



# Energy Efficiency Assessments

There are lots of options to reduce energy bills, energy use and greenhouse gas production and improve comfort, for example:

- roof insulation,
- wall insulation,
- double glazed windows,
- roller shutters,
- solar power,
- etc.

However, it is all too common for people to spend money on an energy saving approach and then realise that an alternative approach would have had a shorter payback period.

So:

- Which options should you apply now?
- How much insulation is the most economic?
- What size solar system should you get?
- Should you go all electric now?

As one of my best lecturers used to say, 'It all depends.'

Among other things it depends on:

- the orientation of the house
- the design of the house
- where you live
- how you use the house
- your life stage
- whether you are planning renovations
- the sizes of windows
- whether improving comfort is also a goal
- how much your energy bills cost you

Over a decade, you can spend tens of thousands of dollars on energy and tens of thousands of dollars on energy efficiency improvements. Getting a home energy efficiency assessment can help you prioritise your spending, and ensure you get the most bang for the buck.

Often the biggest saving is when I say don't spend money on that, this option is much more effective and costs less.

## Options

There are a number of approaches that we use to help people like you save money by reducing their electricity and gas bills.

### Basic Home Energy Audit

This would provide advice on:

- What is driving energy costs.
- Would be based on your usage of appliances and an examination of energy bills.
- Would give an indicative understanding of building of building heating and cooling needs.
- Recommendations, both for low-cost improvements for immediate comfort improvements and energy savings and long term improvements.

To do this I would

- Visit
  - Discuss your long-term goals (preferably with any other adults in the household) any issues with the home, how you use the home and financial constraints. (30 minutes)
  - Assess the building's construction and condition. (60 minutes)
  - Take thermal images as appropriate.
- Preparation of a long-term plan based on your objectives.
- Meet (preferably by video hookup) to discuss the draft report to ensure it meets your needs. (30 minutes)
- Finalise and present the updated report.

### Enhanced Residential Efficiency Scorecard

The Scorecard Assessment was developed by the Victorian Government and is now endorsed by all Australian Governments. This gives it a high level of credibility and is based on Australian building practices and the Australian climate.

This provides:

- Advice on what is driving energy costs.
- An overall star rating out of 10 that represents the average cost of energy for your home. With one star indicating low performance and ten stars indicating high performance.
- Recommendations, both for low-cost improvements for immediate comfort improvements and energy savings and long term improvements.

To do this I would

- Visit
  - Discuss your long-term goals (preferably with other adults in the household) any particular issues with the home, how you use the home and financial constraints. (30 minutes)
  - Assess the building's construction and condition. (60-90 minutes)
  - Take thermal images as appropriate (a free bonus).
  - Preparation a draft scorecard report and discuss it and recommend improvements (30 minutes).
- Quality check the report including confirmation of star ratings of appliances.
- Finalise and issue the updated report. (any significant changes would be discussed with you)

## Advanced Passive House EnerPHit Analysis

The best option for a long term plan is for me to prepare an Enerphit Report, which analyses your home using the [Passive House](#) Standard, generally considered the most rigorous energy efficient standard for homes.

This would provide advice on

- What is driving energy costs.
- Would be based on your usage of appliances and an examination of energy bills.
- Would include a full assessment of building heating and cooling needs.
- Assess for solar suitability.
- Recommendations, both for low-cost improvements for immediate comfort improvements and energy savings and long-term improvements.

To do this I would

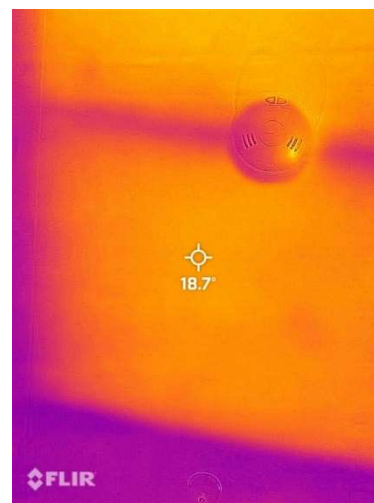
- Visit
  - Discuss your long-term goals (preferably with other adults in the household) any particular issues with the home, how you use the home and financial constraints. (30 minutes)
  - Measure up the building and assess condition. (90 minutes)
  - Take thermal images as appropriate.
- Prepare a full building analysis using the Passive House Planning Package (PHPP) including financial assessments of the proposed changes.
- We would then prepare an EnerPHit Retrofit Plan (a report in a format developed by the Passive House Institute) based on your objectives and the specific cost-effective opportunities for your home.
- Email the draft report to you.
- Meet (preferably by video hookup) to discuss the draft report to ensure it meets your needs. (30 minutes)
- Finalise and present the updated report.

## Examples of low-cost savings opportunities

The following savings opportunities were discovered in an audit.



*Thermal Image 1 The fan needs a non-return fan cover and the insulation replaced (the yellow should be purple)*



*Thermal Image 2 Showing an area missing insulation (the yellow should be purple)*

## Benefits list

Benefit	Basic Home Energy Audit	Residential Efficiency Scorecard	Advanced Passive House EnerPHit Analysis
Reduce energy costs	✓	✓	✓
Reduce energy use	✓	✓	✓
Reduce greenhouse gas production	✓	✓	✓
Increase comfort	✓	✓	✓
Report based on over 30 years of building energy use experience see <a href="#">Clive Blanchard</a>	✓	✓	✓
Thermal imaging photos to identify problem spots (this invariably identifies some problems that can be quickly and easily fixed, see images above)	✓	✓	✓
Assessment of energy performance of the home		✓	✓
Financial justifications so you know you are getting the most bang for the buck and the proposed changes will pay for themselves			✓
Optimised energy cost reductions			✓
Bonus Assessment of suitability for solar power		✓	✓
Analysed by the Passive House Planning Package (PHPP)			✓
An EnerPHit Retrofit Plan (ERP) report (generally considered to be the most rigorous standard in the world for retrofits/renovations)			✓
<b>Guaranteed savings</b>	✓	✓	✓

If you choose the Scorecard, but change your mind within two weeks after receiving the final report and want to upgrade to the full analysis, the cost of the initial investment will be deducted from the total cost of the Advanced Passive House EnerPHit Analysis.

## Guarantee:

I guarantee I can identify cost effective savings, that pay for the assessment, or the assessment is free.

## Testimonials

'Your Low Energy Home gave me the exact information that I was after, and had been looking a long time for but had not been able to find elsewhere. Clive provides expert, independent advice as well as a range of tailored suggestions and solutions to improve the comfort of my home that I can implement at my own pace and will give me the best bang for my buck. I have never - and could never - receive that level of advice from any biased salesperson. He conducts thorough analysis on site as well as after-hours research, so I found the time he spent and the level of information provided to be incredibly high value.' (Cara, Adelaide)

For more testimonials go to [Testimonials - YOUR LOW ENERGY HOME](#)

## Next steps

To book a free initial consultation or to answer any questions:

Phone 0407 718 949 or

Email [cliveb@lowenergyhome.com.au](mailto:cliveb@lowenergyhome.com.au) or

Contact me at [www.lowenergyhome.com.au/contact.html](http://www.lowenergyhome.com.au/contact.html)