was able to provide information on how most kitchens waste energy, showing examples of popular chain restaurants who have since improved their food preparation practices. After the seminar, the class was corralled into the SCE test kitchen to see their chef prepare lunch in a "Combi-oven." Using dry heat and steam, the large multi-functional oven prepared a full meal with minimal preheating. Overall, the class was extremely useful as it coincided with the development of Green Commons (GCP's energy audit of the Los Olivos Dining Commons) and inspired Green Campus to continue projects in Cal Poly kitchens!



Courtesy of laist.com

## Green Campus is Hiring!

Interested in a paid internship to work on campus sustainability, energy efficiency, and educational outreach? The Alliance to Save Energy's Green Campus Program is looking for a student to fill the position of Project Coordinator! The Project Coordinator will work within an approximately 4-person team, for an average of 7 - 10 hours per week, at \$11 per hour. The position starts in the fall 2010 quarter and continues year-round. This position is an internship that demands an organized self-starter who is passionate about the environment and technologically savvy and familiar with the Cal Poly Pomona campus community. Freshmen and sophomores able to make a long-term commitment preferred. Applications are due by midnight, October 8th. For a full job description, contact us at [greencampus.cpp@gmail.com](mailto:greencampus.cpp@gmail.com).

## Campus Conservation Nationals

Beginning November 1st, Green Campus will be hosting the nationwide "Compete to Reduce!" housing energy competition, Campus Conservation Nationals. Cal Poly Pomona suites and dorms will be competing against forty universities across the country to achieve the highest energy savings. Lasting three weeks until November 19th, Green Campus will routinely update each building's savings on an online "dashboard" where students can keep track of how they're doing.

Check out your residence hall at:  
[www.buildingdashboard.net/calpoly](http://www.buildingdashboard.net/calpoly)

Keep an eye out for announcements and fliers as we gear up to help Cal Poly Pomona be a leader in sustainability!

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### Contact Us!

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*A view of the new Residential suites, looking in the direction of the baseball field.*