

# Northwest Public Power Association **BULLETIN**

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## Businesses say no to energy-wasting ways SnoPUD energy-saving competition takes new angle on efficiency

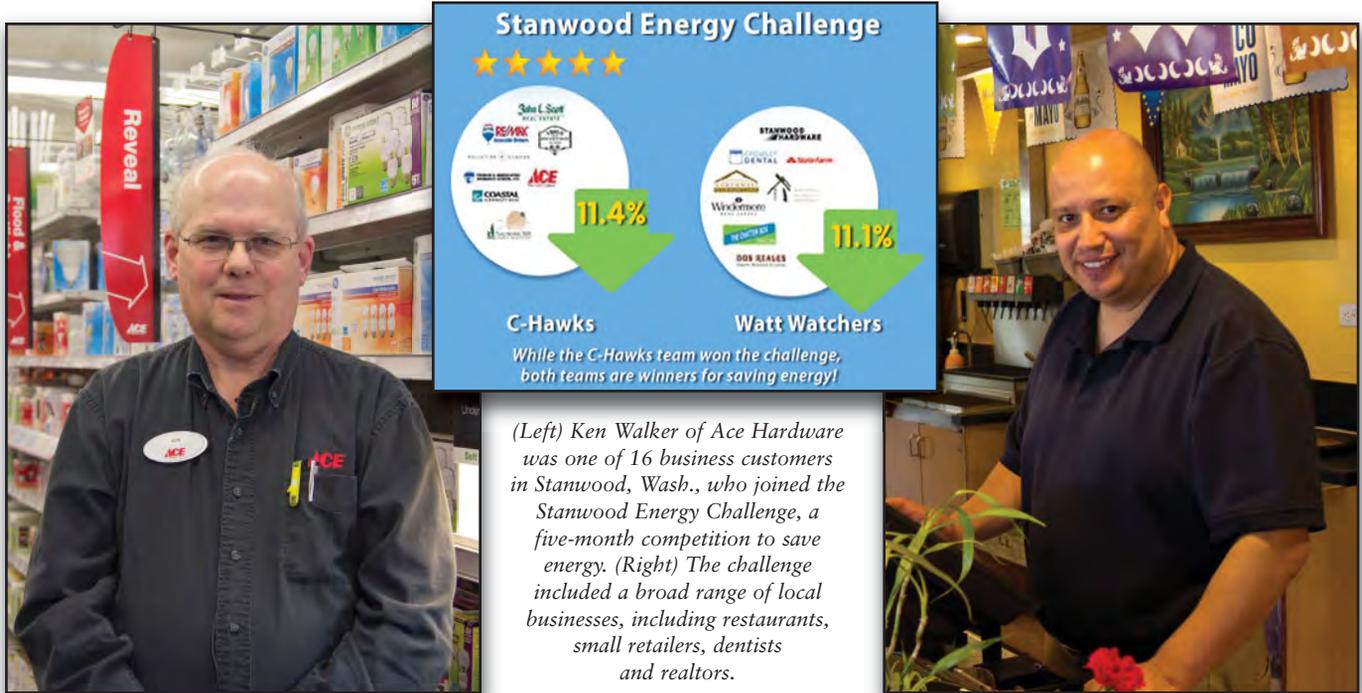


**STANWOOD**  
energy **CHALLENGE**

by Neil Neroutsos and Joel Scruggs

# Businesses say no to energy-wasting ways

## SnoPUD energy-saving competition takes new angle on efficiency



*(Left) Ken Walker of Ace Hardware was one of 16 business customers in Stanwood, Wash., who joined the Stanwood Energy Challenge, a five-month competition to save energy. (Right) The challenge included a broad range of local businesses, including restaurants, small retailers, dentists and realtors.*

Good things happen when a community comes together and competes. In Stanwood, Wash., 16 small businesses accepted a recent challenge from the Snohomish County Public Utility District to see how much energy they could save.

“The Stanwood Energy Challenge was a fun way to engage the community in learning more about how small actions and changes can eliminate energy waste,” said Laura McCrae, utility analyst for the PUD.

The program engaged two teams, comprised of eight small businesses each, in a five-month competition to see which team could reduce its energy use by the largest percentage. Staged in a semi-rural community about 50 miles north of Seattle, the challenge recruited hardware stores, restaurants, dental clinics, realtors, architectural firms, and other businesses. To add an element of fun, the businesses selected team names: the C-Hawks and the Watt Watchers.

Unlike traditional energy-efficiency programs that focus on the replacement of inefficient equipment such as appliances and lighting, the competition emphasized energy savings through changes in individual or organizational behavior and decision making.

The Bonneville Power Administration (BPA), one of the program partners, provided funding. The PUD selected PECEI, a Portland energy efficiency company, to provide pilot design

and implementation. The project team also included Lucid, an Oakland firm, which used its Building Dashboard software platform to provide businesses detailed insight into their real-time electricity usage and to track the teams’ success. Tablets were placed in visible, public areas of each business to share real-time results. On-site signage helped educate customers and raised community awareness.

“Competitions like this help us better understand how to measure behavior-based energy efficiency and show us there’s plenty of energy savings waiting to be had through employee behavior change in the Northwest,” said Richard Genécé, BPA’s vice president of Energy Efficiency.

With energy used in commercial buildings accounting for about a third of the region’s energy load, the challenge demonstrated that with a little time, ingenuity, and feedback, businesses can change their energy use behavior.

### Engaging businesses

In addition to the participating businesses, the PUD reached out to local business associations, civic leaders, and other community groups to garner support. City government formally endorsed the program and hosted organizing meetings and a celebratory awards program. The chamber of commerce and merchants’ association communicated the success of the program to the greater community.

“While small businesses are a rich opportunity for energy efficiency, they are often the most difficult to reach,” McCrae said. “The PUD knows these smaller organizations are typically busy with core business activities and often don’t have the interest or expertise to focus on reducing their energy use.”

A key feature of the program was using the dashboard to empower businesses with real-time energy information in order to help them identify low-cost opportunities for savings.

“Every penny counts — anything from the doors being sealed, to your lighting, to your neon signs,” said Jose Amador, owner of Amigo Mexican Restaurant. “There are so many ways to save money that if you’re not looking at it, it’ll literally take away your profits.”

Businesses reported that educating employees and getting them actively involved in the competition were critical to success.

“Our employees were very excited,” said Andy Egloff, vice president of Coastal Community Bank. “There are a lot of eye-opening things going on around here now, from the light bulbs to the computer terminals.”

### And the winner is...

Once the results were verified in early summer, the C-Hawks edged out the Watt Watchers, with respective energy reductions of 11.4 percent and 11.1 percent. Moreover, the benefits went beyond electricity savings as the actions businesses took also may have trimmed their natural gas, propane, and water use.

The PUD recognized the participants during an awards ceremony at the Stanwood City Council meeting in July. The Hare Award, for the biggest early saver, was given to Northwest Veterinary Clinic, which cut its use by 20 percent in the first month of the competition. The Tortoise Award, for the biggest late saver, went to Designs Northwest, which saved 38 percent in the final month. Windermere received the Most Valuable Saver Award due to its impressive efforts to troubleshoot energy issues with lighting and thermostats.

### Program design

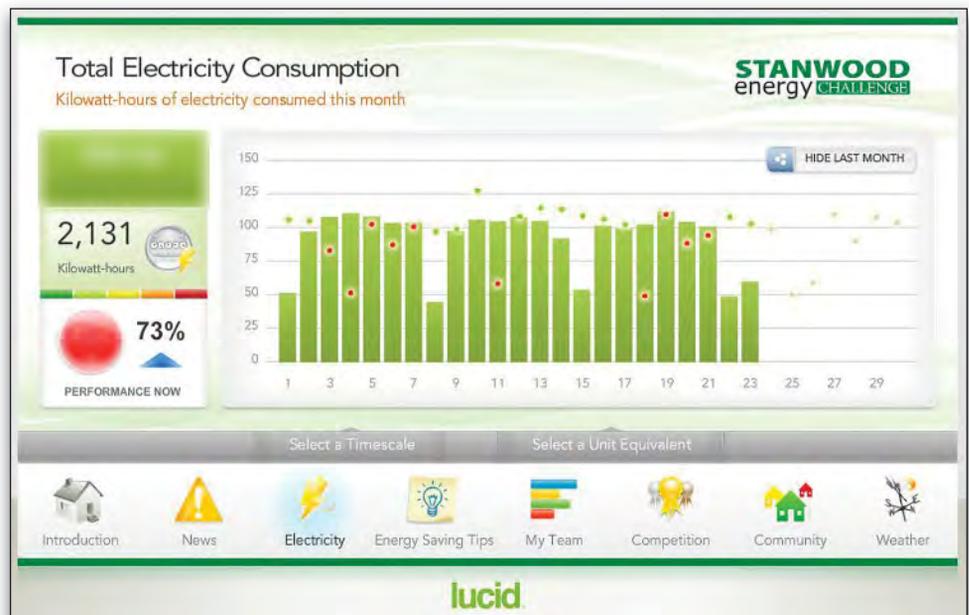
One key aspect of the Stanwood Energy Challenge is that it developed plans for measurement and verification well ahead of the program implementation. The project team knew that they needed hourly (or shorter) energy use data to verify savings estimates.

The pilot plan also called for differentiating between energy savings from behavior changes and those from equipment upgrades and other efficiency measures. It approached small businesses from a different angle. The goal was to see what behavior and operational changes employees could make to save energy in small businesses, given the context of a supportive community and a fun competition. The challenge encouraged behavior change (free savings), maintenance opportunities (thermostat settings and HVAC system tuning), and simple upgrades (light bulbs and thermostats); it also informed participants about more complex upgrades such as lighting fixtures and HVAC systems.

The dashboard provided several layers of information that proved useful during the competition. Electricity use, for example, could be tracked in several ways: by kilowatt-hours, energy use in dollars, and by how savings contributed to CO<sub>2</sub> reduction. Businesses could compare their energy use today versus yesterday, this week versus last week and by other time periods. The dashboard also offered a library of energy saving tips, grouped by business type (retail, office, restaurants, etc.). Participants could see how their individual businesses performed compared to other team members. Businesses could also view team-to-team performance results.

Businesses reported that the competition was not only an opportunity to save on energy bills, but it gave them opportunities to be role models in the community. It allowed them to show other businesses what could be done to reduce energy waste.

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*Snohomish PUD Commissioner Kathleen Vaughn (center) and Utility Analyst Laura McCrae (far left) honored a group of business customers who participated in the Stanwood Energy Challenge at a community event this summer.*

The competition benefitted greatly by engaging the community prior to kick-off. The City of Stanwood and the local business associations committed to help recruit businesses and support it through ongoing communications. At the same time, the PUD obtained internal buy-in from various utility departments which would help ensure success, including Key Accounts, Metering, Communications & Marketing, and Planning & Evaluation.

While word of mouth helped communicate the challenge, the PUD also issued press releases, pitched stories to local media, and ran newspaper advertisements. In addition, the utility produced signage and sent updates to program participants and supporters. It created a collection of videos and written testimonials, which were posted along with other program information on a special website ([www.stanwoodchallenge.com](http://www.stanwoodchallenge.com)).

Ongoing interaction with all team participants by the PUD and PECI kept businesses excited about their savings results and actively involved in the process. PUD and PECI team members made sure they were available to troubleshoot any issues that arose. When they began the process of connecting the dashboard tablets, for example, they ran into issues of how tablets would be incorporated into the businesses' networks, each with its own unique configuration. Lucid, PECI, and the PUD Metering Department worked together to troubleshoot issues and resolve them prior to the launch.

The program demonstrated that through a combination of community, competition, teamwork, doing the right thing for the environment, and eliminating waste, it could provide motivation for energy savings. It demonstrated that such an approach could catch on in a community to achieve not only

success with savings, but overall success in business operations.

The Stanwood Energy Challenge model is one approach to behavior-based energy efficiency; other utilities are piloting behavior-based programs in an effort to keep the energy efficiency pipeline flowing.

"It's a great time to test models to changing customer behavior about when and how much energy they use," said Larry Blaufus, senior manager of customer accounts and energy services at Clark Public Utilities.

In the last few years, BPA has partnered with Snohomish PUD, Cowlitz Public Utility District, Springfield Utility Board, and Clark Public Utilities to test different models. A 2013 Snohomish PUD pilot tested a combination of energy-use feedback mechanisms and a competition between stores at 110 Starbuck's locations in the Northwest. The Clark and Cowlitz pilots are using frequent energy-use reports that show how households compare to their neighbors and other households in the region along with energy-saving tips to change behavior. Clark also tested whether adding a Facebook tie-in could bolster interest in the program. Cowlitz, a

Longview, Wash.-based utility with complete advanced metering infrastructure, also tested high-energy-usage alerts to trigger behavior changes. Meanwhile, Springfield partnered with a multi-tenant commercial building to test occupant engagement to change behavior.

Regarding the role of behavior change in future conservation programs, Blaufus said Clark is taking a wait-and-see-the-savings approach.

"We are hopeful that we can learn what's effective and refine the approaches in advance of even greater conservation challenges," he said.

While saving energy is the goal, there are also non-energy benefits to programs like this. Through the challenge, some businesses installed more energy-efficiency measures and others identified how operational changes could save them money on their energy bill.

"But that's not all," noted Summer Goodwin, BPA's behavior-based energy efficiency program lead. "The competition raised energy awareness in the community and forged new relationships with the utility, which is invaluable."

Results from the pilots are expected later this year.

To learn more about the community competition, visit [www.StanwoodChallenge.com](http://www.StanwoodChallenge.com). The website includes energy-saving resources, as well as testimonials and videos featuring many of the participating businesses. **NWPPA**

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