

MANUFACTURING FACT SHEET

Energy Management for Your Business



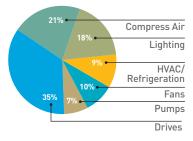
PG&E's Energy Solutions for Manufacturing Facilities

Industry Facts

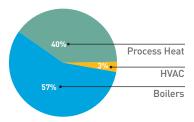
Energy management experts from Pacific Gas and Electric Company (PG&E) are ready to help your facility meet today's energy challenges. California's manufacturing industry processes are energy intensive and consume enormous amounts of energy. Production inefficiencies are often related to deficient operating and maintenance practices, which could lead to higher energy costs. Operational efficiencies can be maximized through smart energy management, optimization of your systems and installation of energy-efficient equipment and technology.

A significant portion of your facilities' financial success depends on reducing your controllable costs. PG&E's manufacturing energy specialists can help you use energy more efficiently, maximize the return on your investments, improve net operating income, increase building and facility asset value and balance out your carbon footprint.

Major Electricity Use in Manufacturing Facilities



Major Gas Use in Manufacturing Facilities



Energy Management Services for Manufacturing Facilities

Service	Description	Result
Pricing Plans	Analysis of your industrial facilities' energy usage patterns to determine your most beneficial pricing plan	Can reduce your energy bills
Customized Retrofit Incentives	Incentives for replacing equipment and systems to achieve greater energy efficiency	Reduces energy costs, lowers GHG emissions and increases operational efficiency
Energy-efficiency Rebates	Rebates paid for installing qualifying energy-efficient equipment	Improves return on investment for most common measures
Energy Audits	Assessment of your site to identify the best opportunities for improved energy efficiency and potential savings	Analyzes current energy usage and identifies savings opportunities
New Construction	Resources and incentives for energy-efficient design and construction	Increases operational efficiency and reduces energy costs
Demand Response	Incentives for voluntary temporary load reduction during peak demand periods	Reduces peak energy costs and ensures the reliability of California's electrical grid
Solar and Self-generation	Rebates for the installation of photovoltaic, wind, fuel cell and other generation systems	Reduces energy costs and carbon footprint
On-bill Financing (OBF)	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

"The installation of the variable volume injection molding machine was very successful. Not only do we really notice the energy savings, but the new machine helps us to be more productive, because the new technology allows us to produce components that require greater control."

Ebi Mogharei, Hayward Plant Manager, INJEX Industries

Your Next Steps with PG&E

For more information on how PG&E can help your manufacturing facility manage energy consumption and reduce costs, visit www.pge.com/industrial.

You can also contact your PG&E account representative or call our Business Customer Service Center at 1-800-468-4743.

Energy-efficiency Solutions and New Technologies

Here are some of the most popular measures and technologies that manufacturing facilities can use to save money and energy. PG&E account representatives, program partners and affiliates can help you choose the projects that make the most sense for your business.

Energy-efficiency Measures

Measure	Investment	Typical Payback
Steam Traps	Low Cost	1 year
Lighting Improvements	Low Cost	1–2 years
Motor System Opportunities	Low Cost	1-2 years
Tank and Pipe Insulation	Low Cost	1-2 years
Air Compressor Systems	Smart Investment	1-2 years
Boiler Upgrade or Replacement	Smart Investment	1–5 years
Steam or Water Process Boiler	Smart Investment	1–5 years
Cooling Tower with VSD	Smart Investment	2–3 years
Chiller Upgrade or Replacement	Smart Investment	2–10 years
Injection Molding Machines	Smart Investment	3–5 years

New Technologies

Measure	Benefit
Fork Lift Battery Charger	New, high-frequency battery chargers
LED Lighting	LEDs are more energy efficient than incandescent lamps and can reduce the amount of energy your facility uses.

New Regulatory Requirements

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

California Energy Standards

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