

Solar power, energy-efficient light bulbs will cut energy costs dramatically



By JULIE ANN GRIMM | The New Mexican
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How many changes of light bulbs does it take to cut an energy bill? Monte del Sol high school students answered that question this week as they changed dozens of bulbs in a Santa Fe apartment building .

About 90 new energy-efficient light bulbs installed Thursday will slice electricity bills for Sonrisa apartments by about \$1,000 next year. Energy use in the low-cost housing run by St.

Elizabeth Shelter will shrink even more

in a few weeks, when water heaters at the apartments start using power from the sun instead of natural gas.

The new solar-powered hot water and the efficient bulbs are part of a strategy to save money and reduce energy use for the shelter agency. The changes come courtesy of Local Energy, a nonprofit group that uses grants and donations to promote alternatives to mainstream power sources.

Six Monte del Sol freshmen replaced light bulbs in eight apartments in the building off Jaguar Drive.

“It’s pretty cool,” said 15-year-old Nick Sandoval as he stood on a ladder to swap out an old light bulb with a more efficient model “It saves energy and helps people who are in need.”

Instead of using the familiar globe-shaped incandescent bulbs that are standard in most New Mexico homes, the apartments now have compact fluorescent lamps. The new bulbs use about one-fourth of the energy of the older bulbs and are just as bright. All Local Energy had to do was harness the power of high school students to unscrew the old bulbs and twist in the new ones.

Project engineer Christian SAVE Casillas expects the electricity bill to drop considerably because of the new bulbs. The bigger plan to convert the hotwater system will knock off an additional \$700 next year, he said. But if natural gas prices rise the way industry officials predict, the apartments could save even more.

Dankoff Solar, a Santa Fe-based solar-goods wholesaler, donated about \$10,000 worth of solar panels and piping for the system. Another local company, Cedar Mountain Solar, will install it next month. Water will flow through the panels to be heated by the sun, stored in insulated tanks and pumped to faucets in laundry rooms, showers and kitchen sinks.

Even though New Mexico has great sun exposure, it only makes up 5 percent of Dankoff's business, said Bruce Adams, vice president of sales for the national distributor.

The company ships more products to California, New York and New Jersey. Unlike New Mexico, Adams says, those states have incentive programs that make it more economical for people to incorporate solar technology into homes.

St. Elizabeth wouldn't have been able to buy the system. But the shelter's assistant director, Richard Lucero, said the money and energy savings from the project will make a significant difference for the displaced families the agency serves.

"It really causes our burden to be lifted," he told Monte del Sol students Thursday. "That means we have more to assist people in other ways."

Local Energy will track the utility bills at the apartments to evaluate the success of the conversion. Casillas hopes the group can organize a similar project next year.

The nonprofit is also using a federal grant to design a system that would use waste wood to provide warmth for hydronic heaters in homes and businesses downtown.
