

# Renewable Energy and Environmentally Sustainable Design Case Studies

## Hidden Valley House - Sun Lizard

**Site:** Hidden Valley, (near Wallan), Victoria

**Dates:**

- Design Phase Commencement: June 2005
- System Installed: July 2006

**Client:**

Private Client

**Project Goal:**

To reduce the running time and cost of the electrical slab heating.

**Project Features:**

The Sun Lizard was installed on an existing two storey house to the North West of Melbourne at Hidden Valley.

The client first enquired about the use of a Sun Lizard in the winter of 2005 to help reduce running costs of her existing in-slab electric heating system.

On advice from Going Solar, the amount of insulation in the roof was significantly increased to make the whole house more energy efficient. This is an important first step before installing any renewable energy equipment. For this reason the system was not installed until July 2006.

Whilst the Sun Lizard does contribute some heat on a sunny winter's day, its prime function is to capture the 'waste heat' that sits below the ceiling and recirculate it to floor level. Note that the ceiling register which collects the 'waste heat' is located at the top of the stairs.

In summer, the Sun Lizard does not become obsolete, but rather gathers the unwanted heat from below the ceiling and expels it into the atmosphere, thus helping to keep the house cooler.

**Project Team:**

- Jarrod Tewierik, Project Manager, Going Solar

**Further Information:**

- [admin@goingsolar.com.au](mailto:admin@goingsolar.com.au)
- [www.goingsolar.com.au/cat\\_household.htm](http://www.goingsolar.com.au/cat_household.htm)



The Sun Lizard on the roof

The air pipes in the roof cavity duct air from the upstairs ceiling to the Sun Lizard and (in winter) to the ground floor register.



The first floor showing the ceiling register



The ground floor showing the wall register

