



## GET OUT OF HOT WATER JANUARY ENERGY ACTION SHEET

This month's projected annual savings: up to \$112; 2.1% of energy use

HEATING WATER ACCOUNTS FOR ALMOST ONE FIFTH OF A TYPICAL HOUSEHOLD'S DIRECT ENERGY USE. It's second only to heating and air conditioning.

This month, save water, energy, and money:

- Install [faucet aerators](#) & [low-flow showerheads](#), [It's simple – here's how](#). These reduce the water used by up to 60%, maintain water pressure, & pay for themselves within a year.
- **Shorten showers to five minutes.** You'll use less than half the water of a bath. Typically, washing ourselves uses more hot water than anything else in our homes.
- **If you own your water heater, plan for what you'll replace it with when it reaches the end of its life.** New water heaters can use just half the energy of old ones. When your old one fails (BRRRR!), you'll want to replace it quickly!



References available upon request from [CreationCarePartners@gmail.com](mailto:CreationCarePartners@gmail.com). This info sheet employs the Task of the Month concept developed by Dr. Stephanie Kimball for Earth Care, an affiliate of Hoosier Interfaith Power & Light.

## HOW TO DO IT: CONSIDERING WATER HEATERS

**Electric tanks compared:** Highly efficient, a [hybrid electric](#) (a heat pump water heater) costs more than a **standard electric**, uses two thirds less energy and also dehumidifies. In the example below, it pays for its higher up-front cost with savings in four years and, in ten years, saves \$2000. A hybrid needs a space that is at least seven feet high and an area of at least 700 cubic feet. In a cold climate, it is best installed in an unheated space. In a warm climate, it reduces the need for AC if it is installed in space that you cool with AC.

**Natural gas (NG) tanks compared:** A conventional EnergyStar NG tank saves a little compared to a **standard** NG tank.

**Tankless and tanks compared:** A tankless makes sense where space is tight and hot water use is low. Its energy savings quickly make up for its higher purchase price. With a tankless, a household that uses 41 or less gallons per day may reduce its energy use by 24% to 34%. One that uses 85 gallons may cut by 8% to 14%. NG tankless heaters [emit more methane](#) than NG tanks do. Electric tankless heaters use more energy than hybrid electrics and [require an electrical upgrade. Utility companies may soon charge for the burden tankless electrics impose on the grid.](#)

This table gives a **relative** sense of different technologies for a household of four. Actual figures will vary depending on the model, utility rates and water use.

### An Example of Costs, Savings and Energy Use: A Household of Four

	Gas			Electric		
	Standard	Energy Star	Tankless	Standard	Hybrid	Tankless
Purchase price	\$640	\$676	\$711	\$409	\$1,210	\$703
Annual operating cost	\$284	\$280	\$228	\$419	\$104	NA
Total 10-year cost	\$3,480	\$3,476	\$2,991	\$4,599	\$2,250	NA
10-year savings		\$4	\$485		\$2,260	NA
Payback period (years)		9 years	2.8 years		2.5 years	NA
Energy factor	0.65	0.68	0.81	0.93	3.75	NA

Assumes: \$.12 per kWh, \$1.09 per therm. A high energy factor indicates higher efficiency. Savings and payback periods are relative to the standard models. Installation costs not included.

Estimated Savings	Energy Footprint Financial	
Reduce showers to five minutes or less	1.1%	\$59
Install low-flow aerators and showerheads	1.0%	\$53
Replace standard gas with a tankless OR a standard electric with a hybrid electric	4.8%	\$110 \$220
Notes: Assumes 3-person household. Water heater switches: 10 years annualized.		



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