Choosing the right size hot water system

Think carefully about what your household needs from a new hot water system. Every household is unique, and this impacts what size is appropriate.

The guidance below has been developed to assist you in choosing the right size system.

A system that is too small for your household may mean regularly running out of hot water A system that is too large for your household will cost more to buy and run

The Victorian Energy Upgrades (VEU) program offers incentives for households to upgrade to efficient hot water systems. Only products meeting VEU program requirements can be installed under this program. We recommend discussing sizing with your installer.

If the system you intend to install is smaller than the size recommended in this fact sheet, you may experience shortages of hot water.

Recommended tank size

Disclaimer: Sizing any hot water system should account for several factors and not only the number of bedrooms. We recommend that sizing and installation is always conducted by a fully qualified technician.

The 'size' of a hot water system refers to how much hot water it can provide. This is determined by tank size (the amount of water stored, listed in litres) and how quickly new water entering the tank can be heated. Our recommendations rely on tank size because it is easily comparable. The VEU program recommends sizing your system based on the number of bedrooms, as the number of people in a household changes over time. For example, the demand for hot water might increase with the addition of children or tenants.

The recommended sizes include some extra capacity to account for changes in water consumption and a range in the number of occupants.

RECOMMENDED TANK SIZE FOR HOT WATER SYSTEMS	
Number of bedrooms	Recommended tank size
1-2	150-225 litres
3	225-300 litres
4 or more	More than 300 litres

There is a range of hot water systems eligible under the VEU program. Not all products are of the same quality or suitability for all households.

Remember to do your research on products and warranties as they vary between manufacturers.





How does household behaviour impact recommended tank size?

When and how frequently your household uses hot water will impact the size of the hot water system needed to meet your household's needs.

Before investing in a larger hot water system, consider upgrading the efficiency of your appliances. For example, efficient shower heads can reduce your water use and energy bills.

Consider a larger system than our recommended size if you have high hot water consumption.



People in my household have long and/ or frequent showers



People in my household have regular baths



People in my household shower directly after one another, or at the same time (in different showers)



My showers do not have efficient 'low flow' shower heads



My clothes washing machine and/or dishwasher use plumbed hot water

Solar and timers

- Many heat pumps have a timer to control when water is heated to make the most of electricity generated from solar panels.
- A larger tank may be required for households using timers to reduce the risk of hot water running out between reheating times.

Noise and system placement

- Heat pumps generate noise comparable to an air-conditioner. Some systems are noisier than others.
- Select a location for your system that is appropriate for you and your neighbours.

Electric elements

- Some heat pumps have a 'booster' element. This can increase the speed that water is heated and be useful in cold climates but can also increase running costs.
- Electric boosted solar water heaters use elements to heat water in the tank. The size and number of elements will impact how quickly water is heated.

Climate

- The energy use and performance of hot water systems are impacted by the local climate. It can also take longer to heat water in colder climates.
- Speak to your installer about models and sizes best suited to your climate.

Other considerations

Existing hot water system

- If your current system has a tank, consider the size of the tank when looking at replacements.
- If your current system is instantaneous, consider your household hot water use when looking at replacements.

More information about water heating upgrades, sizing, and other upgrades on offer under the VEU program are available on our website:

https://www.energy.vic.gov.au/forhouseholds/victorian-energy-upgradesfor-households/hot-water-systems

If you have a complaint, please call (03) 9032 1310 or email veu@esc.vic.gov.au



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