



MULTIFAMILY UPGRADE CUSTOMER HANDBOOK

PACIFIC GAS AND ELECTRIC COMPANY

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Version Log

This document was last updated July 9, 2018.

Changes made between versions include the following:

Version 6.2:

Section 1: Clarified that project deadlines are based on the Verification Documents Due date detailed in the incentive reservation letter for each project.

Appendix: Updated minimum equipment specifications and added recommended performance criteria.

Version 6.1:

Updated requirements to receive a portion of the assessment incentive early:

- ~~• Submit their application, with program-approved rater selected, within 21 days of prequal call.~~
- Complete the assessment review process within 90 days of submitting program application
- Apply for MUP *before* March 31, 2018

Section 2: Clarified water-performance bonus criteria – cold water-savings measures do not count towards the 10% site savings requirement.

Version 6.0:

Section 1: Program deadlines updated for 2018. Projects whose work scopes extend into the next program year, must complete at least 50% of their total work scopes during the 2018 program year to be eligible for incentives. At incentive reservation, the project team will determine the qualifications to meet this requirement. The deadline to complete 2018 work scopes is November 9, 2018.

Section 1: Early completion incentive. PG&E offers the contractor (or the project team) \$50/unit for completing the project on or before the date documented in the incentive reservation letter. If the project does not complete by the deadline, the project will forgo this incentive.

Section 1: Early assessment incentives. MUP offers an additional incentive for projects that complete their property assessment within the following parameters. Successful projects must:

- Submit their application, with program-approved rater selected, within 21 days of prequal call.
- Complete the assessment review process within 90 days of submitting program application
- Apply for MUP *before* March 31, 2018

Projects that successfully complete these steps, in the timeframe specified above, will receive 25 percent of the total assessment incentive at the incentive reservation stage.

Section 2: Added water-performance bonus.

Version 5:

Section 1: Program deadlines updated for 2017. Projects must complete all enrollment procedures, including the submittal of a complete application package, and successfully pass the assessment review process by September 29, 2017. Projects must complete construction and submit all completion documentation to MUP Staff by within 30 days of completion date milestone identified in Incentive Reservation Letter, or by November 13, 2017, whichever comes first.

Section 1: Program upgrade incentives updated for 2017.

Section 2: Updated eligibility requirements to include minimum program specifications for appliances and fixtures.

Section 5: Program milestone updates for 2017. Three project team check-in meetings with MUP Staff.

Version 4:

Section 1: Program deadlines updated for 2016. All projects must complete all enrollment procedures, including the submittal of a complete application package, and successfully pass the assessment review process by **October 1, 2016**. Projects must complete construction and submit all completion documentation to MUP Staff by **November 15, 2016**.

Section 1: Assessment incentives are paid once based on the total number of qualifying units on the property.

Section 1: Upgrade incentives are paid to qualifying projects for eligible upgrades once every three years, unless the project is approved and enrolled in the (optional) incremental program (Section 4).

Section 3: The MUP Staff will issue a participation survey to the project team. The survey must be completed before the MUP Staff can issue a completion letter to the project team and request payment from PG&E.

Section 4: Added Incremental Path (Optional) section.

Version 3:

Other Program Policies: Added section on property owner selection of Rater and changes to Rater during project.

Version 2:

Section 1: Incentives: added clarification on assessment incentive. The assessment incentive is paid on program-qualified buildings only, upon verification of installed upgrade measures.

Section 2: General eligibility: added clarification regarding projects who receive propane gas.

Section 2: Eligible measures: added language regarding applicability of pool pumps and renewable systems. Removed language requiring lighting to be attached to the building.

1. Program Summary

The Pacific Gas and Electric Company (PG&E) Multifamily Upgrade Program (MUP) promotes and facilitates energy-efficient retrofits of multifamily housing (“projects”) through design assistance, cash incentives, and program coordination (the “program”). TRC Energy Services (TRC) implements, oversees and coordinates this program (the “MUP Staff”) on behalf of PG&E. To promote a comprehensive, whole-building upgrade strategy, projects must adhere to the following minimum criteria to qualify:

- Improve building energy efficiency by ten (10) percent as compared to existing conditions
- Install a minimum of two (2) upgrade measures, in two of the four unique measure categories (envelope, heating/cooling, water heating, and appliances/lighting). Engage the services of a Multifamily Upgrade Program Approved Rater and Contractor (the “project team”) to conduct building audit, analysis, installation and verification.

The deadline to complete a project is listed as the Verification Documents Due date on the Incentive Reservation Letter, an example is shown in Figure 1. Projects completing in the 2018 program year should submit verification documents by October 05, 2018 to ensure payment by December 2018. Projects submitting after that date may have incentive payments delayed until January 2019. Projects whose work scopes extend into the next program year, must complete at least 50% of their total work scopes during the 2018 program year to be eligible for incentives. At incentive reservation, the project team will determine the qualifications to meet this requirement.

Milestone	Scheduled Meeting Date
Assessment meeting	04/20/18
50% construction completion meeting	06/01/2018
Pre-verification meeting	08/01/2018
Construction completion	08/14/2018
Verification documents due	09/14/2018

Figure 1 Example timeline from Incentive Reservation Letter

If projects fail to meet the completion deadline identified in the Incentive Reservation Letter, or a one-time approved extension deadline, this failure may result in significant changes to the final incentive amount (including void of incentive reservation).

Contact Information

Multifamily Upgrade Program

Toll Free: **866-352-7457**

Email: multifamilyupgrade@trcsolutions.com

- Program Manager: **Michael Maroney**, mmaroney@trcsolutions.com
- Technical Manager: **Matt Jones**, mrjones@trcsolutions.com

- Project Coordinator: **Siobhan McCabe**, smccabe@trcsolutions.com

Incentives

The 2018 program offers the following incentives:

- Assessment Incentive:** per dwelling unit incentive for assessment and verification, paid to the Owner Applicant, unless signed over to the Approved Rater performing these services. This assessment is paid on program-qualified buildings only, upon project completion (after verification of installed upgrade measures).
- Upgrade Incentive:** performance-based escalating incentive for the energy efficiency upgrades, paid to the Owner Applicant, unless signed over to the Approved Contractor installing the upgrades.

The program will only issue incentives to projects that have submitted all required documentation and meet all program requirements as outlined in *Section 2. Eligibility*. PG&E will issue incentive checks to the Owner Applicant, unless otherwise designated to the Approved Rater or Approved Contractor specified on the application. PG&E reserves the right to alter the incentive structure or adjust incentive amounts during the program cycle. Funds are limited and available on a first-come, first-served basis.

PG&E offers the contractor (or the project team) \$50/unit for completing the project on or before the completion date documented in the incentive reservation letter. If the project does not complete by the deadline, the project will forgo this incentive.

Assessment Incentive

The assessment incentive is designed to offset a portion of the cost¹ of a comprehensive energy assessment and verification. Upon successful project completion and verification, the program will issue the incentive to the property owner. Alternatively, the owner has the option to sign the incentive over to the Approved Rater supporting the project. Assessment incentives are paid once based on the total number of qualifying units on the property.

The assessment incentive equates to \$100 per dwelling unit for up to 200 units; the minimum total incentive is \$2,500 and the maximum is \$20,000 per project. Projects achieving at least 25 percent improvement are eligible for a higher per-unit incentive of \$125 per unit for up to 200 units, or \$25,000. The table below summarizes the assessment incentive structure. *Post-upgrade modeled savings* refers to the percentage of energy savings that each building achieves after installing and verifying all upgrade measures.

Post-Upgrade Modeled Savings (%)	Assessment Incentive (per dwelling unit)
10 - 24	\$100 (project min. \$2,500, max. \$20,000)
25 and above	\$25 bonus (max. \$5,000)

¹ Energy assessment and verification costs vary depending on services offered and agreed upon between the property owner and the Approved Rater.

Figure 2. MUP Assessment Incentive

Early Assessment Incentives

MUP offers an early incentive for projects that complete their property assessment within the following parameters. Successful projects must:

- Apply for MUP *before* March 31, 2018
- Complete the assessment review process within 90 days of submitting program application

Projects that successfully complete these steps, in the timeframe specified above, will receive a 25 percent of the total assessment incentive at the incentive reservation stage.

Upgrade Incentive

Upgrade incentives are tiered based on modeled whole-building site energy savings, starting at \$400 per dwelling unit (at 10 percent whole-building improvement) and escalating up to \$3,000 per unit (at 50 percent improvement). The program pays the incentive after the successful completion and verification of the project. The incentive is designed to offset a portion of the installed cost² of upgrades that contribute to the whole-building savings, and cannot exceed actual upgrade costs. Upgrade incentives are paid to qualifying projects for eligible upgrades once every three years, unless the project is approved and enrolled in the (optional) incremental program (Section 4).

Per unit incentive calculations are as follows:

- 10 – 18 percent improvement:
 - \$400/unit base incentive
 - \$25/unit per additional percent improvement from 11 – 18 percent
- 19 percent improvement and greater:
 - \$675/unit base incentive
 - \$75/unit per additional percent improvement from 19 – 50 percent (capped at \$3,000/unit)

The following table shows example upgrade incentive amounts.

Post-Upgrade Modeled Savings	Incentive per Dwelling Unit
10%	\$400
15%	\$525
20%	\$750
25%	\$1,125
30%	\$1,500
35%	\$1,875
40%	\$2,250
45%	\$2,625
>50%	\$3,000

Figure 3. MUP Upgrade Incentive

² Installed cost is a sum of both material (equipment) and labor (installation) costs. These costs are reported at project completion and shall only include costs that contribute to the whole-building energy savings (i.e. envelope, HVAC, hot water, appliances, and lighting, etc.).

The Multifamily Upgrade Program calculates incentives at one-percent increments, rounding **down** to the nearest percentage point. Figure 3 illustrates the upgrade and assessment incentives that the program offers for each increment of building energy efficiency improvement.

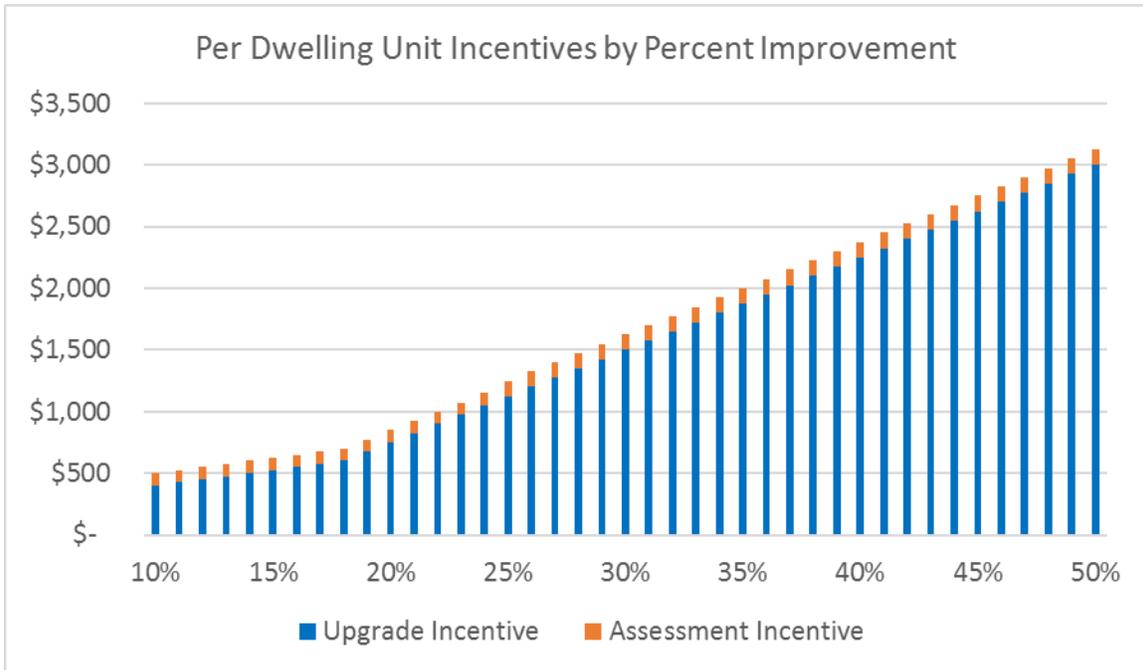


Figure 4. MUP Upgrade Incentive Chart

2. Eligibility

General Eligibility

- **PG&E service:** A Project's installation address must receive electric and/or natural gas service from PG&E. PG&E electric customers who receive propane gas qualify. PG&E customers that receive one commodity (gas or electric) must contact MUP Staff for incentive calculation instructions.
- **Building criteria:** Multifamily Upgrade Program defines a multifamily building as having five or more attached dwelling units in each building. Both low-rise and high-rise buildings are eligible. Properties with multiple duplex, triplex, or quadplexes (two to four attached units) on a single parcel may also qualify. PG&E serves single family homes through a separate program (contact MUP Staff for additional information).
- **Existing buildings:** The program can only accept projects from an existing property interested in undergoing a retrofit. The program establishes the pre-retrofit using building assemblies and systems in place at the time of the assessment. PG&E serves new construction projects through a separate program (contact MUP Staff for additional information).
- **Third-party verification:** An Approved Rater must verify existing conditions prior to the start of construction and upgraded conditions after retrofit construction. An Approved Contractor(s) must install all energy efficiency measures identified under the Multifamily Upgrade Program scope.
- **Energy use improvement requirements:** An Approved Rater must assess the property using the program's modeling software to determine existing (baseline) conditions and make proper energy efficiency improvement recommendations for each participating building. The project must demonstrate a minimum of 10 percent of modeled energy upgrades for each building to be eligible for incentives.
- **Project completion:** To be eligible for incentives, all projects must comply with the program process outlined in Section 3 of this handbook, including test-out protocols, third-party verification, and combustion appliance safety testing. See Section 3. Program Process for specific requirements.

Participation Requirements

- **Comply with California law:** Participants, Approved Raters, and Approved Contractors must meet all applicable State laws, including State and local building codes, and inspection and permitting requirements.
- **Use an Approved Rater:** Raters must complete the necessary training and demonstrate compliance with all eligibility requirements to become an Approved Rater in the Multifamily Upgrade Program and perform energy and combustion safety assessments. Participants must select an Approved Rater from the program's pre-approved list (available on www.multifamilyupgrade.com).
- **Use an Approved Contractor(s):** Contractors must complete the necessary training and all parties working on the project (including subcontractors) must demonstrate compliance with all eligibility requirements to become an Approved Contractor in the

Multifamily Upgrade Program. Participants must select an Approved Contractor from the programs' pre-approved list (available on the website). Participants that would like to enlist the services of a contractor not on the list must first contact program staff to verify contractor eligibility before commencing construction work.

- **Pre-construction reservation:** Projects must successfully complete Multifamily Upgrade Program assessment review and submit a complete assessment package, as explained under *Section 3. Program Process, Step 3. Property Assessment* of this handbook, and receive a letter of reservation prior to starting construction.
- **No double dipping:** Projects cannot receive a rebate for the same product (s) from more than one California investor-owned utility or other rebates funded through CPUC-authorized energy efficiency funds. Products that PG&E has discounted at the point of sale are not eligible for additional rebates.
- **Adherence to program deadlines:** 2018 Projects must complete construction and submit all completion documentation by the Verification Documents Due date identified in Incentive Reservation Letter for each project. Applications shall remain valid from time of successful post-assessment desktop review and scope of work confirmation through December 31, 2018. Projects shall remain on schedule and notify MUP Staff if the schedule changes. Additional program deadlines may apply. Refer to additional program timelines in *Section 5. Other Program Policies*.

Eligible Measures

The Multifamily Upgrade Program uses a modeling software that captures performance for the whole building and allows for recommendations on a wide variety of measures to determine estimated energy savings potentials. Projects must complete the installation of two or more measure-types in two unique measure categories and achieve a minimum of 10 percent in modeled energy upgrades to qualify for incentives. Examples of these measures include (high level bullets are unique measure categories):

- Envelope
 - Roof/attic insulation
 - Wall insulation
 - Floor Insulation
 - Cool roof or radiant barrier
 - Windows
- Heating Ventilation and Air Conditioning
 - Heating
 - Air Conditioning
 - Fans
 - Duct sealing and insulation (as applicable)
- Domestic Hot Water
 - Boilers
 - Pumps, controls, and pipe insulation
 - Pool pumps and equipment
 - Low-flow fixtures
- Lighting and Appliances
 - Indoor and exterior lighting
 - Refrigerators and dishwashers
 - Laundry appliances

In order to be eligible for upgrade incentives, all measures must meet the following criteria:

- Meet or exceed current California building and appliance standards (codes) for energy efficiency
- Meet or exceed minimum program specifications for appliances and fixtures for energy efficiency (see appendix)
- Be installed according to manufacturers' installation standards

The program may consider additional measures not referenced in the list above on a case-by-case basis.

Renewable systems (solar photovoltaic or solar thermal) and envelope air sealing (building leakage reduction) do not qualify as eligible measures through this program.

Water Performance Bonus

Choose three measures and receive a 1% bonus based on the MUP incentive scale. This bonus applies to the incentive amount, not site savings. Energy savings from cold water measures do not occur at the site and do not count towards the 10% site energy savings requirement.

Measure	Requirements
Showerheads	75% of units
Aerators	75% of units
Toilets	75% of units
Turf replacement	75% of existing turf
Irrigation controllers	100% irrigated area
Rain barrels	Installed per manufacturer's specs

3. Program Process

The Multifamily Upgrade Program participation process includes seven steps:

1. Pre-qualification
2. Enrollment
3. Assessment
4. Incentive reservation
5. Energy efficiency upgrades
6. Verification
7. Payment

Step 1: Pre-Qualification

The project applicant (property owner or manager) must first complete and *submit an interest form* (found on the program website: www.multifamilyupgrade.com). MUP Staff will use this form to assess basic building conditions and determine if the property may be eligible for other utility programs.

Upon receipt, TRC will review the Interest Form and follow-up with a short *pre-enrollment meeting* (via phone call) with the project applicant. During the pre-enrollment meeting, TRC will review existing property characteristics and upgrade plans with the applicant, to determine if the proposed project/building meets the basic eligibility criteria of the Multifamily Upgrade Program. This meeting is projected to take between 15-30 minutes.

Projects that may be eligible for other PG&E programs, may contact or be contacted by PG&E's single-point-of-contact representative for additional guidance on how to participate in additional programs.

Step 2: Enrollment

Once the project has been qualified, the applicant will *form a project team* by hiring an Approved Rater and Approved Contractor(s) (together, the "project team"). The program encourages applicants to select project team members from the lists of Approved Raters and Contractors. However, program staff can work with an applicant to qualify external raters or contractors to perform work under the Multifamily Upgrade Program.

The applicant will sign and *submit an application* to the Multifamily Upgrade Program. Part of this agreement includes the requirement that the applicant address any combustion appliance safety (CAS) and other health and safety issues that may be discovered during the property assessment.

Please note that the program will only reserve incentives after a project successfully completes the assessment (Step 3) and assessment desktop review (Step 4).

Step 3: Assessment

Once enrolled, the property will undergo a *comprehensive energy and combustion safety assessment*, to determine existing (baseline) conditions. An Approved Rater must perform this assessment, which includes:

- **Energy assessment:** Complete an ASHRAE Level 2 energy assessment and report (details defined in the MUP Partner Handbook).
- **Combustion safety testing:** Testing must comply with MUP Partner Handbook requirements, which include Building Performance Institute guidelines.
- **As needed program mentoring:** TRC will work with the applicant and its project team to determine if mentoring services are appropriate for the project.
- **Building energy simulation:** Through July 31, 2018, raters shall complete an energy simulation for each building using either the Residential Performance or Non-Residential Performance modules in EnergyPro version 5 or version 7, to document the building's existing conditions and expected post-retrofit conditions. Incentives will be reserved based on the version submitted, prior to the July 31st deadline. Following the July 31st deadline, raters shall complete energy simulations in EnergyPro version 7 Non-Residential Performance and incentives will be reserved based on these outputs. Our technical team is available to assist with the transition of models throughout 2018.
- **Scope of work development:** The recommended scope of work must include energy efficiency upgrades that achieve modeled energy savings of at least ten percent at the building level, and any repairs needed to fix combustion appliance safety issues.

Step 4: Incentive Reservation

The Approved Rater shall *submit a test-in submittal package* on behalf of the project applicant. The package will include:

- EnergyPro model (.bld file) for each building
- ECON2 for each building
- Data collection forms, take-offs, and photos of existing building conditions
- Lighting schedule for units, common areas, and exterior site lighting
- Assessment report
- Construction schedule
- Copy of PG&E utility bill for each commodity supplied
- W-9 form for each incentive payee (owner, Approved Rater, or Approved Contractor)

TRC's Multifamily Upgrade Program *quality assurance* staff will review the test-in submittal package to insure completeness, accuracy, and compliance with program requirements. TRC staff will identify inaccurate and incomplete packages; any project deemed inaccurate or incomplete must address all issues prior to advancing to Step 5.

Once a project passes desktop review, TRC will issue a *letter of reservation* to the applicant and Approved Raters and Contractors listed on the application that summarizes the approved upgrade scope of work, proposed construction schedule, and reserved incentive amount.

Funding is limited. The program will consider reservations on a first-come, first-served basis and projects must adhere to the time limitations of the program. Final incentives are calculated based on

verified upgrade construction. Changes to the scope of work and the proposed timing of construction schedule may result in significant changes to the final incentive amount.

Step 5: Energy Efficiency Upgrades

The letter of reservation serves as a notice to proceed with *installation of the energy efficiency upgrade scope of work*. All projects must install energy efficiency upgrade measures in the approved scope of work to manufacturers' specifications and in accordance with California Law. All projects must use an Approved Contractor to install these measures. Applicants may refer contractors of choice to the Multifamily Upgrade Program at any time for program participation eligibility verification; all contractors must receive program approval before installing project energy upgrade measures.

Prior to commencement of work, the owner shall install a CO alarm in every unit that is affected by the scope of work. The CO alarm and installation shall be compliant with California law.

The applicant or Approved Rater (on behalf of the applicant) must notify MUP Staff if the planned upgrade scope of work changes during construction. Because the program uses the original scope of work to determine incentive amounts, the program cannot guarantee incentives if changes in the scope of work occur. Projects may need to resubmit test-in project files in order to revise and determine accurate incentive amounts.

Step 6: Verification

Upon completion of work, the participating Approved Rater will *verify installed measures* and complete test-out combustion safety diagnostics. The Approved Rater will confirm whether measures meet Multifamily Upgrade Program installation standards, whether the project has performed all combustion safety appliance testing corrective actions identified previously, and that the scope of work is consistent with the proposed installation scope of work that was originally submitted during the initial review. If verification identifies changes to the scope that would modify the calculated upgrade incentive amount, the Approved Rater will *submit a new test-out submittal package* to verify the accuracy of the new energy savings potential. This package will include:

- Project Verification Form
- Photo documentation of upgrades based on sampling protocols
- Multifamily CAS Compliance Results (workbook or report)
- Cut sheets for installed upgrade measures
- Copies of permits for upgrades (as applicable)
- Copies of invoices for upgrade measures
- Energy model files and ECON2s, if there have been any specification changes to the scope of work
- Lighting Schedule
- Quick Reference Checklists

MUP Staff will follow up with the applicant via email and/or phone for any additional information needed to complete desktop *test-out quality assurance* review.

MUP Staff will select a sample of participating projects for field quality assurance. In the case that staff select a for field quality assurance, Multifamily Upgrade Program staff will contact the project team to schedule an on-site inspection far enough in advance allowing for adequate notice to residents. The inspection will require access to all installed upgrades included in the scope of work for which the participant is requesting incentives from the Multifamily Upgrade Program.

Step 7: Payment

Once the verification process has confirmed that the project has met the incentive requirements and completed combustion appliance safety test(s), the MUP Staff will issue a participation survey to the project team. Once the participation survey is completed, the MUP Staff will issue a *completion letter* to the applicant by email. The letter will indicate that program staff have forwarded a completion package to PG&E for incentive processing. Congratulations, you are finished!

PG&E will process upgrade and assessment incentives based on the energy savings and dwelling unit count reported in the completion letter. PG&E will only address payments to the owner applicant and/or Approved Rater or Contractor identified on the project application.

4. Incremental Path (Optional)

The Multifamily Upgrade Program (MUP) Incremental Path provides an alternative solution for property owners with construction timelines extending into the next program year. This alternative option allows customers to receive partial rebates upon completion of each stage to help off-set costs and extend the time needed to finalize the entire project.

Eligibility

Projects under each property must:

- Complete the first stage of construction and verification submission before October 5, 2018
- Complete all upgrades by October 5, 2019
- Accept Terms and Conditions for the Multifamily Upgrade Program

Projects pursuing the incremental path must complete the first stage of construction and a minimum of 50% of the total upgrade scope of work in the first program year enrolled. Multifamily Upgrade Program staff will determine which measure and/or work will meet the 50% scope requirement. Incentive amounts and program policies are subject to change from one program year to another. Consequently, incentive amounts for stages completed beyond October 5, 2018 will be subject to change based on Multifamily Upgrade Program incentive offerings in 2019. Should the program end, the program will honor incentives for completion of the current project stage by the date listed within reservation letter.

Incentives

Upgrade

Total upgrade incentive amounts for Incremental Path projects will align with MUP incentives, as listed under the *Incentives* section. Incremental Path upgrade incentives are determined as follows:

- Multifamily Upgrade Program staff will calculate incentive amounts by stage; incentives paid will depend on the estimated energy savings associated with the scope of each stage. Staff will include this breakdown in the letter of reservation.

Assessment Incentives

Total assessment incentive amounts for Incremental Path projects will align with MUP incentives, as listed under the *Incentives* section. The Program will pay assessment incentives as follows:

- Seventy percent (70%) of assessment incentives at completion of the first stage.
- Thirty percent (30%) at completion of the final stage.

Process

Projects pursuing the Incremental Path will participate according to the following steps:

- Step 1: Pre-Qualification through Step 4: Incentive Reservation of the Multifamily Upgrade Program process.
- Prior to Incentive Reservation, the project team will determine the construction timeline and completion dates for each stage of the project. A project may be divided into two stages, one for each program year.
- Program staff will include the stages, expected completion dates, and scheduled incentive payments on the letter of reservation for each MUP Incremental Path project.
- *Step 5: Energy Efficiency Upgrades,*
- *Step 6: Verification:* The Partner Rater will verify measure installation after construction completion of each stage. Submission of verification documentation and invoices for installed measures will trigger incentive processing for that stage. If the project changes the scope of work, the Incremental Path, Raters shall submit revised energy models at the end of each stage.
 - **Combustion Safety:** The Rater shall follow combustion safety testing protocols according to *Section 5 of the Multifamily Upgrade Approved Rater and Contractor Handbook*. The Incremental Path requires carbon monoxide detector installation in each dwelling unit (unless they are already present and working) prior to the start of stage I construction. Projects will only complete test-out combustion safety testing in accordance with the work scope in each stage.
- *Step 7: Payment*

5. Project Timelines

In order to best manage program volume, and serve the multifamily market equitably, the Multifamily Upgrade Program staff relies on continual progress of each project in the program. As such, staff will monitor the following project milestones and timelines for each project. If a project does not meet a project milestone within the expected timeline, it will lose its place in the incentive queue and may rejoin the queue at the bottom of the project list. If the program is fully subscribed, this may result in the loss of assessment and upgrade incentives for the project. The table below summarizes timeline expectations for participating projects.

Project Milestone	Timeline
Assessment Site Visit	Within two months of application submission date
Test-in submittal	Within one month of assessment date
Project team check-in with MUP Staff #1	After Assessment Site Visit and before Construction commencement
Test-in submittal revisions	Within 7 business days once comments are issued by Multifamily Upgrade Program staff
Construction commencement	Within two months once letter of reservation is issued
Team check-in with MUP Staff #2	Upon construction kick-off
Project team check-in with MUP Staff #3	At 50% construction completion listed on letter of reservation
Approved Rater or Contractor verification of installed measures	Within two weeks of construction completion
Test-out submittal	Within two weeks of Approved Rater verification
Test-out submittal revisions	Within 7 business days once comments are issued by MUP Staff

Figure 5. MUP Project Milestones and Timelines

The MUP Staff will also adhere to timelines for responding to project submittals. Staff will review and issue comments to the Approved Rater on all project submittals and resubmittals, both test-in and test-out, within ten business days of receipt.

6. Other Program Policies

IRS 1099 Reporting

The IRS considers any incentive payments over \$600.00 as taxable income. MUP Staff will report all incentive payments on an IRS Form 1099. Each project must submit a Form W-9 as a part of the complete application package.

Dispute Resolution

MUP Staff will aim to resolve all applicant complaints quickly and efficiently. If MUP Staff is unable to resolve the complaint within 15 business days, MUP Staff will advise the complainant by telephone or in writing within 48 hours of learning the fact. In the event that a complaint results in a dispute and is not resolved to the satisfaction of both parties within 45 business days, the parties will use a third-party dispute resolution party to resolve the issue.

MUP Staff will not secure Approved Raters or Contractors for property owners nor become a party to any agreements between owners, raters, contractors, or suppliers. For contractor disputes, consult the Contractors State License Board for dispute resolution procedures.

Property Owner Selection of a Rater and Contractor

The property owner selects an approved program Rater and Contractor, and may elect to change their choice of approved program Rater and Contractor at any time. When these instances arise, the program requires that a new application be filled out and signed by all responsible parties. PG&E and its program contractors will not get involved with contractual issues among members of the project team, such as enforcement of financial agreements, etc. PG&E will not release project documents such as EnergyPro files (.bld.) to the public (or to members of the project team) without the explicit consent of the document author.

Disclosure and Auspices

California consumers are not obligated to purchase any full fee service or other service not funded by this program. This program is funded by California utility ratepayers under the auspices of the California Public Utilities Commission.

Limitation of Liability

The applicants have read and understands the terms and conditions on the application and agree to abide by the rules, requirements and terms set forth on the application. If the agreement is terminated for any reason, TRC and PG&E shall not be liable to the applicants for damages or compensation of any kind.

MUP Staff reserves the right to determine eligibility for incentives. Funding approval is limited and will be paid on a first-come, first-served basis to qualified applicants. Funds will only be reserved upon

successful completion of plan review, and approval from PG&E. The incentive reservation is subject to the availability of authorized funds.

The applicant understands that the incentive requires inspection and measurements of the performance of the measures. The applicant agrees to provide access to the project site for these purposes to MUP Staff and/or its agents, PG&E and/or its agents, local building department staff, and the CPUC and/or its agents.

Applicant understands that if the incentive is modified in any way or terminated by order of any government entity, then the agreement shall be revised or terminated consistent with that order.

Both funding and the conditions of the incentives are subject to the jurisdiction of the California Public Utility Commission (CPUC) and shall be subject to such changes and modifications as the CPUC may, from time to time, direct in the exercise of its jurisdiction. If there are changes in the incentive, MUP Staff will endeavor, but cannot guarantee, to provide a reasonable period of time before changes go into effect.

MUP Staff and PG&E make no representation or warranty, and assumes no liability with respect to quality, safety, performance, or other aspect of any design, system or appliance installed pursuant to the agreement, and expressly disclaims any such representation, warranty or liability. The applicant agrees to indemnify TRC and PG&E affiliates, officers, directors, agents, employees, parent company and subsidiaries against all loss, damage, expense, fees, costs and liabilities arising from any measures installed.

Appendix



Pacific Gas and Electric Company Multifamily Upgrade Program Equipment Specifications

The Multifamily Upgrade Program (MUP) requires that installed appliances and fixtures exceed California's energy efficiency building code. This is a summary of the minimum efficiency requirements for common appliances and fixtures accepted in MUP.



BUILDING ENVELOPE

Roof/Ceiling Insulation

Minimum: $\geq R19$

Recommended: $\geq R-40$

Windows

Minimum: ≤ 0.58 U-factor

Recommended: CZ: 1,3,5 ≤ 0.25 U-factor, no recommended SHGC;

CZ: 2, 4, 6-16 ≤ 0.30 U-factor, ≤ 0.25 SHGC



DOMESTIC HOT WATER

Gas Storage Water Heater (≤ 55 gal)

Minimum: ENERGY STAR ≥ 0.67 EF

Recommended: ≥ 0.70 EF

Gas Storage Water Heater (≤ 140 gal)

Minimum: ENERGY STAR ≥ 0.93 EF

Recommended: ≥ 0.95 EF

Electric Storage Water Heater

Minimum: ENERGY STAR ≥ 2.20 UEF

Recommended: ≥ 3.00 UEF



HEATING, VENTILATION, AND AIR CONDITIONING

Split Air Source Heat Pumps

Minimum: ENERGY STAR ≥ 8.5 HSPF & ≥ 15 SEER & ≥ 12.5 EER

Recommended: ≥ 10.0 HSPF & ≥ 16 SEER & ≥ 13 EER

Central Packaged Air Conditioners

Minimum: ENERGY STAR ≥ 15 SEER & 12.5 EER

Recommended: ≥ 16 SEER & ≥ 13 EER

Central Gas Furnaces

Minimum: ENERGY STAR $\geq 90\%$ AFUE

Recommended: $\geq 95\%$ AFUE



APPLIANCES

Front Loading Clothes Washer

Minimum: ENERGY STAR ≥ 2.76 IMEF & ≤ 3.2 IWF

Recommended: ≥ 2.92 IMEF & ≤ 3.2 IWF

Dishwashers

Maximum: ENERGY STAR ≤ 270 kWh/yr

Recommended: ENERGY STAR ≤ 270 kWh/yr

Refrigerators

ENERGY STAR qualified



WATER FIXTURES

Toilets

Maximum: ≤ 1.28 gallons per flush (GPF)

Recommended: ≤ 1.20 GPF or dual flush

Showerheads

Maximum: ≤ 1.70 gallons per minute (GPM)

Recommended: ≤ 1.50 GPM

Faucets and Aerators

Maximum: ≤ 1.50 GPM

Recommended: ≤ 1.00 GPM



LIGHTING

Indoor Lighting

Minimum: High efficacy

Recommended: [DLC listed](#) or ENERGY STAR qualified

Outdoor Lighting

Eligibility on a case-by-case basis