

Pacific Gas and Electric Company
Energy-Efficiency Rebates for Your Business

Refrigeration Rebate Catalog

Saving energy for a brighter future



Together, Building
a Better California

Table of Contents

Ultra-Low Temperature (ULT) Freezers	1
Anti-Sweat Heater (ASH) Controls	1
Efficient Evaporator Fan Motors	2
Auto-Closers for Walk-in Cooler or Freezer Doors	3
Evaporator Fan Controllers for Walk-in Coolers and Freezers	3
New High-Efficiency Refrigeration Display Cases with Special Doors (Low Temperature)	4
New Display Cases to Replace Open Multi-Deck Refrigerated Displays (Low and Medium Temperature)	5
Vending Machine Controllers	6

Commercial Cooling

Commercial Glass Door Refrigerators	7
Commercial Solid Door Refrigerators	8
Commercial Solid Door Freezers	9
Commercial Ice Machines	10

Ultra-Low Temperature (ULT) Freezers

Requirements:

- Freezer must have ENERGY STAR® label.
- Doors must be mounted on vertical hinges.
- Volume must be between 15 and 29 cubic feet (0.425–0.821 cubic meters).
- Freezer must be capable of maintaining temperatures down to –80 °C.
- Installation address must have a commercial electric account with PG&E.

Rebate Code	Description	Rebate/Unit Measure
RF006	High Efficiency Ultra-Low Temperature (–80 °C) Freezer 15 to < 24 ft ³	\$300
RF007	High Efficiency Ultra-Low Temperature (–80 °C) Freezer 24 to 29 ft ³	\$600

Anti-Sweat Heater (ASH) Controls

Requirements:

- Display cases must be equipped with humidity-sensing controls that reduce the amount of power supplied to the heaters.
- Controls must sense the relative humidity in the air surrounding the display case and reduce or turn off the anti-sweat heaters of the glass door (if applicable) and door frame during periods of low humidity.
- Equivalent technologies that reduce or turn off anti-sweat heaters, depending on the level of condensation on the inner glass pane, may qualify.
- Rebate amount is based on the horizontal linear footage of the display case (for example, the width of the display case).
- Installation address must have a commercial electric account with PG&E.

Exclusions:

This rebate cannot be used in conjunction with rebates for new display cases with doors (rebate codes R4 and R5).

Rebate Code	Description	Rebate/Unit Measure
R7	Anti-Sweat Heater (ASH) Controls (Medium Temperature)	\$25/linear ft.
HB31	Anti-Sweat Heater (ASH) Controls (Low Temperature)	\$25/linear ft.



Efficient Evaporator Fan Motors

Requirements:

- Electronically commutated motors (ECM) must be installed in refrigerated display cases, walk-in coolers and freezers.
- Fan motor must replace standard efficiency shaded-pole or permanent split capacitor evaporator fan motor.
- Installation address must have a commercial electric account with PG&E.

Exclusions:

- Motors in walk-ins built after 2008 are not eligible.
- Motors in display cases built after 2011 are not eligible.
- May not be used in conjunction with PG&E rebates for new display cases.

Rebate Code	Description	Rebate/Unit Measure
R145	Efficient ECM Evaporator Fan Motor Medium-Temperature Display Case	\$35/motor
R176	Efficient ECM Evaporator Fan Motor Low-Temperature Display Case	\$50/motor
RF004	Efficient ECM Evaporator Fan Motor Walk-in Cooler	\$75/motor
RF005	Efficient ECM Evaporator Fan Motor Walk-in Freezer	\$75/motor

Auto-Closers for Walk-in Cooler or Freezer Doors

Requirements:

- Auto-closer must be applied to the main insulated door of a walk-in cooler or freezer; additional interior doors are not eligible.
- Auto-closer must be able to firmly close the door when it is within one inch of full closure.
- Installation address must have a commercial electric account with PG&E.

Exclusions:

- Additional interior doors are not eligible.
- Door closers for walk-in coolers or freezers built after 2008 are not eligible.
- Doors that have previously had an auto-closer installed.

Rebate Code	Description	Rebate/Unit Measure
R79	Auto-Closers for Walk-in Cooler Doors	\$75/closer
R80	Auto-Closers for Walk-in Freezer Doors	\$75/closer

Evaporator Fan Controllers for Walk-in Coolers and Freezers

Requirements:

- Existing evaporator fan must run continuously at full speed, with the exception of defrost cycles.
- Evaporator fan must be at least 1/20 horsepower.
- Evaporator fan motor must be single phase.
- Control type must be cycling control (not variable frequency drive).
- Control must reduce fan power at least 75 percent when the compressor cycles off.
- Evaporator must use off-cycle or time-off defrost.
- Installation address must have a commercial electric account with PG&E.

Rebate Code	Description	Rebate/Unit Measure
R53	Evaporator Fan Controllers for Walk-in Coolers and Freezers	\$75/controller



New High-Efficiency Refrigeration Display Cases with Special Doors (Low Temperature)

Requirements:

- Display cases must replace less efficient reach-in unit and have new remote or self-contained, high-efficiency, reach-in case.
- New display cases must include:
 - T8 lamps with electronic ballasts or LEDs
 - Electronically commutated motors
 - Low or no anti-sweat glass, double-paned doors
- Display cases must replace low temperature, self-contained remote cases (see definitions).
- Display cases must be equal to or shorter than original case.
- Rebate is based on the linear footage of new display case.
- Rebate applies following building types: assembly, sit-down restaurants, grocery and retail.
- Installation address must have a commercial electric account with PG&E.

Exclusions:

- Rebate cannot be used in conjunction with the *Anti-Sweat Heater (ASH) Controls* rebate.
- Deli cases, custom coolers/freezers and walk-in boxes with reach-in doors do not qualify for this rebate.
- Display case replacements that are part of large-scale store remodels and any new construction projects are not eligible. Large-scale remodels are projects involving 50 percent of the linear feet of refrigerated casework or 32 linear feet of casework replacements, whichever is less.

Rebate Code	Description	Rebate/Unit Measure
R87	New High-Efficiency Refrigeration Display Cases with Special Doors Low Temperature	\$75/linear ft.



New Display Cases to Replace Open Multi-Deck Refrigerated Displays (Low and Medium Temperature)

Requirements:

- Replace an open multi-deck display case without doors with a new case that includes doors.
- New display cases must include:
 - T8 lamps with electronic ballasts or LEDs
 - Electronically commutated motors
 - Double-pane doors with heat-reflective treatment or gas fill
- New cases must be equal to or shorter than original case
- Rebate can be for self-contained or remote cases.
- Rebate is based on the horizontal linear footage of the new display case.
- Rebate applies to grocery stores only.
- Installation address must have a commercial electric account with PG&E.
- Refer to definition section for additional clarification.

Exclusions:

- Deli cases, custom coolers/freezers and walk-in boxes with reach-in doors do not qualify for this rebate.
- Display case replacements that are part of large-scale store remodels, and any new construction projects, are not eligible. Large-scale remodels are projects involving 50 percent of the linear feet of refrigerated casework or 32 linear feet of casework replacements, whichever is less.

Rebate Code	Description	Rebate/Unit Measure
R4	New Display Cases to Replace Open Multi-Deck Refrigerated Displays Low Temperature	\$175/linear ft.
R5	New Display Cases to Replace Open Multi-Deck Refrigerated Displays Medium Temperature	\$75/linear ft.



Vending Machine Controllers

Requirements:

- Controller must turn off lights and compressor when surrounding area is unoccupied for a time period adjustable between 15 and 60 minutes.
- Coolers must have glass sliding or pull-open doors with self-contained condensing unit.
- Coolers must maintain temperatures for nonperishable products.
- Installation address must have a commercial electric account with PG&E.

Rebate Code	Description	Rebate/Unit Measure
R86	Vending Machine Controller (Cooled)	\$100/controller



Commercial Cooling

Commercial Glass Door Refrigerators

Requirements:

- Qualifying models must be listed in the California Energy Commission (CEC) database.
- Refrigeration system must be built in (packaged).
- Model must meet ENERGY STAR® Version 4.0 specification.
- Installation address must have a commercial electric account with PG&E.
- For a list of rebate-qualified commercial glass door refrigerators, visit caenergywise.com/rebates.

Exclusions:

Units with remote refrigeration systems do not qualify.

Rebate Code	Description	Rebate/Unit Measure
F171	Commercial Glass Door Refrigerator Internal volume less than 15 ft ³	\$40/unit
F172	Commercial Glass Door Refrigerator Internal volume 15 ft ³ –29.9 ft ³	\$60/unit
F173	Commercial Glass Door Refrigerator Internal volume 30 ft ³ –49.9 ft ³	\$80/unit
F174	Commercial Glass Door Refrigerator Internal volume 50 ft ³ or greater	\$100/unit

ft³ equals cubic feet



Commercial Solid Door Refrigerators

Requirements:

- Qualifying models must be listed in the California Energy Commission (CEC) database.
- Refrigeration system must be built in (packaged).
- Model must meet ENERGY STAR® Version 4.0 specification.
- Installation address must have a commercial electric account with PG&E.
- For a list of rebate-qualified commercial solid door refrigerators, visit caenergywise.com/rebates.

Exclusions:

Units with remote refrigeration systems do not qualify.

Rebate Code	Description	Rebate/Unit Measure
F183	Commercial Solid Door Refrigerator Internal volume less than 15 ft ³	\$45/unit
F184	Commercial Solid Door Refrigerator Internal volume 15 ft ³ –29.9 ft ³	\$60/unit
F185	Commercial Solid Door Refrigerator Internal volume 30 ft ³ –49.9 ft ³	\$85/unit
F186	Commercial Solid Door Refrigerator Internal volume 50 ft ³ or greater	\$120/unit

ft³ equals cubic feet



Commercial Solid Door Freezers

Requirements:

- Qualifying models must be listed in the California Energy Commission (CEC) database.
- Refrigeration system must be built in (packaged).
- Model must meet ENERGY STAR® Version 4.0 specification.
- Installation address must have a commercial electric account with PG&E.
- For a list of rebate-qualified commercial solid door freezers, visit caenergywise.com/rebates.

Exclusions:

Units with remote refrigeration systems do not qualify.

Rebate Code	Description	Rebate/Unit Measure
F179	Commercial Solid Door Freezer Internal volume less than 15 ft ³	\$75/unit
F180	Commercial Solid Door Freezer Internal volume 15 ft ³ –29.9 ft ³	\$100/unit
F181	Commercial Solid Door Freezer Internal volume 30 ft ³ –49.9 ft ³	\$160/unit
F182	Commercial Solid Door Freezer Internal volume 50 ft ³ or greater	\$350/unit

ft³ equals cubic feet

Commercial Ice Machines

Requirements:

- Qualifying models must be listed in the California Energy Commission (CEC) database.
- Models must meet ENERGY STAR® Version 3.0 specification.
- Models include machines generating ice cubes that are 60 grams (2 oz.) or lighter. It also includes ice makers that flake, crush and fragment ice cubes.
- Rebate amount depends on ice making rate (pounds per day) and equipment type: self-contained units (SCU), Ice-making heads (IMH) and remote condensing units (RCU).
- Only air-cooled machines qualify for this rebate.
- Customer must purchase the entire Air Conditioning, Heating and Refrigeration Institute (AHRI)-tested ice-making system.
- Remote machines must be purchased with qualifying remote condenser or remote condenser/compressor unit.
- Ice machines must be tested in accordance with the AHRI Standard 810. Visit ahrinet.org to learn more about product information and testing procedures.
- Installation address must have a commercial electric account with PG&E.
- For a list of rebate-qualified commercial ice machines, visit caenergywise.com/rebates.

Rebate Code	Description	Rebate/Unit Measure
FS014	Commercial Ice Machine SCU < 110 lbs/day	\$50/unit
FS015	Commercial Ice Machine SCU 110–200 lbs/day	\$75/unit
FS016	Commercial Ice Machine SCU > 200 lbs/day	\$100/unit
FS017	Commercial Ice Machine IMH < 300 lbs/day	\$75/unit
FS018	Commercial Ice Machine IMH 300–800 lbs/day	\$125/unit
FS019	Commercial Ice Machine IMH 801–1,500 lbs/day	\$200/unit
FS020	Commercial Ice Machine IMH >1,500 lbs/day	\$300/unit
FS021	Commercial Ice Machine RCU < 988 lbs/day	\$200/unit
FS022	Commercial Ice Machine RCU ≥ 988 lbs/day	\$300/unit

Definitions

Air Conditioning, Heating and Refrigeration Institute (AHRI): This organization offers product information and testing procedures. For more information, visit ahrinet.org.

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE): This organization provides lists of program-qualifying products and information on test procedures. For more information, visit ashrae.org.

Annual Fuel Utilization Efficiency (AFUE): This measures the percentage of fuel that is converted into usable heating energy. For example, a 90 percent AFUE furnace means that 90 percent of the fuel is used in heating a facility, while 10 percent escapes as exhaust with the combustion gases.

Anti-Sweat Heaters (ASH): ASH are typically applied to low-temperature refrigerated display cases to prevent glass doors from fogging and cold surfaces from forming condensation. Commonly, ASH stay on at full load around the clock. Their contribution to the cooling load and electric power consumption of the refrigeration system can be significant.

Ballast: This is a lighting component that controls the electrical current drawn in from a power source.

Btu: British thermal unit, which refers to the amount of heat required to raise the temperature of 1 pound of water by 1 degree Fahrenheit.

Btuh: British thermal units per hour.

Bubble Diffusion: This is a laundry method of inserting ozone into water by continuously bubbling ozone directly into the drum of the clothes washer throughout the wash cycle.

California Energy Commission's Appliance Efficiency Database: energy.ca.gov/appliances.

CEC: This refers to the California Energy Commission.

Climate Zones (CZ): Climate zones are based on energy use, temperature, weather and other factors. They are basically a set of geographic areas that are grouped according to similar climatic characteristics.

CO₂ Sensor: This device measures the parts per million (PPM) of CO₂ in the air.

Color Rendering Index (CRI): This is a measure of a light source's ability to show object colors "realistically" or "naturally" compared to a familiar reference source, either incandescent light or daylight.

Conditioned Area/Space: This term refers to an area being heated or cooled by the heating, ventilation and air conditioning (HVAC) system.

Consortium for Energy Efficiency (CEE): To learn more about CEE's Tier specifications, visit cee1.org.

Database for Energy Efficient Resources (DEER): This database contains information on selected energy-efficient technologies and measures.

Display Case: This equipment is designed to store and display chilled and/or frozen foodstuffs.

Electrical Testing Laboratory (ETL): This organization marks products of compliance to applicable electrical, gas and other safety standards. For more information, visit etl.com.

Electronically Commutated Motors (ECM): ECMs are synchronous motors that are powered by a DC electric source using an integrated inverter/switching power supply, producing an AC electric signal, which drives the motor.

End-Use Customers: This term refers to customers who acquire energy for their own consumption.

Energy Factor (EF): EF measures a water heater's efficiency, based on recovery efficiency, standby losses and cycling losses. The higher the EF, the more efficient the water heater. This measure is only used for residential-grade water heaters.

ENERGY STAR®: To learn more about ENERGY STAR's energy-efficiency specifications, visit energystar.gov/cfs.

Fixture: Generally, a light fixture is an electrical device used to create artificial light by use of an electric lamp. All light fixtures have a fixture body and a socket to hold the lamp and allow for its replacement. For PG&E lighting rebates, a fixture refers to new equipment being installed based on system wattage (lamp and ballast for fluorescent fixtures).

HID: This refers to high-intensity discharge.

High-Performance Linear Fluorescent Fixture Ballasts: This term refers to National Electrical Manufacturers Association (NEMA) premium or Consortium for Energy Efficiency (CEE)-qualified T8 ballasts or T5 ballasts.

High-Performance Linear Fluorescent Lamps: This refers to Consortium for Energy Efficiency (CEE)-qualified 4-foot T8 lamps or 2-foot T8/T5 lamps with at least 20,000-hour-rated life and a Color Rendering Index (CRI) that meets or exceeds 82.

Horsepower (hp): This is a unit of power equal to 550 foot-pounds per second.

Ice Making Head (IMH): Automatic commercial ice makers that do not contain integral storage bins, but are generally designed to accommodate a variety of bin capacities. Storage bins entail additional energy use not included in the reported energy consumption figures for these units.

Indoor Tank: This refers to a tank located in an enclosed indoor space, where it is not exposed to sun or wind.

Integrated Retrofit Kits: These replace existing fluorescent lamps, sockets and ballasts, along with the lens and frame, and they can be installed easily into the existing fluorescent fixture. Troffers provide the required electrical components, LED light sources and optical elements, which include new lens and door frame—all in a prepackaged kit.

K-Value: This refers to thermal conductivity and has a unit of Btu-inch per hour, per square foot, per degree Fahrenheit.

Kilolumen: A kilolumen is 1,000 lumens.

Large Office: This refers to office buildings typically greater than 20,000 square feet.

Large Retail: Retail buildings that are typically greater than 5,000 square feet.

Light-Emitting Diode (LED): LED is a light-emitting diode product that is assembled into a lamp (or light bulb) for use in lighting fixtures. LED lamps have a lifespan and electrical efficiency that is several times better than incandescent lamps, and significantly better than most fluorescent lamps, with some chips able to emit more than 100 lumens per watt.

Low Temperature: For freezers, refrigerated space temperatures are considered “low” if they are below 32 degrees Fahrenheit.

Lumen (lm): A lumen is the unit of light output.

MBtu: 1,000 British thermal units.

MBtuh: 1,000 British thermal units per hour.

Medium Temperature: For coolers, refrigerated space temperatures are considered “medium” if they are between 32 to 50 degrees Fahrenheit.

Minimum Energy Efficiency Ratio (EER): EER is a measure of the efficiency of the unit. It indicates the cooling capacity in Btu per watt hour. The higher the EER rating, the higher the efficiency of the unit.

National Electrical Manufacturers Association (NEMA) Premium Ballasts: These are the most efficient fluorescent fixed output and dimmable electronics for T8 ballasts to be recognized by NEMA.

NEMA Premium Motor: This is an alternating current (AC) induction motor that has a certified efficiency rating from NEMA.

Parking Garage: A parking garage is a covered building or structure for the purpose of parking vehicles, which consists of at least a roof over the parking area, enclosed with walls on all sides. Parking garages may have fences, rails, partial walls (pony wall) or other barriers in place of one or more walls. The structure has an entrance(s) and exit(s) and includes areas for vehicle maneuvering to reach the parking spaces. If the roof of the parking structure is also used for parking, the section without an overhead roof is considered a parking lot instead of a parking garage.

Permanent Mag Motor: This term refers to a permanent magnet alternating current (AC) motor.

Pounds per Square Inch (PSIG): This refers to the pounds of steam pressure per square inch, as shown on a gauge. The steam system should have a steam pressure gauge attached that reads the pressure of the steam in the pipes. The pressure gauge will register in pounds of pressure per square inch.

Reach-in Cabinets: These are refrigerated retail display cabinets with chilled glass door(s) and horizontal/semi-horizontal merchandising. Cabinets enable customers to view contents even when closed, and enable customers to self-serve. Styles include:

- “Plug-in” refrigerated display cabinets with integral refrigeration systems (for example, incorporating a compressor and condensing unit)
- “Remote” refrigerated display cabinets designed to work with a nonintegral refrigeration system (for example, where the compressor and condenser, or all or parts of the refrigeration system, are located at a different location from the cabinet)

Remote Condensing Unit (RCU): A type of automatic commercial ice maker in which the ice-making mechanism and condenser or condensing unit are in separate sections. This includes ice makers with and without remote compressor.

R-Value: Insulation is rated in terms of thermal resistance, called R-value, which indicates the resistance to heat flow. A greater R-value corresponds with a greater insulating effectiveness.

Self-Contained Unit (SCU): A type of automatic commercial ice maker in which the ice-making mechanism and storage compartment are in an integral cabinet.

Shaded-Pole Motor: This type of motor is the original form of an AC single-phase induction motor.

Small Office: This refers to office buildings that are typically less than 20,000 square feet.

Small Retail: This refers to retail buildings that are typically less than 5,000 square feet.

System Types: Commercial refrigeration equipment can be classified into two categories: split-system refrigeration systems and self-contained refrigeration systems. Split-system configurations have a condenser unit that is located remotely, usually on the rooftop, which allows it to exchange heat with the outside air. Self-contained units have all of the components, including the condenser, contained in a single package.

Thermal Efficiency (TE): Measures a water heater’s efficiency, based on recovery efficiency, standby losses and cycling losses. The higher the TE, the more efficient the water heater. It is only used for nonresidential grade water heaters.

Ton: When used in reference to air conditioning systems, a ton is the unit of measurement that is the cooling capacity of the system and is 12,000 Btuh.

Total Washer Capacity: This refers to the rated capacity of installed and operating washing machine units that will be connected to an ozone laundry system. This is normally measured in pounds capacity.

Troffer: A troffer is a rectangular light fixture that fits into a modular dropped ceiling grid.

Underwriters Laboratories (UL): This independent product safety certification organization’s website is ul.com.

Uniform Energy Factor (UEF): This measures a water heater's efficiency, based on recovery efficiency, standby losses and cycling losses. The higher the UEF, the more efficient the water heater. UEF is used to measure both residential and nonresidential water heaters.

Variable Frequency Drive (VFD): This electric motor control changes the driven motor's input power frequency measured in cycles per second by either manual setting or variable input from one or more sensors.

Venturi Injection: This laundry method inserts ozone, using very high pressure, directly into the cold-water supply line leading to a washer.

Walk-in Coolers/Freezers: Also known as "walk-ins," these are insulated refrigerated spaces with access doors large enough for people to enter. Walk-ins are used for food storage and merchandising in the food service and food sales applications.

More ways for your business to save money

To find the latest rebate information and catalogs or to apply for rebates online, visit [pge.com/businessrebates](https://www.pge.com/businessrebates).

PG&E offers a wide range of tools and resources that can help your business save energy and money while helping the environment.

- Check out PG&E's Calculated Incentives for businesses if you did not find a rebate matching the high-efficiency equipment you would like to install. To learn more, visit [pge.com/cr](https://www.pge.com/cr).
- Sign up for automated benchmarking service at [pge.com/benchmarking](https://www.pge.com/benchmarking), which allows you to use the ENERGY STAR® Portfolio Manager to track and compare your facility's energy performance over time.
- Use PG&E's audit tools to identify options for saving energy and money at your facility, and get started on developing a comprehensive energy management plan. Visit the Business Energy Checkup at [pge.com/waystosave](https://www.pge.com/waystosave).
- Find out how you can earn incentives for large custom projects, including equipment upgrades and retrocommissioning, by using PG&E's Calculated Incentives Program. Visit [pge.com/customized](https://www.pge.com/customized) and [pge.com/rcx](https://www.pge.com/rcx).
- Explore PG&E's demand response programs, which offer incentives for managing your energy use during times of peak demand. Visit [pge.com/demandresponse](https://www.pge.com/demandresponse).
- Check out PG&E's third-party programs at [pge.com/thirdparty](https://www.pge.com/thirdparty). These programs are managed by energy-efficiency specialists and offer a range of services to provide you with industry-specific, energy-saving solutions—from dairies and wineries to food processors.
- Use PG&E's Savings By Design or Customized New Construction programs to build in energy efficiency from the ground up and earn incentives at the same time. To get started, visit [pge.com/savingsbydesign](https://www.pge.com/savingsbydesign).
- Go to the Agriculture and Food Processing section of PG&E's website at [pge.com/ag](https://www.pge.com/ag) to learn about loans and grants that focus on food, agribusiness, alternative energy and environmental programs, or call our **Agricultural Customer Service Center** at [1-877-311-FARM \(3276\)](tel:1-877-311-FARM).
- If you are considering generating your own electricity, talk to your PG&E account representative about incentives for solar, wind and fuel cell self-generation equipment.

You also may learn more about these programs, tools and offers by contacting your local PG&E account representative or by calling our **Business Customer Service Center** at [1-800-468-4743](tel:1-800-468-4743).

Ready to get started with your next project and need the help of a contractor? Find local vendors who participate in PG&E's energy-efficiency rebate programs for your business at [pge.com/tradeprodirectory](https://www.pge.com/tradeprodirectory).