

## Case Study 1: Gayle

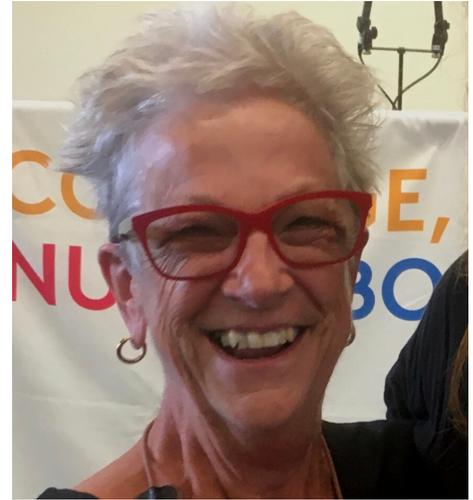
Went from **5.8** to **10** star VRES rating

Energy use & CO2 emitted before upgrade\* = **53613MJ, 4161kg CO2**

Energy Use & CO2 after upgrade\* = **-8451MJ, -2628kg CO2**

Gayle is now a net energy exporter and is carbon positive

\*amounts are estimates predicted by the Scorecard tool



**Above top left to right:** 4.1kW solar PV system installed, a happy Gayle , energy efficient heat pump hot water, insulation prior to upgrade

Gayle lives in a relatively modern two bedroom home in Creswick, but found that it was uncomfortably cold during the extended colder months of the Central Highlands region.

Although Gayle already had central gas ducted heating and a reverse cycle airconditioner she used for heating her lounge-dining area she was finding it difficult to maintain a consistent level of warmth.

On top of that, over winter her energy bills were getting out of control regardless of her efforts to restrict her daily energy use and wear additional layers of clothing whenever possible.

As a member of Transition Creswick, a local sustainability group, Gayle was also keen to do her bit to reduce her carbon footprint and lessen her impact on the environment. When Gayle spoke to Tim about her concerns, he suggested that she sign up for the new Hepburn Z-NET Home Energy Assessments and Energy Savvy Upgrades program.

As a registered assessor for the Victorian Residential Energy Scorecard (VRES) program, Tim conducted an energy audit of Gayle's home and was able to identify a number of ways she could reduce her energy bills and retrofit energy efficient upgrades to her home. VRES helps householders better understand the energy performance of their homes by allocating a rating between 1 and 10 stars.

With the help of an \$880 subsidy from the Victorian State Government's Energy Savvy Upgrades program, Gayle enlisted trade qualified local energy efficiency suppliers to make a number of the recommended improvements to her home.

Gayle installed a 4.1kW solar PV system to her roof, disconnected her gas ducted heating system, draught proofed her doors and floor vents, installed heavy duty curtains and pelmets in her main living area, and added an extra R-3.5 to her existing ceiling insulation.

As a result of the home upgrades, Gayle's VRES home rating went from five to ten out of ten stars!

Gayle's home is now predicted to be carbon positive. This means her home will be producing an environmental benefit by removing additional carbon dioxide from the atmosphere.

**"The house was uncomfortably cold, it made me feel unwell, but I also wanted to reduce my environmental impact "**

As Gayle will be exporting renewable energy back to the grid, she will also receive a credit from her energy retailer which will help offset the upfront costs of her upgrades. Her payback period should be shorter because of this. Although, there is still work that could be done to make the house even more comfortable, the outcome so far for Gayle and the planet has been positively good.

**Hepburn Z-NET Home Energy Assessments & Energy Savvy Upgrades.**

Email: [assessor@hepburnznet.org.au](mailto:assessor@hepburnznet.org.au)  
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