PG&E's Energy Management Solutions for

RESTAURANTS

Pacific Gas and Electric Company offers design assistance and financial incentives, as well as education and training to support energy efficient restaurants and food service facilities.

PG&E's Food Service Technology Center (FTSTC), the nation's premier source for food service efficiency research and education, is available to help you with all your food service energy needs. Whether you are planning a new facility, retrofitting old inefficient equipment, or implementing demand response capabilities, PG&E's energy management solutions can be customized to meet the unique needs of your project.

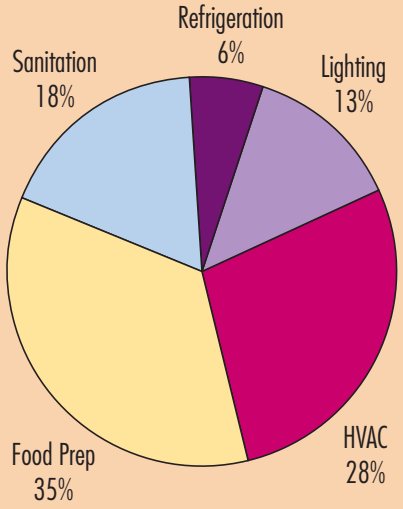
For more information on PG&E's ENERGY MANAGEMENT SOLUTIONS, call the Business Customer Center (800) 468-4743 or visit www.pge.com/business

Pacific Gas and Electric Company®

Restaurants rank among the most energy-intensive commercial spaces in California on a square-foot basis.

Many opportunities exist to improve energy efficiency, lower operating costs, and improve the performance of the building and cooking systems. The figure at right is a representative breakdown of energy consumption by end-use in a typical full service restaurant. It clearly illustrates that cooling, cooking/refrigeration, and lighting systems consume the most energy in restaurants. PG&E's Food Service Technology Center can help you reduce energy use and lower the energy bills. For more information visit www.pge.com/fstc.

ENERGY USE IN RESTAURANTS



THE FOLLOWING STRATEGIES CAN ASSIST TO CREATE AN ENERGY EFFICIENT RESTAURANT.

BUILDING ORIENTATION – Select building orientation to enhance energy performance and thermal comfort. Taking the sun and other environmental factors into account during design can cut heating and cooling bills.

NATURAL LIGHT – Utilize natural light to illuminate dining and cooking areas during the day using perimeter windows, light-pipes and skylights. Daylighting can decrease electric lighting use while enhancing the luminous environment of the interior space. It is important, however, to choose the appropriate window placement, glass, window films and shading strategies to help reduce glare and heat gain from sunlight. Properly designed exterior shading is a cost effective way to keep heat out of the building. In order to reap the highest energy savings and reduce demand, a day lit space should include dimming controls on the electric lights.

LIGHTING – Invest in efficient electric lighting. Investigate, specify, and install energy-efficient fixtures, lamps, and ballasts. Wherever possible, replace incandescent lamps with ENERGY STAR® qualified Compact Fluorescent Lamps (CFLs). Low-temperature models also are available for walk-in refrigerators and freezers. Small, dimmable, cold-cathode compact fluorescent lamps (CCCFLs) are available for many decorative lighting applications. Replace all T12 fluorescent lighting with energy efficient T8 lighting systems. Most food service operations run the lights during the daytime; so, efficient lighting is an effective way to save energy and reduce demand.

LIGHTING CONTROLS – Install occupancy sensors in spaces with variable occupancy such as closets, storage rooms, offices, or walk-in

refrigerators (low-temperature occupancy sensors are available). A lighting control panel with an astronomical clock is an excellent way to ensure that exterior lighting is off during daylight (peak demand) hours.

WATER – Because restaurants use high volumes of water, focus on measures to save water, especially hot water. Check and fix water leaks. Set hot water thermostats no higher than necessary to deliver proper sanitation at the dish machine (usually 140° F measured at the pot sink closest to the dish machine). Add aerators to hand-sinks, insulate hot-water pipes and install low flow pre-rinse valves in the dishroom.

COOKING APPLIANCES – Buy energy efficient or ENERGY STAR qualified appliances whenever possible. Efficient appliances have lower operating costs and typically perform better than low-efficiency models. PG&E offers generous rebates towards the purchase of energy efficient cooking, holding, and refrigeration equipment. For a list of eligible appliances visit PG&E's Food Service Technology Center rebate website at www.fishnick.com/rebates. Try to reduce equipment idle time by implementing a start-up and shut-down schedule and by turning off back-up appliances when possible.

DISHWASHERS – Operate dishwashers efficiently: only run the dishwasher with fully –loaded racks and turn off tank heaters and booster heaters at night. Dishwasher maintenance is important: Check dishwasher rinse pressure and replace worn spray nozzles.

REFRIGERATORS – Buy efficient equipment and implement good maintenance practices: replace damaged strip curtains and ineffective door closers on walk-ins, regularly check and clean condenser and evaporator coils, maintain proper refrigerant charge (requires professional assistance), and shade remote (rooftop) condenser units from direct sunlight. Installing high-efficiency ECM fan motors in walk-ins is an easy way to save energy and reduce demand. Whenever possible, turn off the door heaters on reach-ins. PG&E offers rebates for ECM motors, strip curtains, door closers, and premium efficiency reach-ins and ice machines.

HEATING AND COOLING – Specify high efficiency heating and air conditioning and take advantage of evaporative cooling where possible. Energy and demand savings can be achieved by properly maintaining heating and cooling equipment.. Recommendations include:

- Make sure that economizers are working properly
- Replace air-filters regularly
- Turn duct-mounted make-up air thermostats down to 55° F
- Install programmable thermostats or an energy management system
- Commercial Kitchen Ventilation (CKV)

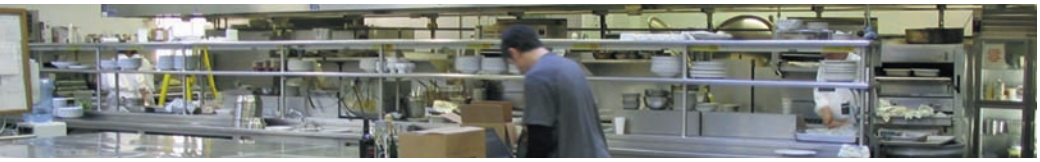
– A properly designed and optimized kitchen exhaust system is one of the most effective energy saving measures. Coupled with a variable speed "demand ventilation" control, a well-designed hood system can reduce the volume of air needed for ventilation by almost 50%. PG&E's Food Service Technology Center offers online CKV design guides, demand ventilation case studies, and other CKV design and operations tips for free at www.pge.com/fstc. Always remember to turn exhaust hoods off when the kitchen is closed!

COMMISSIONING – Proper commissioning of the heating, cooling, and ventilation equipment in a new restaurant will save energy, reduce demand and make the spaced more comfortable. Re-commissioning of an existing facility along with an inspection of the duct work is an excellent way to cut down on building energy costs.

DEMAND RESPONSE – Reduce electricity use during peak utility hours (typically noon to 6 pm) to reduce energy demand and lower utility bills.

PG&E'S ENERGY MANAGEMENT SOLUTIONS can help you control your operating expenses through building energy efficiency and demand response capabilities into your new and existing facilities, and your long-range planning. Services include energy analyses of existing facilities, design assistance for planned projects, equipment rebates, project incentives, and education and training.

PG&E'S Energy Management Solutions



PG&E OFFERS A WIDE RANGE OF SOLUTIONS TO HELP YOU MANAGE THE ENERGY AT YOUR FACILITY. CONTACT PG&E TO FIND OUT HOW YOU CAN TAKE ADVANTAGE OF THESE SERVICES.

Energy Analyses

An energy analysis – also referred to as an "energy audit" – is the first step towards a comprehensive energy management plan and can help you identify a no cost, low cost and investment grade action plan. PG&E offers an on-site Integrated Energy Audit that identifies opportunities in demand response and self-generation as well as energy efficiency.

Energy Efficiency Rebates for Your Business

Rebates are the quickest and simplest way for you to get cash back for your eligible energy efficient purchases. PG&E offers rebates for hundreds of energy-efficient technologies in multiple categories: Appliances and General Improvements, Boilers and Water Heating, Food Service, Heating Ventilation and Air Conditioning (HVAC), Lighting, and Refrigeration. To find out if a product qualifies under the rebate program, go to www.pge.com/biz/rebates/rebates_assistance or contact the Business Customer Center at 1 (800) 468-4743 to request an application and one or more technology catalogs.

Customized Energy Efficiency/Demand Response Incentive Application

For more customized energy efficiency projects or projects with a demand response component, PG&E offers design assistance, calculation support, and standardized incentive rates through the Customized Energy Efficiency/Demand Response Incentive.

Total incentive payments are based on actual reductions in energy usage. Customers and their consultants may sponsor projects under this approach. Be sure to contact PG&E early in the design process, before you start your project, so that you can schedule optional technical support and the required pre-inspection of your existing equipment.

New Construction Design Assistance and Cash Incentives

PG&E's new construction program – also referred to as Savings By Design – provides owner and design team cash incentives, technical design assistance, and education to support the design and construction of energy efficient new facilities and process systems. Incentives are based on exceeding Title 24 requirements by at least 10% for standard building systems, and on exceeding industry standard practice baselines for process systems. Through both the simple Systems Approach and the more integrated Whole Building Approach, owners and design teams may be eligible for cash incentives.

Energy Management Education and Training

You can learn about the latest and best energy-efficiency practices, technologies, tools and more through the hundreds of free classes offered by PG&E every year. To search by market sector, technology, class location (including web-based classes) or target audience, use the Pacific Energy Center's class search tool at www.pge.com/education_training/classes/energy_efficiency

PG&E's Food Service Technology Center

Serving Up The Best In Energy Efficiency Consulting Services Since 1987 PG&E's Food Service Technology Center provides nationally-recognized energy efficiency consulting services to the commercial food service industry. Restaurant owners and operators, institutional food service providers, cooking equipment manufacturers and kitchen designers rely on the FSTC to provide unbiased, comprehensive information about energy use and efficiency. Operated under contract to PG&E by Fisher-Nickel, inc., the center provides an array of services to the industry, including:

- Kitchen equipment test reports, allowing customers to objectively compare the performance of cooking and food preparation equipment.
- Design consultation services, helping business owners design and specify equipment for their food service operations for maximum efficiency.
- On-site facility surveys, culminating in a list of recommended actions to cut energy use and costs.
- Educational seminars covering all aspects of energy performance in commercial kitchens.
- Equipment testing services to determine the energy and performance characteristics of food service equipment.

To learn more about the services available to you visit the FSTC website at www.pge.com/fstc.

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