

Why get an Energy Audit?

Do you want your home to be more energy efficient and save on energy bills? Of course you do!

But where do you start? The first logical step is to have a home energy audit done by a qualified assessor. How can you reduce your energy if you don't know where it's all going? A proper energy audit will identify (and reconcile back to your energy bill) where the energy is being used in your home, what the key energy users are, cost justify any recommendations and provide practical solutions on what you can do about it. You should also be provided with a report containing an action list so that you can refer back to it at a later stage as you work through your solutions.



Once you have had an energy audit on your home, you'll have your list of recommendations, an action plan and you'll know what changes will make the biggest impact. Then it's your choice what you do, and do not do. But at least you'll be aware of what things are costing!

So by having an energy audit done you'll benefit by ...

- Identifying how much energy you are using
- Highlighting the main energy-using appliances in the home
- Providing advice on what can be done about it,
- Provide a cost/benefit analysis on key recommendations

Once you have this information, assuming you act on it, you would benefit from increased comfort of your home, reduced energy bills, increased homes value and reduce your impact on the environment. You may also be able to take advantage of available government incentives (there are still some available)!

To give you an idea, below is a short case study of a Melbourne home audited recently.

Case study – 3br home, occupied by 4 people (2 x adults, 2 x small children)

We were called into a home that was using 46 kilowatts per day. The 'average' in Melbourne is 16 kWh per day for a home of this size and occupancy.

After the auditor reviewed the home, checked the energy bills and discussed usage with the owners, the key issues were identified and energy use calculated. We found that the key area of energy use were...

- Electric panel heaters (18 kW used overnight)
- Lots of oven cooking (7.2 kW per day)
- Overuse of clothes dryer (7.5 kW per day)
- Inefficient lighting (5.5 kW per day)

The remaining 7.8 kWh was the fridge and other miscellaneous equipment.

Recommendations made by the Assessor were to:

- Minimise the dryer use (use a clothes line)
- Replace lighting with LED (payback would be 4.3 years) OR minimise use of halogen down-lights and use energy efficient lamps instead
- Replace the older style electric panel heaters in the bedrooms with Econo-heater that use just 400w per hour (as opposed to 2400w per hour) to keep bedrooms warm in winter,
- Use the microwave instead of the oven when possible

The family reduced dryer use by half, did not replace halogen lighting but did install 2 x energy efficient floor lamps, and used those most of the time instead of the fixed lighting. They also replaced the heaters in the bedrooms with the recommended unit and started using the microwave for some of their cooking. Their energy bill fell from 46 kWh per day on average, to 19 kWh per day.

Reducing quarterly bills from \$1,159 to \$479 – saving \$680 per quarter, i.e. \$2720 per year (= 2 return flights to Europe each year!). Savings easily covered the cost of the assessment and appliances purchased at the beginning.

Win : Win! Why Wait?!

Note that every home is different, and the way it is used differs. So always use a qualified energy auditor for the best results.

Written by [Danielle King](#), Director of [Green Moves Australia](#)