

CPUC TECH: Heat Pump Contractor Web Survey

June 19, 2023

Instrument

Landing page text: First we have a couple questions to make sure you're eligible for the survey. Click the arrow below to get started.

Screening [ASK ALL]

[SINGLE RESPONSE]

S1. Does your company offer residential equipment or services for HVAC and/or water heating in California?

1. Yes, residential HVAC system installation, repair, and/or maintenance
2. Yes, residential water heater installation, repair, and/or maintenance
3. Yes, both residential HVAC system and water heater installation, repair, and/or maintenance
4. No, none of those [THANK and TERMINATE]

[GENERATE HVAC=1 if S1=1 or 3]

[GENERATE WH=1 if S1=2 or 3]

[SINGLE RESPONSE]

S2. Does your company do work in retrofit or new construction scenarios, or both?

1. Retrofit/replacement only
2. New construction only [THANK AND TERMINATE]
3. Retrofit and new construction
4. Unsure [THANK AND TERMINATE]

[GENERATE RETRO=1 IF S2=1 OR 3]

[GENERATE NC=1 IF S2= 3]

[MULTIPLE RESPONSE]

S3. What market(s) does your company serve? *Please select all that apply.*

1. Single family homes
2. Small multifamily (2-4 units)
3. Large multifamily (5 or more units)
4. Small commercial properties
5. Large commercial properties
6. Other, please specify: [OPEN-ENDED RESPONSE]

[TERMINATE IF S3<>1,2, OR 3]

TERMINATE TEXT: Thank you for your interest in our survey. Unfortunately, you are not eligible because we need to speak with contractors who have experience with retrofit residential HVAC and/or water heating work in California.

[Ask if HVAC=1]

S4. Approximately what percent of your company's HVAC business (based on the number of jobs completed and **not** revenue) comes from service calls, maintenance visits, and installation jobs?
Your best estimate is fine.

- By **service calls**, we mean appointments that are made to fix a fault in HVAC systems that either shut the system down or inhibits the system's operation to the point that the customer detects a problem.
- By **maintenance visits**, we mean checkups to inspect, test, measure, and preserve an HVAC system.
- By **installation jobs**, we mean projects where the primary purpose is to install new equipment or replace existing equipment.

[RESPONSES MUST SUM TO 100%]

1. Service calls ___ %
2. Maintenance visits ___ %
3. Installation jobs ___ %

[ASK IF WH=1]

S5. Approximately what percent of your company's water heating business (based on the number of jobs completed and **not** revenue) comes from service calls, maintenance visits, and installation jobs?
Your best estimate is fine.

- By **service calls**, we mean appointments that are made to fix a hot water heater issue that either shuts the system down or inhibits the system's operation to the point that the customer detects a problem.
- By **maintenance visits**, we mean checkups to inspect, test, measure, and preserve a water heating system.
- By **installation jobs**, we mean projects where the primary purpose is to install new equipment or replace existing equipment.

[RESPONSES MUST SUM TO 100%]

1. Service calls ___ %
2. Maintenance visits ___ %
3. Installation jobs ___ %

[DISPLAY IF S3>3] For the rest of the survey, please think only about your residential jobs, whether single or multi-family.

[DISPLAY IF TECH_Enrolled=0]

S3. Are you currently enrolled as a participating contractor in TECH Clean California?

1. Yes
2. No

Respondent/ Company Background [ASK ALL]

[MULTIPLE RESPONSE]

Q1. Which of the following describe your role at your company? *Please select all that apply.*

1. Owner
2. President/CEO
3. General Manager
4. Service Manager
5. Sales Manager
6. Other, please specify: [OPEN ENDED RESPONSE]

Q2. What is the address of the facility where you work? *This information will be used only for survey analysis. We will not share this address with anyone nor send anything to it.*

1. Street Address: [OPEN-ENDED RESPONSE]
2. City: [OPEN-ENDED RESPONSE]
3. Zip: [NUMERIC OPEN-ENDED RESPONSE]

[MULTIPLE RESPONSE]

Q3. Which utility service territories do you work in/sell to? *Please select all that apply.*

1. PG&E
2. SDG&E
3. SCE
4. SoCalGas
5. SMUD
6. LADWP
7. Other, please specify: [OPEN ENDED RESPONSE]

[SINGLE RESPONSE]

Q4. Which of the following best describes the facility where you work?

1. Your company's only location
2. The headquarters of a company with multiple locations
3. A branch or franchise location of a company based in California
4. A branch or franchise location of a company based outside California
5. Other, please specify: [OPEN ENDED RESPONSE]
6. Don't know

[SINGLE RESPONSE]

Q5. How many employees, including yourself, work at your company? *Please include both part-time and full-time employees.*

1. 1

2. 2-4
3. 5-9
4. 10-24
5. 25-49
6. 50-99
7. 100 or more
98. Don't know

Q6. Are the employees at your company members of a union?

1. Yes
2. No
98. Don't know

[ASK IF Q6 = 1]

Q7. Which union(s) do the employees at your company belong to?

0. Please specify: [OPEN-ENDED RESPONSE]

[ASK ALL; MULTIPLE RESPONSE]

Q8. Right now, do you personally hold any of the following licenses in the State of California? *Please select all that apply.*

Please note that this information is strictly confidential and will not be shared with the state or used to take any negative actions against you or your firm.

1. C-20 HVAC Contractor
2. C-10 Electrical Contractor
3. C-36 Plumbing Contractor
4. D-34 Prefabricated Equipment
5. B General Building Contractor
6. C-46 Solar Contractor
97. I do not have any of these licenses [EXCLUSIVE]

[IF Q5=2–7; ASK FOR EACH Q8 RESPONSE OPTION **OTHER THAN** 97 in Q8]

Q9. Does any other employee of your firm hold the following licenses?

1. C-20 HVAC Contractor
2. C-10 Electrical Contractor
3. C-36 Plumbing Contractor
4. D-34 Prefabricated Equipment
5. B General Building Contractor
6. C-46 Solar Contractor

Q10. What is your company's annual revenue?

1. Less than \$100,000
2. \$100,000 to \$249,000
3. \$250,000 to \$499,999

- 4. \$500,000 to \$999,999
- 5. \$1 million to \$2,999,999
- 6. \$3 million to \$7,999,999
- 7. \$8 million or more
- 98. Don't know
- 99. Prefer not to answer

Experience with Heat Pump Systems

HVAC Heat Pumps

[SKIP TO HEAT PUMP WATER HEATERS SECTION IF HVAC<>1]

[SKIP TO Q13 IF S4_3<50%]

The next few questions are about your experience with HVAC heat pumps, including ducted or ductless systems.

[DISPLAY Q11, Q11A, and Q11B ON SAME PAGE]

Q11. Does your company have experience with the following HVAC heat pump installations?

Q11A. HVAC heat pumps for single-family residential, low-rise multifamily, or in-unit multifamily

- 1. Yes
- 2. No

Q11B. Large, centralized HVAC heat pump systems (usually in high-rise multifamily)

- 1. Yes
- 2. No

[ASK IF Q11A =1]

Q12. How confident are [IF Q5=1 DISPLAY: you ELSE DISPLAY: you in your staff's] ability to sell, correctly size, install, service, and maintain HVAC heat pumps for single-family residential, low-rise multifamily, or in-unit multifamily properties? *Please select "N/A" if any of the following are not applicable.*

	Not at all confident 1	A little confident 2	Moderately confident 3	Very confident 4	Extremely confident 5	N/A 97
1. Selling HVAC heat pumps						
2. Sizing HVAC heat pumps						
3. Installing HVAC heat pumps						
4. Servicing HVAC heat pumps						

		Not at all confident 1	A little confident 2	Moderately confident 3	Very confident 4	Extremely confident 5	N/A 97
5.	Maintaining HVAC heat pumps						

[ASK IF Q11B =1]

Q12B. How confident are [IF Q5=1 DISPLAY: you ELSE DISPLAY: you in your staff's] ability to sell, correctly size, install, service, and maintain large, centralized HVAC heat pump systems? *Please select "N/A" if any of the following are not applicable.*

		Not at all confident 1	A little confident 2	Moderately confident 3	Very confident 4	Extremely confident 5	N/A 97
6.	Selling HVAC heat pumps						
7.	Sizing HVAC heat pumps						
8.	Installing HVAC heat pumps						
9.	Servicing HVAC heat pumps						
10.	Maintaining HVAC heat pumps						

Q13. Of all the residential HVAC jobs your company completed in the last year, what percent would you say were heat pumps? *Your best estimate is fine.*

- 0. [NUMERIC OPEN END 0-100]
- 98. Don't know

[ASK IF Q13 >0]

Q13A. On average, how many days does it take to complete a HVAC heat pump installation?

- 0. [NUMERIC OPEN END 0-20]
- 98. Don't know

Heat Pump Water Heaters

[SKIP TO STAFFING AND TRAINING SECTION IF WH<>1]

The next few questions are about your experience with heat pump water heaters.

[SKIP TO Q16 IF S5_3 <50%]

[DISPLAY Q14, Q14A, and Q14B ON SAME PAGE]

Q14. Do you have experience with the following heat pump water heater installations?

Q14A. Heat pump water heaters for single-family residential, low-rise multifamily, or in-unit multifamily

1. Yes
2. No

Q14B. Large, centralized heat pump water heater systems (usually in high-rise multifamily)

1. Yes
2. No

[ASK IF Q14A=1]

Q15. How confident are [IF Q5=1 DISPLAY: you ELSE DISPLAY: you in your staff's] ability to sell and correctly size, install, maintain and service heat pump water heaters for single-family residential, low-rise multifamily, or in-unit multifamily properties? *Please select "N/A" if any of the following are not applicable.*

		Not at all confident 1	A little confident 2	Moderately confident 3	Very confident 4	Extremely confident 5	N/A 97
1.	Selling heat pump water heaters						
2.	Sizing heat pump water heaters						
3.	Installing heat pump water heaters						
4.	Maintaining heat pump water heaters						
5.	Servicing heat pump water heaters						

[ASK IF Q14B=1]

Q15B. How confident are [IF Q5=1 DISPLAY: you ELSE DISPLAY: you in your staff's] ability to sell and correctly size, install, maintain and service heat pump water heaters for Large, centralized heat pump water heater systems? *Please select "N/A" if any of the following are not applicable.*

		Not at all confident 1	A little confident 2	Moderately confident 3	Very confident 4	Extremely confident 5	N/A 97
1.	Selling heat pump water heaters						

	Not at all confident 1	A little confident 2	Moderately confident 3	Very confident 4	Extremely confident 5	N/A 97
2. Sizing heat pump water heaters						
3. Installing heat pump water heaters						
4. Maintaining heat pump water heaters						
5. Servicing heat pump water heaters						

Q16. Of all the residential water heating installations your company completed in the last year, what percent would you say were heat pump water heaters? Your best estimate is fine.

- 0. [NUMERIC OPEN END 0-100]
- 98. Don't know

[ASK IF Q16 >0 AND Q14A=1]

Q16A. On average, how many days does it take to complete a unitary heat pump water heater system installation for a single-family residential or low-rise multifamily, or in-unit multifamily building?

- 0. [NUMERIC OPEN END 0-20]
- 98. Don't know

[ASK IF Q16 >0 AND Q14B=1]

Q16B. [IF ASKED Q16A DISPLAY: And about how many days does it take for a] [IF NOT ASKED Q16A DISPLAY: On average, how many days does it take to complete a] large, centralized heat pump water heater system installation?

- 0. [NUMERIC OPEN END 0-20]
- 98. Don't know

Staffing and Training

The next questions are about training and staffing.

Q17. Have you received training on how to sell, size, install, service, and/or maintain HVAC heat pumps [SHOW IF WH=1: or heat pump water heaters] for residential properties?

- 1. Yes
- 2. No

[ASK IF Q17=1]

Q18. From where did you receive the heat pump training? Please select all that apply.

1. Technical or trade school
2. Community college
3. Union
4. Private training institute
5. [OPTION REMOVED]
6. Utility education center
7. Distributor
8. Manufacturer
9. Certifying organization (AHRI, NCI, etc.)
10. On-the-job
0. Other, please specify: [OPEN-ENDED RESPONSE]
98. Don't know

[MULTIPLE RESPONSE; UP TO 3]

Q19. From which of the following would you prefer to receive [IF Q17=1 SHOW: additional] heat pump training from? *Please select up to three training options.*

1. Technical or trade school
2. Community college
3. Union
4. Private training institute
5. [OPTION REMOVED]
6. Utility education center
7. Distributor
8. Manufacturer
9. Certifying organization (AHRI, NCI, etc.)
10. On-the-job
0. Other, please specify: [OPEN-ENDED RESPONSE]
98. Don't know

Q19A. What is your preferred way to participate in trainings? [SINGLE RESPONSE]

1. In-person
2. Online
3. Hybrid of in-person and online
4. No preference

Q20. When looking to hire a new installer/technician, how attractive is it that they have heat pump experience?

1. Very attractive
2. Moderately attractive
3. A little attractive
4. Not at all attractive
98. Don't know
99. Not Applicable – I don't hire others.

Q20A. About how many installers/technicians are hired in a typical year at your company?

- 0. [NUMERIC OPEN END 0-200]
- 98. Don't know

[ASK IF HVAC=1; and Q5 <> 1]

Q21. Of all the technicians at your company, what percent have installed or worked on HVAC heat pumps in the past year? *Your best guess is fine.*

- 0. [NUMERIC OPEN END 0-100%]
- 98. Don't know

[ASK IF WH=1; and Q5 <> 1]

Q22. Of all the technicians at your company, what percent have installed or worked on heat pump water heaters in the past year? *Your best guess is fine.*

- 0. [NUMERIC OPEN END 0-100%]
- 98. Don't know

Financing and Incentives

[ASK IF HVAC=1 OR WH=1]

Q23. Does your company offer financing to residential customers installing new HVAC or water heating equipment?

- 1. Yes
- 2. No

[ASK IF Q23 =1]

Q23A. What type of financing does your company offer residential customers? *Please select all that apply.*

- 1. Through a private lender
- 2. GoGreen Home Financing
- 3. On-bill financing (with a utility)
- 4. Through the manufacturer
- 5. Other, please specify: [OPEN-END TEXT]

[ASK IF Q23=1 AND, Q11A=1 OR Q11B=1 Q14A =1 OR Q14B=1]

Q24. What percent of customers who purchase **heat pump equipment** use the financing your company offers? *Your best estimate is fine.*

- 0. [NUMERIC OPEN END 0-100]
- 98. Don't know

Sales

We have a few questions about sales. Your answers will be confidential and only reported together with other answers.

[ASK IF HVAC=1]

Q25. How many residential HVAC heat pump units did your firm sell in the past year? *Your best estimate is fine.*

- 0. [NUMERIC OPEN END 0-99999]
- 98. Don't know

[ASK IF Q25>0]

Q26. What percent of the HVAC heat pumps your firm sold in the past year included time-of-use controls? In other words, what percent had a smart thermostat with capability to reduce energy use during peak rate times?

- 0. [NUMERIC OPEN END 0-100]
- 98. Unsure or don't know what these are

[ASK if Q25>0]

Q26A. What percent of your HVAC heat pump customers in the last year were enrolled into a demand response program as part of their purchase?

- 0. [NUMERIC OPEN END 0-100]
- 98. Unsure or don't know what these are

[ASK IF WH=1]

Q27. How many heat pump water heater units did your firm sell in the past year? *Your best estimate is fine.*

- 0. [NUMERIC OPEN END 0-99999]
- 98. Don't know

[ASK IF Q27>0]

Q28. What percent of the heat pump water heaters your firm sold in the past year included time-of-use controls? In other words, it can reduce its energy use during peak rate times. *Your best estimate is fine.*

- 0. [NUMERIC OPEN END 0-100]
- 98. Unsure or don't know what these are

[ASK IF Q27>0]

Q29. What percent of the heat pump water heaters your firm sold in the past year were installed with connectivity (Wi-Fi, Bluetooth, cellular, etc.)? *Your best estimate is fine.*

- 0. [NUMERIC OPEN END 0-100]
- 98. Unsure or don't know what these are

[ASK IF Q27>0]

Q29A. What percent of the heat pump water heaters your firm sold in the past year were installed with thermostatic mixing valves (TMVs)? *Your best estimate is fine.*

- 0. [NUMERIC OPEN END 0-100]
- 98. Unsure or don't know what these are

[ASK IF Q27>0]

Q29B. What percent of your heat pump water heater customers in the last year were enrolled into a demand response program as part of their purchase?

- 0. [NUMERIC OPEN END 0-100]
- 98. Unsure or don't know what these are

[ASK IF Q27>0]

Q29C. What percent of your heat pump water heater customers in the last year required an electrical panel upgrade to accommodate the heat pump water heater?

- 0. [NUMERIC OPEN END 0-100]
- 98. Unsure

[ASK IF Q14A = 1]

Q29D. With what percent of your heat pump water heater customers do you discuss the benefits of upsizing their tank?

- 0. [NUMERIC OPEN END 0-100]
- 98. Unsure

Promotion Strategies

[ASK IF Q25>0 OR Q27>0]

In this last section, we'd like to know how you promote your heat pump equipment, if at all.

[SINGLE RESPONSE]

Q30. How much effort does your company put into marketing **heat pump** equipment in comparison to the other equipment it sells?

1. My company puts more effort into promoting heat pump equipment compared to other equipment we sell
2. My company puts the same amount of effort into promoting heat pump equipment compared to other equipment we sell
3. My company puts less effort into promoting heat pump equipment compared to other equipment we sell
4. My company does not promote heat pump equipment

[ASK IF Q30<4]

[MULTIPLE RESPONSE]

Q31. Through what channels does your company promote heat pumps? *Please select all that apply.*

1. On-site at customer's property
2. Online/on company website
3. Through direct mail advertisements
4. TV/radio/newspaper advertisements
5. Emailed newsletters
6. Other, please specify: [OPEN ENDED]

Q32. Are you aware of the rebates or incentives available in California for installing HVAC heat pumps and/or heat pump water heaters?

1. Yes
2. No
98. Don't know

[ASK IF Q32=1]

Q33. Do you promote these heat pump rebates or incentives to your customers?

1. Yes
2. No

Closing [ASK ALL]

Q34. Thank you for your answers. As a token of our appreciation, we will be sending you a \$100 Tango e-gift card that can be redeemed at one of many businesses, such as Amazon, Best Buy, Nike, Home Depot, and many more. Below, please enter your name and the email address you would like your Tango gift card sent to. [RESPONSE REQUIRED]

If you do not want to receive a Tango gift card, please select "I do not want my Tango gift card."

1. Name: [OPEN-END TEXT BOX]
2. Email Address: [OPEN-END TEXT BOX]
98. I do not want my Tango gift card [EXCLUSIVE]

Thank you very much for taking the time to share your experience with efficient HVAC and/or water heating equipment. The California Public Utilities Commission appreciates your valuable feedback.

We have another survey opportunity you may be interested in. The survey focuses on water heater trainings, installations, and hiring staff for water heater work. We are offering a \$150 incentive for completing that survey. If you are interested in taking it, please click "yes" below, and we will email you an invitation in 2 to 4 weeks. Whether you complete the other survey is entirely optional and will not be connected to your responses from this survey.

1. [DISPLAY IF EMAIL PROVIDED IN Q34] Yes
2. [DISPLAY IF Q34=98] Yes, please email: [OPEN-END TEXT BOX]
3. No

[IF Q34 = 1 OR 2 DISPLAY "Thank you. We will send the survey invitation to the email you provided in the next 2-4 weeks.]

[IF Q34 <98 DISPLAY "Please allow up to 2-4 weeks for your Tango gift card to be delivered.]