

Advanced Home Upgrade 2019 Incentive Structure

- Must do minimum of 4 measures, 2 of which are shell and 1 HVAC
- \$5,500 maximum incentive per home in CZs 1, 4, 11, 12, 13,16 and \$3,500 in CZs 2, 3, 5

Measure Description	Program Standard	Quantity	Customer Incentive CZs 1, 4, 11, 12, 13, 16	Customer Incentive CZs 2, 3, 5
Shell - Wall insulation	R value \geq 13 (2x4 framing) or R value \geq 19 (2x6 framing), installed per CEC QII Standards.	Minimum 50% total wall area (all walls)	\$500	\$300
Shell - Attic Insulation	R-44 or better, installed per CEC QII standards. Existing insulation maximum R19 in CZ 2, 3, 5. Existing insulation maximum R30 in CZ 1, 4, 11, 12, 13, 16.	100% of accessible attic area (minimum 50% of total attic area)	\$500	\$300
Shell - Floor insulation	R value \geq 19, installed to full-joint thickness, per CEC QII Standards.	100% of accessible floor area (minimum 50% of total floor area)	\$500	\$300
Shell - Whole building/envelope air sealing and Ventilation	0.35 or better ACHn target, 0.5 ACHn minimum performance, achieved in accordance with BPI standards and ventilated per ASHRAE 62.2. (installation of balanced Heat Recovery Ventilation recommended) 1) 15% building leakage reduction (pre vs. post) 2) 30% building leakage reduction (pre vs. post)	800 square foot conditioned area (at 8 ft average ceiling height) minimum		
			\$300	\$200
			\$500	\$300
HVAC - New Ducts and Insulation	Replacement only; R-8 All CZs @ 5% leakage or less. Existing ducts must be 10% leakage or greater to be eligible for upgrade.	100% of accessible ducts; up to 2 systems per dwelling unit	\$500	\$500
HVAC - Cooling	Split AC: SEER 15.0 / EER 12.5 or better Packaged AC: SEER 15.0 / EER 12.0 or better	Up to 2 HVAC systems (total) per dwelling unit	\$500	\$300
HVAC - Heating	Sealed Gas Furnace: 92% AFUE or better Heat Pump: 9.0 HSPF or better		\$500	\$500
HVAC - Ultimate Comfort	Meet 7 Residential HVAC System Commissioning Specifications including Delivered Sensible EER @ 85% or better (85% Delivered Heat for Furnaces)	One system per dwelling unit	\$1000	\$500
Gas Storage Water Heater	0.70 EF/UEF or better	Up to 2 DHWs (total) per dwelling unit	\$300	\$300
Condensing Gas Storage Water Heater	0.90 EF/UEF (Sealed Combustion)		\$500	\$500
Electric Storage Water Heater	2.0 EF/UEF or better		\$500	\$500
Pool Pump	CEC Title 20 compliant variable speed pool pump replacing existing single or two-speed pump (primary in-ground pool system only; no jacuzzis)	One pool pump per project site	\$200	\$200
Smart Thermostat	EnergyStar certified Smart Thermostats. Must be Wi-Fi enabled and confirmed via test login.	Up to 2 per dwelling unit with corresponding HVAC system	\$100	\$100
Lighting	\$5 per pin-base recessed LED retrofit fixture (Title 24 - JA8 Compliant)	Up to 25 per dwelling unit	\$125	\$125
Per-Project Maximum			\$5,500	\$3,500

Notes:

- Incentive amounts differ based on CEC Climate Zone, customers will be able to look up their climate zone on the PG&E website
- All measures are deemed single measures with a distinct incentive amount
- Incentive amounts are set relative to average post-install metered savings in that climate zone
- All energy savings estimates are pre-configured and set relative to average post-install savings in that climate zone
- Modeling will no longer be required, contractors who use modeling as part of their business process can still upload HPXML files but they will not change the savings recorded or incentives available
- The “Pre-Install” workflow will be eliminated and replaced with a simpler “Funds Reservation” process
- HPHI (Ultimate Comfort) has two incentives; an incentive directly to the contractor (\$1,200) AND an incentive to the customer (\$500 - \$1,000 depending on climate zone).
- CAS testing still applies pre- and post- install

Timeline:

Feb 6, 7, 8, 11, 12 - daily Q&A sessions (30 min) to discuss new incentive structure

Feb 15 - send out updated FAQ and answers to questions to all contractors as a direct email

Incentive Structure Change Roll-out

March 31, 2019

Applications must be PRE-INSTALL APPROVED (approved, not just submitted) by 5 pm PST to qualify under the current incentive structure. Approval must have passed Build It Green (BIG) Desktop Review.

April 1, 2019

New application and incentive structure launches.

Dec 5, 2019

All applications approved under the old incentive structure expire on if not Post-Install Approved by BIG Desktop Review.

Contractor FAQ:

How Will I Reserve Funds Under the New System?

A contractor will create a request for incentive funds by entering the dwelling address and other fields to verify the customer. The contractor will choose which measures the customer is planning to install and upload the Pre-Install CAS form. After a brief review by BIG Desktop Review the incentive funds will be reserved. Models will not be necessary.

Are test-in and test-out forms still going to be required?

CAS and diagnostic (CFM50 (whole house infiltration), CFM25 (duct testing), etc.) test-in and test-out will still be required. There will always be a test-in and out when we address the pressure dynamics of a home. Also, finding issues with CO and gas leaks early is better than the alternative; flip the conversation to safety and peace of mind. We are working on a digital CAS form for submission directly from the field.

You must use the same method at test-in and test-out, either Duct Leakage to Outside (DLTO) or Total Duct Leakage (TDL).

Can rebates still be assigned to contractor and customer? Where is this selected?

Yes, rebates can be still be assigned to either A) contract signing customer B) contractor C) third-party -- just as they are now. The same form will apply and the contractor will choose the payee in the portal just like the current system. The payee information will be collected on the Post-Install application.

Are there any minimum out of pocket expenses required for customers (i.e. rebate caps) to participate?

No, there are no out of pocket requirements or rebate caps in relation to customer cost. The total incentive available is capped at \$5,500 for CEC Climate Zones 1, 4, 11, 12, 13, 16 and \$3,500 in CEC Climate Zones 2, 3, 5.

Will we still be receiving realization rate reports? If yes, what will be the basis of the reports as there is no modeled savings?

There will still be information conveyed as average historical savings within the two climate zone groups. Savings based feedback is planned going forward but the format and structure is under development. We hope to be able to provide comparison to average historical per project savings relative to actual savings in aggregate savings, more to come on that later. The overall goal for each program project is still 1200 kWh and 120 Therms average annual savings.

Measure Specific Questions

Insulation

If attic doesn't have room for R44, if they insulate up to what space allows for, will that measure qualify?

Eave vents would need baffles, but otherwise fill insulation cavity to as close to R-44 as possible. Venting is crucial because of condensation. All homes need a way to dry out, because you can't negate moisture and humidity gains. Added documentation would be required. Application would need to show multiple depth-measurement and attic-height photos.

In the rare case a customer has a flat roof and are on a slab, would they still be able to participate in the AHUP program?

Wall insulation is a highly effective energy efficiency upgrade measure. For example, the drill and fill Wall Insulation method can serve as both an insulator and air barrier (building leakage reduction). This could count towards two qualifying shell measures.

HVAC

Which Package HVAC Units are approved models for incentive?

Package units don't meet the heating efficiency requirements but can meet the cooling efficiency requirements (15.0 SEER/12.0 EER or better for package units).

If there is a swamp cooler with ductwork, that they replace both system and ducts - would that qualify for the duct replacement rebate?

The cooling equipment measure can be claimed, but swamp cooler duct systems are typically not equivalent to a traditional forced air duct system. Therefore, the duct leakage replacement measure cannot be claimed, unless there is an existing furnace with its own duct system that is being replaced. If the swamp cooler duct system is damaged, it would still be best practice to repair or replace it for your customer.

For HPHI, there was a recommended best practice to switch out package unit for a split system. Is this required?

Yes, if you are certified, and aiming to claim the HPHI measure. However, this isn't meant to address all scenarios, but on a project where the customer may also be considering a roof replacement, then the opportunity for switching to a split system might make more sense. Meeting HPHI eligibility requires either existing Split Furnace/AC upgrade or switching from existing Packaged Furnace/AC to upgraded Split Furnace/AC.

Duct Work

For the duct replacement measure, what are the qualification specifications? Sometimes it is only possible to do a partial duct replacement.

The measure is for duct system replacement. It's possible that less than 100% of the system is accessible, however, all accessible ducts must be replaced and reach 5% or better system leakage to claim the measure.

Did the program consider incentivizing duct sealing? Why or why not?

The decision was made to incentivize replacement only as this ensures that duct insulation is combined with duct leakage reduction. This also helps align with Title 24 requirements for system design and encourages better system supply design.

Poor duct designs lead to high static pressure (typically >½" water column), noisy systems, and poor delivery of heating and/or cooling. With high static pressure fan motors use more electricity to deliver air than is needed. If poorly designed duct systems are better sealed, it can actually lead to increased electrical consumption.

Smart Thermostats

What qualifies as proof of Wi-Fi connection for a Smart Thermostat rebate?

The easiest thing to do is take a photo of the customer's computer screen or smart phone logged into the thermostat via Wi-Fi. Depending on which manufacturer of thermostat is chosen, there may be other methods, we're not dictating any particular method, just verification of a completed connection that is clearly indicated from the photo documentation.

Is there contractor pricing for Smart Thermostats?

We have special contractor rates only for ecobee at this time. Negotiations with other brands are ongoing. Please look for future information on contractor pricing in upcoming newsletters.

Other Measures

Measures not found on the current list of incentivized items. Why were they not included?

- **Tankless water heaters**
 - Programs have found that many customers don't need to be incentivized to install a tankless water heater and they tend to over-consume energy after one is installed.
- **Windows**
 - Windows are a very expensive measure which occasionally don't provide enough savings to balance out the customer cost. Customers often don't need to be incentivized for window upgrades.
- **Heat pump water heaters**
 - The current efficiency specification of 2.0 EF/UEF can only be achieved with a heat pump storage water heater. In order to claim the measure there must be an existing electric storage water heater.
- **Whole house fans**
 - Whole house fans can save energy when properly installed and operated. However, because they depend heavily on user behavior actual savings can be unreliable and was not under consideration for this round of Program changes.

Customer Qualifications

What is the minimum amount of time a customer must 'Share their Data'?

One year pre- and post-installation minimum. New homeowners can participate but may not have enough data to contribute to aggregated actual savings feedback.

May a new homeowner without past energy bills still participate in the program? Is there a minimum amount of time a customer needs to be in a home to participate in the program?

No current minimum. There is a potential policy change coming in 2020 on this but for now they can participate.

If customer has rental properties, what are the logistics for landlord/renter participation?

Same as they are currently. The Program is open to both property owners and renters with permission from the property owner. PG&E can only issue rebates or incentives to the PG&E Utility Account Holder on record (by default) until that account owner conveys the incentive to someone else via the Customer Payment Assignment Form (CIPA). The CIPA Form is available for download at <https://homeupgrade.org/resources/documents/>.

What are the guidelines for customers with solar (who won't show much change in utility usage pre and post job), and customers who decide to get solar after their home upgrade (i.e. reduce before they produce)?

Right now they can participate as normal. That may change in 2020 when we begin screening customers based on potential savings.

What are the eligibility / program qualifications for the following types of customers living in shared territory?

- PG&E all electric home (no gas or propane)
- PG&E electric / other utility gas supply
- Other utility electric supply / PG&E gas

PG&E Chapter 11 Bankruptcy

PG&E has shared information on their [intended operational plan](#). Please use this language as official guidance for all inquiries.

Program operation is covered in the [FAQ](#).