Tips for new home buyers



Building or buying a new home is a great opportunity to ensure your home has comfortable temperatures year-round, is cheap to run and is environmentally friendly. Hume City Council encourages you to implement the tips below and to use the resources listed. From 1 October 2023 New Homes will be required to improve minimum performance from 6 stars to 7 stars under the Nationwide House Energy Rating Scheme (NatHERS). With good design, especially at the planning stage, you can more easily meet or boost your rating further to increase your comfort, save money on energy bills and future proof your asset.

1 Choosing your lot

Choose a lot that allows you to place your home with living areas facing north.

This is the first and most important step to set yourself up for success. Windows and glass doors that face north provide the largest heat gains in winter and with appropriately sized eaves are shaded to reduce heat gains in summer. Glazing on other aspects (east, south and west) should be minimised. More information available in <u>Sustainability Victoria's Energy Smart Housing Manual</u>.

(2) Heat Island Effect

Light coloured roofs reflect up to 70% of summer heat gain, approximately 50% more than a dark roof as shown in <u>Your Home</u> – Australia's guide to environmentally sustainable homes.

This leads to less energy usage to cool your home in summer by reducing internal temperatures. Light coloured bricks, paving and trees and plants also help keep your home cool in summer and reduce the urban heat island effect in your neighbourhood. Some synthetic turf, particularly those with non-organic infill (e.g. rubber), can have a much hotter surface temperature on hot, sunny days compared to natural grass. This is because synthetic turf generally absorbs, rather than reflects sunlight, causing the emission of heat.

3 Solar/Battery

The best way to save on your energy bills is generating your own electricity at home using a solar system.

You can apply for the solar PV rebate of up to \$1,400 and interest-free loan of the same value while your house is being built. You could save on installation costs and start saving with solar as soon as you move in. By reducing the need to purchase energy from the grid you can save up to \$1,073 every year on energy bills. For those keen to go further and extend the use of their own renewable energy, battery systems will store any excess energy you don't use during the day for later when your solar system is not generating electricity. Rebates for both rooftop solar and batteries are available through Solar Victoria. Buying GreenPower from your retailer is another great way to ensure all of your electricity use is renewable.

4 Hume Solar Roll-out

To make it even easier for Hume residents, Council has partnered with the Yarra Energy Foundation who have appointed an accredited solar provider Green Home Green Planet to deliver cost effective solar installations for your new home.

"Hume City Council is offering concession card holders an additional \$700 rebate to reduce the upfront costs of solar by up to \$3,500." Find out more at <u>Hume Solar</u>



(5) Choose all-electric

New all-electric homes are cheaper to heat, cool and run. This can save households around \$1,800 per year on their energy bills when solar panels are also included.

Visit <u>Victoria's Gas Substitution Road Map</u> for more information.

6 Insulation and building envelope (or thermal fabric)

A well-insulated home keeps hot air out in summer and warm air in in winter.

Insulation with an R value of 3.5 is required in Victoria in the roof and R value of 1.5 in the walls. Consider boosting these to up to R-5.0 and R-2.5 respectively and including underfloor insulation to improve comfort and further reduce bills. More advice available at <u>Sustainability Victoria</u>.

7 Living/Dining

In Victoria, the largest user of energy in the home is space heating.

The most energy efficient way to heat your home is by using reverse cycle (split system) air conditioning. Split systems can heat or cool your home quickly and cost less than gas heating or other electric heating. On average Victorian households can save \$570 every year.

Include internal doors so that you can use zones to heat or cool only those areas you are using. For more information see <u>Victoria's Gas Substitution Road Map</u>.



The second largest user of energy in a typical Victorian household is water heating.

Electric heat pumps or solar hot water boosted by electricity are efficient options recommended for all electric homes. On average this can save Victorian households \$120 every year. For more information see <u>Victoria's Gas Substitution Road Map</u>.

9 Kitchen

Cooking on a gas stovetop is inefficient and National Asthma Council has reported approximately 12 per cent of childhood asthma cases in Australia can be attributed to gas stovetops for cooking.

Induction cooktops use significantly less energy and are safer, faster and easier to clean. On average this can save Victorian households \$270 every year. Visit <u>Victoria's Gas Substitution Road Map</u> for more information.

10 Three-phase power

If you are considering adding a household battery and one (or more) electric vehicles to your home in the future.

Consider three-phase power over single phase to handle the increased demand required to charge one (or more) electric vehicles fully overnight. Visit the <u>Electric Vehicle Council</u> for more information.





