

# 8 Quick Tips for SLASHING UTILITY

We checked with experts about the easiest, quickest solutions. Here's what they said.

We've been saying it forever, and it's true: Foodservice consumes more energy per square foot than any other retail industry. Water usage ranks high, too.

So, what are the handiest solutions to cut your utility costs? What are the easiest fixes with minimal upfront expenses and the quickest paybacks? To find out, we checked with two of the top sources in the industry on the topic—Dave Zabrowski, vice president, Frontier Energy, operator of PG&E's Food Service Technology Center in San Ramon, Calif., and Jeff Clark, head of Sustainability & Nutrition, Member Engagement, at the National Restaurant Association in

Turn the page for eight areas they say are ripe for energy savings:

# 8 Quick Tips



# STARTUP/SHUT-DOWN SCHEDULES

Foodservice has a rich tradition of firing up everything hours before opening, and with today's equipment, that's an unnecessary waste. Look at your menu and which equipment is used when. "Establish a startup/ shutdown schedule, and expect to save 3% to 5%," Zabrowski says. He notes Arby's did this as part of its overall Efficiency Matters program, which cut energy and water consumption across all corporate locations by 20%.



# LOW-FLOW PRERINSE SPRAY VALVES

An older conventional spray valve might flow at 5 gpm. The latest low-flow spray valves rate around 1.6 gpm. At one hour per day usage, you can drop water and heating energy costs from about \$2,200 per year to roughly \$500. "And remember these sprayers get banged up and abused, and even newer ones need to be replaced periodically," Clark says.



# WATER LEAKS

Fixing water leaks is a "no brainer," Clark says. "We worked with one site recently that was leaking 80,000 gal./yr. That's the equivalent of a small backyard swimming pool." Check for leaks within equipment, in the lines, hidden in the facility's structure and foundation, even outside in sprinkler systems.

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# REFRIGERATION CONDENSER COILS

Both sources say coils are a biggie. Zabrowski refers to a study looking at business energy usage done with the city and county of San Francisco. One section dealt with reach-in refrigeration and included measuring energy consumption of 10 reach-ins before and after cleaning condenser coils. The energy reductions ranged from 2% for a recently cleaned unit to 49% for a heavily dirty one. The average energy savings was 17%.





# DISHMACHINES

Maintain dishmachines and check water-supply pressure in accordance with manufacturer specs. Switching out an older legacy warewasher for a new highefficiency one can cut water and energy usage by more than half. Existing units can benefit greatly from proper and regular maintenance. And observe the water pressure-low pressure can cause poor performance, requiring rewashing, leading to more consumption of water and heating energy. Watch out for overspray, too. If spray is exiting the unit, maybe draining out and down the scrapping side, those volumes and costs add up quickly.

# LED LIGHTING

LED (light emitting diode) lamps, which in the early days had relatively limited applications in foodservice, have advanced by leaps and bounds over the past five to 10 years. LEDs now come in sizes and shapes to suit just about any application you can think of, from walk-in to dining-room to outdoor lighting. They far surpass not only incandescent technology but compact fluorescents and halogen as well. What you used to do with a 60W bulb now is done with a 9W or even 4W LED. That's a 93% reduction in energy, and LEDs last many, many times longersometimes measured in years or decades, depending on specifics. Plus prices have dropped significantly, meaning paybacks are quick.



# HIGH-EFFICIENCY FRYERS

Numerous concepts rely on fryers for some or much of the menu. They get heavy use many minutes of operation per day—and how they perform impacts not only your energy consumption but cooking oil consumption as well. Going to a high-efficiency, Energy Star-rated fryer works on multiple levels. The more efficient heat transfer means more even heating, which also reduces scorching and extends oil life. A study by SoCal Gas found oil savings often can be three times the energy savings. More good news: In recent years, Energy Star technology has trickled down to less expensive models. Which means you can get the benefits, spend less and accelerate the payback.



# REBATES

California has long led the way in rebates for Energy Star-rated equipment, and now utilities in other parts of the country are coming around as they realize commercial foodservice is a huge industry customer. Always check with your utility, and encourage other foodservice operators in your area to team up to encourage utilities to get onboard.

# $\partial V | D O S$ at a glance

Here's how efficiency profiles on the nine categories of Energy Star-rated equipment models compare to current standard models. (For more information, visit energystar.gov/cfs.)

COFFEE BREWERS Typical energy reduction: <b>35%</b> Average annual savings per unit: \$35	DISHWASHERS Typical energy reduction: 40% Typical water reduction: 50% Average annual combined savings per unit: \$1,500	FRYERS STD. VAT ELEC. Typical energy reduction: 14% Average annual savings per unit: \$260	GRIDDLES ELEC. Typical energy reduction: <b>11%</b> Average annual savings per unit: \$135	HOT FOOD HOLDING CABINETS Typical energy reduction: <b>70%</b> Average annual savings per unit: \$325	ICE MAKERS BATCH TYPE Typical energy reduction: 10% Typical water reduction: 20% Average annual elec.	OVENS Typical energing electric typ <b>20%</b> Average and per unit (electric) Average and per unit (gat
		Typical energy reduction: <b>30%</b> Average annual savings per unit: \$410	Typical energy reduction: <b>10%</b> Average annual savings per unit: \$95		CONTINUOUS TYPE Typical energy reduction: <b>16%</b> Average annual savings per unit: \$145	

# **ENERGY STAR UPDATE**

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Ever wonder how much energy you're saving with Energy Star-rated equipment? What's the cumulative effect?

The answers vary by type of equipment, of course. But consider Energy Star's first-ever commercial foodservice category-reach-in, solid-door refrigeration. Since its unveiling in 2001 at The NAFEM Show, industry observers figure refrigeration takes considerably less than half the energy it did 18 years ago, maybe even as little as 25%. That is major progress.

And the work continues. In 2018, Energy Star rolled out a new V1.1 Commercial Coffee Brewers specification, and the first two manufacturers got quite a few models certified.

Meanwhile, last year Energy Star also launched its inaugural Commercial Food Service Workshop. The meeting, held at McCormick Place in Chicago during the National Restaurant Association Show, drew manufacturers, utilities, channel partners and kitchen design consultants to pick up some hard industry data about energy consumption, and to discuss strategies for leveraging the Energy Star brand to influence more customers to purchase energy efficient equipment. One morsel offered for consideration: Commercial foodservice

spends \$40 billion annually on energy. A 10% reduction would be equivalent to growing the entire industry by a half percent.

At this year's CFS Workshop, attendees discussed and continued developing a "midstream" strategy for incentivizing the channel to promote Energy Star equipment.

The next 18 months are busy ones for revisions. On tap:

- "This year, the program is prioritizing commercial dishwashers and ovens for product specification revisions," says Tanja Crk, product manager commercial foodservice at Energy Star.
- The EPA is actively looking into possible scope expansion of the Engery Star commercial refrigeration specification to incorporate chef bases, buffet prep tables and blast chiller products to the specification next year.
- Additional work on ice machines and steam cookers is slated for next year.
- A new federal standard for refrigerated beverage vending machines has been in effect since January, and at press time the revised Energy Star spec was due to be finalized in July.

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rgy reduction gas and es):

inual savings ectric): \$680 inual savings s): \$140

# REFRIGERATORS **AND FREEZERS**

Typical energy reduction (among all types): 20%

Average annual savings per unit, solid-door refrig .: \$30+

Average annual savings per unit, glass-door refrig.: \$45

Average annual savings per unit, solid-door frzr.: \$55+

Average annual savings per unit, glass-door frzr.: \$100+

# **STEAM COOKERS**

Typical energy reduction: up to **60%** Typical water reduction: up to **90%** Average annual savings (both elec. and gas):

approx. \$1,000 per unit

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