

TECH Clean California

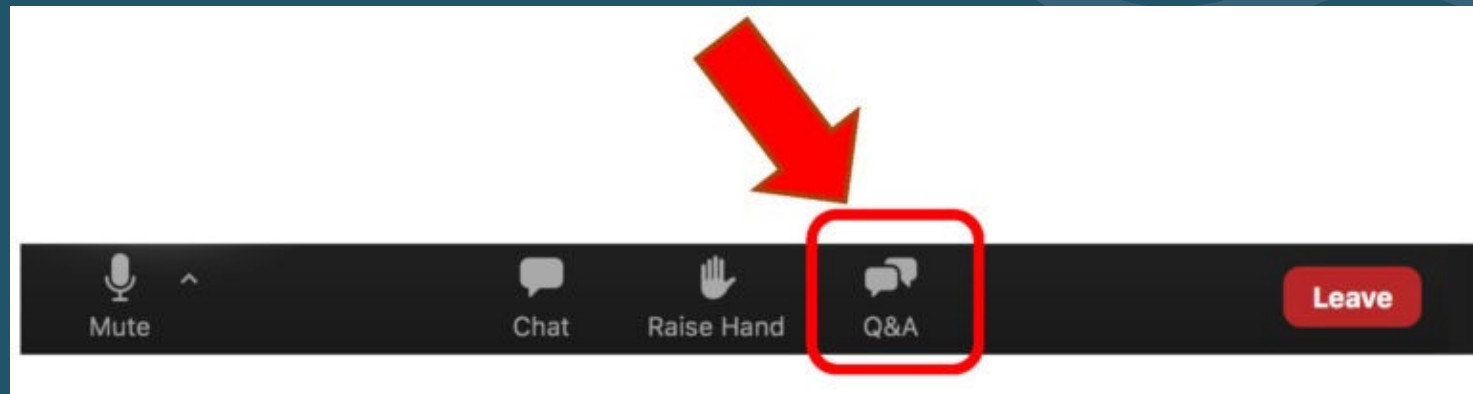
Statewide Heat Pump Water Heater
Multifamily Incentive Rules
12/5/23



Zoom Q&A

Click on the “Q&A” button at the bottom of your screen.

You may need to “hover” or click on your screen for that option to appear.





Agenda

1. Program Overview
2. HPWH Load Shifting Benefits
3. Incentives Overview
4. Customer Eligibility
5. Customer Requirements
6. Contractor Requirements
7. Reservation Requirements
8. Eligible Equipment
9. Installation Requirements
10. Reservation Submittal Process
11. Q & A

1. Program Overview



TECH Clean California HPWH Partner Organizations



Energy Solutions
Primary
Contractor, Project
Management



Frontier Energy
Contractor
outreach,
enrollment, and
management



**Association for Energy
Affordability (AEA)**
Multifamily incentive
design,
implementation, and
stakeholder
management

RECURVE

Recurve
Data
analysis
and
reporting



**Energy
Outlet**
Incentive
claim
processing



Ecotope
Central
HPWH load
shifting
calculations

TECH Team:  Energy Solutions



RECURVE



Tre'Laine

Statewide Heat Pump Water Heater Incentives

- \$80M in additional incentives funding for heat pump water heaters through the TECH Heat Pump Water Heater Program
 - 50% allocated for low-income customer installations
- Eligible projects include residential single-family (unitary), residential multifamily (unitary and central), and commercial (unitary)
- New requirements regarding load shifting
 - Customers: enroll in a demand response (DR) program and be on a time-of-use (TOU) rate
 - Contractors: set up the HPWH to shift load off peak hours
- Launch Day: Single family (unitary) - Currently Open
 - Multi-family (unitary) - 12/12/23 12p.m. PT
 - Multi-family central - TBD





TECH Clean California HPWH Budget

			HPWH Program Budget (\$40.203 M)	Cap-and-Trade Budget (\$40 M)			All Funds
Customer Class	Budget Percentage	Limitations	HPWH Program Budget	SoCalGas (50.08%)	PG&E (43.04%)	SDG&E (6.88%)	Total Budget
General Market Residential (Unitary and Central)	47.36%	Unitary: 20% minimum Central: 40% maximum*	\$19,040,141	\$9,487,155	\$8,153,498	\$1,303,347	\$37,984,141
Equity Residential (Unitary and Central)	47.36%	Unitary: 20% minimum Central: 40% maximum*	\$19,040,141	\$9,487,155	\$8,153,498	\$1,303,347	\$37,984,141
Commercial Unitary	5.28%	none	\$2,122,718	\$1,057,690	\$909,005	\$145,306	\$4,234,718
*20 percent floor for unitary systems, initial 40 percent cap for central systems, lifted if load shifting is proven successful.			\$40,203,000	\$20,032,000	\$17,216,000	\$2,752,000	\$80,203,000

2. HPWH Load Shifting Benefits





**HPWHs are
load-shifting
superstars**

Demand Response and Load Shifting: What and Why?

Demand response: a temporary change in energy usage.

Relevant program requirement: customer DR enrollment

Load shifting: a type of demand response - specifically, moving electricity consumption from one time of the day to another.

Relevant program requirement: HPWH following a TOU rate, with customers on a TOU rate.

Both help optimize the timing of electricity usage for customers (\$) and the grid.

To achieve California's renewable energy goals, it's critical that electricity consumption (or "load" or "demand") can better match electricity supply, especially during mid-day solar availability.





Multifamily Time of Use (TOU) Enrollment Requirement

TOU Rates: Pricing varies based on time of day and season.

Requirements:

- Customer agrees to TOU requirement in the Program Terms and Conditions
- Customer agrees to be put on a TOU rate by their utility if not already on one
- Opportunity for customer to specify a rate or agree to standard default
- For multifamily, only the **common area meters** are required to be enrolled.
- For multifamily, **individual tenant meters** are exempt from this requirement, but it's recommended.





Multifamily Demand Response (DR) Requirement

Demand Response: Programs facilitate a temporary change in energy usage.

Requirements:

- Customer agrees to DR requirement in TECH Program Terms and Conditions
- Customer must enroll in a qualified DR program for a minimum of 3 years.
- Program will provide contractors with customer handouts that provide explanations and links for enrollment
- For multifamily, only the **common area meters** are required to be enrolled.
- For multifamily, **Individual tenant meters** are exempt from this requirement, but it's recommended.





Time-of-Use and Demand Response Details

Time-of-Use (TOU): Multifamily Unitary only

- Customers can opt to be placed on the default time-of-use rate or one of their choosing
- Any customer already on a time-of-use rate will not have their rate changed unless specified
- Solar and EV rates are time-of-use rates, meaning if that is what a customer is on, nothing more is needed
- Common Area meters are required to enroll, individual tenant meters are exempt

Demand Response

- Many options, enrollment can be as quick as 3 minutes
- Contractors can suggest a particular program
- Contractor expected to help the customer to enroll before offering the incentive
- Common Area meters are required to enroll, individual tenant meters are exempt

*Residential customers of utilities without time-of-use rates and/or without an eligible demand response program are still eligible for TECH HPWH Incentives but are **exempt** from these requirements.*

Please see the following webpages for information and FAQs on Time-Of-Use Rates and Demand Response:

Time-of-Use Rates: <https://switchison.org/techcleanca/time-of-use-rates/>

Demand Response: <https://switchison.org/techcleanca/demand-response>

3. Incentives Overview



Statewide Heat Pump Water Heater Incentive Details

Category	Customer Class	HPWH Incentive	Low-GWP Kicker Incentive***	≥ 55 Gallon Capacity Incentive	Electrical Panel Upgrade Incentive	Max Incentive
Residential Unitary	General Market	\$3,100	\$1,500	\$700	\$2,000*	\$7,300
Residential Unitary	Equity	\$4,185	\$1,500	\$700	\$4,000**	\$10,385

* For General Market customers, the Electrical Upgrade incentive is capped at 50% of eligible electrical costs

**For Equity customers, the \$4,000 incentive may cover a variety of other “pre-electrification” costs associated with a HPWH installation

*** Low GWP kicker incentive is for HPWHs with a refrigerant with GWP of 150 or less. Other ratings, such as OPD rating, cannot be used in place of GWP.

Electrical and Pre-Electrification Upgrade incentives*

Eligible Electric Upgrades**:

- Replace/upgrade/relocation main service panel
- Install smart load center/circuit breaker
- Install subpanel
- Upgrade feeder and/or secondary disconnect/dwelling unit main disconnect

Eligible Pre-Electrification Costs (Equity Only)**:

- Relocate HPWH
- Additional plumbing/wiring upgrades
- Venting
- Replace/repair/seal flooring, walls, or ceiling due to leakage or improper venting

Information regarding electrical and pre-electrical upgrade incentives is posted in a knowledge base article here: <https://frontierenergy-tech.my.site.com/contractorsupport/s/article/Electrical-Panel-Upgrades>

*Only applicable to **unitary** heat pump water installations

** Details will need to be included at 3-month proof of project milestone submission

***Electrical Upgrade incentives can only be paid to contractors who completed the work under their license, meaning majority of measures can only be pursued by contractors with a General B or C-10. Adding a subpanel, however, is eligible to be pursued by all.



Heat Pump Water Heater Incentive Rules – All Projects

- Thermostatic mixing valves are required on all installations and must be properly installed and calibrated
 - Thermostatic mixing valves must conform to ASSE 1017 (point of distribution)
 - Built-in thermostatic mixing valves may conform to UL 60730-1, ASSE 1082, or ASSE 1084
- Contractor must pass 100% of the incentive to the customer
- Incentives available for all replacements types except heat pump water heater to heat pump water heater conversions
 - Same incentive amount for electric conversions



4. Customer Eligibility



Which Customers Qualify?

- 100% of residential customers in California qualify for TECH Heat Pump Water Heater incentives as long as they are replacing an existing non-heat pump water heater system!
- Customers may qualify for higher “equity incentives”



Multifamily Equity Customer Requirements



Requirements

- Deed-restricted low-income residential housing **and** is either:
 - Located in a disadvantaged community
 - A building where at least 80 percent of the households have incomes at or below 60 percent of the area median income
- Also available to customers who have participated in/are eligible for the MASH or SOMAH
- Properties in Tribal Lands do not require a deed restriction

Confirming Equity Eligibility

- Building owner provides copy of deed restriction to the TECH Clean California team during reservation stage

5. Customer Requirements



Customer Program Terms and Conditions

- All customers receiving TECH incentives must sign the TECH Program Terms and Conditions. This agreement will replace the contractor to customer contract that the program currently requires
 - Signed terms & conditions form will need to be uploaded to claim form and provided at 3-month proof of project milestone
- Customers will have to provide the following for heat pump water heater projects only (through terms & conditions)
 1. Confirmation that they allow their utility to switch them onto a time-of-use rate if they are not already on one. They can specify a specific rate or choose the default
 2. Confirmation that they will enroll in an eligible demand response program if there is one available to them
 3. Electric account number

Blank copies of the Customer Program Terms & Conditions form are located at
switchison.org/contractors/tech-clean-california/

6. Contractor Requirements



Contractor Enrollment Requirements

Overall Participant Requirements

1. Hold one of the eligible TECH license types (General A/B, C-20, C36)
2. Have no outstanding complaints with BBB
3. Meet the training requirements listed below
4. Signed updated Trade Professional Participation Agreement (TPPA)

Participant Training Requirements

- At least **one individual from an organization** must attend the ENERGY STAR® Manufacturer Action Council's webinar training (training completion will be tracked)
 - Training schedule and sign up located at switchison.org/contractors/training-hub/
- Others at the organization must take one of the following training courses:
 - A state-certified apprenticeship program
 - TECH & ESMAC heat pump water heater training
 - Manufacturer-specific training located [here](#)

TECH Contractor Enrollment



Never Enrolled?

<https://switchison.cleanenergyconnection.org/form/enrollment-form>

Enrollment requirements include:

1. Active California contractor license in good standing
2. Adherence to the requirements outlined in the [Trade Professional Participation Agreement](#) including insurance coverage
3. Brief program training completion

How To Enroll?



Previously Enrolled?

<https://frontierenergy.formstack.com/forms/tppa>

How to tell if you completed?

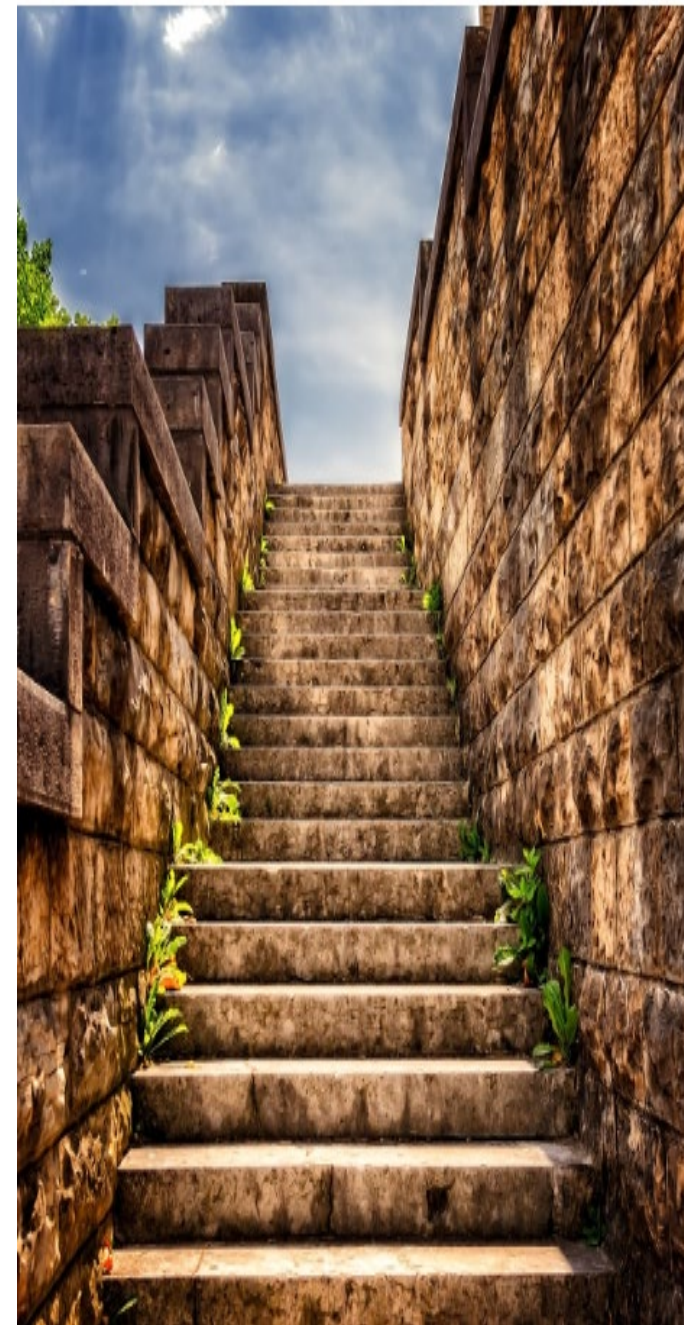
1. Check your email for a confirmation
2. Review your listing on CleanEnergyConnection to see if you have a TECH badge
3. Email TECH.info@energy-solution.com

7. Reservation Requirements



Reservation Steps

Steps	
1	Submit reservation form for review
2	Once approved by the TECH team, reservation will be active up to 12 months
3	Submit a Proof of Project Milestone (PPM) to reservation within 3 months of reservation approval to maintain an active reservation
4	It is recommended to wait for confirmation of PPM approval from the TECH team before commencing equipment purchase and installation
5	Project application can be submitted as soon as the project installation is complete



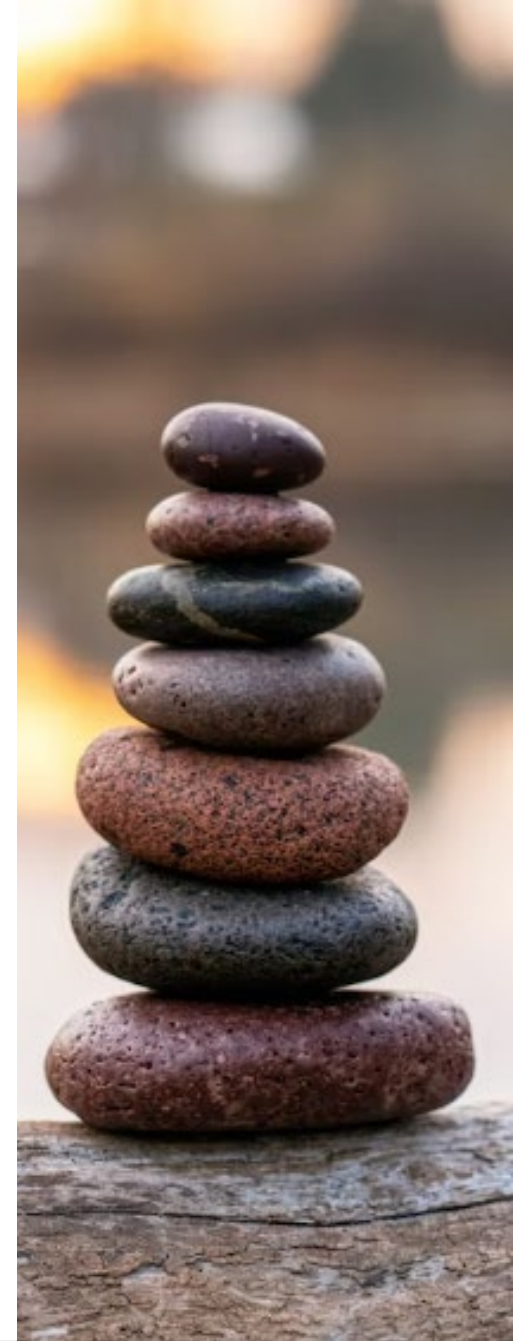


Proof of Project Milestone Requirements: 3 month

1. MF Unitary HPWH Documentation Requirements

- I. Signed TECH Program Terms and Conditions, *and*
- II. HPWH Equipment Models to be installed, *and*
- III. Documentation that HPWH Equipment Model(s) meet or exceed First Hour Rating for each apartment it will be installed in and confirmation that the HPWHs will be installed at project with adequate ventilation in accordance with manufacturer requirements, *and*
- IV. Project Construction Schedule
- V. Proof of Permit Application *or* Signed Contract between Property Owner and Contractor
- VI. If applying for apartment panel incentive category, full description of that scope of work including supporting justification and anticipated cost is required. Sizing for future all-electric apartments will be encouraged during the review process.

Projects that do not meet the 3-month project milestone will be subject to Reservation Form cancellation. A new project reservation submission will be required, and the project will re-enter the bottom of the queue



Proof of Project Milestone Requirements: 6 month

1. All MF Unitary HPWH projects shall have completed heat pump equipment purchases and shall provide supporting documentation upon request.
2. Projects that cannot meet the 6-month project milestone **may** be subject to Reservation Form cancellation and **will not** be eligible for any extension requests beyond the standard 12-month reservation form. The project may choose to submit a new Reservation Form, which will be subject to approval pending the availability of funds and all program rules in place at that time.





Proof of Project Milestone Requirements: 9 month

1. All MF Unitary HPWH projects shall have begun substantial installation activities, as outlined in the knowledge base article. This shall be supported by photo documentation upon request.
2. Projects that do not meet the 9-month project milestone *may* be subject to Reservation Form cancellation and **will not** be eligible for any extension requests beyond the standard 12-month reservation term.



8. Eligible Equipment



Equipment Eligibility

	Equipment Requirements
Residential Unitary (Multifamily)	<p>CEC JA13¹ compliant and either:</p> <ul style="list-style-type: none">• NEEA² with EcoPort• or ENERGY STAR[®] Residential WH³ V4 (or later), Connected Capable.

1. [Joint Appendix JA13– Qualification Requirements for Heat Pump Water Heater Demand Management Systems](#)
2. [Northwest Energy Efficiency Alliance Residential Heat Pump Water Heater Qualified Products List](#)
3. [ENERGY STAR[®] Product Specification for Residential Water Heaters](#)

Overview of Eligible Residential Unitary and Split Heat Pump Water Heater Products

Unitary heat pump water heaters' eligibility is the same for **Single-Family, Multifamily, and Small Business Installations**

- Eligible units include all heat pump water heaters produced by the following brands:
 - Rheem (including 120v)
 - Ruud
 - AO Smith (including 120v)
 - Bradford White
 - State
 - American Standard
 - American
 - Richmond
 - Reliance
 - Harvest Thermal
 - Lochinvar
- Not Eligible:
 - **SanCO2**



9. Installation Requirements



Installation Requirements by Project Type

All project types:

- In all cases, only installations where a heat pump water heater is replacing a non-heat pump water heating system qualify. Heat pump water heater to heat pump water heater conversions *do not qualify for incentives*
- New construction projects not eligible
- **Thermostatic mixing valves must be properly installed and calibrated**
 - Thermostatic mixing valves must conform to ASSE 1017 (point of distribution)
 - Built-in thermostatic mixing valves may conform to UL 60730-1, ASSE 1082, or ASSE 1084

	Installation Requirements
Residential Unitary (Multifamily)	<ul style="list-style-type: none">• Contractor is responsible to set the heat pump water heater to follow a TOU rate schedule via the manufacturer app.• Unit must be sized at a minimum to meet California Plumbing Code first-hour rating requirement.

Residential Unitary
(Multifamily)



Unitary Heat Pump Water Heater Requirements

The following rules apply to all single-family and multifamily unitary heat pump water heater installations

- 1. Heat pump water heaters must be **programmed to follow a customer’s time-of-use rate** *if applicable*
- 2. Units must **be sized at a minimum to meet first hour rating** as defined by CA 2022 plumbing code

Participants will be asked to report on number of bedrooms and bathrooms in the residence to confirm heat pump water heaters were sized appropriately

Number of Bathrooms	1 – 1.5	1 – 1.5	1 – 1.5	2 – 2.5	2 – 2.5	2 – 2.5	2 – 2.5	3-3.5	3-3.5	3-3.5	3-3.5
Number of Bedrooms	1	2	3	2	3	4	5	3	4	5	6
First Hour Rating (Gallons)	38	49	49	49	62	62	74	62	74	74	74

Multifamily: Participation Steps to Keep in Mind

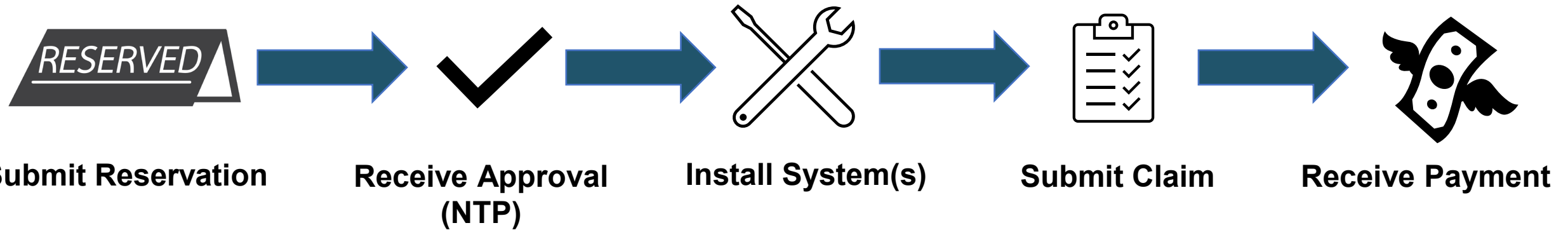
- All multifamily projects will require initial reservations
 - Reservation form can be found at techcleanca.com/incentives/multifamily-information/
 - All reserved projects will have **3, 6 and 9 month proof of project milestone check points.**
- Multifamily is defined as any building with more than one unit. This is a change from the first round of TECH Clean California incentives.
 - This will not impact the available incentive as incentive rates for unitary heat pump water heaters are the same for multifamily or single-family
 - Installations in an individual homeowner/HOA unit falls under single family
- For multi-family unitary, only the common area meters will need to be enrolled on a time-of-use rate and demand response program if one is available. Individual tenant meters are *exempt* from this requirement, but it's recommended.

10. Reservation Submittal Process





Submission Process





Reservation Policies

- Submitted reservations are not guaranteed incentives until approved
- Project (scope of work being incentivized) should not start until reservation is approved
- Approved reservations may not be substituted with unreserved projects
- The Contractor listed on the reservation form cannot be replaced with another Contractor
 - Unless Property Owner provides documentation that existing Contractor has been removed entirely from project for justified circumstances
- Work must be completed 12 months from the date of reservation approval
 - If complexities arise, reservations may submit a request for an extension beyond 12 months of reservation approval date
 - Send request to TECHMF@aea.us.org at least 1 month in advance of reservation expiration date, and
 - Must provide evidence of substantial project progress, and
 - Submitting a request does not guarantee reservation will be extended
- In all instances reservations expire June 2025



Reservation Submission and Approval Process



1. Submit reservation (Contractor or Property Owner)

- New online form, no login needed, **not IRIS**
- Link available 12/12/23 at 12 PM PT
 - Reservations submitted using old Reservation PDF form will not be accepted
- The Contractor or Property Owner completes and submits the online reservation form



2. Initial reservation review (AEA)

- AEA reviews submitted reservation form
 - If corrections are needed, Contractor is emailed a correction request link to update information and resubmits
 - If equity eligible, Contractor and Property Owner are emailed requesting supporting documents
- AEA completes and approves initial review



3. Request for signatures (Contractor & Property Owner)

- Digital signature request links are emailed to Contractor and Property Owner



4. Final reservation review and approval (ES)

- Energy Solutions completes final review and approves reservation



5. Notice to Proceed (NTP)

- Contractor and Property Owner are emailed an approved copy of signed reservation form, program terms and conditions, and equipment requirements

Create a Reservation – Property and Contractor

- To submit a reservation form, go to: [TECH Public Reporting Multifamily Incentives \(techcleanca.com\)](https://techcleanca.com) (Available December 12th at 12 PM PST)

Required Information:

- Page 1
 - Property
 - Property Equity Eligibility
 - Property Owner Company
 - Property Owner Contacts
 - Primary
 - Signatory (if different)
- Page 2
 - Contractor Company
 - Contractor Contacts
 - Primary
 - Signatory (if different)

Multifamily Incentive Reservation Form

TECH Multifamily Incentive Process

Step 1: Initiate process to reserve funds by completing this form

Step 2: TECH Team reviews reservation

- * If corrections are needed, the contractor is emailed a correction request link to update information and resubmit
- * The contractor and property owner will be contacted by email to determine equity-eligibility

Step 3: Electronic signature links are emailed to the contractor and property owner

- * After reservation is signed, another email is sent with a link to verify signatures

Step 4: TECH Incentive Manager completes final review of reservation

Step 5: Contractor and property owner are notified by email whether reservation is approved/not approved

- * If approved, a copy of the reservation form, the program terms and conditions, and equipment requirements is provided

If you have any questions or need assistance contact TECHMF@aea.us.org

Property Information

Occupant Status * Housing Type *

Number of Dwelling Units * Number of Buildings *

Property Name * Property Street Address *

Property City * Property Zip Code *

Property Meter Structure

Existing Space Heating Paid By * Proposed Space Heating Paid By *

Existing Domestic Hot Water Paid By * Proposed Domestic Hot Water Paid By *

Property Equity Incentive Eligibility

Please select all criteria that apply and represent this property. Select N/A if not applicable.*

- ☐ N/A
- ☐ At least 66% of the living units are 80% AMI or less
- ☐ Deed restricted housing or property with restrictive covenant
- ☐ At least 80% of the living units are 60% AMI or less
- ☐ Property is eligible for SOMAH
- ☐ Property is in Tribal Lands

If you have a Deed Restriction, Restrictive Covenant, Rent Roll, SOMAH Participation Agreement, or other documents to support Equity Incentive eligibility, upload here.
Supporting documents may also be emailed to TECHMF@aea.us.org after reservation is submitted, be sure to reference the TECH Reservation ID number and/or Property Address.

[Choose File](#) No file chosen

Create a Reservation – Equipment Scope of Work

- Page 3

- HPWH

- Quantity
 - Equity Eligibility Adder
 - Low GWP Adder
 - Total Incentive

- Electrical Upgrades

- General Market and/or Equity Quantity
 - Total Incentive
 - Total TECH Standard Incentive Requested

Multifamily Incentive Reservation Form

Page 3

Reservation for Qualifying Equipment Scope of Work (Retrofit Only)

Only TECH measures with current funding are shown on this form, and TECH measures not shown are not available to be reserved at this time. Funding and reservation launch dates for other TECH measures will be announced when available. When funding for additional measures is available, they will be included on this form.

Heat Pump Water Heater (HPWH)

Apartment Unitary HPWH

Gas/Propane/Electric Resistance to HPWH

Sub-SubCategory	Incentive for Individual Apartment	Qty of HPWHs	Total Incentive
< 55 Gallons	\$3100		\$0
≥ 55 Gallons	\$3800		\$0
Equity Eligible Adder	\$1085		\$0
Low GWP Adder	\$700		\$0

Undersized Apt. Electrical Infrastructure upgraded as part of Unitary HPWH Installation

Apt subpanel, feeder, meter disconnect upgrade

Upgrade Type	TECH Incentive (per Apartment Receiving Electrical Upgrade)	Qty	Total Incentive
General market	\$2000		\$0
Equity	\$4000		\$0

Total TECH Standard Incentive Reserved *

\$0

Create a Reservation – Layered Incentives, Acknowledgement and Submission

- **Page 4**
 - Anticipated layered incentive programs
 - Project notes/information
 - Acknowledge
 - Terms and Conditions
 - Qualifying Equipment Requirements
 - Project Milestone Requirements and Submission Deadlines
 - **Page 5**
 - Review all reservation form information entered
 - Confirm and submit completed reservation
- Reservation confirmation and request emails will be sent from TECHMF@aea.us.org
- Recommend adding as a contact to avoid going to Junk folder

Multifamily Incentive Reservation Form

Page 5

Anticipated Layered Incentive Programs

Anticipated Layered Incentive Programs (please select all that apply after)

- ☐ 3C-REN
- ☐ BAMBE
- ☐ CAMR
- ☐ Energy Smart Home
- ☐ ESA-MF
- ☐ LIWP
- ☐ MAHEP
- ☐ SMUD
- ☐ Social REN
- ☐ Other

Total Anticipated Layered Incentives

\$

Project Notes

Project Notes

Acknowledge Info

Please review, upon approval of reservation you will be required to agree to Terms and Conditions and acknowledge the qualifying equipment to ensure compliance with the Program.

Acknowledge Terms and Conditions
Acknowledge Qualifying Equipment Requirements

- ☐ By selecting this box, I acknowledge that I have reviewed the Project Milestone Requirements and understand that Projects unable to comply with the Project Milestone Requirements and extensions.
- ☐ By selecting this box, I acknowledge that I have reviewed and agree with the Program Terms and Conditions and Qualifying Equipment Requirements and understand that Projects unable

Reservation Review and Confirmation

Please select "Review Reservation" button below to review your application responses, edit and print a copy for your records.

IMPORTANT: You must select the "Confirm" button at the bottom of the next screen to complete and submit your reservation for review.

11. Contact Us



Contact Us

General multifamily questions:

TECHMF@aea.us.org

For contractor support:

TECH.contractor@energy-solution.com

For claims/IRIS support:

TECH.incentives@energy-solution.com

Resources available at:

- <https://techcleanca.com/>
- <https://frontierenergy-tech.my.site.com/contractorsupport/s/>
- <https://switchison.org/contractors/tech-clean-california/>



12. Q & A

