



# SUSTAINABILITY NEWS BEAT

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<http://sustainability.ucsb.edu>

## LEED™ Portfolio Program

By Perrin Pellegrin

The University of California, Santa Barbara is one of four university campuses selected to participate in the US Green Building Council's Portfolio Program. The Portfolio Program enables owners to integrate the Leadership in Energy and Environmental Design (LEED) green building rating system into new and existing buildings in their company's portfolio, and to do so in a cost and time effective way without sacrificing the technical rigor and integrity of LEED. The Portfolio Program recognizes market leaders who have committed to high levels of LEED certification within their portfolio.

Through the Portfolio Program, UCSB has been focusing on developing campus-wide LEED Existing Building (EB) credits and recently submitted 24 credits to the USGBC for review. Once signed off by the Council, UCSB will be able to dedicate the LEED EB credits to all campus buildings. By joining this program UCSB will be given clear guidance and resources by the USGBC to assess current building performance and be able to show a cost-effective way to improve environmental performance and recognition for leaders.

"This is a great step forward for the efficient and healthy operations and maintenance of buildings at UCSB", said Perrin Pellegrin, Campus Sustainability Manager, "The Portfolio Program will streamline the documentation process to allow us to focus our efforts on greening the buildings themselves".

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Over the next five years, this pilot program will focus on 25 campus buildings, representing over 3 million square feet, with the goal of having the remainder of campus buildings go through the process. This year, the program will focus on the completion of LEED credits that apply to the entire campus, as well as certification for four campus buildings: Bren Hall, Life Sciences, Embarcadero Hall, and North Hall.

In 2005, Girvetz Hall was the first campus building to receive a LEED EB silver rating. Documentation from the LEED EB project at the Recreation Center is currently under review by the USGBC and striving to achieve a silver rating.

For more information on the Portfolio Program go to:

[http://sustainability.ucsb.edu/built/green\\_buildings.php](http://sustainability.ucsb.edu/built/green_buildings.php)

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

### SUSTAINABILITY EVENTS

Change Agent Meeting - PF Learning Center  
Wednesday February 20 9-10 am

Proposal Deadline, Cal Poly Sustainability Conference  
February 26, <http://sustainability.calpoly.edu>

CSSC Convergence at UCSB  
Weekend of February 29

## Dar Roberts Battles Carbon

By Taylor Orr

In the classroom, Dr. Dar Roberts, Professor of Geography, teaches remote sensing, historical geography and environmental optics. But at home, Roberts is consumed with tracking and reducing his own carbon emissions. While going green is often perceived as carrying a hefty price tag, Roberts has managed to save money while reducing his environmental impact.

“The nice thing about arguing [about carbon emissions] on a money level is that it doesn’t matter what the politics are. Even if you don’t believe in global warming, you still like money,” Roberts said.

After the 2001 energy crisis, Roberts began to think of ways to save energy. As he dug deeper into his research, he said he was “blown away by how fast we can reduce our energy use.” A few years ago, when Roberts began plans to remodel his home, he had the perfect opportunity to implement a number of energy saving tactics. He was determined to make his home as green as possible.

He found several simple projects that dramatically reduced his energy use such as using Compact Florescent Light Bulbs (CFLs) and adjusting his computer’s energy settings. By replacing 16 incandescent bulbs with CFLs, Roberts saved his family \$180 per year in electricity costs, paying off the price of the bulbs in less than one year. In addition, by setting his computer to enter hibernation mode after several minutes of inactivity, he managed to save 220 kWh a year, which adds up to \$27 annually or 5% of his total energy use.

During the remodel, the Roberts family installed solar panels on the roof of the house and now manages to produce more energy than they consume. He is eagerly awaiting the release of an electric plug-in vehicle, so that he can power his car using the excess energy the solar panels generate.

Other green household additions include carpet made from recycled bottles.



*Dr. Dar Roberts  
Professor of Geography*

Roberts claims the carpet is soft and more stain resistant than regular carpet. Double paned glass reduces energy loss and keeps his house cool. His bathroom counters are made by EnviroSlab and contain recycled mirror and glass particles. He uses water efficient devices, such as low flow toilets and low flow shower heads. And he replaced his old water heater with a new, more energy-efficient model.

*“Green building is not only for elite people with a lot of money.”*

However, the most difficult calculations for Roberts have been purchases made from products brought to the coast by freight. Freight carriers, such as cargo ships that carry large volumes of goods to the US, are the highest carbon dioxide emitter, emitting 5% of the world’s carbon emissions, according to *The Guardian* newspaper. Inspired by the book *The Omnivore’s Dilemma* by Michael Pollan, Roberts began purchasing more locally grown foods from the Farmer’s Market, and he changed his shopping list with the seasons. For example, he stopped eating blueberries in the winter because they must be imported from the Southern Hemisphere.

By 2004, the Roberts’ house had reduced electricity usage by 70% from

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when he first started calculating his emissions in 2001. Roberts' next project is installing solar water heating and insulation. As long as there is room for improvement, Roberts' job is never done.

"Green building is not only for elite people with a lot of money. Green building can be both cost effective and environmentally sound," he said.

## Taking a Bite Out of Landscaping

By Christopher Darancette

Simple question: how do worms, soil and gardening pertain to cooking? If you're a UCSB Dining Commons cook, that would describe your day off. UCSB's Housing and Residential Services upholds its commitment to sustainability by offering its staff the opportunity to see where the food goes after serving students.

Ric Williams, Superintendent of Grounds for Housing, takes staff and faculty through a tour he designed that includes the local organic production facilities run by UC Dining Commons' primary distributor, Jordanos. UC staff also visits the Housing site for vermiculture projects using red earthworms in combination with food waste composted by UCSB. This program creates prime soil that is reused on campus or distributed to community gardens and farmers.

Mr. Williams has been at the forefront of a new landscaping trend that is emerging at some of the most sustainable universities: edible landscaping. Using the ideas of localizing produce and sustainable agriculture, Mr. Williams now recycles dining commons compost back into his edible landscaping projects. Similar to programs at

UC San Diego and Evergreen College, the facilities department would like to use organic gardens as a more viable substitute to buying out-of-country produce.

As a long-term goal, Ric Williams would like to expand organic gardens to provide easily accessible organic herbs and vegetables to dining commons cooks and staff. At nearby De La Guerra Dining Commons for instance, cooks could gather fresh herbs from the local edible landscaping to add to students' favorite dishes.

Though edible landscaping is now in the "initial thought process stage," Bonnie Crouse, Assistant Director of Residential Dining Services, is interested in making "some gardens amongst the landscaping - probably adjacent to each dining commons."

It may be some time until we can see a landscape where utility, variety, and flavor can complement beauty and durability. Until then it can remain a novel concept, and a reminder of both the environmental impact of our food systems and the benefits of locally and sustainably grown agriculture.



*Rosemary (Rosmarinus officinalis)*

## Chemical Exchange Program

By Taylor Orr

As the environmental adage goes: “reduce, reuse, recycle”. The Chemical Exchange Program has taken this guiding principle and applied it to the science world at UCSB, taking chemicals that would otherwise be disposed of and creating a free website for orphaned reagents. The Chemical Exchange program was created by Laboratory Research and Technical Support (LabRATS) in partnership with Environmental Health and Safety (EH&S). This group of staff, interns and volunteers works with laboratory managers, students, post docs and faculty to increase resource efficiency and research quality, while leaving the smallest environmental impact possible.

Just as people who gather at swap meets, thrift stores and flea markets seek to discard their unwanted treasures in hopes of gaining new ones, the Chemical Exchange Program has connected the goods with the people who use them. Laboratory Manager Allen Doyle of the Ecology, Evolution and Marine Biology Department said, “Unused chemicals were being shipped out as waste. As a researcher, I realized I could promote this to my colleagues. I realized we could use leftover chemicals in our everyday operations.”

“[My colleagues] are curious and cautious. They are interested in using free reagents, yet the value of our experiments is high. They don't want to get something contaminated and ruin an experiment,” said Doyle. Sealed bottles likely have the original purity grade, while opened bottles should be used for processes with lower purity requirements.

“Reducing waste is always better than disposing of it. We will run out of places to put waste in long-run. While some hazardous solvents are burned as fuel, most water-based wastes take lot of energy to incinerate or neutralize,” said Doyle. The amount of money saved by the Chemical Exchange Program will

*“Reducing waste is always better than disposing of it.”*

be revealed after its first year.

“People can clean out their closets and donate to the Chemical Exchange Program. The more people who use it, the better savings we'll have,” said Doyle. Doyle credits the Geography Department and TGIF for support of the program.

[http://sustainability.ucsb.edu/LARS/programs/chemical\\_exchange.php](http://sustainability.ucsb.edu/LARS/programs/chemical_exchange.php)



*Sodium Metaphosphate Exchange*

### CONTRIBUTORS

**Perrin Pellegrin**  
Sustainability Manager, Campus Design & Facilities

**Ryan Schauland**  
Sustainability and Energy Coordinator, Campus Design & Facilities

**Jill Richardson**  
Sustainability Coordinator, Office of VC Administrative Services

**Logan Green**  
Sustainability Coordinator, Office of VC Administrative Services

**Katie Maynard**  
Sustainability Coordinator, Geography

**Taylor Orr**  
Student Writer

**Christopher Darancette**  
Student Writer