

Suburban Journals

St. Charles County: 10 ways cities are going green Solar panels, light bulbs and nitrogen can save energy and money

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More communities are undertaking green projects, focusing on saving energy and taking economical steps to be environmentally friendly. St. Peters, O'Fallon and Lake Saint Louis have created environmental committees to advise governing boards. Here are 10 things St. Charles County communities are doing to lighten carbon footprints.



Ryan Prewitt photo - Solar evacuation tubes on Dardenne Prairie City Hall produce energy - not electricity - to run the city's geothermal heat pumps. Solar panels will produce 100 percent of the power for the city's heating and 30 percent of the cooling, and all the hot water needs.

1. Little solar on the Prairie

Dardenne Prairie likely has built the most environmentally friendly and energy efficient city hall in Missouri. The solar evacuation tubes to run 10 geothermal heat pumps aren't yet hooked up, but energy bills for the 18,000-square-foot building run just \$800.

"This can take care of 100 percent of the heating, about 30 percent of the cooling and all of the hot water heating for the building," said Mayor Pam Fogarty, who is certified in Leadership in Energy and Environmental Design (LEED).

The solar units' life cycle is longer than HVAC, she said. Once the solar panels are hooked up, Fogarty said, energy bills will be almost nil.

2. Classical gas

St. Peters residents can cut gasoline usage by 2.5 percent by replacing the air in their vehicle tires with nitrogen, a service offered by the city. Less nitrogen gas escapes the tires when compared to air. Nitrogen's volume also fluctuates less with temperature changes. The constant tire pressure improves gas mileage, saving an average 15 gallons of gas a year. If 10 percent of St. Peters residents participate, they could save 68,400 gallons of gas per year and cut emissions.

St. Peters residents may call 636-970-1456, ext. 1, to make an appointment at the city's nitrogen facility behind Recycle City, 135 Ecology Drive.

"Race cars and airlines use nitrogen in their tires," said Ron Darling, St. Peters' health and environmental services manager. "They know something."

3. Tons of difference

A plastic lid made tons of difference for recycling in O'Fallon. The city used a U.S. Department of Energy grant to replace 13,000 split lids on 64-gallon recyclables containers with single lids. Split compartments had separated different recyclables, but the city switched to single-stream recycling in 2005.

In February, O'Fallon collected 373 tons of recyclable materials. After the lid replacement, the city collected 506 tons of recyclables in March and a city record 533 tons in April, a 43 percent increase in two months.

"We're probably the leader regarding recyclables in the area," said Community Development Director Jack Strick.

4. Green brings breaks

St. Charles encourages developers to build environmentally friendly buildings by giving breaks on parking, setbacks and up to 85 percent off building permit fees for going green. No developer has yet taken advantage of the "green ordinance" passed in December, but several have expressed interest, said Community Development Director Bruce Evans.

"If they use native species in landscape planting, they get points for that. If they use a rain garden to water plants, there's points for that," Evans said. "Anything that reduces energy use or reduces impact on the environment, they'll get points for it."

Builders accumulate points to qualify for greater incentives.

5. E-cycling

Last October's electronics and appliance recycling day at The Meadows, a shopping center in Lake Saint Louis, collected three tractor-trailer loads of computers, televisions, refrigerators, air conditioning units and other items.

"Most of the items were TVs or old computers," said Scott Ellis, chairman of the city's Green Environmental Advisory Committee.

The committee is planning another collection this fall. There is a fee to recycle some items, such as \$5 for a computer monitor or refrigerator and \$15 for a large TV. The city works with Web Innovations and Technology Services, a nonprofit group. "They maintain that 100 percent of what's brought in is fixed and put into service or is recycled," Ellis said.

6. Curly bulbs to go

St. Peters is distributing CFL (compact fluorescent light) bulbs to city residents. Over a year, a CFL bulb saves \$11 to \$16 in energy costs over incandescent bulbs. To put out the same light of a 60-watt incandescent bulb, a CFL bulb uses 13 or 14 watts.

"Each kilowatt hour (1,000 watts for one hour) is 7.9 cents out of your pocket," Darling said. "Multiply that by 30,000, and now you have a citywide savings of about \$2 million." The curly-cue fluorescent lights fit in standard light sockets.

7. Vanity of the sunflowers

Fogarty's bathroom vanity at City Hall is made from sunflowers, seeds and all. "You're not cutting down a tree for this," Fogarty said. "It's the same technology as particle board, but the glues and things used to do that are nontoxic."

All paints and woods used in City Hall have few or no volatile organic compounds. The building has recycled mahogany wood, and the lumber used came from certified forests, in which trees that are cut down are replaced by new plantings.

8. Energy audit

Cuivre River Electric Cooperative performed an energy audit on Lake Saint Louis City Hall and recommended some energy-saving steps, such as motion sensors for lights, Ellis said.

Cuivre River Electric provides free energy audits for its residential customers. To make an appointment, call 636-695-4733. Its website, www.cuivre.com, lists rebates available for purchasing energy-efficient appliances and heat pumps.

9. Cups of sugar

Environmental care goes beyond construction in Dardenne Prairie into purchasing. When feasible, city officials purchase items made from recycled, recyclable or biodegradable materials. The paper coffee cups in the kitchen are made from sugar cane, and disposable utensils are made from corn starch. Both are biodegradable.

"I'm no tree hugger," Fogarty said. Each purchase makes economic sense and takes health into consideration, she said.

10. Park del Sol

A solar voltaic panel will provide electricity in St. Peters' planned Lakeside 370 Park, scheduled to open next April. "We're going to use a solar module that will decrease our energy use at the park and help offset energy costs," said Director of Parks and Recreation Jeff Hutsler. He said the solar panel will provide some electricity for restrooms, park lighting and an RV campsite.