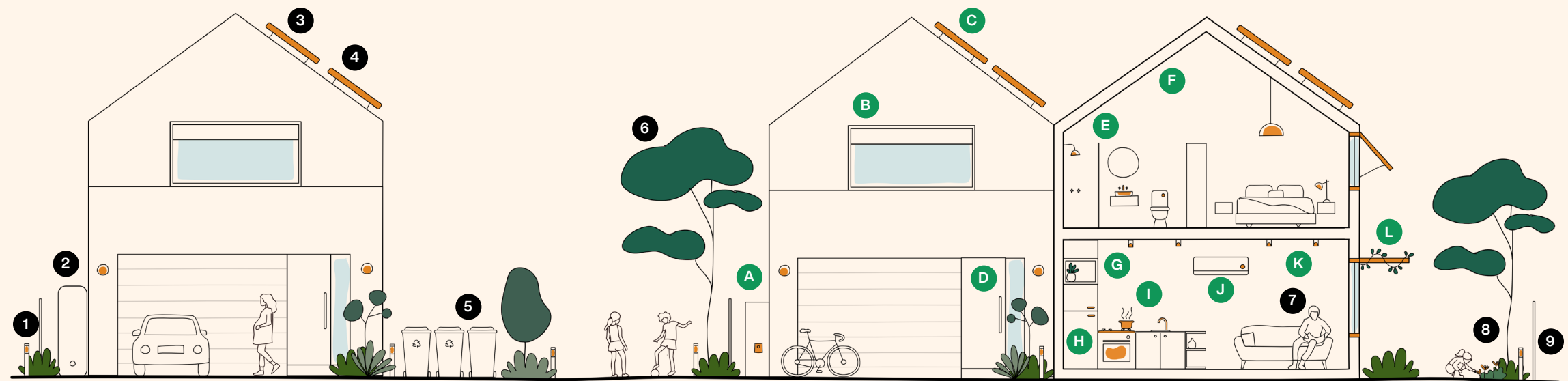


# UNLOCKING SUSTAINABLE TOWNHOUSES

You deserve an efficient, comfortable, safe and healthy home. You deserve clean energy and affordable bills. Identify the efficiency and sustainability opportunities that are right for your townhouse. Consult with your owners corporation committee about making improvements in the common area too.

Don't forget to check if you're eligible for [Victorian Energy Upgrades](#) or [Solar Victoria](#) rebates.



## The Victorian Owners Corporation Act Supports Sustainability

Window shading, double glazing, split system air conditioners, and heat pumps all require external infrastructure visible from the outside of your building. You may need permission from your owners corporation prior to retrofitting these items.

Remember, the Victorian Owners Corporation Act states that “An owners corporation must not make rules that unreasonably prohibit the installation of sustainability items on the exterior of a lot”.

### Ready to retrofit, not sure where to start?

Share this guide with your owners corporation committee and manager to start the discussion. For more information about how to work with and make decisions with your owners corporation, visit the [Owners Corporation on the Consumer Affairs Victoria website](#).

## Plan for an All-Electric Building

We are living in the clean energy revolution. Rooftops are now resources and in the near future, an electric vehicle will act like a big battery. Our homes will be all-electric, powered by renewable energy and have cleaner indoor air that's good for our health.

It's important that apartment buildings aren't left behind. [Unlocking Sustainable Strata's Guide to Electrifying Your Apartment Building](#) will help you and your owners corporation committee electrify common areas and private townhouses. It outlines the steps to take and provides options for the best all-electric retrofit technologies across heating, hot water, cooking and more.

## WHAT YOUR OWNERS CORPORATION COULD DO

1. Upgrade outdoor lighting\*
2. Install a water tank\*
3. Install solar
4. Maintain your solar panels
5. Turn your food scraps into a resource
6. Let nature cool your building
7. Make it easy for residents to live sustainably
8. Start a community garden in your common area
9. Buy renewable electricity for your common area

## WHAT YOU COULD DO IN YOUR TOWNHOUSE

- A. Upgrade to an all-electric efficient hot water system
- B. Install double glazing
- C. Install solar
- D. Draught proof your townhouse
- E. Reduce water use\*
- F. Insulate your ceiling\*
- G. Switch to LED lighting\*
- H. Buy electric, energy efficient appliances
- I. Switch to all-electric cooking
- J. Switch to efficient, electric heating and cooling\*
- K. Buy renewable electricity
- L. Install external shading

\* If your building was constructed after 2005, these actions may not be relevant to you.

For townhouse owners,  
owners corporations & managers

Got the basics? Check out our detailed outline below for more information to assist with your retrofitting journey.

## OWNERS CORPORATIONS

### 1. Upgrade outdoor lighting\*

Outdoor lighting can run up to 12 hours a day, consuming significant amounts of electricity. Switching to LED lights is one of the lowest cost, highest benefit actions you can take, using up to 80% less electricity.

When replacing or upgrading, make sure the waterproof seals around the fittings are intact and fitted properly.

### 2. Install a water tank\*

Rainwater is a valuable natural resource. Using rainwater can reduce water bills, provide an alternative supply during water restrictions, and help maintain a green, healthy common area garden.

Slimline water tanks are a perfect solution for townhouse complexes where space is at a premium.

### 3. Install solar

The vast majority of Australians want their homes powered by renewable energy, so it's no surprise that we have the highest penetration of solar PV per capita in the world. The average solar system in Australia pays for itself within 4 years, and after that, the electricity it generates is free.

New Solshare technology is making it easy for owners corporations to install one solar system to power the common area and individual apartments. This means cutting electricity costs for common areas and for residents. The Yarra Energy Foundation has developed a [Guide to Solar for Apartments](#) to help you understand the process.

### 4. Maintain your solar panels

Solar PV and solar hot water systems require some maintenance to operate efficiently. The surface of the panels should be cleaned every 6-12 months. Many local solar businesses offer cleaning and maintenance services.

### 5. Turn your food scraps into a resource

Check if your council or waste contractor offers a food and garden organics collection to turn your food waste into compost. If not, consider installing a common worm farm or compost. If well managed, these systems have little to no smell as they transform food scraps into nutrients that can be used in gardens.

### 6. Let nature cool your building

Concrete driveways and paving act like heat traps, making your townhouse hotter, increasing the need for air conditioning. Planting trees and plants through the common area will shade the concrete and help to reduce the temperature of air moving into homes.

Plants and soil provide a cooling effect through the process of evapotranspiration, and plants can also be used to provide shade and funnel cooling breezes. Shading to the north of a home should be provided by deciduous plants which lose their leaves in winter.

### 7. Make it easy for residents to live sustainably

Some sustainability upgrades - double glazed windows and window awnings - provide a huge benefit to residents. They also impact the look of your complex and therefore typically need approval from the owners corporation.

Often there is a desire to maintain a consistent look to the building facade. To do this, owners corporations can develop style guidelines that specify colours, materials, size of the windows or awnings. This gives owners the freedom to undertake upgrades, while respecting the visual amenity of other occupants.

### 8. Start a community garden in your common area

Communal gardens provide health and wellbeing benefits. Residents can access fresh food and green space, stay active maintaining the garden, and connect socially. Knowing your neighbours makes your complex safer and builds social resilience.

Start with a small garden, managed by a group of residents. Expand the garden as interest grows.

### 9. Buy renewable electricity for your common area

Become part of Victoria's clean energy transition and support the green economy. The [Green Electricity Guide](#) can help you select a sustainable electricity retailer.

## TOWNHOUSE OWNERS

### A. Upgrade to an all-electric efficient hot water system

Hot water systems are the second highest user of energy in Australian homes. Gas is no longer the most efficient way to heat water and is being phased out across Victoria to support the transition to zero emissions.

If you have a gas hot water system servicing your townhouse, the best replacement is a heat pump hot water system. Electric instantaneous hot water systems are also good, but cost more to run.

For more information, visit the [A Guide to Electrifying your Apartment Building or Townhouse](#).

### B. Install double glazing

Double glazing can improve the thermal performance of windows by around 30%, and reduce outside noise entering your townhouse.

Windows can be made from timber, aluminium or uPVC. Both timber and uPVC have excellent thermal properties. However, timber windows require maintenance, whereas uPVC windows do not.

### C. Install solar

The vast majority of Australians want their homes powered by renewable energy, so it's no surprise that we have the highest penetration of solar PV per capita in the world. The average solar system in Australia pays for itself within 4 years, after that the electricity it generates is free.

You may want to install solar just for your townhouse, or you could talk to your owners corporation committee about installing solar for your whole complex using [Solshare](#) technology. Before installing solar, remember to check your Plan of Subdivision to see if you own the roof or if it belongs to the owners corporation.

### D. Draught proof your townhouse

Up to 25% of winter heat loss from homes is caused by drafts (gaps and cracks in walls and around doors and windows). Draught proofing will make your home more comfortable and cheaper to heat and cool.

Draught proofing is something you may be able to do yourself with products from your local hardware shop or you can employ a tradesperson. The [Sustainability Victoria website](#) has useful guidance.

### E. Reduce water use\*

Reducing hot water use will not only cut your water bills, it will also reduce your energy bills.

In Victoria we should be using a maximum of 155L of water per person per day. If you are using more than that, first make sure you have a modern, low flow showerhead. You can also upgrade your taps or you can DIY install flow restrictors from your local hardware shop. Lastly, replace your single flush toilet cistern with a low water, dual flush alternative.

When purchasing, look for the [WELS water star rating](#) on taps, showerheads, toilets, dishwashers and washing machines.

You could also look to [install a rainwater tank](#) to use for toilet flushing and/or to water your garden.

### F. Insulate your ceiling\*

Effective ceiling insulation is the best barrier against the summer heat and the winter cold, saving you up to 20% on your heating and cooling energy costs.

If you have a hatch into your ceiling space, you can have bulk insulation installed. Before calling an installer, check if you have any insulation already installed. If your insulation is older than 15 years, it will likely need to be replaced.

If your ceiling cavity can't accommodate insulation, and you have a dark coloured roof, consider working with your owners corporation to paint the roof in a [light or reflective coating](#).

### G. Switch to LED lighting\*

LED lights use up to 80% less electricity. Switching to LEDs is one of the lowest cost, highest benefit actions you can take.

Halogen downlights and old incandescent bulbs are the most energy guzzling and should be replaced immediately. Fluorescent lights should also be switched to LED. This can be done on failure if funds are limited.

### H. Buy electric, energy efficient appliances

Home appliances and equipment use an average of 25% of household energy. Buying highly efficient appliances will reduce ongoing electricity bills.

Energy star rating labels will help you purchase efficient appliances when shopping for an air conditioner, dryer, computer monitor, dishwasher, fridge, freezer, washing machine or TV. However, it is important to [understand how to use the label](#), especially when comparing between different sized products.

## Unlocking Sustainable Strata

## Townhouses

### I. Switch to all-electric cooking

Gas cooktops are inefficient and lead to poor indoor air quality. A child living with gas cooking in the home [faces a comparable risk of asthma](#) to a child living with household cigarette smoke. Switch to an induction cooktop and electric oven. For more information, see the [Guide to Electrifying your Apartment Building or Townhouse](#)

### J. Switch to efficient electric heating and cooling\*

Gas is no longer the most efficient way to heat your home and is being phased out across Victoria to support the transition to zero emissions. The best replacement is a split system air conditioner, which can also cool your home in summer. For more information, see the [Guide to Electrifying your Apartment Building or Townhouse](#).

Ceiling fans are also a low cost way to cool your home, and can also be used in reverse during winter to push hot air down into living spaces.

During summer, remember to open all your windows when the temperature drops. This will cool your home overnight and reduce the need for air conditioning the following day

### K. Buy renewable electricity

Become part of Victoria's clean energy transition and support the green economy. The [Green Electricity Guide](#) can help you select a sustainable electricity retailer.

### L. Install external shading

Windows are the main source of heat gain into your home. Appropriate shading over windows and doors will help keep your home cool in summer, and allow sunlight in during winter. Shading is most effective when installed externally, so an awning will be more effective than an internal blind.

The type of shading you require will depend on the orientation of your windows and doors. The [Your Home website](#) provides advice to help you select the best solution.

Remember your owners corporation may have guidelines regarding changes to the building facade so remember to check with your owners corporation committee or manager before proceeding. Don't forget to talk with your neighbours too, they might like to follow your example.