

## Getting started on the path to an all-electric home

Save money, improve your comfort, protect your health and the climate



### Compare and get \$250

Take advantage of the Victorian government's **Power Saving Bonus** program.

- Collect \$250 for comparing your electricity and gas bills with the offers of other retailers.
- Easy to use and informative [website](#)<sup>1</sup>.
- If you find a better electricity offer you will benefit even more by making a switch.
- Ten minutes of your time and an easy \$250 in your pocket.



### Easy ways to get warm and save money

Taking small actions can make a big difference, especially in winter.

- Turn off lights in rooms you aren't using.
- Put on a jumper and woolly socks.
- Take a hot water bottle to bed.

Wash clothes in cold water<sup>2</sup>.

Run your dishwasher during the day if you have solar and off-peak if you don't (if you have a time of use [energy plan](#)<sup>3</sup>).



### Heat your home with your air conditioner

Super easy - **turn on your reverse cycle air conditioner (RCAC) to heat your home instead of gas central heating.**

- RCACs are heat pumps and are at least<sup>4</sup> **four times more efficient** (p. 13)<sup>5</sup> at producing heat compared to gas ducted heating.
- Your RCAC will provide heat at approximately **1/3 the cost of gas**<sup>6,7</sup> ducted heating.
- Don't forget to **clean your RCAC's filter** from time to time to maximise performance. Check out how-to videos [here](#)<sup>8</sup>, [here](#)<sup>9</sup> and [here](#)<sup>10</sup>.



### Heat pump hot water

Get ready to replace your hot water service **with a heat pump for big savings and lower emissions.**

- There is nothing worse than a cold shower mid-winter. When your hot water service fails, the impulse is to grab the first one a plumber will install. **Be ready** to install a [heat pump for efficient](#)<sup>11</sup>, cost-effective hot water, or better yet, install a heat pump now.
- Heating water with a heat pump **will cost you half** (p.14)<sup>12</sup> **or less**<sup>13</sup> of what it costs to heat water with gas.



### Switch to an induction cooktop and reduce harmful indoor pollutants

According to *Asthma Australia*, **gas cooking is estimated to be responsible**<sup>14</sup> **for up to 12% of childhood asthma**<sup>15</sup>. *Gas cooking is comparable to the effect on asthma of living with someone who smokes* (p.25)<sup>16</sup>.

- A recent US study<sup>17</sup> found that **one in eight**<sup>18</sup> **cases** of childhood asthma are caused by gas cooking.
- Induction cooktops are **fast, efficient** (p. 7)<sup>19</sup>, **easy to clean and safe**.
- A portable induction cooktop is a **very affordable**<sup>20</sup> way to stop cooking with unhealthy gas.

### Victorian government rebates

The Victorian government offers **substantial rebates** to residents and businesses to switch to **efficient appliances and improve energy efficiency.**

Visit the [Victorian Energy Upgrades](#) page.<sup>21</sup>

[Solar Victoria](#)<sup>22</sup> offers rebates for panels, hot water systems and batteries.

### Want to find out more?



For more information on electrification visit [electrifyboroondara/learn/overview](#)



## Seal up drafts and insulate your home to reduce bills and increase your comfort

*The integrity of the thermal envelope of your home is key to your ability to maintain a **comfortable temperature at the least cost.***

Many of us live in homes where the single glazed windows rattle, there are drafts under doors, open vents and insufficient or absent insulation in roofs, walls and underfloor. **Fixing these issues** will improve your family's comfort and health.

Consider **starting with low cost or DIY solutions** to substantially **reduce heat leakage**<sup>23</sup>.

- **Heavy floor to ceiling drapes** with a pelmet are **similar to double glazing**<sup>24</sup> in effect.
- Consider **secondary glazing** or **glazing film**<sup>25</sup> as affordable ways to improve window performance.
- The Boroondara Library system can loan you a **thermal imaging camera**<sup>26</sup> to help you identify where your home leaks heat.



## How much energy are your appliances using?

*Take stock of the appliances you are running. Do you really need them always on standby?*

- Do you have an **old second fridge** running in the garage? It can cost hundreds of dollars a year to run an inefficient 20 year old fridge.
- If you have an old TV that gets very hot, check out the newer, **energy efficient** models that can use much less electricity and offer better image quality. [Energy efficient appliances lower bills.](#)<sup>27</sup>
- Pay attention to **star ratings**<sup>28</sup> when replacing appliances to save money in the long run.
- You can borrow an **energy monitor**<sup>29</sup> from the City of Boroondara Library system which will tell you how much energy each of your appliances are using.



- Timer
- Energy monitor
- Thermal imaging camera



## Solar - produce your own energy and make big savings

### Going solar makes financial sense

- According to Solar Victoria typical solar households can save up to **\$1073 per year**<sup>30</sup> on electricity.
- **Substantial solar rebates**<sup>31</sup> and interest free loans are currently offered by the Victorian government to eligible households.
- **Payback period estimates** can be as low as **three years**<sup>32</sup> depending on the household, size of the system installed and available rebates.
- For more information explore the Victorian Government's **Solar Buyers Guides**.<sup>33</sup>

### Use approved solar retailers and installers

You can find authorised solar retailers and installers on the [www.solar.vic.gov.au](http://www.solar.vic.gov.au) website.<sup>34</sup>

### Solar Savers

The City of Boroondara, and other local Councils, have joined up with **Solar Savers**<sup>35</sup>, a local government initiative that will put you in touch with **trusted suppliers** for competitive quotes.

- Solar Savers gives you peace of mind and takes the guesswork out of finding a solar supplier.
- **Call today** - 1300 548 598.



## Electrify Boroondara

*Electrify Boroondara is a **community-led alliance** empowering our community to take practical steps to save money, reduce emissions and create a safe future for our kids.*

By switching your appliances from gas to electricity, you can:

- **save money** on your household bills
- improve **your family's health and comfort**
- take action to **protect our climate** and environment.

**It's easier than you think to take the first steps!**

Find out more at [electrifyboroondara.org](http://electrifyboroondara.org)

## Further information

*Visit the **Electrify Boroondara website** to find out how local residents are making the switch to a clean electric home.*



Visit [electrifyboroondara.org](http://electrifyboroondara.org)

### Disclaimer

Please note that whilst Electrify Boroondara 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 situation and preferences.

# References

## Power Saving Bonus (PSB) Program

### 1) [Victorian Government website](#)

The PSB Program is available to all Victorian households, including those who have previously received a bonus.

## Easy ways to get warm and save money

2) [Choice Magazine article](#) on easy ways to **save \$500/year** on laundry costs.

3) [Tariffs explainer](#), see also Choice Magazine [page on choosing your energy supplier](#), with [best providers](#) and [how to switch](#).

## Heat your home with your air conditioner

4) Engineer Tim Forcey recounts moving from an old gas ducted heating system to heat pump reverse cycle air conditioners, which are between to 13 to eight times more efficient in practice, depending on system factors.

5) Saul Griffith/Rewiring Australia's comprehensive [Castles and Cars report](#), p.13.

6) Sustainability Victoria's [page comparing heating running costs](#).

7) A [Melbourne Energy Institute paper](#) on falling gas demand noted **instant savings** for up to 1 million households merely by switching off gas heating and using their reverse cycle air conditioners for heating.

8, 9, 10) Short YouTube how-to videos on **filter cleaning** from [Daikin](#), [Mitsubishi Electric](#) and a [Panasonic article](#).

## Heat pump hot water

11) Renew Economy [explainer](#) on **heat pump** hot water services, **how they work**.

12) Saul Griffith/Rewiring Australia's [Castles and Cars report](#), p.14.

13) Renew Economy [article](#) on heat pump hot water, and **further savings** including [synergies](#) with rooftop solar.

## Switch to an induction cooktop and reduce harmful indoor pollutants

14) Asthma Australia publicised University of Queensland research which found "that **12% of childhood asthma is attributable to gas stoves** used for cooking", and emphasised the health impacts of household gas in a [recent report](#).

15, 16) Asthma Australia [stated](#) "Cooking with gas is estimated to be responsible for up to 12 percent of the childhood asthma burden in Australia", citing a Climate Council [report](#) on the health impacts of gas, surveying existing research (p.25).

17, 18) A recent [US study](#) found that "that 12.7% of current childhood asthma in the US is attributable to gas stove use." A [Guardian article](#) noted "risks to children" from "nitrous oxide" and "toxic chemicals", citing the US study and another article published by the Harvard Medical School which stated that "children living in households that use gas stoves for cooking **are 42% more likely to have asthma**."

19) Climate Council [report](#) comparing gas and electric appliances: induction cooking is "**far more efficient**" than gas (p. 7).

20) Choice Magazine [overview article](#) about portable induction cooktops, **with prices ranging between \$50-\$150**.

## Victorian Government Rebates

21) Visit the [Victorian Energy Upgrades \(VEU\)](#) page for information on rebates for upgrading to more efficient appliances.

22) [Solar Victoria](#) offers rebates for [solar PV](#), [heat pump hot water](#), and [solar batteries](#).

## Seal up drafts and insulate your home to lower bills and increase your comfort

23) Visit the [Energy Tips website](#), full of useful ways to **increase the comfort and energy performance** of your home.

24, 25) Here are some articles on [window thermal efficiency](#), [DIY pelmet instructions](#), [double/secondary glazing and film](#).

26) [Boroondara libraries](#) offer a FLIR TG165-X Spot **thermal imaging camera** for loan.

## How much energy are your appliances using?

27, 28) Choice Magazine article with **appliance efficiency and savings comparisons**. Australian [energy star ratings](#) explainer.

29) [Boroondara libraries](#) offer a PowerMate Lite **energy monitor** for loan.

## Solar - produce your own energy and make big savings

30) Solar Victoria found that solar saved Victorian households, on average, **\$1073 per year**. Check out [case studies here](#).

31) Eligible households can receive [substantial rebates](#) under Victoria's Solar Homes program.

32) [Solar Victoria](#) cites 3-5 year solar PV payback. **Clean Energy Regulator (CER)** support 3 years - [article here](#), [CER quote here](#).

33, 34) Check out Solar Victoria's comprehensive [Buyers Guides](#) series, and list of [authorised retailers](#).

35) [Solar Savers](#) is a local government initiative, streamlining the process of solar installation with trusted suppliers.

## Electrify Boroondara

For more information visit [electrifyboroondara.org/get-started](http://electrifyboroondara.org/get-started)