

BENTON RURAL ELECTRIC ASSOCIATION

402 7th Street • P.O. Box 1150 • Prosser, Washington • (509) 786-2913 • Fax (509) 786-0291

Dear Member,

Here is what you need to know about Benton REA's heat pump water heater (HPWH) rebate program.

- You must be a Benton REA member to receive a rebate
- These tanks are a little larger than standard tanks
- Some refer to this technology as "hybrid water heaters"
- Heat pump water heaters should work great in some applications and are just the wrong technology for others I can help you determine if this is the right technology for you
- HPWHs need to be installed by a "trained installer". This could be a contractor, you or your uncle Charlie. Attached is a list of trained installation professionals. Self-installation training for AO Smith, Kenmore, State and American equipment can be found here:
 - o <u>university.hotwater.com/residential/heat-pump/</u>
 - o www.hotwater.com/service/heat-pump-certification/
- Your favorite hardware store may employ installers but they are not the only installers available you may wish to contact others for installation prices
- You and the installer need to complete the form included with this letter and submit it with a copy of the invoice to myself at Benton REA.

Understanding Tiers

- "Tier 1" generally refers to HPWHs that expel exhaust air to the space where they are located; it was the first evolution of this technology and I doubt if they are even available for purchase anymore. When properly installed, Benton REA offers a \$300 rebate for Tier 1 HPWHs.
- "Tier 2" products (when located inside the home) may be installed so as to have their exhaust air ducted to the exterior of the home. When properly installed, Benton REA offers a \$600 rebate for Tier 2 HPWHs.
- "Tier 3" is very similar to Tier 2 but it comes from the factory with default energy saving settings selected on the control panel. When properly installed, Benton REA offers a \$600 rebate for Tier 3 HPWHs.

This incentive is now also available for installations in manufactured homes!

Included with this letter is a qualified products list for Tier 2 and Tier 3 products. If the unit you are looking at is not on the list, it may be Tier 1 –<u>check with me before purchasing</u>!

Hot Water Solutions

Visit <u>HotWaterSolutionsnw.org/</u> to learn more about HPWHs. Specifically, this portion of the website may be very helpful, <u>hotwatersolutionsnw.org/what-is-a-heat-pump-water-heater/is-it-right-for-you</u>.

That web site identifies particular brands and models that are eligible for the previously mentioned rebates and may identify locations where buy-downs are occurring.

We'll probably want to swing by and take a picture of your new unit for our records.

In years past, a \$300 federal tax credit on this equipment has been available – you should check to see if that still applies; so do your homework on that. This is relatively new technology and we are trying to do a good job of informing you on this potential purchase. I would encourage you to call us so we can make sure that you get off on the right foot. This has the potential for very significant energy savings in your home and we want to make your experience with it as positive as possible.

Sincerely,

Eric Miller Energy Services 509-781-6751 emiller@bentonrea.org

Benton Rural E A Electric Association

Heat Pump Water Heater Rebate Form

All sections must be filled out by the installer at the time of installation. A copy of this completed form and the purchase receipt or invoice must be promptly submitted to the homeowner's utility in accordance with utility policy.

| Household Information | | Program Use Only Project ID: | | | | |
|--|-------------------------|------------------------------|-----------------|-------------------|-----------------|--|
| Customer Name | Installation Address Ci | | / | St | Zip | |
| Phone (with area code) | Mailing Address Cit | | 1 | St | Zip | |
| Email Year Built: Heated Area (sq ft) | | | | | | |
| Home Type Single Family Home Manufactured Home | | | | | | |
| Heating Electric Furnace Zonal Electric Resistance Ductless Heat Pump Ducted Heat Pump system: Fireplace/Woodstove/Pellet stove Gas Furnace Other (specify): | | | | | | |
| Air Conditioning: | | | | | | |
| Number of occupants: | Number of water heaters | 3: | | | | |
| Information about the water heater being replaced (this row only) | Fuel □Electric □Gas* | Age (years): | Size (gallons): | Function Function | onal? 5 🔲 no | |

* In existing homes, only heat pump water heaters replacing existing electric tanks are eligible.

Installation Information

| Brand Installed | Model | | | Size (gallons): | Date of installation: |
|--|--------------------|-------------------------|-------------|--------------------------------------|----------------------------|
| | | | | | |
| Other Appliances in installation room: 🔲 Clothes dryer 🔲 Fridge 🔲 Freezer 🔲 Furnace 🔲 Other (specify): | | | | | |
| Where was this water heater purchased? | | | | | |
| Total installed cost (before rebates): \$ Break down cost into the categories below: | | | | | |
| Equipment: \$Labor: \$Electrical: \$Other: \$Specify: | | | | | |
| Installation location: Conditioned space | | | | | |
| Specify: 🔲 Garage 🔲 Basement 🔲 Closet 🔲 Utility room 📄 Laundry room 🔲 Other: | | | | | |
| Installation room size (feet): (length) x (width) x (height) =cu.ft. | | | | | |
| Ducted Installations | CO Monitor Locatio | n: Ducted out of space? | conditioned | Length of intake of Length of exhaus | duct (ft): t duct (ft): |

Required Customer and Technician Signatures Both signatures are required. If installed by the homeowner, the homeowner must also sign the installer section.

By signing below, the homeowner certifies that they understand and agree that they may be contacted for the purpose of scheduling an on-site installation quality assurance visit by a representative of the Heat Pump Water Heater (HPWH) program. This form must be signed by the person whose name appears on the electric utility account. ENERGY INFORMATION RELEASE: The undersigned utility customer requests and authorizes the specified utility to release billing and usage information for the account listed below to the HPWH program. With this authorization, the HPWH program can request billing information for up to two years pre-installation and two years post-installation. The utility customer also hereby releases the utility company from any and all liability arising from or connected with providing this information.

| A copy of the purchase receipt or installer's invoice is included with this application. | | | | |
|--|--|--|--|--|
| Electric Utility: | Account #: | | | |
| | | | | |
| Account holder name: | | | | |
| | | | | |
| Account holder signature: | Date: | | | |
| | | | | |
| By signing below, installer certifies that this form and any accompanying docu | mentation are complete and accurate; that all measures | | | |
| associated with this project were completed as of the signature date below; the | at all equipment was installed according to the | | | |
| manufacturer's specifications and any additional specifications required by Bonneville Power Administration; and that unit is functional | | | | |
| and operational prior to submission of this rebate form. | | | | |
| Manufacturer | Date of | | | |
| Training Location: | Training: | | | |
| Installer name: | Contractor | | | |
| | Non-contractor or Homeowner | | | |
| Installer signature: | Date: | | | |
| | | | | |

PRIVACY ACT STATEMENT Basic authority for collecting this information is authorized by 16 U.S.C. §§ 832 et. seq., and 838 et. seq., pursuant to Bonneville Power Administration's Conservation Program system of records established in 46 FR 31700. This information is primarily intended to further, but is incidental to the performance of, BPA's overall Energy Efficiency Program, the objective of which is to acquire energy resources through energy efficiency, to determine what cost-effective conservation and direct application renewable resources measures should be installed or adopted under different circumstances, and to provide incentives for the installation of such measures. Other routine issues of this information include: aggregated into a database on energy efficiency; furnished to authorized personnel for installation/repair of equipment; aggregated into a database for program publicity; and in some instances information regarding buildings will be made available to subsequent purchasers of the buildings. Your disclosure of the requested information is voluntary; however failure to provide requested information means that it will not be possible for you to participate in this BPA Energy Efficiency program.

Please return this form to:

Benton REA PO Box 1150 Prosser, WA 99350 emiller@bentonrea.org

| Company Name | Office/Location Address | City | ST | ZIP | MainPhone | Contact #1 |
|-------------------------------|-------------------------|---------------|----|-------|----------------|------------------|
| A & N Heating and Cooling | 205 E Curtiss | Walla Walla | WA | 99362 | (509) 520-0432 | Mark A. Brown |
| Apollo Heating and Air | 1119 W. Columbia Dr. | Kennewick | WA | 99336 | (509) 987-1500 | Jason Lynch |
| Burkes Plumbing | 1551 Nagler Rd | Selah | WA | 98942 | (509) 697-6574 | Kenneth Burke |
| Campbell & Co. | 2828 W Irving St | Pasco | WA | 99301 | (509) 948-4244 | Clint Young |
| Doc Water Heater | 3000 Fire Mountain Road | West Richland | WA | 99353 | (509) 628-9621 | Gary Lincoln |
| Olmstead Electric | POB 1721 | Walla Walla | WA | 99362 | (509) 529-7799 | Chuck Olmstead |
| Roto-Rooter Plumbing & Drain | 801 S Clodfelter Rd | Kennewick | WA | 99336 | (509) 440-5825 | Curtis Johnson |
| Sun River Electric | 9312 W 10th | Kennewick | WA | 99326 | (509) 727-7701 | Sean Walton |
| Total Energy Management, Inc. | 1975 Butler Loop | Richland | WA | 99354 | (509) 946-4500 | George Grimes |
| Total Quality Air LLC | 1916 N 18th Drive | Pasco | WA | 99301 | (509) 205-1592 | Carlos Garcia |
| Tritan Plumbing | 5306 S. Cascade Pl. | Kennewick | WA | 99337 | (509) 438-2214 | Tom Stride |
| Waterways Inc | 2118 SE 12th Ave # 101 | Battle Ground | WA | 98604 | (360) 687-1304 | Anders Sundqvist |
| Miller & Team | POB 1701 | Zillah | WA | 98953 | (509)829-0747 | Chris Miller |
| Ray's Plumbing | 200 Abbess Lane | Yakima | WA | 98908 | (509)966+2860 | Ray |
| Pioneer Plumbing | 716 W 22nd Ave | Kennewick | WA | 99337 | (509)396-7944 | Mike or Sara |

DO-IT-YOURSELF INSTALLATION TIPS In the second se

🚥 Before you begin...

Familiarize yourself with all elements of installing an electric water heater. This sheet provides you with tips specific to the additional steps required to install a heat pump water heater; it is not an installation guide. It does not serve as a replacement for manufacturer instructions.

DO YOUR HOMEWORK

- Review manufacturer's installation instructions and any supplementary resources, such as videos, that may be available.
- If you do not feel comfortable installing a standard electric water heater, do not attempt to install a heat pump water heater.
- Verify that your installation will be in compliance with all code and permitting requirements.
 - Oregon: cbs.state.or.us/bcd
 - Idaho: dbs.idaho.gov
 - Washington: https://fortress.wa.gov/ga/apps/sbcc or Ini.wa.gov
 - Montana: bsd.dli.mt.gov/bc/bs_index.asp
- Ensure that your installation meets utility rebate and/or tax credit requirements. Visit SmartWaterHeat.org/Rebates for more information.

Parts to have ready

- Electrical tape
- Wire nuts
- Teflon thread tape
- Water supply pipes
 - Push-fit connectors do not require soldering; verify local code compliance
- Pipe connector for temperature/ pressure relief valve pipe
- PVC pipe and accessories for condensate lines
 - PVC connectors threaded for condensate outlet connection (both 45° and 90° elbows)
 - Pipe hangers
 - PVC glue

- Pipe insulation
- Earthquake straps
- Wood or other spacing blocks
- Shims

Optional:

- Condensate pump
 - Clear vinyl tubing, sized for condensate pump and sufficient length to reach drain
 - Tubing hangers
- Drain pan to sit beneath unit
 - New unit may have a larger circumference than existing tank
- Thermal expansion tank if required by local code



Tools to have ready

- Pipe cutter or hacksaw
- Measuring tape
- Gloves
- Plumber's wrench
- Screwdrivers
- Drill
- Level
- Ladder
- Electrical current tester or voltmeter
- Socket wrench
- Garden hose





1. REMOVE EXISTING UNIT

- Turn off power to the existing unit at the breaker box and disconnect electrical connections.
- Turn off water to the existing unit and disconnect water connections, leaving some pipe for new connections.
 - Note: Use a hacksaw or pipe cutter for this step.
- Remove existing unit.



2. POSITION NEW HEAT PUMP WATER HEATER

- Place drain pan in desired installation location, ensuring proper space between unit and wall.
 - Unless ducted, most units require at least 1,000 cubic feet of air-flow around them to draw air from. This is the equivalent of a 10'x12'x8' space.
 - Installation in an outdoor or unprotected area is not recommended.
 - Position the unit so the air filter, cover and front panels can be easily accessed for inspection and servicing.
- Place the new unit inside the drain pan.

Note: Heat pump water heaters are much heavier than standard electric units, and are very top heavy. Use care when moving.

Attach earthquake straps that comply with manufacturer's clearance requirements and local code. If necessary, attach blocks to studs using appropriate anchors and maintain proper spacing from wall when straps are tightened.



3. INSTALL FILTER

- Ensure installation location allows access to air filter, which must be cleaned regularly. See the manufacturer's manual for cleaning schedule.
- Some filters lift up, while other filters are accessed on the side of the unit.



4. LEVEL UNIT

- Ensure the unit is level, using shims if necessary.
- Like a refrigerator, leveling ensures the unit operates properly.
- Some local codes require the unit to sit on a stand, check with your city for requirements.



5. CONNECT PIPES

- Connect water pipes in accordance with manufacturer's instructions.
 Note: Flexible pipe connections may be allowed and require no soldering, clamps, unions or glue.
- Use teflon tape on all threaded connections.
- Install temperature/pressure relief valve (TPV) per installation instructions and local codes.



6. INSULATE HOT WATER SUPPLY

Insulate hot water supply with flexible insulation to help maximize energy savings.



7. INSTALL ELECTRICAL CONNECTIONS

 Install electrical connections in accordance with manufacturer installation instructions.

Note: Verify proper voltage with electrical current tester or voltmeter.







8. ADDRESS CONDENSATE MANAGEMENT

- Identify condensate drain port(s) and choose the most appropriate drainage method for your installation.
- Attach PVC pipe to drain port and route in a downward slope to either a floor or sink drain.

Note: If there is not a drain nearby, a condensate pump is required (see below).

• If drainage pipe is directed outside, ensure pipe will not freeze.

Condensate Pump Installation Tips

- Install condensate pump per manufacturer instructions.
- Most condensate pumps can be attached to a wall hanger and plugged into a standard 115W outlet.
- Ensure tubing is connected securely to pump output and drains to a suitable termination point.
- Tubing may need to be routed up and over surrounding rooms.
- To help pull tubing through insulation and/or areas with limited access, attach a long PVC pipe to tube and gently pull tube through.
- Tubing and pipe hangers can be installed on condensate lines to prevent slippage and achieve a cleaner look.

9. FILL TANK

- Double-check connections to ensure there are no leaks.
- Turn on a hot water faucet in the house to allow air to escape the new tank as it is filled.
- Turn on cold water supply to the unit.
- When the hot water faucet in the house has a steady stream, the tank is full.



10. START YOUR HEAT PUMP WATER HEATER

- The heat pump water heater is ready to turn on. Turn on the power to the unit at the breaker.
- Verify the condensation pump is working properly by filling it slowly with water until the pump engages.
- Refer to manufacturer's operation manual and Smart Water Heat's Homeowner Quick Reference Guide for maintenance and operation guidelines.

Disclaimer: This document provides general tips for a quality installation of a heat pump water heater; it is not an installation guide. For complete information regarding installation requirements, features, benefits, operation and maintenance, review the manufacturer's installation manual for the installed product. Images of specific manufacturer product lines are not placed as endorsements nor does this guide guarantee their quality.

Smart Water Heat is an initiative of the Northwest Energy Efficiency Alliance, an alliance of Northwest utilities and energy efficiency partners.

