



# Energy Management for Your Business



## PG&E's Energy Solutions for Restaurants

### Industry Facts

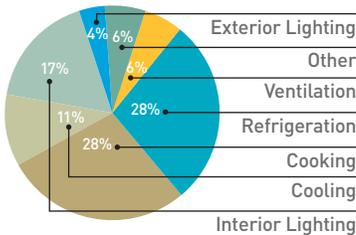
Food service facilities are highly energy intensive, using three times more energy than other types of commercial buildings. Up to 80 percent of that energy does no useful work and is wasted through excess heat and noise from inefficient equipment, heating ventilation and air conditioning systems and lighting and refrigeration. We understand that your day-to-day restaurant operations are your first priority. That is why our energy management experts are prepared to help solve your energy challenges.

### Benefits of energy management:

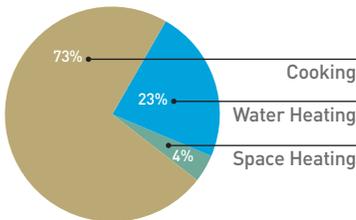
Energy management experts from Pacific Gas and Electric Company (PG&E) can help minimize operating costs. In 2011, PG&E paid more than \$2 million in energy-efficiency incentives to restaurants, resulting in an annual energy savings of more than 12 million kilowatt-hours (kWh) and 120,000 therms. By working with PG&E's energy specialists, you can help solve the unique energy management challenges of your restaurant facilities.

Contact PG&E to have our energy management experts help your food service facilities save energy and money, ensure the reliability of California's electric grid and reduce greenhouse gas emissions.

Major Electricity Use in Restaurants



Major Gas Use in Restaurants



### Energy Management Services for Restaurants

Service	Description	Result
<b>Pricing Plans</b>	Analysis of your business's energy usage patterns to determine your most beneficial pricing plan	Can reduce your energy bills
<b>Customized Retrofit Incentives</b>	Incentives for replacing equipment and systems to achieve greater energy efficiency	Reduces energy costs and improves operations
<b>Energy-efficiency Rebates</b>	Rebates paid for installing qualifying energy-efficient equipment	Improves return on investment for most common measures
<b>Energy Audits</b>	Assessment of your site to identify the best opportunities for improved energy efficiency and potential savings	Analyzes current energy usage and identifies savings opportunities
<b>New Construction</b>	Resources and incentives for energy-efficient design and construction	Increases operational efficiency and reduces energy costs
<b>Automated Benchmarking Service (ABS)</b>	Online tool to monitor monthly energy-usage data using ENERGY STAR® Portfolio Manager	Measurement and tracking of your energy performance
<b>Financial Modeling</b>	Help with determining how and where value will flow from energy-efficiency investments	Better sharing of costs and benefits in multi-tenant buildings
<b>LEED Assistance</b>	Assistance achieving energy and atmosphere credits in the LEED certification process	Collaboration and alignment of environmental goals
<b>Demand Response</b>	Incentives for voluntary temporary load reduction during peak demand periods	Reduces peak energy costs and ensures the reliability of California's electrical grid
<b>Solar and Self-generation</b>	Rebates for the installation of photovoltaic, wind, fuel cell and other generation systems	Reduces energy costs and carbon footprint
<b>On-bill Financing (OBF)</b>	No-interest loans available to eligible customers for energy-efficient retrofit projects, to be repaid through monthly PG&E bills	Provides financing for energy-efficiency projects

## Energy-efficient Solutions and New Technologies

Here are some of the most popular measures and technologies that can be used in food service buildings to save money and energy. PG&E account representatives, program partners and affiliates can help you choose the energy-efficiency projects and products that make the most sense for your restaurant.



### Energy-efficiency Measures

Measure	Benefit	Typical Payback
<b>Optimize Controls Strategy</b>	Improved scheduling, sequencing and set-points can reduce wasted energy.	<b>Immediate to 1 year</b>
<b>Lighting Controls</b>	Electronic controls can be used to switch off lights when not in use.	<b>1.5–6 years</b>
<b>Indoor Lighting Upgrades</b>	Replacing older generations of fluorescent lamps with the latest ones or converting to LEDs or HIDs, where applicable, can lower lighting costs.	<b>2–5 years</b>
<b>Variable Frequency Drives (VFDs) on Motors</b>	VFDs on supply air and cooling tower fans improve efficiency by matching the motor speed to the load requirement.	<b>2–7 years</b>
<b>Window Film</b>	Window film can reduce heat gain through windows and lower cooling costs.	<b>3.5–6 years</b>

### New Technologies

Measure	Benefit
<b>Wireless Building Controls</b>	Increased monitoring and control of building systems without installation of costly wiring
<b>Discharge Air Regulation Technique (DART)</b>	Low-cost way to improve constant-volume air handling efficiencies—without a major retrofit to variable air volume (VAV)—using advanced fan control
<b>Daylight Harvesting Ballasts</b>	New lighting ballasts that automatically adjust output based on daylight conditions
<b>Task/Ambient Lighting</b>	An innovative way to lower lighting energy use by lowering ambient levels and employing high-efficiency task lighting (typically LED)
<b>Frictionless Chiller Compressor</b>	Increased chiller efficiencies (especially at part-load) through the use of energy-efficient frictionless compressors
<b>Variable Refrigerant Flow Package Units</b>	More efficient and effective delivery of cooling by varying refrigerant flow as opposed to just airflow
<b>Digital Controls System Upgrades</b>	Digital controls to track and manage energy use in buildings more precisely

## New Regulatory Requirements

PG&E's energy management services can also help your organization meet the following energy-focused standards for California food service buildings.

### California Energy Standards

Name	Description
<b>California Title 24</b>	Specifies minimum building energy performance
<b>California AB 1103</b>	Mandates benchmarking of commercial buildings being sold, leased or refinanced
<b>California AB 32 (Global Warming Solutions Act)</b>	Requires businesses to reduce greenhouse gas emissions
<b>Nitrogen Oxide (NOx) Boiler Standards</b> (San Francisco Bay Area and San Joaquin Valley)	Specifies lower levels of allowable NOx emissions associated with boiler systems
<b>Green Building Initiative State of California Executive Order S-20-04</b>	Requires improved energy efficiency and reduced water consumption to balance out the carbon footprint of all new buildings in California

## Your Next Steps with PG&E

For more information on how PG&E can help you manage energy consumption and reduce costs at your property, visit [www.pge.com/foodservice](http://www.pge.com/foodservice).

To get started, contact your local PG&E account representative or call our Business Customer Service Center at 1-800-468-4743.