

## U.S. Department of Energy - Energy Efficiency and Renewable Energy Energy Savers

### Selecting a New Water Heater

You have a lot to consider when selecting a new water heater for your home. You should choose a water heating system that will not only provide enough hot water but also that will do so energy efficiently, saving you money. This includes considering the different types of water heaters available and determining the right size and fuel source for your home.

### Types of Water Heaters

It's a good idea to know the different types of water heaters available before you purchase one:

- **Conventional storage water heaters**  
Offer a ready reservoir (storage tank) of hot water
- **Demand (tankless or instantaneous) water heaters**  
Heat water directly without the use of a storage tank
- **Heat pump water heaters**  
Move heat from one place to another instead of generating heat directly for providing hot water
- **Solar water heaters**  
Use the sun's heat to provide hot water
- **Tankless coil and indirect water heaters**  
Use a home's space heating system to heat water

### Selection Criteria

When selecting the best type and model of water heater for your home, you also need to consider the following:

- **Fuel type, availability and cost**  
The fuel type or energy source you use for water heating will not only affect the water heater's annual operation costs but also its size and energy efficiency.
- **Size**  
To provide your household with enough hot water and to maximize efficiency, you need a properly sized water heater.
- **Energy efficiency**  
To maximize your energy and cost savings, you want to know how energy efficient a water heater is before you purchase it.
- **Costs**  
Before you purchase a water heater, it's also a good idea to estimate its annual operating costs and compare those costs with other less or more energy-efficient models.

### Learn More

#### Codes & Standards

- [Water Heater Energy Efficiency Standards](#)  
DOE Appliances and Commercial Equipment Standards Program

#### Financing & Incentives

- [Find Federal Tax Credits for Energy Efficiency](#)  
ENERGY STAR®

#### Product Information

- [Which Water Heater Is Right for You?](#)

ENERGY STAR®

### Related Links

- [Water Heaters and Energy Conservation](#)  
Home Energy Magazine
- [Domestic Hot Water - Single Family Housing](#)  
Energy Efficient Rehab Advisor

### Reading List

- Krigger, J.; Dorsi, C. (2004). *Residential Energy: Cost Savings and Comfort for Existing Buildings*. Helena, MT: Saturn Resource Management.
- *Water Heating* ([PDF 836 KB](#)). (August 2001). DOE/GO-102001-0785. U.S. Department of Energy.
- *Home Energy Briefs: #5 Water Heating* ([PDF 161 KB](#)). (2004). Rocky Mountain Institute. 6 pp.
- Wiehagen, J.; Sikora, J. L. (March 2003). *Performance Comparison of Residential Hot Water Systems* ([PDF 1.01 MB](#)). NREL Report No. SR-550-32922. Golden, CO: National Renewable Energy Laboratory. 61 pp.

[Energy Savers Home](#) | [EERE Home](#) | [U.S. Department of Energy](#)  
[Webmaster](#) | [Web Site Policies](#) | [Security & Privacy](#) | [USA.gov](#)

Content Last Updated: February 24, 2009