

Agriculture Energy Savings Action Plan (AESAP) Rebate Catalog



AESAP Rebate Catalog 2025v2 Visit <u>AgEnergySavings.com</u> to confirm current rates



Contents

Contents	0
Program Overview	1
Ag Ventilation	2
Ag Ventilation Fan	2
Ag Ventilation Fan VFD	
LED Lighting	4
Indoor Horticulture Grow Lighting	4
Irrigation	6
Ag Well and Booster Pump VFD	6
Water Pump Upgrade	8
Natural Gas	9
Boiler	9
Greenhouse Heat Curtain	
Greenhouse Infrared Film	11
Pipe Insulation	
Processing	14
Dust Collection Fan VFD	
Refrigeration	
Glycol Pump VFD	
Floating Head Pressure Controls, Multiplex	
Additional AESAP Program Offerings	

Program Overview



Savings for Agriculture Customers. The agricultural industry is extremely energy and water-intensive, and that's why Pacific Gas and Electric Company (PG&E) offers a variety of rebates, incentives, and financing options to help your operation reduce energy usage and costs. Upgrading ventilation, irrigation, and other critical systems with more energy-efficient options is one way to reduce your overhead, improve production, and preserve natural resources.

Rebates do not require pre-installation approval. Simply submit invoices with supporting documentation as outlined in the requirements and TRC will process and deliver the rebate to you. If you have an energy-savings measure not listed on the rebate list, **contact TRC** to see if it would qualify as a customized incentive.

Ag sectors served



Eligibility

Customer eligibility and qualifying terms and conditions are found on the AESAP Program Application which must be signed and submitted to receive rebate. To receive a rebate, customer must submit an application with itemized invoice for equipment purchased within 60 days from purchase date, installation date, or account establishment date (SAID activated) whichever is latest. Products purchased and installed in adherence to these terms and meet all individual measure requirements are eligible for a rebate, provided rebate funding is still available. Rebate offerings, qualifying products and rebate amounts may change without notice during the term. Eligible agriculture customers must already pay the Public Purpose Program (PPP) charge on their energy bill.

Ag Ventilation

Ag Ventilation Fan

Measure Co	ode	Measure Description	Rebate	Green House	Irrigation	Livestoc k/Dairy	Process	Winery
	Α	Efficient Ag Ventilation Fans 22-30 in	<u>Rebate</u> varies by -	•		•		_
	В	Efficient Ag Ventilation Fans 31-40 in	<u>CZ, contact</u> <u>us</u>	•	٠			
SWPR001	С	Efficient Ag Ventilation Fans 41-49 in	\$60/unit	•		٠		_
	D	Efficient Ag Ventilation Fans 50-62 in	\$80/unit	٠		٠		_
	E	Efficient Ag Ventilation Fans 63-76 in	\$80/unit	•		•		
	F	Efficient Ag Ventilation Fans 77-86 in	\$80/unit	•		•		

CZ: Climate Zone

- Measure Application Types: New Construction (NC) and Normal Replacement (NR)
- Fan sizes 22" through 62" must have been tested by ANSI/AMCA 230-12 or later agricultural fan testing protocol and must meet the minimum required efficiencies.
- A lower number of 72" and 84" measure case fans are eligible to replace a larger number of existing fans, so long as measure eligibility regarding airflow (cfm) is followed.
- Climate Zone 1 is not eligible for rebate

Measure Application Type	Size	Minimum Allowable Efficiency (CFM/W)
	22-26 inch	13.18
New Construction and Normal Replacement	36 inch	16.62
	48 inch	19.27
	50-62 inch	20.75
	72 inch	>20.75
	84 inch	>20.75

Ag Ventilation Fan VFD

Measure Code		Measure Description	Rebate	Green Livestock/ House Irrigation Dairy		Process	Winery	
SWPR006	В	Ag Ventilation Fan VFD (1 to 5 hp)	\$80/rated hp			•		

hp: horsepower

- Measure Application Type: Add on Equipment (AOE)
- This measure is applicable for all existing agriculture facilities used to house livestock, which includes Other Agricultural (AgOth) and Livestock Farms (ALF).
- The measure is applicable in California climate zones CZ06, CZ07, CZ08, CZ09, CZ10, CZ11, CZ12, CZ13, CZ14 and CZ15
- The existing fan shall meet the following requirements:
 - 1. The base case fan will either operate continuously or have ON/OFF controls
 - 2. Must not be for HVAC, exhaust, pressurization, or other process applications
 - **3.** Individual fan motors are not to exceed 5 hp (Motor sizes outside these ranges are not typical and indicate another process
 - 4. The fan must operate continuously or be manually operated with an ON/OFF control switch. Fan motors must not be two-speed or have an existing VSD
- The VFD must be used to vary the speed of a livestock barn ventilation fan automatically based on ambient conditions.
- The VSD must be installed as close to the motor as possible when applying VSD to a standard duty NEMA motor. Failure to do so may result in premature motor failure. Sufficient airflow must be maintained through the motor to prevent overheating
- The VSD is recommended to meet requirements as specified by IEEE Standard 519-2014
- The customer must have an existing electrically operated fixed speed fan installed on site or plans to install a new electrically operated fixed speed fan
- Customer must include documentation that identifies:
 - 1. quantity of VFDs installed
 - 2. type controlling multiple fans up to 5-hp each in arrays with one VFD or one VFD for each fan
 - 3. horsepower rating of motor(s) and VFD(s)
 - 4. manufacturer make/model of each VFD installed
 - 5. Description of control strategy min and max temperature (deg F) and speed (%)

LED Lighting

Indoor Horticulture Grow Lighting

Measure Co	de	Measure Description	Rebate	Green	Irrigation	Livestock /Dairy	Process	Winerv
	Α	Greenhouse Cannabis Flowering, ≥2.86 PPE (NC or NR)		•	Ingadon	, Ban y	Trocess	y nici y
	В	Greenhouse Cannabis Propagation/Vegetative, ≥2.86 PPE (NC or NR)		•				
	С	Greenhouse Non-Cannabis Flowering, ≥2.86 PPE (NC or NR)		•				
	D	Greenhouse Non-Cannabis Propagation/Vegetative, ≥2.86 PPE (NC or NR)		•				
	E	Non-Stacked Cannabis Flowering, ≥2.86 PPE (NC or NR)		•				
5WI 6019	F	Non-Stacked Cannabis Propagation/Vegetative, ≥2.86 PPE (NC or NR)	\$39-79 /fixture	•				
Sweddis	G	Non-Stacked Non-Cannabis Flowering, ≥2.86 PPE (NC or NR)	/Incluie	٠				
	н	Non-Stacked Non-Cannabis Propagation/Vegetative, ≥2.86 PPE (NC or NR)		•				
	I	Stacked Cannabis Flowering, ≥2.86 PPE (NC or NR)		•				
	J	Stacked Cannabis Propagation/Vegetative, ≥2.86 PPE (NC or NR)		•				
	к	Stacked Non-Cannabis Flowering, ≥2.86 PPE (NC or NR)		•				
	L	Stacked Non-Cannabis Propagation/Vegetative, ≥2.86 PPE (NC or NR)		•				

NC: New Construction, NR: Normal Replacement, PPE: Photosynthetic Photon Efficacy

- Fixtures must meet the <u>DLC OPL HTR V3.0</u> or any subsequent versions that meet the measure package requirements that are in effect at the time of the program application.
- Fixtures must adhere to the 2024 industry standard practice's specified values for PPE (2.86 PPE).
- Eligible Products: The fixtures must meet the specification in the Measure Case Description and the most recent DLC Version requirements. NR measures may replace any existing non-LED or LED fixture. The fixtures must be listed on the most current version of DLC QPL that are in effect at the time of the program application:
 - 1. Minimum DLC efficacy: 2.3 mol × J⁻¹. Measure case minimum efficacy exceeds DLC efficacy and must still be met to qualify for this measure package.
 - 2. Dimming capability: All luminaires with PPF \geq 350 mol \times s⁻¹. Dimming implementation is not required for this measure.
 - 3. 120 480 VAC supply voltage
 - 4. Photon Flux Maintenance, Photosynthetic (PFMP) ≥ 36,000 hours
 - 5. Driver lifetime ≥ 50,000 hours
 - 6. Fan lifetime (where applicable) ≥ 50,000 hours
 - 7. Warranty \geq 5 Years for fixtures or \geq 3 years for lamps
 - 8. Power Factor (PF) \geq 0.9
 - 9. Total Harmonic Distortion (THDi) ≤ 20%
 - 10. Safety: Horticultural lighting designation by OSHA NRTL or SCC recognized body
- Title 24 and Permitting requirements: Pursuant to Senate Bill SB1414 California Public Utilities Code Section 399.4 (b)(1), requirements on certification by the Customer or Contractor indicating the improvement or installation has complied with any applicable permitting requirements, including any applicable specifications or requirements set forth in the California Building Standards Code (Title 24 of the California Code of Regulations) and also if the

Contractor performed the installation or improvement, that the Contractor holds the appropriate license for the work performed, shall be complied with for this Measure application.

- This measure is applicable for fully enclosed indoor agriculture structures in all California climate zones within PG&E territory. The appropriate building type is Other Agriculture (AgOth) and Greenhouse (GHs) building type. Buildings with any HVAC system are eligible.
- Program Exclusions: 1) Light engines / retrofit kits. 2) Non-LED fixture sources. 3) Dynamically configurable AC products. 4) LED A lamps used for photoperiodic lighting during vegetative growth period.
- NC Measure Application Type with New vintage to be used for projects for Greenfield NC project or when installing equipment in an alteration or expansion project that increases footprint or load by 30% or more.
- Data Collection Requirements:
 - 1. Site ID installed location of the incentivized equipment (e.g., site address)
 - 2. Quantity per Site Total units of incentivized equipment located at the site or project
 - 3. Measure equipment ID 1, 2 unique identifier for each unit of incentivized equipment (e.g., serial number)
 - 4. Measure equipment model number
 - 5. Measure equipment manufacturer
 - 6. Measure equipment energy efficiency rating
 - 7. Climate Zone and Building Type

1. Exemptions to the equipment identifier requirement will be made for measure package offerings where leveraging a serial number or other practical unique identifier is infeasible. Exemptions will need to be approved by the CPUC in advance.

2. If the measure equipment is not serialized, a practical unique identifier may be determined by the Program Implementer and/or the Program Administrator (e.g., Measure equipment Manufacturer-Measure equipment mode number-Unique Application ID-SiteID-Location within installed site).

Irrigation

Ag Well and Booster Pump VFD

Measure Coo	de	Measure Description	Rebate	Green House Irrigation	Livestoc Proces k/Dairy s	Winery
	C (IR017)	VFD Ag Pumps Well, NC (25 hp to 300 hp)	\$9/rated hp	•	•	•
534/0002	D (IR019)	VFD Ag Pumps Booster, NC (25 hp to 150 hp)	\$15/rated hp	•	•	•
500002	A (IRO36)	VFD on Ag Pumps Well, AOE (25 hp to 300 hp)	\$9/rated hp	•	•	•
	B (IRO37)	VFD on Ag Pumps Booster, AOE (25 hp to 150 hp)	\$15/rated hp	٠	•	•
	A (IRO2O)	Tier 2 VFD Pump Well, NC (≤75 hp)	\$11/rated hp	٠	•	•
	B (IRO21)	Tier 2 VFD Pump Well, NC (>75 to ≤600 hp)	\$8/rated hp	٠	•	•
	C (IR022)	Tier 2 VFD Pump Booster, NC (≤75 hp)	\$15/rated hp	•	•	•
	D (IRO23)	Tier 2 VFD Pump Booster, NC (>75 to ≤150 hp)	\$15/rated hp	٠	•	•
	I (IRO28)	Tier 2 VFD on Ag Pump Well, AOE (≤75 hp	\$11/rated hp	•	•	•
	J (IRO29)	Tier 2 VFD on Ag Pump Well, AOE (>75 to ≤600 hp)	\$8/rated hp	•	•	•
	K (IRO30)	Tier 2 VFD on Ag Pump Booster, AOE (≤75 hp)	\$15/rated hp	•	•	•
SWWPNN5	L (IRO31)	Tier 2 VFD on Ag Pump Booster, AOE (>75 to ≤150 hp)	\$15/rated hp	٠	•	•
5	E (IR024)	Tier 3 VFD Ag Pump Well, NC (≤75 hp)	\$11/rated hp	•	•	•
	F (IR025)	Tier 3 VFD Ag Pump Well, NC (>75 to ≤600 hp)	\$8/rated hp	•	•	•
	G (IRO26)	Tier 3 VFD Ag Pump Booster, NC (≤75 hp)	\$15/rated hp	•	•	•
	H (IRO27)	Tier 3 VFD Ag Pump Booster, NC (>75 to ≤150 hp)	\$15/rated hp	•	•	•
	M (IRO32)	Tier 3 VFD on Ag Pump Well, AOE (≤75 hp)	\$11/rated hp	•	•	•
	N (IRO33)	Tier 3 VFD on Ag Pump Well, AOE (>75 to ≤600 hp)	\$8/rated hp	٠	•	•
	0 (IR034)	Tier 3 VFD on Ag Pump Booster, AOE (≤75 hp)	\$15/rated hp	•	•	•
	P (IR035)	Tier 3 VFD on Ag Pump Booster, AOE (>75 to ≤150 hp)	\$15/rated hp	٠	•	•

hp: horsepower, NC: New construction, AOE: Add on Equipment

(requirements on next page)

Ag Well and Booster Pump VFD (cont.)

- Measure Application Types: Add on Equipment (AOE) and New Construction (NC)
- Measures are applicable for all existing and new agriculture facilities in all PG&E climate zones
- Customer must include documentation that identifies:
 - 1. quantity of VFDs
 - 2. type well and/or booster
 - 3. horsepower rating of motor(s) and VFD(s)
 - 4. area map showing physical location of pumps
 - 5. manufacturer make/model of each VFD installed
- VFD must be used to adjust operation of a pump to meet flow/pressure requirements and not be used simply as a soft starter or for cavitation control
- Pumping application must currently have the means to vary the pressure/flow (i.e., throttle valve, control valve, etc.)
- VFD must be installed on the pump motor with a minimum operation of 1,000 hours per year
- VFD must be installed on a pressurized irrigation system (including sprinklers, microsprinklers and drip, but excluding flood irrigation)
- Customer must have an existing electrically operated agricultural booster or well pump installed on site or plans to install a new agricultural booster or well pump
- Measure cannot be used in the following applications:
 - 1. a well pump used to fill a reservoir
 - 2. well pump discharging directly into a canal and/or
 - 3. a mixed flow pump (high volume, low head)
- To qualify for the higher "Tier 2" Mid-Tier or "Tier 3" Enhanced incentive measures, VFD system must comply with the specifications for PG&E Agricultural Pumping VFD Incentive Program, as prepared by California Polytechnic University, San Luis Obispo. VFD specification should be dated 8/15/2017 or after. Current version of VFD specifications, can be found here: <u>itrc.org/VFD</u>. Pump installer or pump company/manufacture will need to provide statement acknowledging that the ITRC specifications are being met to qualify
- For motors >75hp, VFD is required to meet power quality requirements as specified by Institute of Electrical and Electronics Engineers (IEEE) Standard 519-2014 found at <u>standards.ieee.org/ieee/519/3710</u>/, Recommended Practices and Requirements for Harmonic Control in Electric Power Systems. One of the following documentation options must be provided:
 - 1. Standard (e.g., 6-pulse) VFD with a Harmonic Filter Required Documentation: Harmonic filter manufacturer specifications reporting ≤5% current THD or IEEE 519-2014 compliance.
 - 2. Low Harmonic VFD Product Required Documentation: VFD manufacturer specifications reporting ≤5% current THD or IEEE 519-2014 compliance.
 - 3. VFD Certified to Comply with IEEE 519-2014 Required Documentation: Certification by a registered electrical engineer showing installation meets IEEE 519-2014 at the Point of Common Coupling

Water Pump Upgrade

Maasura Cor	10	Monsure Description	Dobato	Green		Livestock/		
Measure Cou	le	Measure Description	Repate	House	Irrigation	Dairy	Process	Winery
	R	Clean water pump, PEI ≤ 0.41,	\$15/			•		
	<u> </u>	variable speed, 1 ≤ hp ≤ 15 (NC or NR)	rated hp					
	0	Clean water pump, PEI ≤ 0.43,	\$15/			•		
	<u> </u>	variable speed, 1 ≤ hp ≤ 15 (NC or NR)	rated hp					•
	P	Clean water pump, PEI ≤ 0.45,	\$15/			•		
	<u> </u>	variable speed, 1 ≤ hp ≤ 15 (NC or NR)	rated hp					
	i	Clean water pump, PEI ≤ 0.88,	\$10/		•	•		
	<u> </u>	constant speed, 1 ≤ hp ≤ 15 (NC or NR)	rated hp					
	н	Clean water pump, PEI ≤ 0.90,	\$10/		•	•		
	··	constant speed, 1 ≤ hp ≤ 15 (NC or NR)	rated hp					
	G	Clean water pump, PEI ≤ 0.92,	\$10/			•		
	<u> </u>	constant speed, 1 ≤ hp ≤ 15 (NC or NR)	rated hp					
	п.	Clean water pump, PEI ≤ 0.43,	\$20/			•		
	<u> </u>	variable speed, 15 < hp ≤ 50 (NC or NR)	rated hp					
	т	Clean water pump, PEI ≤ 0.45,	\$12/			•		
		variable speed, 15 < hp ≤ 50 (NC or NR)	rated hp					
	5	Clean water pump, PEI ≤ 0.47,	\$7/			•		
5000 004	5	variable speed, 15 < hp ≤ 50 (NC or NR)	rated hp					•
		Clean water pump, PEI ≤ 0.88,	\$20/			•		
	<u> </u>	constant speed, 15 < hp ≤ 50 (NC or NR)	rated hp					
	к	Clean water pump, PEI ≤ 0.90,	\$12/			•		
	N	constant speed, 15 < hp ≤ 50 (NC or NR)	rated hp					
	i	Clean water pump, PEI ≤ 0.92,	\$7/			•		
	<u> </u>	constant speed, 15 < hp ≤ 50 (NC or NR)	rated hp	-				
	w	Clean water pump, PEI ≤ 0.45,	\$4.75/					
	**	variable speed, 50 < hp ≤ 250 (NC or NR)	rated hp	-				•
	v	Clean water pump, PEI ≤ 0.47,	\$2.25/			•		
	•	variable speed, 50 < hp ≤ 250 (NC or NR)	rated hp	-				•
	0	Clean water pump, PEI ≤ 0.89,	\$7.25/			•		
	<u> </u>	constant speed, 50 < hp ≤ 250 (NC or NR)	rated hp					•
	N	Clean water pump, PEI ≤ 0.91,	\$4.50/					
		constant speed, 50 < hp ≤ 250 (NC or NR)	rated hp					•
		Clean water pump, PEI ≤ 0.93,	\$2/			•		
	141	constant speed, 50 < hp ≤ 250 (NC or NR)	rated hp					•

NC: New Construction, NR: Normal Replacement, PEI: Pump Energy Index

Requirements:

- Only clean water pumps that are intended for agricultural, commercial, and industrial sectors with a nominal horsepower rating of <250 and meet the pump energy index (PEI) requirements specified. In addition, the PEI should be confirmed on the Hydraulic Institute (HI) database (<u>https://er.pumps.org/ratings/search</u>).
- Any of the following clean water rotodynamic pump classes are eligible: End Suction Frame Mount (ESFM), End Suction Close Coupled (ESCC), In-line (IL), Radially Split multi-stage vertical in-line diffuser casing (RSV), Vertical Turbine Submersible (ST)
- This measure is applicable for the following agricultural, commercial, or industrial building types of any vintage in any PG&E climate zone. "Commercial" building type (Com) is NOT eligible for downstream delivery types. AgOth, Asm, Cnc, Cre, Dat, ECC, EPr, ERC, Ese, EUD, EUn, Fhc, Gro, Gst, HGR, Hsp, Htl, IndOth, Mtl, Nrs, OfL, OfS, RFF and RSD
- The following information must be provided:
 - 1. Equipment manufacturer, model number, pump and motor hp, pump nominal speed, pump class type
 - 2. Pump operating hours and description of possible seasonal fluctuations
 - 3. Invoice, photo of installation and any available commissioning reports



Natural Gas

Boiler

Measure Code		Measure Description	Rebate	Green House	Irrigation	Livestock/ Dairy	Process	Winery
	A (PR105)	Steam Feedwater Economizer 81.4% TE	\$1/kBtuh	•				•
SWPROU/	B (PR106)	Steam Condensing Economizer 87.2% TE	\$2/kBtuh	•				•
SWWHOO8	A (H11)	Hot Water 85% CE	\$2/kBtuh	•		٠	•	•
	B (BW119)	Hot Water 90% CE	\$4/kBtuh	•		٠	•	٠
	C (H15)	Steam 83% CE	\$2/kBtuh	•			•	•

TE: Thermal Efficiency, CE: Combustion Efficiency

Requirements and Eligibility:

• Measures are allowed for any existing or new agricultural facility in any PG&E climate zone

Steam Boiler Economizer (SWPR007)

- Measure Application Types: Add on Equipment (AOE) and New Construction (NC)
- Measure is applicable to any Existing or New Construction agricultural steam boiler with an input rating ≥ 300,000 Btu/hr and ≤ 20 million Btu/hr
- Boiler manufacturer, model, and spec sheet should be submitted for verification
- No boiler efficiency eligibility requirements for the measure, for both single-stage and dual-stage economizers
- For a dual-stage economizer:
 - 1. the disposal of combustion condensate must meet local codes regarding sanitary drain or storm sewer
 - 2. some applications may require a neutralizer for the acidic combustion condensate

Process Boiler Replacement (SWWH008)

- Measure Application Type: Normal Replacement (NR)
- Water and steam boilers must have an input rating ≤ 20,000 kBtu/hr. The combustion efficiency must have a documented combustion efficiency of 85% or greater for water and 83% or greater for steam under full load conditions
- Measure is not applicable to boilers used for space heating, domestic hot water, pools, or spas, and is not eligible for domestic hot water or space heating
- Existing and replacement boilers must have the same input rating (measured in kBtu/hr)
- Measure is not eligible for New Construction installations

Greenhouse Heat Curtain

Measure Code		Measure Description	Rebate	Green House	Irrigation	Livestock/ Dairy	Process	Winery
SWBE001	A (HV654)	Double layer polyethylene with IR greenhouse with overhead gas furnace		•				
	A (HV655)	Double layer polyethylene with IR greenhouse with radiant heat furnace	\$0.50/ ft ²	•				
	B (HV656)	Single layer polycarbonate greenhouse with overhead gas furnace	area	•				
	B (HV657)	Single layer polycarbonate greenhouse with radiant heat furnace		•				

- Measure Application Types: Building Weatherization (BW) and New Construction (NC)
- This measure is applicable for agricultural or commercial greenhouse of any vintage for the primary purpose of the production of nursery products, horticultural specialties, or ornamental products.
- Must be a single-layer interior curtain installed for heat retention
- Must be installed in a gas-heated greenhouse facility
- The facility must be a greenhouse with the primary purpose of agricultural use.
- The heat curtain must be a new curtain installed where none previously existed or a new curtain that is replacing an existing curtain that is no longer functional.
- The heat curtain must be installed above the conditioned area where the gas heat source provides hot air to plant and seed species.
- The heat curtain must have a natural gas savings rating that meets or exceeds 40%.
- The heat curtain must have a warranty/product life of five years.
- The installation must allow the curtain to be automatically or manually moved into place.
- The square footage of the new heat curtain cannot exceed the square footage of the greenhouse floor. Additionally, any overhang and overlap of curtain material cannot be included in the square footage calculation
- The manufacturer's specification sheet and minimum five-year warranty proof must be submitted with the application.
- Application must include a digital image or drawing of the area of the greenhouse where the new curtain is installed.

Greenhouse Infrared Film

Measure Code		Measure Description	Rebate	Green House	Irrigation	Livestock/ Dairy	Process	Winery
- SWBE002 -	A (HV658)	Double layer polyethylene greenhouse with overhead gas furnace, NC	\$0.02/ ft ²	•				
	A (HV658)	Double layer polyethylene greenhouse with overhead gas furnace, AOE	\$0.04/ ft ²	•				
	A (HV659)	Double layer polyethylene greenhouse with radiant heat furnace, NC	\$0.02/ ft ²	•				
	A (HV659)	Double layer polyethylene greenhouse with radiant heat furnace, AOE	\$0.04/ ft ²	•				

NC= New construction, AOE = Add on Equipment

- Measure Application Types: Building Weatherization (BW) and New Construction (NC)
- This measure is applicable for agricultural or commercial greenhouse of any vintage for the primary purpose of the production of nursery products, horticultural specialties, or ornamental products.
- The IR film must be installed in a gas-heated greenhouse facility.
- The heating equipment type (building HVAC) must be specified in the implementation of the measure.
- The facility must be a greenhouse with the primary purpose of agricultural use.
- The film must be infrared, anti-condensate, polyethylene plastic with a minimum thickness of six thousandths of an inch (6 Mil).
- The IR film shall not be installed on the walls of the greenhouse.
- The manufacturer's specification sheet must be submitted with the application

Pipe Insulation

Pipe diameter is less than or equal to 1 inch

Measure Code		Measure Description	Rebate	Green House	Irrigation	Livestock/ Dairy	Process	Winery
	D (PR051)	1 inch insulation layer, ≤ 1 inch pipe, steam ≤ 15 psig, outdoor	\$4.00/ linear foot	•		٠	•	•
	G (PR052)	1 inch insulation layer, ≤ 1 inch pipe, steam > 15 psig, outdoor	\$4.00/ linear foot	٠		٠	٠	•
	A (PR053)	1 inch insulation layer, ≤ 1 inch pipe, hot water, outdoor	\$4.00/ linear foot	٠		•	٠	•
	F (PR060)	1 inch insulation layer, ≤ 1 inch pipe, steam ≤ 15 psig, indoor	\$4.00/ linear foot	•		•	•	•
	Y (PRO61)	1 inch insulation layer, ≤ 1 inch pipe, steam > 15 psig, indoor	\$4.00/ linear foot	•		•	•	•
	S (PR062)	1 inch insulation layer, ≤ 1 inch pipe, hot water, indoor	\$4.00/ linear foot	•		•	•	•
SWWH017	AE (PR069)	Fitting insulation, ≤ 1 inch pipe, steam ≤ 15 psig, indoor	\$4.00/ fitting	•		•	•	•
	AH (PR070)	Fitting insulation, ≤ 1 inch pipe, steam > 15 psig, indoor	\$4.00/ fitting	•		٠	٠	•
	AB (PR071)	Fitting insulation, ≤ 1 inch pipe, hot water, indoor	\$4.00/ fitting	•		٠	•	•
-	M (PR078)	Fitting insulation, ≤ 1 inch, steam ≤ 15 psig, outdoor	\$4.00/ fitting	•		٠	•	•
	P (PR079)	Fitting insulation, ≤ 1 inch, steam > 15 psig, outdoor	\$4.00/ fitting	•		•	•	•
	J (PR080)	Fitting insulation, ≤ 1 inch, hot water, outdoor	\$4.00/ fitting	•		•	•	•

Pipe diameter larger than 1 inch and less than or equal to 4 inches

Massura Cada		Massure Description	Debate	Green		Livestock/		
Measure Coue		Measure Description	Repate	House	Irrigation	Dairy	Process	Winery
	E (PR057)	1 inch insulation layer, 1 inch < pipe	\$4.00/					
	-(≤ 4 inch, steam ≤ 15 psig, outdoor	linear foot					
	H (PR058)	1 inch insulation layer, 1 inch < pipe	\$4.00/	•			•	
		4 inch, steam > 15 psig, outdoor	linear foot					
	B (PR059)	1 inch insulation layer, 1 inch < pipe	\$4.00/	•		•	•	•
	- (* *****	\leq 4 inch, hot water, outdoor	linear foot					
	W	1 inch insulation layer, 1 inch < pipe	\$4.00/					
	(PR066)	≤ 4 inch, steam ≤ 15 psig, indoor	linear foot			•		
	7 (00067)	1 inch insulation layer, 1 inch < pipe	\$4.00/					
	2 (PR007)	≤ 4 inch, steam > 15 psig, indoor	linear foot	•		•	•	•
C/M/M/LIO17	T (PR068)	1 inch insulation layer, 1 inch < pipe	\$4.00/					
500001/		≤ 4 inch, hot water, indoor	linear foot	•		•	•	•
	AF	Fitting insulation, 1 inch < pipe ≤ 4	\$4.00/					
	(PR075)	inch, steam ≤ 15 psig, indoor	fitting	•		•	•	•
		Fitting insulation, 1 inch < pipe ≤ 4	\$4.00/				•	
	AI (PRU/O)	inch, > 15 psig steam, indoor	fitting	•		•	•	•
	AC	Fitting insulation, 1 inch < pipe ≤ 4	\$4.00/			-	-	
	(PR077)	inch, hot water, indoor	fitting	•		•	•	•
		Fitting insulation, 1 inch < pipe ≤ 4	\$4.00/			•		
	N (PRU84)	inch, ≤ 15 psig steam, outdoor	fitting	•		•	•	•
		Fitting insulation, 1 inch < pipe ≤ 4	\$4.00/				-	
Q V	ų (Рков5)	inch, > 15 psig steam, outdoor	fitting	•		•	•	
		Fitting insulation, 1 inch < pipe ≤ 4	\$4.00/					
	к (ркояс)	inch, hot water, outdoor	fitting	•		•	•	•

(requirements on next page)

Pipe diameter is greater than 4 inches

Measure Code		Measure Description	Rebate	Green		Livestock/		
				House	Irrigation	Dairy	Process	Winery
	F (PR054)	1 inch insulation layer, > 4 inch	\$4.00/			•		
	1 (11(0)4)	pipe, ≤ 15 psig steam, outdoor	linear foot	-				
	I (PR055)	1 inch insulation layer, > 4 inch	\$4.00/			•		
		pipe, > 15 psig steam, outdoor	linear foot					•
		1 inch insulation layer, > 4 inch	\$4.00/					
	C (PR050)	pipe, hot water, outdoor	linear foot	•		•	•	•
		1 inch insulation layer, > 4 inch	\$4.00/					
	X (PRUGS)	pipe, ≤ 15 psig steam, indoor	fitting	•		•	•	•
	AA	1 inch insulation layer, > 4 inch	\$4.00/					
CM/04/1017	(PR064)	pipe, > 15 psig steam, indoor	linear foot	•		•	•	•
	U (PR065)	1 inch insulation layer, > 4 inch	\$4.00/	•				
		pipe, hot water, indoor	linear foot			•	•	•
	AG (PR072)	Fitting insulation, > 4 inch pipe,	\$4.00/	•				
500001/		≤ 15 psig steam, indoor	fitting			•	•	•
	AJ (PR073)	Fitting insulation, > 4 inch pipe,	\$4.00/	•				
		> 15 psig steam, indoor	fitting			•	•	•
	AD (PR074)	Fitting insulation, > 4 inch pipe,	\$4.00/	•				
		hot water, indoor	fitting	•		•	•	•
	0 (PR081)	Fitting insulation, > 4 inch pipe,	\$4.00/	•				
		≤ 15 psig steam, outdoor	fitting			•	•	•
	R (PR082)	Fitting insulation, > 4 inch pipe,	\$4.00/	•				
		> 15 psig steam, outdoor	fitting			•	•	•
		Fitting insulation, > 4 inch pipe,	\$4.00/				-	
	L (PRU03)	hot water, outdoor	fitting	•		•	•	•

- Measure Application Type: Add on Equipment (AOE)
- These measures are applicable to any small, large commercial and industrial pipe insulation retrofit (i.e., non-new construction) application. They cannot be used for residential purposes.
- Minimum-qualifying pipe diameter is 0.5 inch.
- Pipe must transfer fluid directly from gas-fired equipment, and insulation materials/accessories must be installed according to manufacturer's instructions.
- Application must include the manufacturer's name, insulation material type and material K-value rating.
- Acceptable types of insulation for hot water pipes include: elastomeric foam rubber, polyethylene foam, UV-resistant polyethylene foam and rigid polyurethane foam.
- Acceptable types of insulation for steam pipes include silicone foam rubber, melamine foam, rigid urethane-based foam, cellular glass, rigid fiberglass and rigid mineral wool.
- Replacement of damaged or existing insulation is not eligible for a rebate.
- California Building Standards Code (Title 24), Section 123, establishes requirements for pipe insulation in the design and installation of space-conditioning and service water heating systems and equipment. Any pipe requiring insulation according to these standards does not qualify for a rebate. Details are available at energy.ca.gov/title24.
- Pipe insulation for exposed steam and hot-water pipes within 7 feet of the floor that are not otherwise guarded in order to prevent contact does not qualify for rebate.

Processing

Dust Collection Fan VFD

Measure Code		Measure Description	Pobato	Green		Livestock/		
			Repate	House	Irrigation	Dairy	Process	Winery
- - - - - - - - - - - - - - - - - - -	A (PR088)	VFD on 10 hp motor	\$295/unit				•	
	B (PR089)	VFD on 15 hp motor	\$1,200/unit				•	
	C (PR090)	VFD on 20 hp motor	\$1,700/unit				•	
	D (PR091)	VFD on 25 hp motor	\$3,500/unit				•	
	E (PR092)	VFD on 30 hp motor	\$3,500/unit				•	
	F (PR093)	VFD on 40 hp motor	\$4,000/unit				•	
	G (PR094)	VFD on 50 hp motor	\$4,000/unit				•	
	H (PR100)	VFD on 60 hp motor	\$6,500/unit				•	
	I (PR101)	VFD on 75 hp motor	\$8,000/unit				•	
	J (PR102)	VFD on 100 hp motor	\$11,000/unit				•	
	K (PR103)	VFD on 125 hp motor	\$13,500/unit				•	
	L (PR104)	VFD on 150 hp motor	\$15,000/unit				•	

hp: horsepower

- Measure Application Type: Add on Equipment (AOE)
- Applicable to customers in the following NAICS Code: 111000 to 112990, 211120 to 213115 and 311000 to 339999 in all PG&E climate zones for 60 hp to 150 hp NAICS Code: 111000 to 112990 and 311000 to 311999
- Customer must have an existing electrically operated fixed-speed fan installed on site or plans to install a new electrically operated fixed-speed fan
- Existing baghouse, fan, and motor must be in proper operating condition and compatible with a VFD
- Installed VFD must be controlled based on static pressure, airflow rate (cfm), or velocity at the lowest required rate to keep particulates suspended in the air stream
- Fan/blower must not be a designed high-pressure blower. High pressure blowers have designed capacities of less than 150 cfm per rated horsepower (Applicable only to fan motors larger than 50 hp.)
- Measure cannot be used for the following applications:
 - 1. HVAC fan
 - 2. individual fan motor rated less than 10hp or higher than 150hp
 - 3. two-speed fan motor
 - 4. fan motor with an existing VFD or failed VFD
- VFD is recommended, but not required, to meet requirements as specified by IEEE Standard 519-2014

Refrigeration

Glycol Pump VFD

Measure Code		Measure Description	Rebate	Green House	Irrigation	Livestock/ Dairy	Process	Winery
SWPR002	A (MA4)	Glycol Pump VFD Winery 3 hp	\$540/unit					•
	B (MA5)	Glycol Pump VFD Winery 5 hp	\$890/unit					•
	C (MA6)	Glycol Pump VFD Winery 7.5 hp	\$1,300/unit					•
	D (MA7)	Glycol Pump VFD Winery 10 hp	\$1,700/unit					•
	E (MA8)	Glycol Pump VFD Winery 15 hp	\$2,600/unit					•
	F (MA9)	Glycol Pump VFD Winery 20 hp	\$3,500/unit					•
	G (MAA)	Glycol Pump VFD Winery 25 hp	\$4,400/unit					•

hp: horsepower

- Measure Application Type: Add on Equipment (AOE)
- Measure is only applicable to the winery industry for process end-use applications in all PG&E climate zones
- Application of this measure is for the addition of a VFD on an existing glycol pump motor that operates at constant speed. Chilled fluid, other than glycol, can be considered only if the unit energy savings (UES) is equal to or exceeds the UES of this measure. Contact TRC for non-glycol fluid applications prior to purchasing equipment to confirm eligibility.
- VFD must have automated controls based on pressure feedback, fluid temperature feedback, and/or flow rate feedback.
- Customer must provide documentation that the VFD is not installed on a back-up pump or redundant pump.

Floating Head Pressure Controls, Multiplex

Measure Cod	2	Measure Description	Rebate	Green House	Irrigation	Livestock/ Dairy	Process	Winery
SWCR007	A	Control SCT to ambient +12 deg F TD, 70 deg F min, backflood setpoint of 68 deg F (AOE), Cycling	\$55/ Cap-Tons				•	•
	В	Control SCT to ambient +12 deg F TD, 70 deg F min, backflood setpoint of 68 deg F with VFD fan control (AOE)	\$90/ Cap-Tons				•	•
	С	Control SCT to wetbulb +17 deg F TD, 70 deg F min, backflood setpoint of 68 deg F (AOE), Cycling	\$95/ Cap-Tons				•	•
	D	Control SCT to wetbulb +17 deg F TD, 70 deg F min, backflood setpoint of 68 deg F with VFD fan control (AOE)	\$100/ Cap-Tons				•	•

SCT: Saturated Condensing Temperature, AOE: Add on Equipment

- Measure Application Type: Add on Equipment (AOE)
- Floating head pressure control for commercial air-cooled multiplex refrigeration systems:
 - 1. Control SCT to ambient +12 °F TD, 70 °F min, backflood setpoint of 68 °F
 - 2. Control SCT to ambient +12 °F TD, 70 °F min, backflood setpoint of 68 °F with variable-speed fan control
- Floating head pressure control for commercial evaporative-cooled multiplex refrigeration systems:
 - 1. Control SCT to wetbulb +17 °F TD, 70 °F min, backflood setpoint of 68 °F
 - 2. Control SCT to wetbulb +17 °F TD, 70 °F min, backflood setpoint of 68 °F with variable-speed fan control
- For reducing or floating head pressure to lower SCTs, the equipment must meet the following requirements:
 - 1. Add controls to float head pressure down to a lower pressure when conditions permit (i.e., changes control from fixed set point to floating set point).
 - 2. Apply only to refrigeration systems having multiplex compressor systems with existing control of SCT at a fixed setpoint.
 - 3. The new SCT setpoint must be ambient following by controlling condenser fans with variable-speed drives or by staging condenser fans.
- This measure is applicable to all climate zones with any existing Non-Residential building type in commercial and industrial sector, and the following listed vintage categories: Prior to 1978 (represented by typical year "1975"), 1978 through 1992 ("1985"), 1993 through 2001 ("1996"), 2002 through 2005 ("2003"), 2006 through 2009 ("2007"), 2010 through 2013 ("2011")
- Products cannot be used in conjunction with measures that already incorporate floating head pressure controls. In addition, the following are ineligible: a) Projects that only reprogram a controller; new hardware must be installed b) New construction installations c) Any improvements which results in increased system energy use.
- Additionally, the calculation of the design cooling load (tons) is to be based on connected display cases, walk-in coolers and freezers, cooled storage, and prep areas only. Sub-cooler loads and air conditioning loads are ineligible for consideration.
- Building vintage and refrigeration multiplex system vintage after 2013. Customer must provide vintage of the building and the refrigeration multiplex system.

Additional AESAP Program Offerings



The savings don't stop at rebates. If you have an energysaving upgrade in mind but do not see it on this list, chances are it may qualify for the Custom Incentives Program.

All custom incentives require pre-approval prior to equipment purchase and installation and projects will be subject to an engineering review to ensure that measures satisfy program requirements. No-cost engineering assistance is available to all customers and Trade Allies to quantify savings and incentives upon request.



Custom Projects

Have a special project in mind? Our team of experts can help you identify energy-saving opportunities and incentives. Custom opportunities receive cash incentives based on the amount of energy your project saves. In addition to retrofits, customized incentives are available for retro-commissioning activities such as setpoint changes, new load added equipment, as well as modifying existing processes to improve overall kWh or therm per unit produced.



Finance Options

There are many cost-effective ways to finance your projects. We can help you find a way that works best for your business:

On-Bill Financing – 0% interest loans up to \$4MM where the energy savings pays off the loan on your bill. **GoGreen Financing** – The Small Business Financing (SBF) program offers financing with attractive terms for energy-efficiency improvements to businesses.

CONTACT US TODAY TO GET STARTED

1-833-987-SAVE | connect@AgEnergySavings.com www.AgEnergySavings.com

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