

Make the change to cleaner, cheaper energy

PLAN YOUR SWITCH FROM GAS TO ELECTRICITY ...



HEAT PUMPS



An electric heat pump hot water system will deliver hot water cleanly and efficiently.

REVERSE-CYCLE AIR CON



Reverse-cycle air conditioners provide efficient heating & cooling.

INDUCTION COOKTOPS



Induction cooking is fast, responsive, efficient and healthy.

GO ALL ELECTRIC



Closing your gas account will save hundreds of dollars per year in service charges. All electric homes with solar save \$9-16,000 over a decade compared to homes with gas.

Did you know?

Electric appliances are more efficient and cheaper to run than gas appliances.

The efficiency of solar, wind, and battery technologies has improved while the cost of producing panels, turbines and batteries has fallen. Modern electric heat pumps use around a quarter or less of the amount of energy to heat air or water as gas equivalents. It is now cheaper and more efficient to use electricity than gas for heating, hot water and cooking, depending on your choice of appliances.¹

Electric appliances are healthier than gas appliances.

A University of Queensland study found that 12% of childhood asthma comes from exposure to gas stoves used for cooking.² Gas stoves, particularly when unvented, can be a cause of indoor pollution³. Old or faulty gas heating can cause carbon monoxide poisoning.⁴ Fumes from gas also lead to more hospitalisations for chest infections, reduced lung function and poorer thinking ability in children.^{5,6,7}

Gas causes greenhouse emissions.

Gas is a fossil fuel just like coal. When gas is burned for energy, it releases carbon dioxide into the atmosphere. Also, greenhouse gases like methane are released into the air during the mining and production of gas.⁸ Gas can never be as clean as wind and solar. *We have a climate emergency and need to get to net-zero emissions as quickly as possible.*

Renewable energy is cheap and reliable.

Large-scale renewable electricity production technologies (wind, solar, hydro power, battery storage and pumped hydro) are now cheap and reliable enough to replace coal and gas as the energy source for buildings and many industries. We can now skip gas and move directly to renewable energy as coal fired power stations are decommissioned.⁹

1. **Renew—Gas v Electricity:** renew.org.au/renew-magazine/efficient-homes/gas-versus-electricity
2. **Medical Journal of Australia:** mja.com.au/journal/2018/208/7/damp-housing-gas-stoves-and-burden-childhood-asthma-australia
3. **RMI - Health Effects from Gas Stove Pollution:** rmi.org/insight/gas-stoves-pollution-health
4. **John Hopkins Med.:** hopkinsmedicine.org/health/conditions-and-diseases/carbon-monoxide-poisoning
5. **Environmental Health:** ehjournal.biomedcentral.com/articles/10.1186/s12940-016-0207-z
6. **European Respiratory Society:** erj.ersjournals.com/content/36/2/249
7. **Grattan Journal of Epidemiology:** academic.oup.com/aje/article/169/11/1327/159993
8. **Grattan Inst.-Flame Out:** grattan.edu.au/wp-content/uploads/2020/11/Flame-out-Grattan-report.pdf Pg 8-9
9. **AEMO 2020ISP:** aemo.com.au/-/media/files/major-publications/isp/2020/final-2020-integrated-system-plan.pdf?la=en Pg.49

How to make the switch to efficient electric appliances and save money

Your gas appliance will breakdown eventually. Are you prepared?

Don't automatically replace it with another gas appliance. For instance, hot water systems need to be replaced every 10-15 years. Plan now to replace your gas system with an electric heat pump. Learn how to make the switch for all your gas appliances and calculate how much you will save on ['maketheswitch.org.au'](http://maketheswitch.org.au)¹⁰. You can get advice from services like the [Yarra Energy Foundation](#),¹¹ [Australian Energy Foundation](#),¹² and [Renew](#).¹³

> For a new home or major renovation^{14,15}

Going all-electric, with or without rooftop solar, will save money, improve your comfort and health, and help tackle climate change. No gas connection means no annual service charge.

> For both cooling and heating use your reverse-cycle air conditioner¹⁶

It is at least 4 times more efficient than gas heating, depending on your appliances, saving you money and reducing emissions, and is healthier for your family. Simply find the heat button on your remote control.

> For apartment living

You can discuss moving away from gas with your body corporate. If you have a separate townhouse you may be able to replace stand-alone gas units within your property with a reverse cycle air conditioner.

> For landlords

Check out minimum energy efficiency standards for rental properties.¹⁷ Switching rental properties to all-electric will lower tenants' energy bills. Having happy tenants will help to ensure a stable source of income.

> For tenants

As gas appliances come up for replacement, encourage your landlord to consider an efficient electrical equivalent.

> For business owners

Going all-electric makes financial sense in the long-run. Most cooking and manufacturing processes can be done as effectively with electricity. Staff and customers concerned about climate change will ask for it.

> For improved energy efficiency

Seal draughts, add insulation and upgrade window dressing or glazing. For more energy efficient measures see: victorianenergysaver.vic.gov.au

> For cleaner electricity, install rooftop solar panels

They will pay for themselves quickly, especially as you move from gas appliances to electric ones. Check government assistance available for installing solar panels, batteries, solar hot water etc. (*Refer over page*).



For more information check out:

www.lighterfootprints.org/making-the-switch

Common questions

Do heat pumps (split systems) for hot water and home heating work in cold climates?

Yes: Good quality heat pumps e.g reverse cycle air conditioning, for heating buildings and hot water will work anywhere in Australia.¹⁰

Is cooking with induction appliances clean, fast, safe and easy to control?

Yes: Induction cook tops offer fast and accurate control over a wide temperature range for all kinds of cooking.

Suitable cookware, including steamers, casserole pots, woks and tagines, are available. Induction cooktops are more than twice as energy efficient as gas, and are safer (especially good for children and the elderly). They make no fumes and so are safer, healthier and easier to clean. Your food will taste just as good and you'll have the added satisfaction of knowing that you're saving on energy bills, and protecting the health of your family and the planet.¹⁰

Government assistance to help make the switch

Discounted energy saving products: victorianenergysaver.vic.gov.au

Rebates for solar hot water, batteries, solar panels: solar.vic.gov.au

Rebates for a high efficiency reverse cycle air conditioner: solar.vic.gov.au/heaters

Darebin Council's Energy and Climate website including tips for saving energy:

darebin.vic.gov.au/Darebin-Living/Caring-for-the-environment/EnergyClimate

Useful hints and services. City of Yarra's '100% Renewable Yarra': yarracity.vic.gov.au/services/take-climate-action/100-percent-renewable-yarra

Yarra Energy Foundation: yef.org.au

Further information

10. Make the Switch: maketheswitch.org.au (Refer to Myth Busting Q&A, Calculate the Switch)

11. Yarra Energy Foundation: yef.org.au eg yef.org.au/advice-for-your-home/how-to-go-solar/

12. Australian Energy Foundation: aef.com.au

13. Renew (Alternative Technology Association): renew.org.au - eg renew.org.au/renew-magazine/buyers-guides/hot-water-buyers-guide/

14. City of Yarra-Create An All-Electric Home: yarracity.vic.gov.au/services/take-climate-action/100-percent-renewable-yarra/create-an-all-electric-home

15. My Efficient Electric Home: facebook.com/groups/MyEfficientElectricHome

16. Reverse cycle air conditioners use 'heat pump' technology also known as 'split systems'

17. Minimum energy efficiency rental standards: victorianenergysaver.vic.gov.au/victorias-household-energy-savings-package

The original version of this leaflet was produced by the Cooper Climate and Environment Reference Group in March, 2021.

Lighter Footprints has reviewed and endorsed this leaflet.

However, please note that whilst Lighter Footprints has endeavoured to ensure all information is correct, individual circumstances will vary and it is important that you undertake your own research to best cater for your preferences and situation.

We acknowledge and thank the Conservation Council ACT Region for permitting use of its Make the Switch website.

Photo Credits: Renew, Julian Meehan, PX Fuel, Canva

Printed version printed on 100% recycled stock



www.lighterfootprints.org/making-the-switch/