

## SHOWCASE PROJECT: SHARI'S OF LYNNWOOD

### SOLUTION OVERVIEW

Shari's of Lynnwood is a 3,900-square-foot, 24-hour restaurant built in 1993. The company began implementing energy and water saving retrofits in 2012 during a store remodeling project. Through a mix of equipment replacement, process changes, and employee education and engagement, Shari's Café & Pies was able to realize significant reductions to both its energy and water consumption at this restaurant, making it a model for many of the other, older restaurants that comprise the bulk of Shari's overall portfolio.

Shari's conducts chain-wide energy audits throughout the year, during which opportunities to reduce energy and water use are identified. For example, previous audits determined that reducing kitchen water-heater temperature from 155 to 140 degrees Fahrenheit would produce 225,000 kBTU, or \$2,200, in annual savings per location (this practice is applied to all stores, and is checked yearly through a survey). Shari's also discovered that turning off two of the six broiler burners for eight hours of the day during non-peak business hours would save \$640 per restaurant each year, without compromising food quality or customer service. Since all of Shari's restaurants have similar layouts and identical kitchens, recommendations from the energy audit process can be applied across the company's portfolio.

### SECTOR TYPE

Commercial

### LOCATION

Lynnwood, Washington

### PROJECT SIZE

3,900 Square Feet

### FINANCIAL OVERVIEW

Project Cost: \$94,000

### SOLUTIONS

Energy and water reduction solutions began with the integration of a pilot energy management information system (EMIS) in 2012, through which a number of different measures were identified. It became clear that the largest potential energy savings would come from replacing interior and exterior lights with LEDs. Doing so has saved 110,000 kWh, or \$10,500, annually. For reducing water usage, Shari's switched out five heated dipperwells that continuously flowed water 24 hours a day. The new manual wells save 105,000 gallons of water, 4,800 therms of gas, and \$4,900 per

year. Further water, sewer, and gas savings are captured through a smart irrigation system with a Hunter Pro-C controller with Solar Sync. This system uses precipitation data from the National Oceanic and Atmospheric Administration to avoid watering when rain is forecast, and has additional functionality to adjust irrigation based on actual conditions.

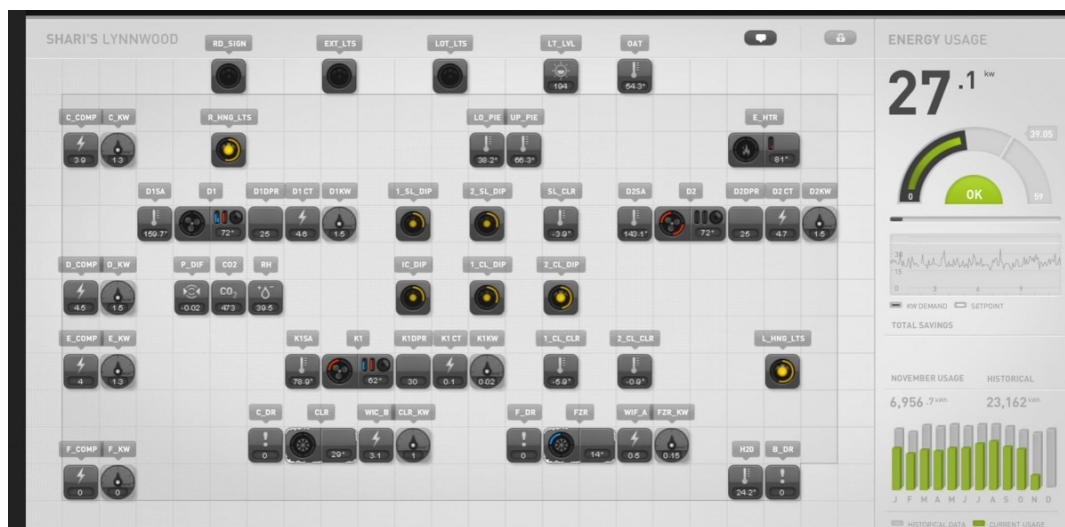
Many of the projects implemented at the Lynnwood location had a return on investment (ROI) of under one year, as shown in the table below.

### Project & ROI\*

- Aerators - 0.0 years
- Heated dipperwells - 0.2 years
- Pre-rinse sprayers - 0.7 years
- Hunter Pro-C irrigation system - 0.7 years
- Demand Control Ventilation - Kitchen - 0.9 years
- EC motors - 1.0 years
- LED interior lighting - 1.1 years
- Occupancy sensors (bathrooms) - 1.7 years
- Auto door closers - 3.5 years
- LED exterior sign - 3.9 years
- EMIS - 3.9 years
- Dish machines - ADS - N/A

*\*ROI's are calculated with utility rebates included*

In addition to the measures listed above, the EMIS system allows the Shari's energy manager at corporate headquarters to make adjustments at individual restaurants from a computer. The figure below is a snap-shot of the tool used by the energy manager to adjust in-store temperature, check the freezer temperature, turn on the outside sign based on local conditions, and more.



Looking ahead, Shari's will continue finding new ways to reduce energy and water usage at this location. For example, Shari's plans to install demand control ventilation systems across the portfolio, which are anticipated to save an additional \$2,500 in energy costs per restaurant, with a

less than 1-year ROI.

## **OTHER BENEFITS**

Shari's in-house team has created a number of tools and resources to engage employees in the effort to reduce energy and water use. This is part of a larger employee engagement effort, which helps staff take more of a role in optimizing operational performance, and also helps them feel more connected to the operations of the store. Shari's developed an online course and [training video](#) for all employees. Shari's has also developed employee guidance describing how to operate equipment properly, check for water leaks, manage lighting, and more. For each position-type in the restaurant, Shari's provides information on how any changes would impact them, which makes the need for these behavioral changes more relatable; therefore, employees are more likely to participate. Shari's often equates energy and water savings to burgers flipped or pies served to provide a metric that staff can relate to in their daily work. Shari's employee engagement program for energy and water efficiency is detailed in its Implementation Model [here](#).

## Annual Energy Use

Baseline(2012)



Actual(2017)



**Energy Savings**

**28%**

## Annual Energy Cost

Baseline(2012)



Actual(2017)

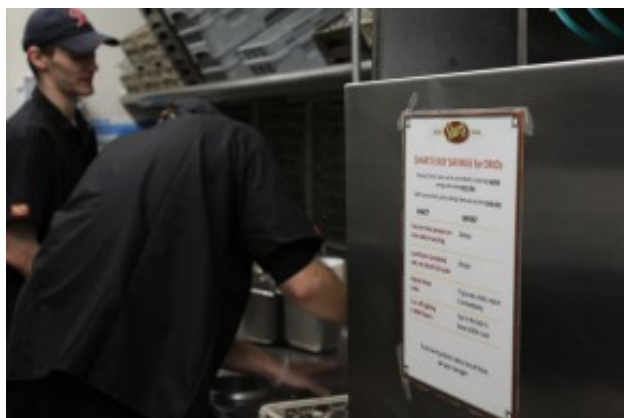


**Cost Savings**

**\$16,200**



Outside Shari's of Lynnwood, WA



Tips for dish machine operators to save energy and water



Pie case at Shari's