

Try sunshine to cut your business power bills

BY KENT CROOK

President, Wiremasters Electric



In most conversations about “going green” or saving energy to preserve the planet, two words come up predictably — solar energy. Most people know the phrase, but have little depth of knowledge about the topic.

Imagine that the sun’s energy could be harnessed efficiently for just one hour, everything electrical on the planet could function for 24 hours — with no carbon emissions and no pollution. Sounds good, you say, but what does that have to do with my business or my community?

If you operate a business with its own building, you can find excellent uses of solar energy for landscape lights, parking area lights, and business signs. The community you live in can use solar energy for school bus stops, bus shelters, playgrounds, park-and-ride lots, public parking areas, parks and boat ramps, industrial parks, and even flagpole areas.

The benefits of solar-powered lighting, for both your business and for your community include: Reduction in crime, better visibility of the illuminated area, and use of a sustainable, “green” approach to out-

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door lighting.

Photovoltaic is the scientific word that refers to converting the sun’s power into electricity. Here’s how solar power works: silicon cells are placed between high-impact glass panels. The cells convert the sun’s energy into electricity in the form of direct current (DC) electricity. That power is sent to 100 percent recyclable batteries or energy-storage devices. With the help of a charge controller that maintains the optimum level of the batteries, there is a consistent reliable charge and discharge for many years.

When you use solar power for external lighting, you’ll find that it is:

- Less expensive, avoiding the costly installation steps of trenching and underground electrical wiring.
- The most sustainable carbon-neutral means to produce exterior lighting.
- Easy to understand; shovel-ready, requiring only 6 to 8 weeks from initial inquiry to installation.
- Capable of long-life LED technology, giving lighting for over 20 years without changing light bulbs.

- Not susceptible to brownouts or blackouts.

- Capable, through the batteries in the system, of a minimum of five nights of light, even when there reduced amounts of sunshine available.

- Solar lighting systems are more affordable and efficient than ever, enhanced by tax rebates and grants up to \$8,000 for their purchase and installation.

POWER VOCABULARY:

LED (Light-Emitting Diode) — An electronic light source, first developed in the 1920s by a radio technician named Oleg Losey. LED has many advantages over traditional light sources such as lower energy consumption, longer lifetime, smaller size and faster switching.

Lumen — A unit of luminous flux or a measure of the perceived power of light. “Radiant flux” measures the total power of light emitted but luminous flux is adjusted to reflect the sensitivity of the human eye to various wavelengths of light.

Kent Crook is president of Wiremasters Electric. Contact him at 305-385-9379 or via email at <kent@kcmiami.com>.