

SGIP HPWH Stakeholder Workshop

June 1, 2023



Program rules are not officially approved and subject to change.

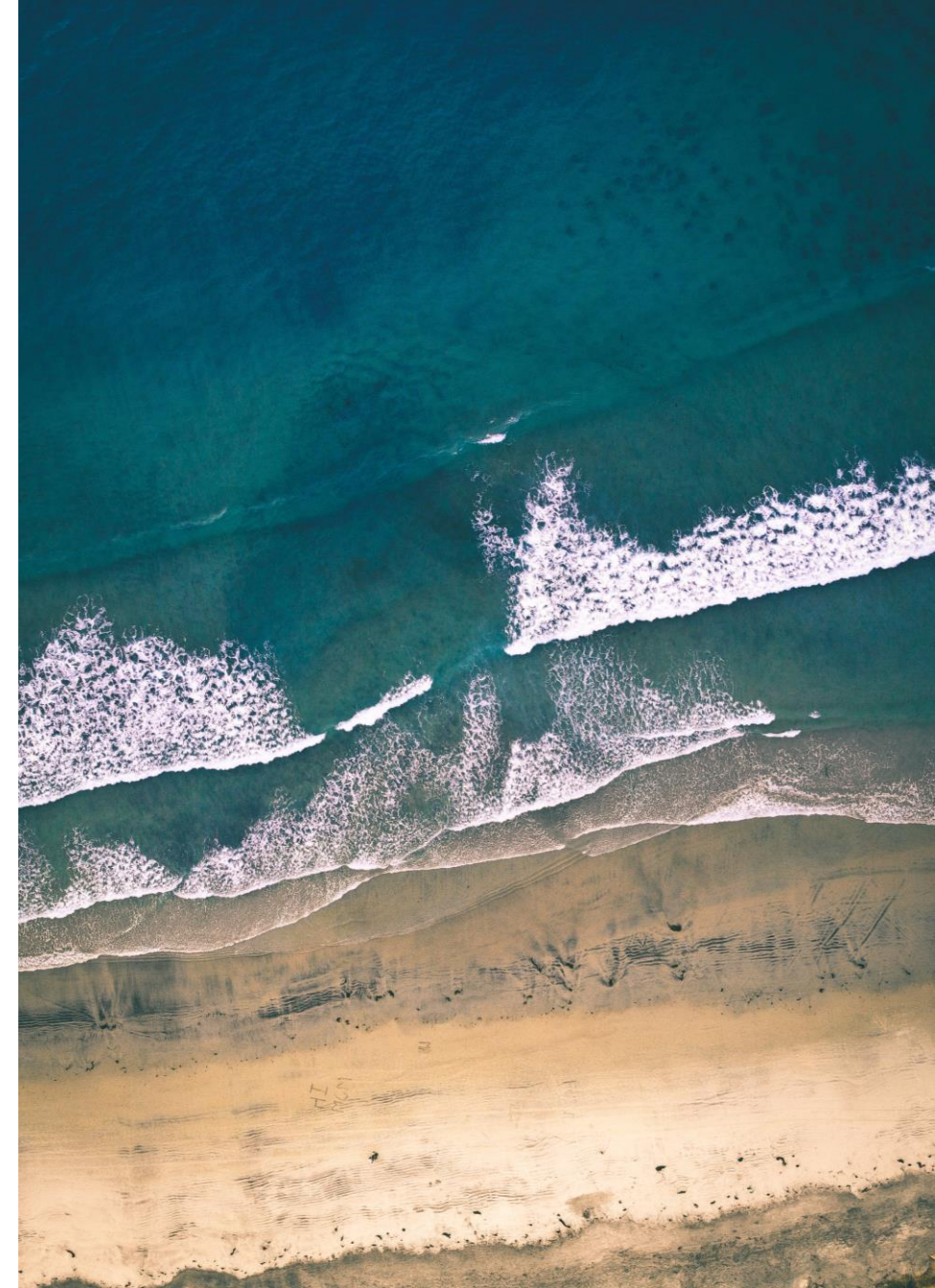


Welcome!

Goal: Provide an overview of the SGIP HPWH Program rules and gather feedback.

Presentation Guidelines:

- Please post your questions in the Q&A feature throughout the meeting.
- If time allows, attendees may be allowed to unmute and share questions verbally. Please try to keep questions/comments within 30 seconds.
- After the presentation, send outstanding comments and questions to tech.info@energy-solution.com



Agenda

- 1 SGIP HPWH Overview

- 2 Program Handbook Rules

- 2a Incentives

- 2b Participant Eligibility

- 2c DR and TOU Requirements

- 2d Project and Equipment Eligibility



About Energy Solutions



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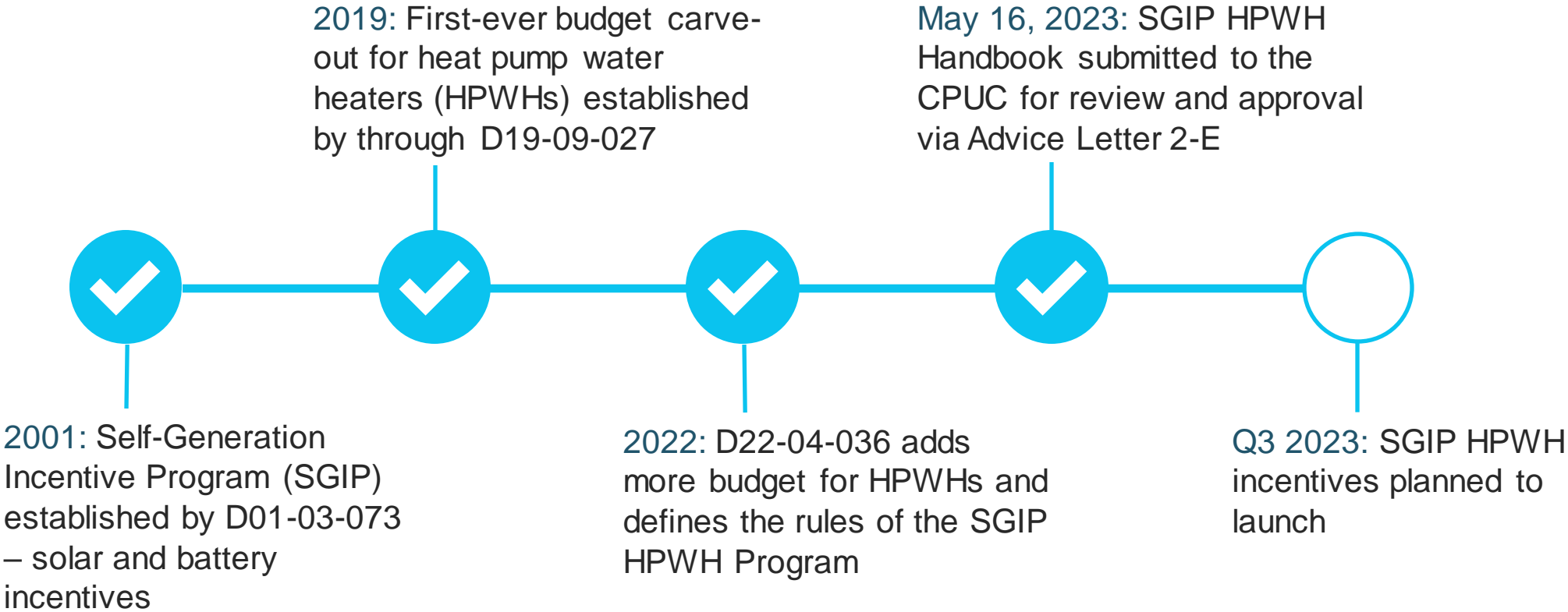
- **Mission-driven, employee-owned** clean energy implementation firm specializing in **market-driven programs** to deliver large-scale energy, carbon, and water savings
- **25-year track record** pioneering award-winning, end-to-end solutions for utility, government, and institutional clients across North America
- **Incentive programs in 20+ states** have represented 200+ manufacturers, paid \$1 billion+ in incentives, and approved 1 million+ applications

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SGIP HPWH Overview

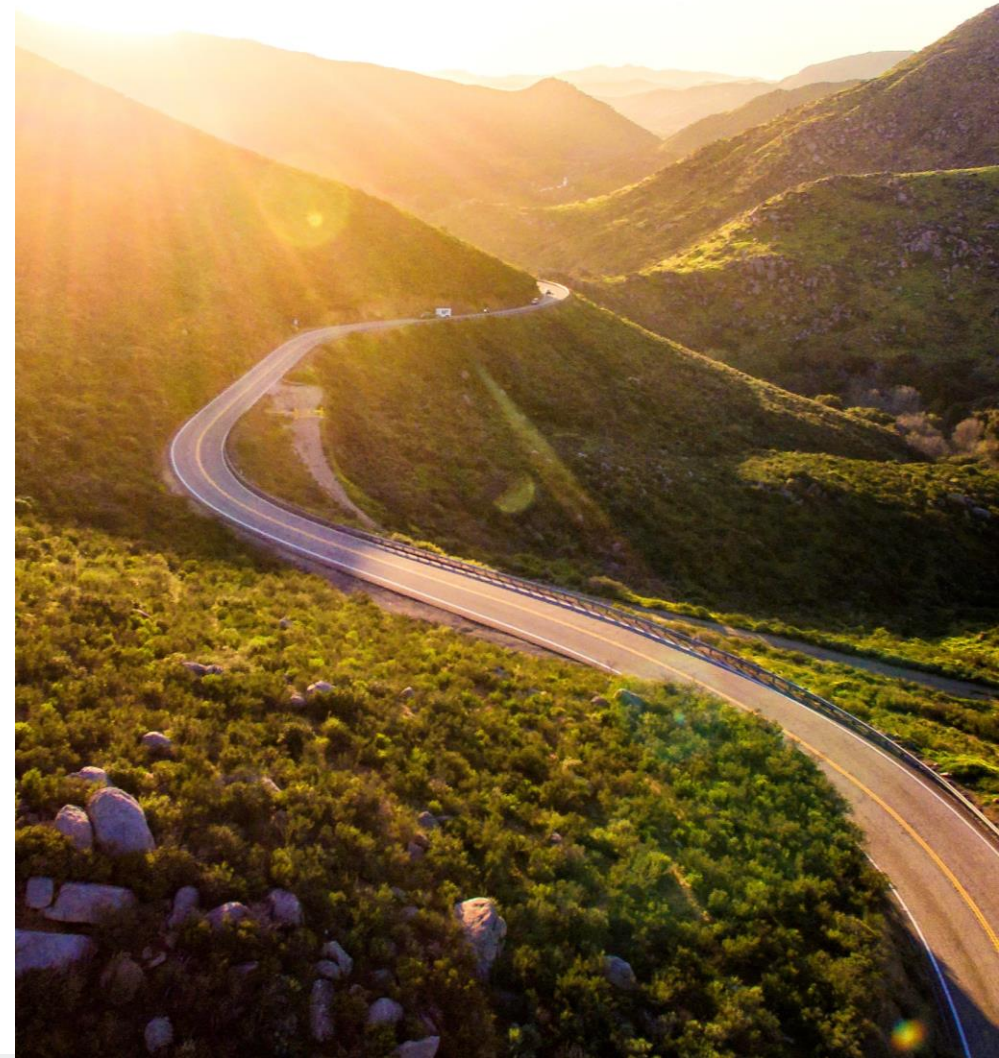


Program Background & Status



Program Goals

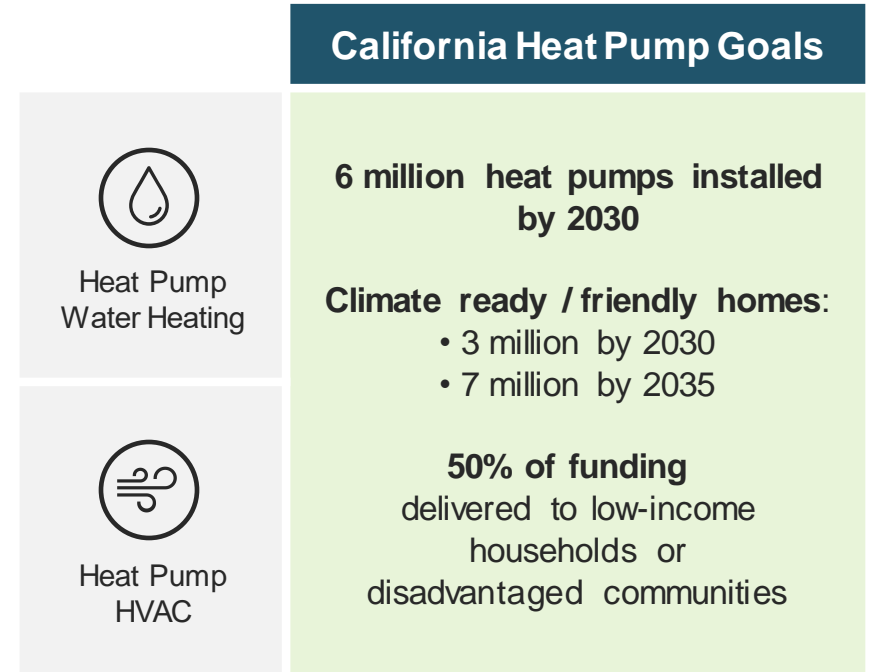
- Deploy HPWHs at scale throughout California
- Integrate demand response and load shifting
- Ensure that installed systems are achieving greenhouse gas reductions
- Ensure equitable distribution of program benefits
- Align with HPWH market transformation strategies and initiatives across the state
- Offer a streamlined experience for contractors and customers



TECH Clean California Overview

What is TECH Clean California?

- California’s flagship heat pump market transformation initiative for space/water heating, designed to help put California on a path towards carbon free homes by 2045
- Guiding principles of equity, regulatory simplicity, and market transformation
- Year 1 successes:
 - Network of 1,400 contractors
 - 650 accounts with installations
 - Over 13,000 heat pump projects funded



Source: California Office of Governor website. July 2022.
“Governor Newsom Calls for Bold Actions to Move Faster Towards Climate Goals”

The TECH Clean California initiative is funded by California ratepayers and taxpayers under the auspices of the California Public Utilities Commission.

SGIP HPWH Partner Organizations



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: 



RECURVE



Tre'Laine

Implementation Through TECH Clean California

- Leveraging TECH’s infrastructure, market relationships, and name recognition
- Additional \$80.2 M incentive budget communicated as TECH Clean California incentives with new requirements
- Fully branded TECH Clean California (“funded by SGIP HPWH” included in some contexts)

	TECH Clean California (HP HVAC & HPWH)	
	TECH HPWH	SGIP HPWH
Incentive recipient	Contractors	
Installation type	Retrofit only	
Building sector	Residential	Residential & Commercial
Eligibility	Statewide	IOU customers
Customer requirements		DR & TOU enrollment
Installation requirements		Load shifting

Budget: TECH vs. SGIP HPWH

- SGIP HPWH budget is the primary funder of HPWH projects.
- TECH will fund HPWH projects that cannot meet SGIP HPWH requirements:
 - Non-IOU customers
 - No TOU rate available
 - No DR program available
- Projects funded by TECH Clean California or SGIP HPWH, not both.



SGIP 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
			\$40,203,000	\$20,032,000	\$17,216,000	\$2,752,000	\$80,203,000

*20 percent floor for unitary systems, initial 40 percent cap for central systems, lifted if load shifting is proven successful.

SGIP HPWH Overview: Q&A



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Program Rules



Incentives



Residential Unitary Incentives

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

*Capped at 50% of the electrical upgrade cost.

Eligible Electric Upgrades:

- Replace/upgrade/relocation main service panel (up to 200 amps only)
- Install smart load center/circuit breaker
- Install subpanel
- Upgrade feeder and/or secondary disconnect/dwelling unit main disconnect

Eligible Equity Costs:

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

Multifamily Central Incentives

Customer Class	Central HPWH Incentive	Low-GWP Kicker	Max Incentive per Project
General Market	\$900/kWh	\$200/kWh	\$300,000
Equity	\$1,000/kWh	\$200/kWh	\$300,000

- Incentives calculated per-project based on load shifting capacity through Ecotope's Ecosizer tool
- "Project" is one central HPWH system serving a distinct group of households

Commercial Unitary Incentives

Customer Class	Unitary HPWH Incentive	Low-GWP Kicker	Max Incentive per Project
Large Commercial	\$700/kWh	\$200/kWh	\$50,000
Small Business	\$3,100/unit	\$1,500/unit	N/A

- Large commercial incentives calculated based on system's thermal energy storage capacity
- "Project" is a unit or system serving one business
- Small business project incentives align with residential unitary incentive design

Incentive Rules: All Customer Classes

- Incentives capped at the total project cost
- Contractor must pass 100% of the incentive to the customer
- Incentives available for all replacements types except HPWHs
- Low GWP kicker incentive is for HPWHs with a refrigerant with GWP of 150 or less
- Incentives may be reduced compared to the levels adopted in the Decision
- Incentive applications are managed online in the same system used for TECH Clean California
- Contract must be signed on or after the date of incentives launch



Incentives: Q&A

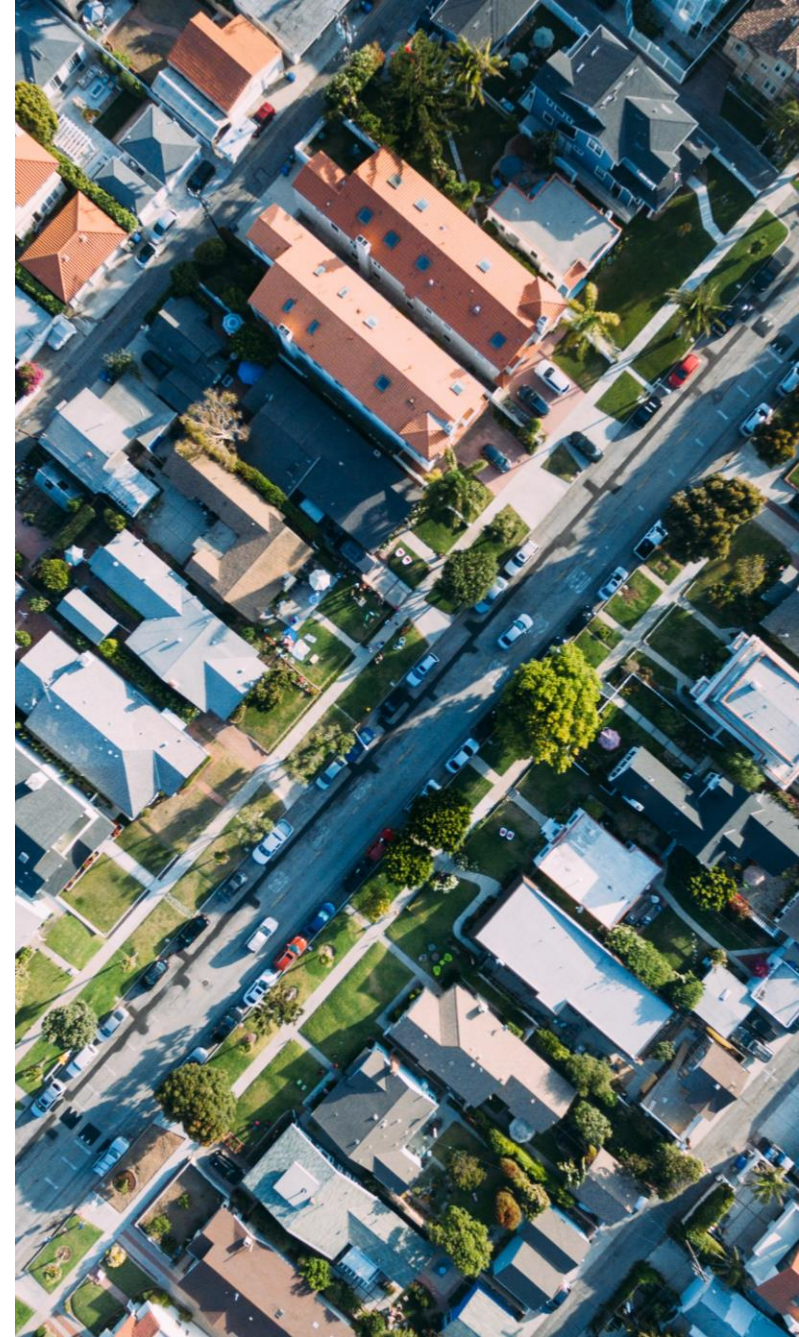


Participant Eligibility



Customer Eligibility

- Gas or electric customers of PG&E, SCE, SoCalGas, or SDG&E
- Enrollment Requirements
 - Demand Response (DR)
 - Time of Use (TOU) Rate



Customer Eligibility — Equity

- **Single family**
 - Live in single family low-income residences
 - Have household income which is 80% of the area median income (AMI) or less
 - Also available customers who have participated in programs which verify income at $\leq 80\%$ AMI or $\leq 250\%$ of Federal Poverty Level (FPL)
- **Multifamily**
 - Deed-restricted low-income residential housing and is either:
 - Located in disadvantaged community
 - A building where at least 80% of the households have incomes at or below 60% of the AMI
 - Also available to customers who have participated in the MASH or SOMAH programs



Contractor Eligibility

- CSLB License Requirements (one or more)
 - C36 (Plumbing)
 - C20 (Warm-Air Heating, Ventilating and Air Conditioning)
 - B (General Contractor)
- New Requirements
 - Provide two or more customer references
 - Installers must take HPWH installation training
 - [ESMAC](#) training completion will be verified



Participant Eligibility: Q&A



DR and TOU Requirements



Time of Use (TOU) Enrollment Requirement

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

Requirements:

- Customer agrees to be put on a TOU rate by their utility if not already on one
- Customer agrees to TOU requirement in the Program Terms and Conditions
- Opportunity for customer to specify a rate or agree to standard default



Demand Response (DR) Requirement

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

Requirements:

- The SGIP HPWH Decisions defines a qualifying program as "a CAISO market-integrated supply-side DR program that counts for resource adequacy."
- Program will provide contractors with customer handouts that provide options for quick enrollment
- Customer agrees to DR requirement in TECH Program Terms and Conditions



Rental Building DR/TOU Policy

- DR and TOU enrollment not required for residents of rental buildings of two or more units
- Common areas with significant flexible loads must enroll in DR and TOU rate
- Property owners will provide tenants with a letter explaining benefits of DR and TOU rates and asking them to enroll



DR and TOU: Q&A



Project and Equipment Eligibility



Requirements for All Project Types

- Thermostatic Mixing Valve (TMV) requirement
 - Must conform to ASSE 1017 (point of distribution)
 - Built-in TMVs may conform to UL 60730-1, ASSE 1082, or ASSE 1084
- Permit requirement
 - Pulled with Authority Having Jurisdiction (AHJ) and closed
 - Permit number required for submission



Project and Equipment Eligibility by Customer Class

	Equipment Requirements	Installation Requirements	Enrollment Requirements
Residential Unitary	JA13 ¹ compliant and either : <ul style="list-style-type: none"> • NEEA² Tier 3 (or higher) with CTA-2045 Compliant Communication Port • or ENERGY STAR[®] Residential WH³ V4 (or later) with Connected Capability. <i>(AHRI 1430 as alternate compliance path)</i> 	Installed in compliance with the CEC’s JA13 installation specification: <ul style="list-style-type: none"> • Execute at a minimum “basic load-up” and “light shed” based on a local TOU rate. • Sized at minimum for plumbing code first hour recovery 	Customer must enroll on a TOU rate and in a qualified DR program.*
Small Business	Same as above.	Same as above.	Same as above.
Multifamily Central	Unitary Central: JA13 compliant or ENERGY STAR [®] Commercial WH V 2.0 (or later) Standard Central: Approved and included in CBECC.	Installed and operated to shift ≥ 5kg CO2/kWh. Must install data monitoring equipment with 2-way communication.	Account linked to central HPWH must enroll in a qualified DR program.
Large Commercial	Individually installed: ENERGY STAR [®] Commercial WH V 2.0 (or later). Ganged-together: JA13 compliant or ENERGY STAR [®] Commercial WH ⁴ V 2.0 (or later).	Installed and operated to shift ≥ 5kg CO2/kWh.	Customer must enroll in a qualified DR program.

*DR and TOU exception for rental buildings with more than one unit

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](#)
4. [ENERGY STAR[®] Product Specification for Commercial Water Heaters](#)

Project and Equipment Eligibility: Q&A



Thank You

For more information or to get involved, contact:

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FRONTIER
energy

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ECOTOPE

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CLEAN CALIFORNIA

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