

ENERGY WISE

Where to start

Call KIUC. We can supply you with a device that will help you measure the temperature of your water and instructions on how to safely lower the temperature settings on your tank.

Remember, never adjust the temperature controls without first turning off power to your water heater at the circuit breaker.

Insulating hot water tanks and pipes

A hot water tank that is not adequately insulated loses heat through its top and sides. Hot and cold pipes coming out from the top of the tank lose heat, too.

To insulate or not to insulate

All water heaters have some insulation built into them at the factory. Older water heaters can benefit greatly from being wrapped. Newer tanks may have insulation value printed on the tank itself or in the owner's manual. A stated insulation value of R-16 or higher means that the tank is well insulated, and it is not necessary to add additional insulation. If you are unsure of the tank's age or no insulation value can be found, it is a good idea to wrap it. Also, honor any statement from the manufacturer that advises against adding additional insulation to tanks.

Insulating materials

Water heaters are insulated with 2 inch thick fiberglass blankets covered with vinyl plastic. The blankets should be wrapped snugly around the sides of the tank, an electric water heater should also be insulated on the top. Blankets are sold as kits that include instructions and tape. They can be purchased at most hardware stores.

Pipe insulation

Insulate the first 3 feet of the hot and cold water pipes coming out from the top of the water heater. Pre-formed foam insulation is your best bet for an easy, hassle free installation. There is no need to warp all the pipes throughout the house. You will spend more money on pipe insulation than you will save in energy.

Where to start

Adding insulation to a water heater and to pipes is fairly straightforward. However, if you have any questions, call KIUC, we are here to help.

Turn it off

If you are going to be away from home for two or more days, you can save money by switching off your water heater at the breaker switch. When you return, hot water will be available shortly after the water heater is turned back on.

An Efficient Water Heating System Saves Energy and Saves Money.


The amount of money that you spend heating water will vary from family to family depending on the number, age and lifestyle of family members, the age and condition of your water heating system and appliances that use hot water. Savings will also vary. This fact sheet has covered low cost and no cost suggestions to help you heat and use hot water efficiently.

Want more information?

For a more detailed description of energy saving measures, call KIUC's energy specialists at 246-8284 or 246-8282.



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On Kauai, heating water can account for more than 50% of your monthly electric bill . . .

Exploring some of the options to make the most efficient use of your water heating system can help you save money.

First, make sure that your water heating system is in good shape. Check to see that there are no leaks or dripping faucets. Pay close attention to underground or hard-to-get-to hot water pipes. An undetected leak may cost you lots of money over a period of time, especially in a hot water pipe.

Showers and Baths

While dish and clothes washing contribute to your hot water usage costs, showers and baths are usually the largest overall users of hot water in the home. Showers generally use less hot water than baths, but conventional showerheads can use as much as 8 gallons of water per

minute. Consider replacing any showerhead that uses more than 3 gallons per minute. A good, energy efficient showerhead will use only 2.5 gallons per minute, and it will make the spray feel like you are using more water than you actually are.

It's a good idea to add aerators to all faucets. Replace aerators that use 3.0 gallons or more per minute. Aerators that use only 1.5 gallons per minute are available at hardware stores.

Where to start

Replacing a wasteful, conventional showerhead is usually an easy job that you can do yourself. There are a wide variety of energy efficient showerheads available at hardware stores, including designer and handheld models. Energy efficient showerheads are sold in any hardware or department store. If you have specific questions about changing yours, call KIUC.

Reducing water temperature

Check the current temperature setting of your water heater. For showers and hand washing, thermostats should be set no hotter than 115-120 degrees. You may find that your first adjustment results in inadequate hot water for your uses. You may need to experiment to find the lowest temperature that will do the best job for you. Older dishwashers can require temperatures up to 149 degrees. Newer dishwashers are designed to operate at lower temperatures. They may also heat the water they need to the correct operating temperature. A good rule is to follow the instructions in your owner's manual if you have one. When washing clothes, always use cold or warm water. Studies have shown that new detergents will work just fine in cooler water.

Is Your Water Heating System Landing You In Hot Water?



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