



ECU

**SUSTAINABLE ENERGY
AND ENVIRONMENTAL
ENGINEERING**

Water Heater Insulating:

Insulating your existing hot water heater can be an effective energy saver and a cheap way to wrap up some savings.

While tankless water heaters are efficient money and energy savers, they can be rather expensive to install. Insulating your existing hot water heater is an easy and economical way save energy and money without breaking the bank.

How does it work?

Although hot water heaters are pre-insulated on the inside you may be able to improve its efficiency. If your water heater is warm to the touch, adding extra insulation on the outside can help keep the heat from escaping the tank. This extra layer of insulation raises the temperature of your hot water, which allows you to dial back your water heater thermostat. The lowering of the thermostat saves energy while still achieving the same water temperatures.



Image of water heater insulation fitting courtesy of iStockphoto.com/glennebo

The benefits of insulating your hot water heater

Insulating Your Hot Water Heater	
Annual Savings	\$28.95
Implied Cost	\$29.89
Payback Period (years)	1.01
Net Present Value ¹	\$450.09
<small>1: Assuming a discount rate of 1.7% compounded annually and a lifespan of 20 years.</small>	

With an average cost around \$30, water heater insulation kits can be found at almost any home improvement store. They are easy for you to install and take a relatively short amount of time. An insulation kit could reduce standby heat losses by 25%–45% and save you about 4%–9%, or around \$20–\$45 per year, in water heating costs. With your energy savings the insulation kit will pay for itself in roughly a years time.



Resources

www.Energy.gov

www.energystar.gov

Coastal Vacation Rental Home Technical Report

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