

A Consumer's Guide to Energy-Efficient Water Heaters

Save energy and money by choosing an energy-efficient water heater!

Water heaters deliver the drinking or sanitary hot water you need. Choosing an energy-efficient water heater for your home is an effective way to significantly reduce the cost of your energy bill. This guide helps you make an informed and energy-efficient purchase.

Choosing the right solution to fit your water heating supply needs

There is a broad range of technologies for water heaters available on the market. You can have electric or fuel driven boilers as well as heat pumps and solar systems. Each of these products has its specific applications due to their technical properties. Water heaters are just one component of your home's water supply system, and as every system is different, not every solution on the market will work with your home.

Choosing an energy efficient water heater can significantly lower your energy costs. For example, if your home is currently equipped with a conventional electric water heater using 1 MWh of energy per year, a new heater with electronic controls can save you more than 150 Euros each year. In other words, in less than five years the amount of money you save on energy will cover the cost of your new boiler.

Shopping for your water heaters

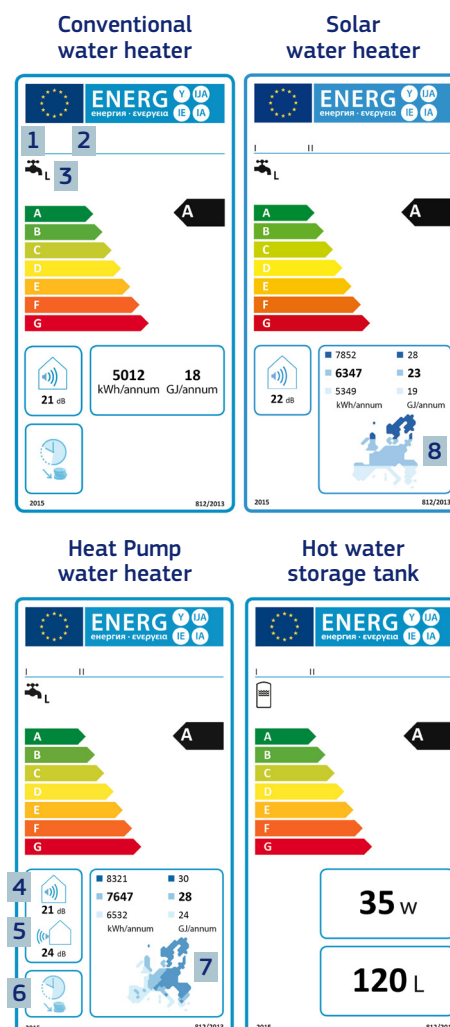
This variety of water heaters available on the market means you can select from a wide range of efficiencies.

So how do you choose?

After you narrow down your options to the products that best meet your needs, the next step is to compare and see which is the most efficient. Therefore look at the product's energy label. If you're not satisfied with the product's efficiency, don't hesitate to ask for a more efficient solution.

Reading the water heater labels

Each water heater will come with an energy label showing its energy efficiency on a scale from **A (most efficient)** to **G (least efficient)**. There are labels for conventional water heaters, solar water heaters, and heat pump water heaters. Furthermore, there is a separate label for packages that combine water heaters with solar devices and hot water storage tanks.



- 1 The company that made or placed the water heater on the market
- 2 The model
- 3 The type of product is indicated by a symbol either showing a radiator, tap or water tank.

- 4 The water heater's maximum indoor sound level.
- 5 The water heater's maximum outdoor sound level.
- 6 Water heaters able to work only during off-peak hours.
- 7 European map displaying 3 indicative temperature zones.
- 8 European map displaying 3 indicative global solar irradiance zones.

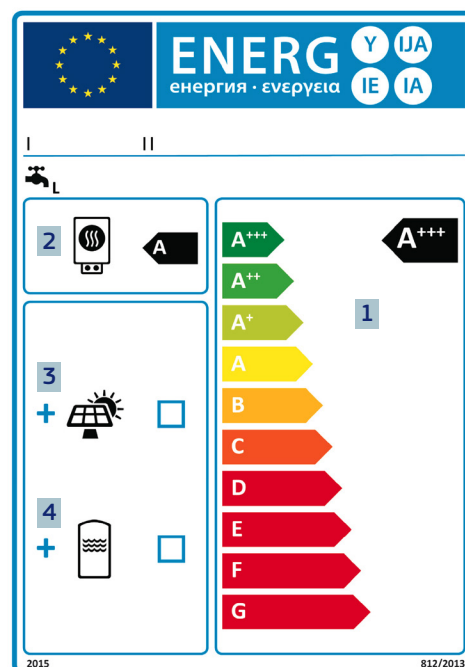
Tips for efficient water heaters

- The proper installation of water heaters requires professional assistance to avoid increased energy demand and safety risks. Professional guidance also ensures the best product for your home is identified.
- Read the label: A 'green' rating means the water heater is one of the most efficient water heaters on the market and can therefore reduce running costs. You can increase your energy-saving advantages by combining different technologies. By 'packaging' these different elements, you can even reach an A+++ rating!
- Consider the noise level: The amount of noise a water heater makes while operating is rated in decibels (dB). To give you some idea of what the scale means, a conversation at home is rated at 50 dB and a motorcycle at 100 dB.
- Use the controls of your water heater to adapt the temperature levels to your needs.
- Warm water may allow bacteria like Legionella to populate your water installation. You should ensure a minimum hot water temperature of 50°C.
- Use your water heater's time-controlled hot water generation ability. For instance, when not at home, you may want to stop the production and circulation of hot water.
- Reduce your hot water consumption. Hot water is a precious resource. You can save water by installing water efficient taps and showerheads.

Reading the package label

For combinations of water heaters, solar devices and hot water storage tanks, your dealer will provide an individual label.

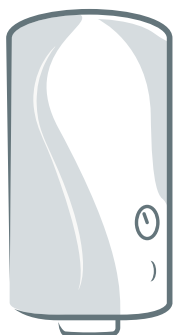
This label gives you the efficiency of the combination of the different components.



- 1 The energy efficiency class of the combination of the different components
- 2 The water heating energy efficiency class of the water heater
- 3 The package includes a solar collector
- 4 The package includes a hot water storage tank

Only with a combination of the different technologies can you achieve an A+++ rating. Please note that such a combination must be planned and installed properly.

More information



European Commission

- Commission Delegated Regulation (EU) No 812/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of water heaters, hot water storage tanks and packages of water heater and solar device
- Commission Regulation (EU) No 814/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water heaters and hot water storage tanks
- Energy Efficiency of Products
- Ecodesign and Energy Labelling

Should you have a question, please visit
Europe Direct Coact Centre

