

COMMERCIAL PROPANE APPLICATIONS: COOKING EQUIPMENT

FACT SHEET

Propane cooking equipment delivers the performance professionals want while decreasing fuel consumption and providing convenience and functionality in any commercial kitchen.

Propane cooking equipment is an effective option for newly constructed kitchens, replacing aging and inefficient equipment in existing facilities, and kitchen space fit-outs for new owners/tenants. New propane-powered Energy Star certified equipment is 10 percent to 60 percent more efficient than standard equipment, [TABLE 1] depending on product type. Replacing older equipment can reduce utility costs while upgrading features, quality, and style of the equipment.

TABLE 1 EFFICIENCY IMPROVEMENT OF ENERGY STAR EQUIPMENT COMPARED WITH STANDARD

EQUIPMENT	IMPROVEMENT PERCENT
Deep Fryers	30-35 Percent
Griddles	10 Percent
Steam Cookers	60 Percent
Convection Ovens	20 Percent



Source: Energy Star Guide for Cafés, Restaurants, and Institutional Kitchens. energystar.gov. Accessed October 2015

PERFORMANCE

High-performance propane ranges, cooktops, and ovens are preferred by a majority of professional chefs and designers, for their own use as well as for their clients. It's an effective option for newly constructed kitchens, replacing aging and inefficient equipment in existing facilities, and kitchen space fit-outs for new owners/tenants. When compared with its electric counterparts, propane offers significant benefits.

- Greater control of heating levels
- Instant-on burners allow cooking to start right away
- Greater capacity levels
- Even heat distribution
- Design flexibility

Propane cooking equipment typically lasts eight years or more in most commercial kitchens, which generally outpaces electric counterparts. The larger size of commercial cooking equipment also puts propane ahead of electric units. For example — large capacity fryers, with 40 gallons of oil or more, are almost exclusively gas-heated units. These high capacity units offer significant benefits for efficiency levels, heat recovery time, and production rates.



APPLICATIONS FOR USE

- Restaurants
- Hotels
- Schools
- Hospitals
- Public Assembly

AT A GLANCE

- Perfect for new construction, replacements, and fit-outs.
- Greater temperature control and even heat distribution.
- Equipment life-cycles of eight years or more.
- Cut CO₂ emissions roughly 40- 50 percent compared with electric.



ENERGY EFFICIENCY

Cooking appliances are used in many commercial buildings. To manage these costs, owners and designers can utilize several cooking appliance categories labeled by the Energy Star program for both propane or electric cooking equipment. Energy Star criteria establishes minimum levels for how much energy is delivered to the cooking process, as well as the energy consumption rate during idle mode.

ENERGY CONSUMPTION AND COSTS

Propane ranges, ovens, and other cooking appliances will have wide variations in energy use and costs depending primarily on frequency of use. But regardless of the specific operational profile, any commercial cooking facility can save money by replacing older cooking appliances with Energy Star certified equipment [TABLE 2].


ENVIRONMENTAL

Propane cooking results in lower CO₂ emissions when compared with electric cooking. This is because a large portion of electricity production comes from fossil fuel-fired generation plants that release CO₂ emissions as part of the generation process. Based on typical cooking usage levels and the emissions which electricity generation creates, CO₂ emissions due to propane cooking are cut roughly 40- 50 percent when compared with electrical alternatives.

Further, high-efficiency equipment also reduces energy consumption and thus the carbon footprint of a facility. According to Energy Star, a fully outfitted commercial food service kitchen can prevent roughly 34,000 pounds of greenhouse gas emissions annually.



TABLE 2 APPLIANCE SAVINGS

	ANTICIPATED ANNUAL SAVINGS OVER STANDARD EQUIPMENT	
	Gas/Propane*	Electric
Commercial Appliances		
Standard Fryers	\$440	\$100
Large Vat Fryers	\$500	\$150
Steam Cookers	\$1,100	\$1,100
Combination Ovens	\$250	\$700
Convection Ovens	\$150	\$100
Griddles	\$100	\$120

*Energy Star savings estimates provided for gas systems. Propane savings will vary, and can be estimated by dividing gas savings by a factor generally ranging from 1.25 to 2 depending on actual pricing

FOR MORE INFORMATION

To learn more about commercial cooking equipment and the Propane Education & Research Council, visit buildwithpropane.com.

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The Propane Education & Research Council was authorized by the U.S. Congress with the passage of Public Law 104-284, the Propane Education and Research Act (PERA), signed into law on October 11, 1996. The mission of the Propane Education & Research Council is to promote the safe, efficient use of odorized propane gas as a preferred energy source.