Screwing in an efficient light bulb

KAREN TELLEEN-LAWTON

WHAT DO Santa Barbaran Paul Taylor Wilson and the Community Environmental Council (CEC) have in common? Both are getting people to switch on a brighter future while reducing energy use. They are replacing incandescent bulbs with Compact Florescent Lamps in their respective areas: Stanford University, where Wilson is a senior, and Santa Barbara.

I missed the Stanford project — I was down in L.A. watching Stanford pummel USC 24-23 — but I tagged along on a CEC installation at a local church, from form-filling to seeing the light. The CEC's Business Direct Installation (BDI) program goal is to show actual reductions in energy usage in small companies and non-profits, and to raise awareness about climate change and energy issues.

The retrofit at All Saints-by-the-Sea Episcopal Church began as most grant programs do, filling out paperwork and playing telephone- and then calendar tag. When retrofit day came, Carlos Ruano, the church sexton, audited the sanctuary with the contractor for Southern California Edison, which is funding the project through a utility bill surcharge.

Unfortunately, the replacement CFLs that fit the sanctuary fixtures would actually have been dimmer, so the main building was axed from the retrofit list.

Five other buildings remained to audit, each with a variety of fixtures. These included incandescent bulbs and spotlights, blinking old florescent tubes and rings, and colors from soft yellow to eerie blue. Most of the classrooms already had up-to-date florescents, and many of the remainder were on dimmer switches, whose technology was not included in the program. Ceiling fixtures in the kitchen were eligible for whiter florescents, but the Parish Hall had hanging fixtures for which there were no more efficient replacements. The pre-school and the church office offered ripe opportunities for lamp change-outs, while the Friendship Center (a daycare center for community seniors with Alzheimer's) had already been updated. In all the rooms slated for retrofit, the bulbs would be switched out and magnetic valves replaced with more efficient electronic ones.

After the campus tour the crew whisked into activity. Bulbs were offloaded, ladders stretched into place, and the transformation began. They replaced the office lamps during a staff meeting; the change was immediately noticeable.

"It's like daylight in here!" staffer/parishioner Clyde Osterhaus-Thayer exclaimed. "Wow, what did they do in here? Now it's as bright as day with half the lights on." The brighter lighting ensures that incandescent bulbs don't find their way back into use.

Megan Diaz, the CEC's Energy, Outreach, and Programs Associate, says the program has been a success in many cities. "Everyone who has participated seems to have had a positive experience," she says, "and in many cases, this has led to further energy conservation measures at participating facilities." This is true at All Saints, where parishioner David Raber plans to use his expertise to further the improvements at other levels.

Southern California Edison estimates that the new highly efficient lighting and refrigeration equipment will save businesses about $5 a day; $1,800 a year. The CEC website promises the program, "reduces your contribution to climate change, protects air quality, improves U.S. energy security, stabilizes energy prices by reducing demand, increases U.S. economic competitiveness, and helps prevent other environmental problems like oil spills and acid rain." This may be a little over the top, but its head is screwed on in the right direction.

Wilson related how the Stanford project came to be. For a class called "Energy Saving Projects at Stanford", he and classmates wrote a proposal demonstrating that Stanford could save more money in energy costs than it would spend supplying each freshman with a CFL (Compact Florescent Lamp) in their fall Freshman packet. Stanford agreed, and students and staff were the beneficiaries of 7,000 CFLs along with a contract that obligates each student to install the lamp within 6 months and relinquish it at the end of the school year.

If every Stanford student were to replace a 60-watt incandescent bulb with a 13-watt CFL, annual savings would amount to 450,000 kilowatts of electricity; 220,000

See **BACKYARD**, page 8

BACKYARD

FROM PAGE 7

pounds of carbon emissions; and $50,000 in utility costs," according to a Stanford Student Housing staffer.

Of course, no solution is perfect. Incandescent light bulbs convert 90 percent of their electrical energy use into heat instead of light, while CFLs waste only 30 percent and last longer as well. But CFLs have a mercury issue that makes recycling problematic. Nevertheless, florescent bulbs have come a long way since their irritating green-glow days and singular curlicue shapes. They now come in many shapes and shades, including incandescent look-alikes. Try them again and find out how many friends you can make screwing in an energy-saving light.

For more information, call the Community Environmental Council at (805) 963-0583 x101 with questions about the Partnership; or call the program contractors at (800) 332-5483 for technical information about efficiency opportunities and savings for your business. www.SouthCoastEnergyWise.org.

Karen Telleen-Lawton's column is a mélange of people, nature, events, and observations transporting the reader around the world and back to Santa Barbara. Her writing can be found at www.CanyonVoices.com, including excerpts from her book, Canyon Voices – the Nature of Rattlesnake Canyon.