

# DoubleTree Hotel Pleasanton, CA

Restaurant Case Study



## Savings By The Numbers

DoubleTree Hotel by Hilton, an upscale, business-oriented hotel in Pleasanton, CA, needed to try something different. Their high-volume kitchen serves a full-service restaurant, room service, and catering throughout the year including business parties and weddings. But their ever-growing utility bill (especially in electric and water usage) was beginning to cripple their bottom-line. How could DoubleTree streamline their kitchen cookline to be more energy efficient while still providing their highly esteemed food services?

The energy efficiency experts at PG&E's Food Service Technology Center (FSTC) performed a site assessment to identify opportunities to improve the back-of-house efficiencies at DoubleTree.

Of all the appliances, the steamers were one of the biggest concerns. The DoubleTree kitchen consisted of three double-compartment boiler-based steamers: one on the front cookline and two on the back cookline. The eight year old steamers were rarely used simultaneously because they constantly required repairs. The three steamers accounted for 66% of the total electric load at DoubleTree. The FSTC also found that the steamers were consuming a combined 246 gallons of water per day. During the monitoring process, the FSTC discovered a 0.06 gal/min valve leak on one of the steamers (Steamer #2), which consumed an average 79 gallons of water per day when the steamer was not in use. Due to their age, frequent need for service, and excessive energy and water use, FSTC researchers recommended replacing all three steamers with energy-efficient alternatives.

DoubleTree replaced the energy-intensive steamers with two energy-efficient steamers and a versatile, energy-efficient combination oven, resulting in a 134 kWh/day and 187 gal/day savings.

Existing Equipment	Replacement Equipment	Benefits	Energy Costs Savings (\$/year) <sup>1</sup>	PG&E Rebate <sup>2</sup>
<b>Steamer #1:</b> Double-compartment steamer (front cookline)	Energy-efficient steam-generator electric steamer with a reduced water consumption condensate cooling system	Reduced energy and water use by running the steam generator only when cooking	\$2,183	\$2,500
<b>Steamer #2:</b> Double-compartment steamer (back cookline)	Energy-efficient 10-pan gas combination oven	<ul style="list-style-type: none"> <li>Increased menu flexibility</li> <li>Reduced water consumption</li> <li>Improved cooking performance</li> <li>Reduced dependence on steamers &amp; convection ovens</li> </ul>	\$2,539	\$700
<b>Steamer #3:</b> Double-compartment steamer (back cookline)	Energy-efficient gas steamer with steam generator	Reduced energy and water use through temperature setback with cooking timer off	\$2,247	\$4,000
<b>Total Savings</b>			<b>\$7,970<sup>3</sup></b>	<b>\$7,200</b>

<sup>1</sup> Facility operates 18 hrs/day, 364 day/year with utility costs of \$0.15/kWh, \$11/CCF (water and sewer), \$1.00/therm

<sup>2</sup> visit: [fishnick.com/saveenergy/rebates](http://fishnick.com/saveenergy/rebates)

<sup>3</sup> Total Savings includes \$1,001 in combined water and sewer savings

Instead of having to use whichever steamer was awaiting repair, DoubleTree could now effectively manage their cooking needs, using the gas or electric replacement steamer for high production steaming and combi oven as either an extra steamer or extra convection oven depending on their needs. Replacing the three steamers saved DoubleTree **\$7,970** annually on their utility bill. The replacement equipment at DoubleTree qualified for **\$7,200** in PG&E rebates designed to help offset the initial cost of new, energy-efficient appliances.



Energy-efficient electric steamer (left), energy-efficient 10-pan gas combination oven (center), and energy-efficient gas steamer (right).