



IN THE PRESS



Vera Goncalves works on a circuit board to be installed in a data logger at Onset Computer Corp. in Pocasset.

What's your shade of green?

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POCASSET — Wind turbines, solar panels, green roofs and other eco-friendly technology are becoming ever more popular and common.

As businesses and consumers rush headlong towards a green future, however, uncertainties remain: How can we know that the solutions we choose are working as they should? Which innovations are producing (or conserving) the most energy?

View live data

Check out conditions at the Onset Computer offices, on Nicole Goldman's roof, and over the waters at Woodneck Beach in Falmouth (the company's head of engineering likes to consult this one before he goes windsurfing):

www.onsetcomp.com/live_systems

Pocasset-based Onset Computer Corp. has a small answer to those big questions.

The company's HOBO brand devices, some no larger than a box of Tic-Tacs, collect the data that are essential for analyzing these issues, said Evan Lubofsky, the company's director of marketing.

"It's one thing to invest in green," he said. "It's another thing to verify how effective it is."

The battery-powered devices, known as data loggers, do just what their name suggests. They can gather information about temperature, relative humidity, light intensity, carbon dioxide levels and any number of other conditions.

Onset Computer has sold more than a million of these devices since it was founded in 1981. Launched in a Falmouth barn, the company has now moved into a renovated retail space along Route 28 and employs 128 workers.

Originally, users had to plug a USB cable into the HOBO devices to download collected information onto a computer, where it could be analyzed with Onset's proprietary software.

This year, however, the company introduced the U30, a model that wirelessly transmits data, allowing users to access the information from an online display anytime.

Clients for the range of products include building managers who want to monitor a facility's energy consumption, scientists trying to track the effects of global warming on Arctic glaciers, and grade school students studying their local ecosystems. The museum case that houses the dress Marilyn Monroe wore in "The Seven Year Itch," contains a HOBO data logger that keeps tabs on climate conditions within the display.

Now, with more businesses and individuals looking for ways to become more energy efficient, Onset has a growing niche of customers who use the devices to bolster their attempts to go green.

Nicole Goldman, the owner of 'g' Green Design Center in Mashpee, recently installed a "green roof" — rooftop gardens that act as natural insulation and storm water management systems — on her Woods Hole home.

Goldman uses one of Onset's data loggers to monitor air temperature, humidity and soil moisture on her roof.

When the water content in the soil drops below a certain level, the device sends a signal to activate the irrigation system, Goldman explained.

In addition to this convenience, the thorough data that the logger provides helps Goldman understand the dynamics of what is still an experimental garden. The data lets her determine which plants thrive under what conditions.

"It's not just intuition that tells you," she said. "You have data that tells you."

It's not just locals that are taking advantage of the technology; in Dearborn, Mich., Ford's F150 assembly plant has created a 454,000-square-foot green roof that is monitored by a HOBO device.

Educators are also using Onset's technology to train future alternative energy experts.

At Cape Cod Community College in West Barnstable, Richard Lawrence is using a U30 data logger as part of a solar hot water system he is installing with a class.

The device will record temperatures at multiple points in the system, sunlight intensity and flow rate and pressure of the fluid in the system.

"Over time we'll be able to go in and look at the performance of the system," Lawrence explained. "It will reinforce the concepts we are teaching in the classroom."

The online display of the system data will allow students to access current information when completing homework assignments, he said.

Onset technology is also in use at the wind turbines at Upper Cape Cod Regional Technical School and Falmouth Academy. Some of the region's cranberry growers also use the devices to alert them when temperatures become low enough to damage their crops.

While the current green movement offers Onset a significant market opportunity, Lubofsky said the company is not merely taking advantage of a trend.

"We're not jumping on the green bandwagon," he said. "We've been there for quite a while."