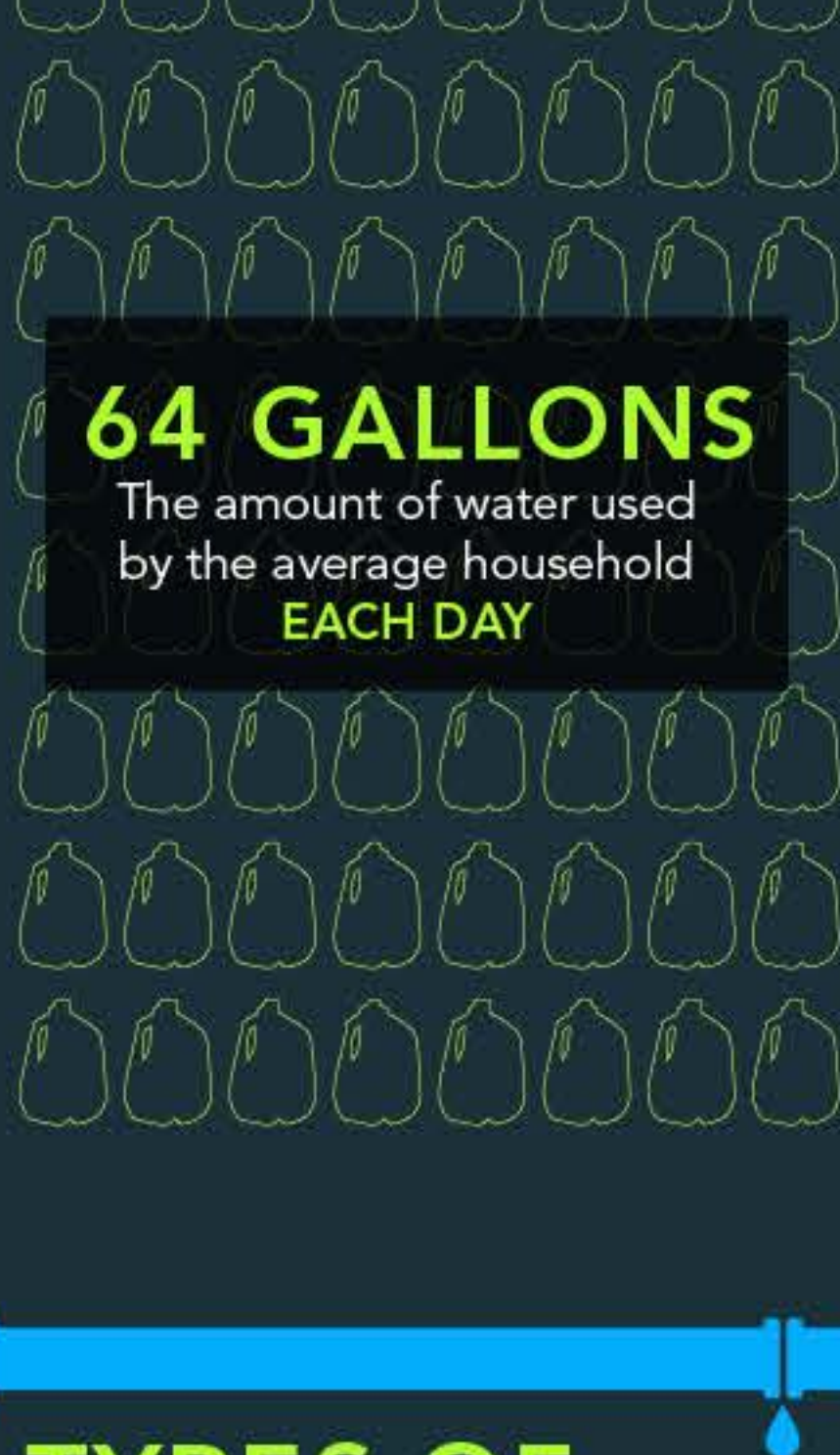




Everything you need to know about

WATER HEATERS



64 GALLONS

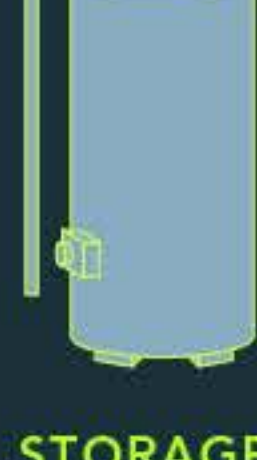
The amount of water used by the average household **EACH DAY**

\$400-600

The amount of money the average household spends on water heating **EACH YEAR**

Water heating is the **2ND LARGEST** expense in your home, accounting for **14-18%** of your utility bills

TYPES OF WATER HEATERS



STORAGE

COST \$

LIFE EXPECTANCY 10-15 years.

PRO Lower purchase cost.

CON Standby heat loss -- energy can be wasted to keep the water in the tank heated to the set temperature.

SOLUTION Look for an insulated tank to reduce heat losses and lower operating costs.

TANKLESS

COST \$\$

LIFE EXPECTANCY 20+ years

PRO Provides a constant supply of hot water, and is 8-34 percent more energy efficient than a storage water heater. Depending on the amount of hot water your home uses daily, you could save at least \$100 a year.

CON Limited flow rate of hot water means simultaneous, multiple uses of hot water can stretch a tankless water heater to its limit, and some times the energy savings don't pay for the cost of purchase and installation.

SOLUTION Install two or more tankless water heaters connected in parallel or separate ones for appliances that use a lot of hot water.

HEAT PUMP

COST \$\$

LIFE EXPECTANCY 10-15 years

PRO 2-3 times more energy efficient than a storage water heater and lower operating costs. Energy Star heat pump water heaters can save homeowners almost \$300 a year on their electric bills

CON Performance is dependent on the installation location, and heat pump water heaters exhaust cold air -- increasing the load on space conditioning appliances during heating months.

SOLUTION Switching the heat pump water heater to regular resistance mode will stop cold air exhaust but also reduce the appliance's efficiency.

SOLAR

COST \$\$\$

LIFE EXPECTANCY About 20 years

PRO 50 percent more efficient than gas or electric water heaters.

CON Solar water heaters may require a backup system for cloudy days and times of high demand.

SOLUTION Make sure you buy a solar water heating system that includes a storage water heater as part of the system package.

TANKLESS COIL & INDIRECT

COST \$\$

LIFE EXPECTANCY 10-11 years

PRO Lower installation and maintenance costs

CON Inefficient choice for many homes, especially for those in warmer climates.

About 27 million households in the U.S. have a water heater that's more than **10 YEARS OLD.**



An average water heater lasts about 10-15 years, and when it fails, it can leave you in a mess.

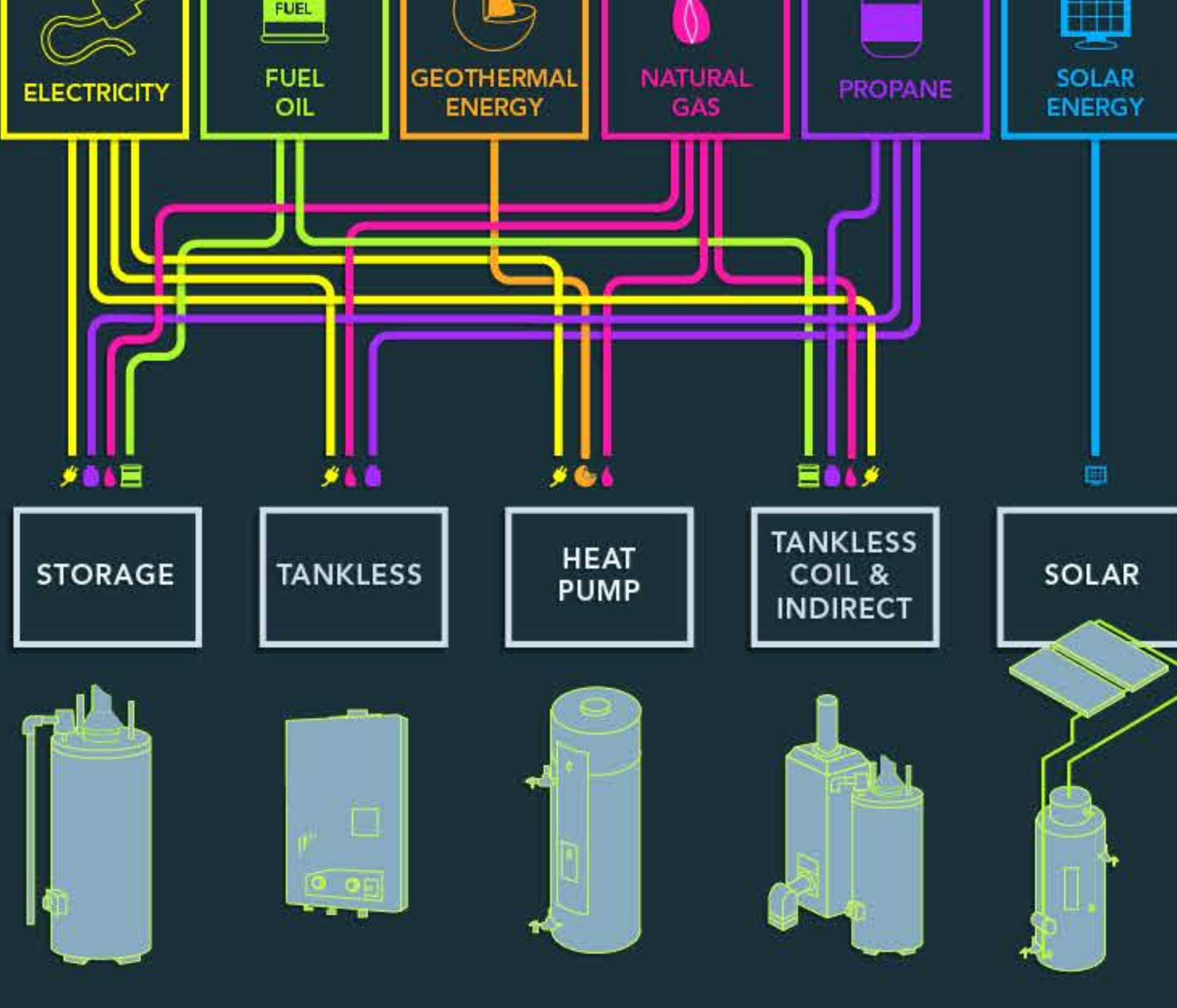
DO YOUR RESEARCH EARLY to find one that best fits your needs.

CHOOSING YOUR WATER HEATER

Don't get caught in hot water! This decision tree will help you determine what type of water heater is best for you.

FUEL TYPE

It is important to compare fuel costs if you have more than one option available. You may find that you will save more money in the long run if you use a different fuel source.



YOU SHOULD ALSO CONSIDER:

EFFICIENCY

To maximize energy and operating cost savings, look for an energy-efficient water heater. A water heater's **ENERGY FACTOR (EF)**. Based on the amount of hot water produced per unit of fuel consumed, an energy factor includes:

RECOVERY EFFICIENCY

How efficiently the heat from the fuel is transferred to the water.

STANDBY LOSSES

The percentage of the heat loss per hour from the stored water compared to the water's heat.

CYCLING LOSSES

The loss of heat as water circulates through a tank or pipes.

COST

When buying a water heater, it is important to not only look at the purchasing cost, but also the installation, operating, and maintenance costs to determine if it is worth investing in a more efficient water heating system.

SIZE

To ensure you will have enough hot water when you want to use it, calculate your household's peak-hour hot water demand and use that to determine your water heater size.

WATER HEATER MAINTENANCE

Periodic maintenance can extend the life of your water heater and minimize efficiency loss.

If you have a storage water heater, be sure to **FLUSH A QUART OF WATER** from the tank every three months and **CHECK THE TEMPERATURE** and pressure valve every six months.

To extend the life of storage water heaters, **REPLACE ANODE RODS** -- replacement frequency depends on the water heater and whether you have soft or hard water.

Regular maintenance on simple solar water heater systems can be as infrequent as every 3-5 years and should be done by a **SOLAR CONTRACTOR**.

TAX CREDITS & REBATES

SAVE 30 PERCENT of the cost, including installation and labor costs, of a solar water heater by taking advantage of the federal tax credit that is good until December 31, 2016.

SAVE UP TO \$300 on gas, oil & propane storage and tankless water heaters. In order to qualify for the federal tax credit, the water heater must have an energy factor of at least 0.82 and be installed by December 31, 2013.

Interested in installing a heat pump water heater? You could qualify for a **\$300 FEDERAL TAX CREDIT**.

Be sure **TO CHECK FOR LOCAL REBATES** and tax credits for energy-efficient water heaters

TIPS FOR REDUCING YOUR WATER HEATING BILLS

USE LESS hot water.

Buy a more efficient model or consider installing a **SOLAR WATER HEATER**.

Turn down your water heater's **THERMOSTAT**.

FIX LEAKS: A leak of one drip per second can cost \$1 a month.

Install **LOW-FLOW FAUCETS AND SHOWERHEADS**.

Purchase **ENERGY STAR APPLIANCES**, such as dishwashers and clothes washers.

Wash your clothes in **COLD WATER**.

Set water heater thermostat to **120 DEGREES F.**

Low-flow fixtures cost about \$10-20 a piece and achieve water savings of **25-60 PERCENT**.

Follow the manufacturer's recommendations for ways to **INSULATE YOUR WATER HEATER** tank and pipes.