Heat pump water heaters (HPWHs) are a great choice for many households. HPWHs are clean, safe, and all-electric. They can be three to four times more efficient than the conventional, gas-fueled storage-tank water heaters typically found in Bay Area homes.

Why install a heat pump water heater?

**Energy efficient:** Uses less energy to heat water compared to gas or electric water heaters.

**Healthier and safe:** No risk of carbon monoxide or nitrogen dioxide in your home caused by combustion of natural gas.

**Money back:** Cash rebates for homeowners and installers.

**Environmentally friendly:** Less air pollution and carbon emissions than gas water heaters.

Get rebates and lower your energy bills

**Save money over time:** HPWHs cost more upfront compared to a conventional water heater but may lower your energy bills.

**Many rebates available:** Multiple contractors and Bay Area Programs, such as Home+, offer HPWH rebates (https://www.bayren.org/incentives).

Lower taxes: In addition to rebates, you might be eligible for a $300 federal tax credit.

Find a qualified contractor

**Browse BayRENs list of contractors:** BayREN contractors have access to numerous rebate programs (https://www.bayren.org/hpwhcontractors).

Before selecting a contractor:

Interview, check references, and request a written quote from at least three contractors. Check their license status with California’s Contractors State License Board (https://bit.ly/2HlcsUH). Check for complaints with the Better Business Bureau (https://www.bbb.org/).

Questions to ask installers during the interview:

- How many HPWHs have you installed?
- Which model do you recommend and why?
- Where do you recommend the unit be installed?
- Where will the condensate drain to?
- Will any electrical upgrades be needed at the installation location or the electrical service panel? Will the cost of the electrical work be included in the estimate?
- How do you recommend I operate the HPWH for optimal performance and cost savings?

Need help getting started?

866-878-6008

Contact a Home Energy Advisor today!
When should I install a HPWH?
Before your current water heater fails! If your water heater is over 10 years old, now is a good time to research HPWHs. Water heaters typically last about 13 years. Emergency replacements can be harder to do than a planned replacement.

What do HPWHs look like?
A HPWH looks similar to a conventional gas water heater. It is comprised of a large cylindrical tank, an inlet pipe through which cold water enters, and an outlet pipe that sends hot water into the home. When replacing a gas water heater with a HPWH, people usually choose a HPWH with a tank size that’s the same or larger than their existing water heater. HPWHs are slightly taller than the same size gas water heater because the heat pump is built into the top of the tank.

How do they work?
Much like a fridge pushes heat out to cool the inside, a HPWH pulls heat in to warm the water inside.

What do they cost?
They cost more upfront than gas or conventional electric water heaters, but the energy savings make up for the initial cost difference. Costs can vary depending on the situation, such as whether the home’s electrical service panel needs to be upgraded. Rebates and a federal tax credit may lower the cost.
For greater savings, ask your contractor about the operating controls on your HPWH. You can program it so that it actively heats water during your electric company’s off-peak hours when electricity rates are lower. The HPWH’s storage tank will keep the water hot for when you need it.

Where is a HPWH typically located?
A HPWH is typically installed in a garage, basement, or attic. It requires some circulation of air. It also has a slight cooling effect on the area around it. A storage area or closet might suffice, but small closets, for example, are not suitable. When you interview installers, ask where they recommend the unit to be installed.
A HPWH produces water condensation inside the unit that must be routed to a drain. Your installer will take this into consideration when recommending best locations.
A HPWH’s fan and compressor make a little noise when it runs, similar to a refrigerator, so avoid installing it next to a bedroom or other location where it would disturb occupants.
What makes HPWHs environmentally friendly?
They use much less energy to produce hot water compared to natural gas, propane water heaters or conventional electric water heaters.

And they’re all-electric. So, if you have a solar electricity system or you choose a 100% renewable electricity plan with your utility company, you’ll feel good knowing your water is heated with zero-emission electricity.

How does the water temperature and capacity compare to gas water heaters?
The output of a HPWH is comparable to that of a gas water heater. The water will get as hot as with a gas water heater. You will have plenty of hot water as long as you use hot water as most households do—some in the morning and some in the evening. HPWHs can take longer to reheat a full tank than a gas water heater, so if you use it all up, you will need to wait a little longer for a full hot tank again. Discuss your household’s hot water use patterns when you interview installers.

Can I install a HPWH myself?
Water heater installation must comply with state and local building codes. Also, HPWH installation requires both plumbing and electrical work. We recommend using a licensed contractor with HPWH experience.

I’m planning to install a solar electricity system. Does that affect my water heater decision?
Most homeowners who have a solar electricity system installed have two goals: reducing their utility bills and powering their home with a cleaner source of energy. If you’re going solar, now is the time to look at the benefits of a heat pump water heater. Tell your solar installer that you may be interested in installing a HPWH now or in the future. It might be easier and more economical to install a somewhat larger solar system now rather than try to expand it later to accommodate the electricity use of a HPWH. Typical energy use for a HPWH is about 1000 kWh per year.