

Funding Opportunities For Energy Efficiency A California Perspective



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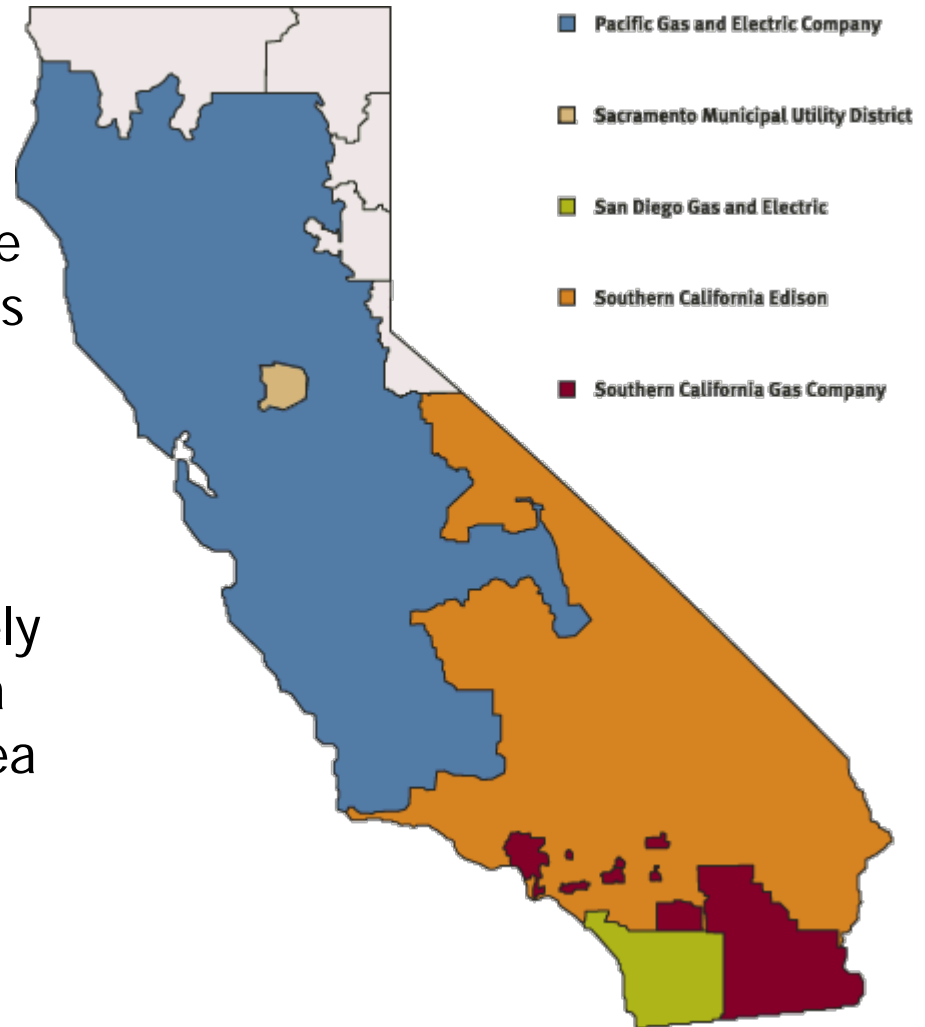
Energy Efficiency and Funding

- Overview of PG&E's Energy Efficiency Programs
- Who does PG&E serve?
- Why is PG&E committed to energy efficiency?
- PG&E programs and financial incentives
- Resources

PG&E's Service Territory

Pacific Gas and Electric Company, incorporated in California in 1905, is one of the largest combination natural gas and electric utilities in the US.

Based in San Francisco, PG&E provides [natural gas](#) and [electric service](#) to approximately 15 million people throughout a 70,000-square-mile service area in northern and central California.



PG&E and Energy Efficiency

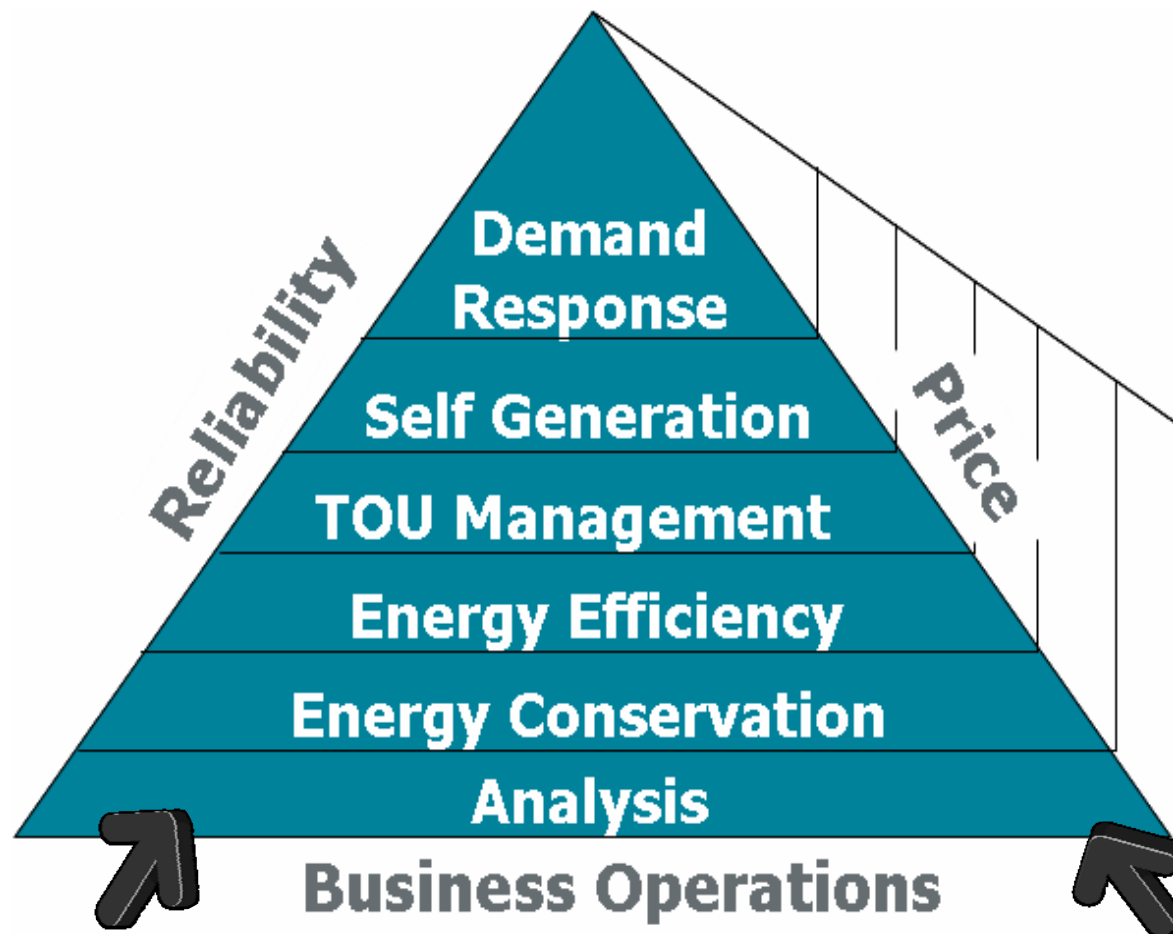
PG&E is celebrating its 33rd year of operating energy efficiency programs and is currently running the largest and most diverse portfolio of programs in the nation



Program Expenditures
2006-2008 \$1.0 billion
2010-2012 \$1.3 billion

Energy efficiency programs are far more cost effective in meeting energy demand than building new generation or purchasing power on the spot market.

The Integrated Energy Management Pyramid



“California Loading Order”

California Ag Energy Snapshot

Energy consumption in the ag sector is concentrated in 3 end uses:

- irrigation, process heat applications, and refrigeration.
- Irrigation *pumping* accounts for 80% of electric energy - averages 53% efficient

Target Customers:

- Irrigated Agriculture
- Dairies
- Refrigerated Warehouses
- Vineyards & Wineries
- Greenhouses & Nurseries
- Post-Harvest Processing (on and near farm)
- Confined Animal Feeding Operations (feedlots)

Customized, Retrofit and New Construction Efficiency Projects in 2008–2009

Ag Projects

- 230 Ag/Pump projects
- 120 Winery/brewery
- 83 Post-Harvest
- 60 Refrig Warehouse
- 47 Dairy
- 39 Greenhouse

Food Processing

- 40 Fruit/ Veg. Canning
- 33 Misc. Food Manuf.
- 20 Beverage Processors
- 19 Dairy Processors
- 15 Bakeries
- 13 Confectioners
- 12 Oils Processing
- 12 Animal Processing
- 6 Poultry

Top Technology Opportunities

Ag

- High Bay lights
- Pump Repairs
- VFDs
- Wine Tank Insulation
- Milk Pump VFDs
- Greenhouse Curtains

Food Processing

- Boiler Upgrades
- Steam System Upgrades
- Refrigeration
- Pumps
- Motors
- Compressed Air

Targeted Energy Audits



Targeted energy audits focus on specific end uses of energy, or single system such as:

- **Lighting**
- **Refrigeration**
- **Boiler systems**
- **HVAC systems**
- **Process**



Agricultural Pumping Efficiency Program (APEP)

Pump repair incentives

- Require pre-test and post-test.
- Typically 25% savings annually.

Subsidized pump tests

- \$150 per pump (>25HP < 75 HP)
- \$200 per pump (> 75 HP)
- \$200 for a natural gas engine pump



www.pumpefficiency.org

Integrated Energy Audits



- PG&E or consultant conducts an on-site integrated energy audit of your facility, equipment and bills
- Audit report itemizes
 - 1) no cost
 - 2) low cost and
 - 3) investment grade recommendations.

Includes estimated energy/cost savings, investment paybacks, and available PG&E incentives.

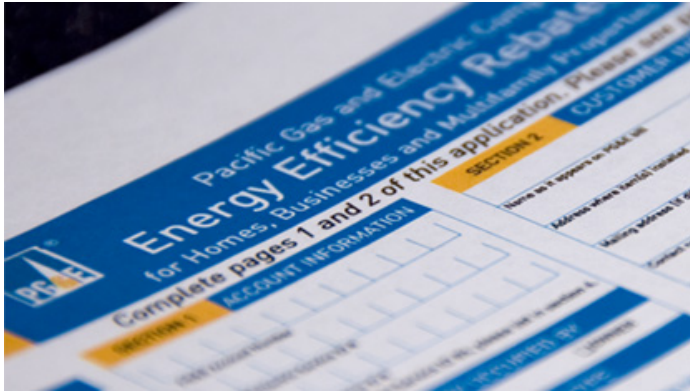
Direct Cash Rebates



- Rebates are the fastest and easiest way to get cash back for common energy efficiency retrofits
- Hundreds of pre-determined rebates are available in 5 different equipment categories
- Rebate checks are mailed in 4-6 weeks



“Customized” Retrofit Incentives



Non-Residential Retrofit (NRR) Program

- For customized projects not available on the rebate catalog
- Standard incentive rates paid: \$.09/kWh, \$100/kW and \$1 therm
- PG&E will pay up to 50% of project implementation costs up to \$ 3.6 million
- Incentive can go to facility owner or the vendor
- Calculation support is available .

Important! PG&E needs to pre-approve any project and do a pre-inspection of the existing equipment

New Construction Incentives

“Savings By Design”



Non Residential New Construction (NRNC) Program

- Supports high-performance building design and construction (must be >10% above Title 24)
- Also available for major renovations and remodels
- Design Assistance provided during building design phase (up to \$50k incentive for design team)
- Up to \$500,000 owner incentives per project based on building performance

Contact us early in project design for best results!

Retro-Commissioning (RCx) “Tune-up”

- RCx is a newer PG&E Program
- Systematic process that will pay to *maintain, repair or optimize*
- RCx pays to bring the facility’s energy use back to when it was new (or better)

Same incentive levels as NRR and NRNC

- Team approach – pre and post M&V and customer training
- Savings of 5-15% of total facility energy costs - <2 year payback



On-Bill Financing

Program Goals:

Funding to build retrofits that are *not being built* due to financial barriers

- Historically all PG&E financing programs have been off-bill.
- Funding will be available only for cost-effective energy efficiency retrofits
- All projects will require simple payback :

energy savings must be equal to, or more than, the monthly loan payment during the loan term.

- Commercial, Industrial and Ag only – no residential loans

On-Bill Financing

- Each loan pool will be a revolving fund of ratepayer dollars
- PG&E must fund \$18.5 million (2011-2012)
 - Commercial Loan Cap \$100,000, Maximum Loan term 5 years
 - **may** offer commercial loans beyond five years
 - Institutional Loan Cap \$250,000, Maximum Loan term 10 years
 - **may** lend up to \$1 million **per facility**
- Loans will be offered at 0% with no fees (per DOC banking exemption.)

Non-Utility Funding Resources

- Energy Analyzers & Audits
- Rebates & Incentives
- Economic Development
- ▼ Incentives by Industry
 - » Agriculture and Food Processing
- Education
- Federal Government
- Health Care
- High Tech Facilities
- Hotels, Motels, Resorts and Food Service Program
- Large Commercial and Institutional Program
- Manufacturing and Heavy Industry Program
- Property Manager and Owner
- Residential New Construction
- Retail
- Small Business
- Water & Wastewater Treatment
- Solar Energy
- Energy Saving Tips
- Buyer's Guides
- Demand Response Programs
- Self-Generation Incentive Program
- Other Programs

Incentives—Agriculture and Food Processing



Is Energy Eating Your Profits?

Agriculture and Food Processing plays a major role in sustaining California's growing economy and requires an ever-rising demand for energy. That's why PG&E offers cash incentives and energy-saving strategies to keep your business running as energy efficiently as possible. By taking advantage of just a few of these programs, you will see how simple it is to save energy and money.

How You Can Get Cash Back

Here are rebate, analysis and incentive programs you can use to help reduce your energy use and improve your bottom line. Free classes on energy efficiency are available as well.

Rebates

Get rebates on everything from boilers and heat pumps to occupancy sensors and wine tank insulation.

Incentive Programs

Get cash for custom-designed energy savings projects at existing or new industrial facilities.

Demand Response Programs

Find out how your business can benefit from curtailing your facility's energy use during times of peak demand.

Education and Training

Learn about the best practices for your industry and the latest energy efficiency technologies.

Additional Sources of Funding

Find additional sources of financial assistance for your renewable or energy, or water saving project.

Start your comprehensive energy management plan with an energy audit or analysis. After

[Print Page](#) | [Email Page](#)

Additional Info

» [Industry Case Studies & Fact Sheets](#)

Related Links

- » [Agricultural Pumping Efficiency Program Calendar](#)
- » [Wine Industry Workshops & Training Calendar](#)
- » [Dairy Biogas Service Providers List](#)

> [Grant Finder Tool](#)

What's your carbon footprint?

[→ Learn more](#)

Find Outages in Your Area

Visit the electrical system outage map.

[→ View Map](#)

Paperless Billing

View and pay bills online.

[→ Learn more](#)

www.pge.com

Non-Utility Funding Resources

[MorrisonGrants.com](https://www.morrisongrants.com)* (subscription based)

Is linked to our Ag/Food website

“MorrisonGrants.com is the Internet’s only live grants database focused exclusively on food & agribusiness, alternative energy/energy efficiency, and the environment.”

Conduct unlimited searches through hundreds of federal, state, and private foundation grants and receive email notifications of any of the dozens of new programs posted weekly that meet your search parameters.”

Morrison & Company's Grant Finder tool:

The screenshot shows the MorrisonGrants website. At the top left is the logo with a green lightning bolt icon and the text "MORRISONGRANTS". To the right, a user profile for "briding" is visible with a "Search Grants" button, "My account" link, and "Logout" link. A green navigation bar contains links for HOME, SERVICES, FAQ, ABOUT US, SUPPORT, CONTACT US, and FEEDBACK. Below this is a banner with images of people, a cow, and wind turbines, with the text "Improve your odds in a competitive grant environment." To the right of the banner is a paragraph: "MorrisonGrants is your one-stop for green grant resources, focusing on food & agribusiness, alternative energy, and environmental programs. Let us help you find, write, and administer grants that meet your organization's needs." Below the banner is a green box with a welcome message: "Welcome to the Internet's only live grants database focused on Food & Agribusiness, Alternative Energy, and the Environment. Unlimited searches through hundreds of federal, state, and private foundation grants, plus email notification of any of the dozens of new programs we post weekly that meet your search parameters. Over 1,200 programs posted now!" The main content area is divided into four columns: "Find Grants" (describing the database and subscription options), "Write Grants" (offering help to rise above competition), "Administer Grants" (describing the team's expertise), and "Free Resources" (listing notification services, templates, and glossaries). A "Not a Subscriber?" box with "Learn More..." and "Subscribe Now!" links is positioned over the "Find Grants" column. The footer includes the PG&E logo, "Pacific Gas & Electric", and "MORRISON & COMPANY" with a navigation bar.

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Improve your odds in a competitive grant environment.

MorrisonGrants is your one-stop for green grant resources, focusing on food & agribusiness, alternative energy, and environmental programs. Let us help you [find](#), [write](#), and [administer grants](#) that meet your organization's needs.

Welcome to the Internet's only live grants database focused on Food & Agribusiness, Alternative Energy, and the Environment. Unlimited searches through hundreds of federal, state, and private foundation grants, plus email notification of any of the dozens of new programs we post weekly that meet your search parameters. Over 1,200 programs posted now!

Find Grants

Hundreds of federal, state, and private foundation grants focused on food & agribusiness, alternative energy, and environmental programs. Search our database or sign up for automatic e-mail notifications. Just \$29.95/month or \$299.95/year.

Write Grants

Let us help you to rise above the competition. Our personal approach works: since 2002, we have been blessed with over 90 percent of our full grant proposals.

Administer Grants

Grant administration is a hassle if you're not fluent in governmentese. Our team includes experienced grant writers as well as Certified Public Accountants who can help you with the intricacies of complying with grant regulations.

Free Resources

[Free notification](#) of selected grants, [templates](#) for common grant requirements, [links to information and resources](#), and a [glossary of grant terms](#).

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On-line Resources

PG&E Business Customer Service Center 1-800 468-4743

www.pge.com/mybusiness

Rebates:

www.pge.com/mybusiness/energysavingrebates

California Solar Initiative:

www.pge.com/solar

Agricultural Pumping Efficiency (Pump Testing)

www.pumpefficiency.org

Morrison Grants

www.morrisongrants.com

Thank you!

Questions?

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