



Using Campus Efficiency Projects to Engage Students:



ALLIANCE TO
SAVE ENERGY
Creating an Energy Efficient World



Pacific Gas and
Electric Company



SDGE
San Diego Gas & Electric

A Green Campus Program Perspective

What is the Alliance to Save Energy?

Mission:

- To promote energy efficiency worldwide to achieve a healthier economy, a cleaner environment, and greater energy security.

Organization:

- Staffed by 80+ professionals
- 33 years of experience
- \$12 million annual budget
- Recognized as the premier energy efficiency organization in the world



Green Campus Overview

- 16 campuses
- Student driven workforce education and training program
- Paid student internships
- Funded by CA IOU's
- LACCD (2009-2010)
 - West Los Angeles
 - East Los Angeles
 - Los Angeles Southwest



Energy Efficiency?

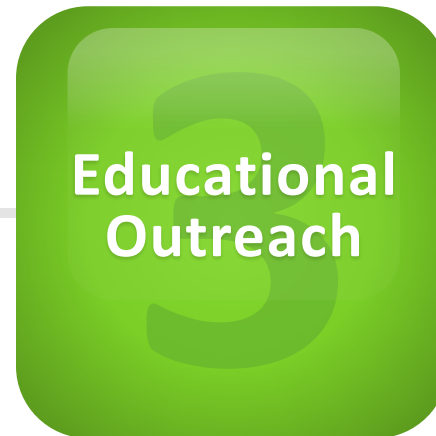
What is it?:

- Defined as “using less energy to provide the same service”. Also tied to energy conservation which is “reducing or going without a service to save energy.” (LBNL)

Why energy efficiency?:

- Less energy=less energy generation= less environmental impact (GHG)
 - Low hanging fruit
 - Quick, fast, cheap
 - Saves \$\$\$!!
-
- Also good way to engage students in something that leads to cost savings on campus!

Program Pillars



Green Career Panels

**Wednesday
Mid-Day
Lecture/Training
Seminar**

The LASC Green Campus interns invites you to one of its lecture/training seminar with three of the major local sustainable companies. This Wednesdays Mid-day Lecture/Training Seminar will explore a wide-range, as well as apply a few interdisciplinary ideas about sustainability, energy efficiency, urban design and planning, as well allowing you to get a hands-on experience using the equipment that these professional use on a daily bases.

2010 May 19 12:00 pm SSC 223A

May 19

Solar City

Is the nation's leading full-service solar provider for homeowners, businesses and government organizations—the first company to provide solar power system design, financing, installation and monitoring services from a single source.



They understand that the environmental impact of energy production is one of the greatest challenges that our planet will face in the near future, and they are committed to doing their part to alleviate this impact.

Prevailing Wind Power

Their years of experience in renewable energy design, permitting, and regulatory process, along with financing options, if needed, remove the barriers and risk for the customer so they can enjoy the cost savings associated with wind and solar power.



General Electric

GE is a diversified infrastructure, finance and media company taking on the world's toughest challenges. From aircraft engines and power generation to financial services, medical imaging, and television programming, GE operates in more than 100 countries and employs about 300,000 people worldwide.



GE has a strong set of global businesses in infrastructure, finance and media aligned to meet today's needs, including the demand for global infrastructure; growing and changing demographics that need access to healthcare, finance, and information and entertainment; and environmental technologies.

***Get up-to-speed on cutting-edge technologies and learn some ways to become more energy efficient by attending this free brown bag lecture/training seminar over the lunch hour!

Things to know:

- This seminar is FREE for all and you do not need to register for them.
- This seminar is hands-on and there will be lots of time for questions and interaction with the speaker.
- Bring your lunch and eat while you learn!



Tabling Events- LACCD

Energy awareness activities and flyers to educate and engage students, faculty, and staff.



**Take the Stairs Day
Earth Day Pledges
Trivia Games/Prizes
Educational Flyers**

Student-Student Interactions!

Educational Materials- LACCD

First ever Best Practice Award for Student Energy Efficiency in the CC category (West Los Angeles College-2010)



Students, Faculty and Staff
Acct. #: 22-345-1870066

Billing Period: 01/01/09-12/31/09

Utility	Total Use	\$/kWh or Therm	Total Cost
Electricity Usage	4,197,969 kWh	0.164	\$688,647.00
Natural Gas	53,952 Therms	1.131	\$61,025.00
	TOTAL		\$749,672.00

This is a Mock Bill (i.e. Fake)! (Based on data from Seimens)
Brought to you by Green Campus!

Note: Southern California Gas (SoCal Gas) provides natural gas service to the facilities. There are three meters serving the campus. For the purpose of this study the average natural gas consumption (therms) for the periods between January 2007 through December 2008 was used.

Tips to Lower Energy and Water Usage

- ✦ Purchase **ENERGY STAR®** products (use less energy than other products)
- ✦ **Turn off all lights** when you leave a room
- ✦ Plug electronics into a **power strip** and turn off when sleeping or when you leave your room
- ✦ Use your **computer's stand-by & hibernate modes**
- ✦ Use the **stairs** instead of elevators
 - Take **shorter showers** and install a low-flow showerhead
 - **Turn off the water** when you brush your teeth or shave
 - Always do **full loads** of laundry and try air drying clothes on a rack
- ☑ Use **sweatshirts or blankets** rather than turning on heaters
- ☑ If you have a **thermostat**, turn it down to **68 degrees** in the winter
- ☑ Use **cold water** rather than heated when you can

Spread the word - tell others about saving energy and water!
Remember, many energy and water sources are finite (i.e. limited quantities)!

Questions / Comments / Concerns: Email GreenCampusProject@gmail.com

Energy and/or Lighting Assessments

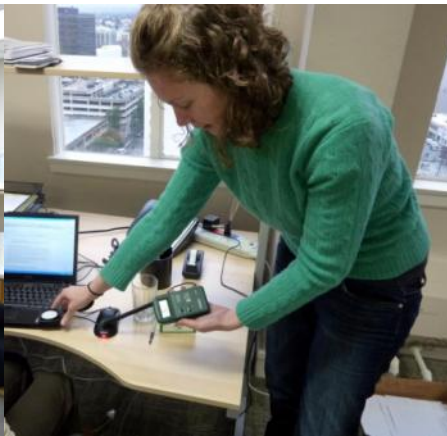
1. Survey lighting or office occupants



2. Identify low or no cost upgrades



3. Submit report and follow up



WLAC
Thermal
Imaging:

29,000
kWh/year;
\$3,770,
20,000 lbs
CO₂

ELAC
Parking
Garage
Lighting:

31,500
kWh/year;
\$4,100,
21,000 lbs
CO₂

Estimated Annual Potential Savings

150 aerator installations (\$2-4 each)

- 0.5gpm fixture retrofit
- ELAC



66 Flow Control Valves (\$5-10 each)

- Controls sink faucet flow
- LASC



Thank you!



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