FIVE SURVEY AREAS:
1. Kitchen and Serving
2. Dining Room
3. Dish Room
4. Rooftop
5. Parking Lot and Exterior

Do It Yourself Energy Survey
Foodservice is Energy Intensive...

Refrigeration (Cold Food)
- Clean condenser coils.
- Shade condenser coils.
- Check refrigerant level—sight glass clear = full charge. If necessary, call a service company to recharge.
- Check refrigerant lines or compressor body for icing. If ice is present, call a service company.
- Check walk-in defrost time clocks and set properly.
- If there is a compressor time clock (not recommended), ensure it is set properly or disable.
- Check if compressors run short cycles. If cycling on/off in less than three minutes for extended period, call a service company.
- Check compressors for oil leaks. If leaks exist, call a service company.

Observations (Cold Food)

Lighting (Illumination)
- Check lighting time clock and/or photocells (install if none exist).*
- Turn off parking lot lights whenever possible.
- Consider parking lot lights with high-low (de-level) controls and occupancy sensors.*
- Turn off soft light, menu boards, decorative lights and roof lights whenever possible. Never leave exterior lighting on during the day.
- Replace T8 fluorescent lamps and magnetic ballasts with T8 or T5 lamps and electronic ballasts (de-tamp when possible).*
- Install ENERGY STAR compact fluorescent lamps, LEDs or induction lighting.
- Convert all quartz-halogen lamps to equal light output (not wattage) pulse-start metal halide (PSMr) or high-pressure sodium (HPS).*

Observations (Illumination)

Air (HVAC)
- Turn off patio and space heaters whenever possible.
- Repair broken fly fans—they should turn off when the door is closed.*
- Turn off patio misters whenever possible.

Observations (HVAC)

Refrigeration 6%
Lighting 13%
Sanitation 18%
HVAC 28%
Food Preparation 35%

“Experience the efficiency” by conducting this hands-on energy survey.

California Utilities Partnering for Energy Efficiency

socalgas.com
sdge.com/foodservice
sce.com/ctac
fishnick.com

* May require professional assistance.

Rebates for Equipment Replacement and New Construction

If you are purchasing new foodservice equipment for your facility, now is the time! We offer rebates on qualified pieces of foodservice equipment. These rebates can help you save by offsetting the initial cost of the equipment and lower operating costs year after year with new high-efficiency equipment. For rebate applications and qualifying equipment lists, visit your utility’s web site noted on the front of this survey.

© 2013 Southern California Gas Company. The above trademarks belong to their respective owners. All rights reserved. Some materials used under License, with all rights reserved by the Licensor.

Printed on recycled paper. N060007 0813 2K
### Kitchen and Serving

#### Lighting (Illumination)
- Install ENERGY STAR® compact fluorescent lamps, LEDs or induction lighting-use dimmable lamps with dimming switches.
- Follow appliance start-up and shutdown schedule. Emphasize attention to overhead lighting, storage and perimeter lighting.
- Repair or replace twist-timer light controls.

#### Ventilation (Air)
- Check thermostat settings and programming.
- Install programmable thermostats.
- Install a low-flow, pre-rinse spray valve at the pot washing sink.
- Replace all water leaks—especially hot water.
- Reduce fire hazards by repairing or replacing damaged grease filters in the exhaust hood.
- Turn off kitchen exhaust and make-up air fans when appliances are off.

#### Refrigeration (Cold Food)
- Install strip curtains and replace damaged strip curtains.
- Install dishwasher exhaust hood when kitchen is closed.
- Fully load dishwasher racks.

#### Sanitation (Water)
- Install ENERGY STAR® compact fluorescent lamps, LEDs or induction lighting (use dimmable lamps with dimming switches.)
- Install energy-efficient conveyors and water troughs when possible.
- Repair all water leaks—especially hot water.
- Insulate hot water lines.
- Repair or replace dishwasher tank heaters when kitchen is closed.

#### Food Prep (Hot Food)
- Install a low-flow, pre-rinse spray valve at the pot washing sink.
- Repair all water leaks—especially hot water.
- Clean upper and lower ventilation systems.
- Prevent外籍 customers from tampering.
- Install programmable thermostats.

#### Observations (Sanitation)
- Turn off restroom exhaust fans during unoccupied hours.
- Replace damaged refrigerator door gaskets.
- Clean condenser coils.
- Install energy-efficient conveyors and water troughs when possible.
- Clean the photographic cell.
- Convert to energy-efficient ECM motors on evaporator and condenser fans.
- Use remotely controllable thermostat if there are problems with tampering.

#### Observations (Ventilation)
- Change water filtration filters.
- Install programmable thermostats.
- Check refrigerant level and charge if necessary—sight glass clear = full charge.
- Install energy-efficient conveyors and water troughs when possible.
- Install energy-efficient conveyors and water troughs when possible.
- Install a low-flow, pre-rinse spray valve at the pot washing sink.

### Serving (Cold Food)

#### Observations (Sanitation)
- Turn off dishwasher exhaust hood when kitchen is closed.
- Turn off rest room exhaust fans during unoccupied hours.
- Fully load dishwasher rack.
- Turn off conveyors and water troughs when possible.

### Dining Room

#### Lighting (Illumination)
- Install energy-efficient conveyors and water troughs when possible.
- Replace T8 fluorescent lamps and magnetic ballasts with T8 or T5 lamps and electronic ballasts (de-lamp where possible).*
- Repair or replace dishwasher tank heaters when kitchen is closed.
- Clean lighting fixtures and remove unnecessary lamps (de-lamp) and disconnect their ballasts.*
- Install occupancy sensors and timers in isolated spaces such as storage areas or walk-ins.
- Repair or replace twist-timer light controls.

#### Ventilation (Air)
- Install a low-flow, pre-rinse spray valve at the pot washing sink.
- Repair all water leaks—especially hot water.
- Clean upper and lower ventilation systems.
- Prevent tampering.
- Install programmable thermostats.

#### Sanitation (Water)
- Install energy-efficient conveyors and water troughs when possible.
- Repair all water leaks—especially hot water.
- Insulate hot water lines.
- Repair or replace twist-timer light controls.
- Install Programmable thermostats.

#### Food Prep (Hot Food)
- Install energy-efficient conveyors and water troughs when possible.
- Repair all water leaks—especially hot water.
- Insulate hot water lines.
- Repair or replace dishwasher tank heaters when kitchen is closed.
- Clean upper and lower ventilation systems.
- Prevent tampering.
- Install programmable thermostats.

#### Observations (Sanitation)
- Turn off dishwasher exhaust hood when kitchen is closed.
- Turn off rest room exhaust fans during unoccupied hours.
- Fully load dishwasher rack.
- Turn off conveyors and water troughs when possible.

#### Observations (Ventilation)
- Install energy-efficient conveyors and water troughs when possible.
- Repair all water leaks—especially hot water.
- Insulate hot water lines.
- Repair or replace twist-timer light controls.
- Install Programmable thermostats.

[* May require professional assistance. *]
### Kitchen and Serving

#### Lighting (Illumination)
- Install ENERGY STAR® compact fluorescent lamps, LEDs or induction lighting-use dimmable lamps with dimming switches.
- Clean lighting fixtures and remove unnecessary lamps (de-lamp) and disconnect their ballasts.*
- Install occupancy sensors and/or timers in isolated spaces such as storage rooms or walk-ins.
- Repair or replace twist-timer light controls.

#### Water (Sanitation)
- Install a low-flow, pre-rinse spray valve at the pot-washing sink.
- Repair all water leaks—especially hot water.
- Set water heater at proper temperature—usually 120°F to 140°F. Examine for leaks on the water heater pressure-relief valve.
- Insulate hot water lines.
- Turn off hot water recirculating pumps when kitchen is closed.
- Survey hot water hose usage and reduce if possible.
- Consider installing a high-pressure nozzle or water bong on hot water hose.
- Turn off hot water to scoop wells and/or drip wells when not needed.
- Encourage proper defrosting—do not use hot water.
- Change water filtration filters.
- Activate and maintain water heater automated flue dampers.

#### Air (Ventilation)
- Check thermostat settings and programming.
- Install programmable thermostats.
- Place fresh batteries in existing programmable thermostats.
- Turn off kitchen exhaust and makeup-air fans when appliances are off.
- Consider variable-speed drives for kitchen exhaust and makeup-air fans.
- Decommission exhaust fans that are no longer needed.
- Move four-way diffusers away from exhaust hoods.*
- Place heavy-duty appliances (ranges and charbroilers) in the center of the hood.
- Place appliances completely under their exhaust hoods.
- Replace and insulate faulty condensate drain line heater wire.
- Clean condenser coils.
- Clean evaporator coils.
- Check defrost time clock and set properly.
- Check evaporator for icing. If ice is present, call a service company.
- Check walk-in cooler and freezer temperatures. Adjust temperature to proper setting.
- Check refrigerant level and recharge if necessary—sight glass clear = full charge.*
- Turn off door heaters if no ice.*
- Purchase ENERGY STAR reach-in refrigerators and freezers.

#### Refrigeration (Cold Food)
- Replace damaged refrigerator door gaskets.
- Install strip curtains and replace damaged strip curtains.
- Install door closers and repair or replace damaged door closers.
- Align refrigerator doors—ensure they close properly.
- Keep refrigerator doors, ice machine and prep table covers closed.
- Maintain good air flow around the evaporator. Remove boxes from front and any objects (plastic bags) from rear.
- Replace and insulate faulty condensate drain line heater wire.
- Install an evaporator fan controller in walk-in.* Or install high-efficiency ECM motors on evaporator and condenser fans.
- Clean condenser coils.
- Clean evaporator coils.
- Check defrost time clocks and set properly.
- Check evaporator for icing. If ice is present, call a service company.
- Check walk-in cooler and freezer temperatures. Adjust temperature to proper setting.
- Check refrigerant level and recharge if necessary—sight glass clear = full charge.*
- Turn off door heaters if no ice.*
- Purchase ENERGY STAR reach-in refrigerators and freezers.

#### Food Prep (Hot Food)
- Follow an appliance start-up and shutdown schedule. Emphasize attention to broilers, ovens, griddles, rotisseries, pasta cookers and fryers.
- Turn off plug loads when possible. Emphasize attention to heat lamps, coffee warmers, holding cabinets, steam tables, plate warmers and conveyor toasters.
- Clean and repair range tops, replace missing knobs, fix air shutters and adjust flame.
- Align oven and steamer doors and replace missing gaskets.
- Repair leaks in gas lines and valves.*
- Establish monthly equipment maintenance schedules.

#### Observations (Sanitation)
- Establish monthly equipment maintenance schedules.
- Repair leaks in gas lines and disconnect their ballasts.*
- Replace T12 fluorescent lamps and magnetic ballasts with T8 or T5 lamps and electronic ballasts (de-lamp where possible).*
- Clean lighting fixtures and remove unnecessary lamps (de-lamp) and disconnect their ballasts.*
- Replace T12 fluorescent lamps and magnetic ballasts with T8 or T5 lamps and electronic ballasts. De-lamp where possible, use dimming ballasts, with integrated photo cell controls if sufficient daylighting exists.*
- Install LED retrofit lamp kits and/or new LED exit signs.
- Install occupancy sensors in isolated spaces such as banquet or party rooms.
- Install occupancy sensors in restrooms (keep one fixture/lamp on during occupied hours).*
- Install window film to block sun-generated heat, use high quality film and professional installer.* Note: energy payback is longer, however customer satisfaction is immediate.

### Dining Room

#### Lighting (Illumination)
- Install ENERGY STAR® compact fluorescent lamps, LEDs or induction lighting-use dimmable lamps with dimming switches.
- Clean lighting fixtures and remove unnecessary lamps (de-lamp) and disconnect their ballasts.*
- Emphasize attention to broilers, ovens, griddles, rotisseries, pasta cookers and fryers.
- Turn off plug loads when possible. Emphasize attention to heat lamps, coffee warmers, holding cabinets, steam tables, plate warmers and conveyor toasters.
- Clean and repair range tops, replace missing knobs, fix air shutters and adjust flame.
- Align oven and steamer doors and replace missing gaskets.
- Repair leaks in gas lines and valves.*
- Establish monthly equipment maintenance schedules.

#### Observations (Sanitation)
- Check thermostat settings and programming:
  - Set thermostat to 76°F for occupied cooling and 85°F for unoccupied (include pre-cooling if necessary). Turn off air conditioning fan during unoccupied hours.
  - Set thermostat to 68°F for occupied heating and 55°F for unoccupied (include pre-heating if necessary). Turn off heating fan during unoccupied hours.
  - Install programmable thermostats with locking covers. Use remotely controllable thermostat if there are problems with tampering.
  - Place fresh batteries in existing programmable thermostats.
  - Turn off restroom exhaust fans during unoccupied hours.

#### Air (HVAC)
- Install a low-flow, pre-rinse spray valve at the dish machine.
- Repair all water leaks—especially hot water.
- Avoid tank heater failure—inspect elements for corrosion.
- Fully load dishwasher racks.
- Turn off conveyors and water troughs when possible.
- Turn off dishwasher tank heater when kitchen is closed.

#### Water (Sanitation)
- Install a low-flow, pre-rinse spray valve at the pot-washing sink.
- Repair all water leaks—especially hot water.
- Set water heater at proper temperature—usually 120°F to 140°F. Examine for leaks on the water heater pressure-relief valve.
- Insulate hot water lines.
- Turn off hot water recirculating pumps when kitchen is closed.
- Survey hot water hose usage and reduce if possible.
- Consider installing a high-pressure nozzle or water bong on hot water hose.
- Turn off hot water to scoop wells and/or drip wells when not needed.
- Encourage proper defrosting—do not use hot water.
- Change water filtration filters.
- Activate and maintain water heater automated flue dampers.

#### Observations (Sanitation)
- Establish monthly equipment maintenance schedules.
- Repair leaks in gas lines and disconnect their ballasts.*
- Replace T12 fluorescent lamps and magnetic ballasts with T8 or T5 lamps and electronic ballasts (de-lamp where possible).*
**FIVE SURVEY AREAS:**
1. **Kitchen and Serving**
2. **Dining Room**
3. **Dish Room**
4. **Rooftop**
5. **Parking Lot and Exterior**

---

**Rebates for Equipment Replacement and New Construction**

If you are purchasing new foodservice equipment for your facility, now is the time! We offer rebates on qualified pieces of foodservice equipment. These rebates can help you save by offsetting the initial cost of the equipment and lower operating costs year after year with new high-efficiency equipment. For rebate applications and qualifying equipment lists, visit your utility’s web site noted on the front of this survey.

---

**Observations (Ventilation)**
- Clean exhaust fans and check for loose or broken belts.
- If exhaust or condenser fan motors need replacement, use high-efficiency motors and/or direct drive units (no fan belts).*
- Maintain evaporative coolers—check media, water flow, sump, fan belt, float level and drain.
- Replace dirty air conditioner filters.
- Maintain economizers on air conditioning units. Ensure they operate and are set to maximize outside air.
- If roofing is to be replaced, install a light color (cool) roof.*

---

**Observations (Illumination)**
- Check lighting time clock and/or photocells (install if none exist).*
- Turn off parking lot lights whenever possible.
- Install ENERGY STAR compact fluorescent lamps, LEDs or induction lighting.
- Convert all quartz-halogen lamps to equal light output (not wattage) pulse-start metal halide (PSMH) or high-pressure sodium (HPS).*

---

**Observations (HVAC)**
- Clean condenser coils.
- Shade condenser coils.
- Check condenser level—sight glass clear = full charge. If necessary, call a service company to recharge.
- Insulate refrigerant suction lines.
- Check refrigerant lines or compressor body for icing. If ice is present, call a service company.
- Check walk-in defrost time clocks and set properly.
- If there is a compressor time clock (not recommended), ensure it is set properly or disable.
- Check if compressors run short cycles. If cycling on/off in less than three minutes for extended periods, call a service company.
- Check compressors for oil leaks. If leaks exist, call a service company.

---

**Observations (Cold Food)**
- Air (Ventilation)
  - Clean exhaust fans and check for loose or broken belts.
  - If exhaust or condenser fan motors need replacement, use high-efficiency motors and/or direct drive units (no fan belts).*
  - Maintain evaporative coolers—check media, water flow, sump, fan belt, float level and drain.
  - Replace dirty air conditioner filters.
  - Maintain economizers on air conditioning units. Ensure they operate and are set to maximize outside air.
  - If roofing is to be replaced, install a light color (cool) roof.*

---

**Observations (HVAC)**
- Check refrigerant level—sight glass clear = full charge. If necessary, call a service company to recharge.
- Insulate refrigerant suction lines.
- Check refrigerant lines or compressor body for icing. If ice is present, call a service company.
- Check walk-in defrost time clocks and set properly.
- If there is a compressor time clock (not recommended), ensure it is set properly or disable.
- Check if compressors run short cycles. If cycling on/off in less than three minutes for extended periods, call a service company.
- Check compressors for oil leaks. If leaks exist, call a service company.

---

**Rebates for Equipment Replacement and New Construction**

If you are purchasing new foodservice equipment for your facility, now is the time! We offer rebates on qualified pieces of foodservice equipment. These rebates can help you save by offsetting the initial cost of the equipment and lower operating costs year after year with new high-efficiency equipment. For rebate applications and qualifying equipment lists, visit your utility’s web site noted on the front of this survey.

---

**Where the Energy Goes:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigeration</td>
<td>6%</td>
</tr>
<tr>
<td>Lighting</td>
<td>13%</td>
</tr>
<tr>
<td>Sanitation</td>
<td>18%</td>
</tr>
<tr>
<td>HVAC</td>
<td>28%</td>
</tr>
<tr>
<td>Food Preparation</td>
<td>35%</td>
</tr>
</tbody>
</table>

---

* May require professional assistance.

---

**Do It Yourself Energy Survey**

*Experience the efficiency* by conducting this hands-on energy survey.