

Lovingly curved

Towards the sun



The outside decking and some flooring is recycled tallowood from the old AFL Waverly football stadium.

In a street lined with Victorian facades, one homeowner is ahead of the times

When you walk into Glenda Lindsay's home, there's no mistaking it's hers. After all, she can speak about its transformation into an award-winning abode in as much detail as the people who built it.

Glenda, and husband Adrian, enlisted Sunpower Design to renovate their 1860s Victorian house in North Fitzroy. They wanted outstanding environmental and occupant health, as well as energy and water efficiency. Sunpower Design delivered just that, and has made the house look pretty damn good too.

Glenda has intricate knowledge about her home because she chose to project manage its renovation. She and Adrian rented nearby so they could watch this stunning sustainable building emerge from rising damp and rotten floorboards.

"I could really keep an eye on what was happening and see how things worked," says Glenda.

At first it feels like you are entering a faithfully-restored Victorian. The streetscape has a heritage overlay, which required certain external features be maintained, and additions such as rainwater tanks to be tucked away from the streetscape.

Two rooms which open off the short entrance hall were restored—beyond that, everything else came down. What's gone up is a bright, spacious and contemporary extension, lovingly curved towards the sun.

The orientation of the block is north-west, but with some clever design, the back of the house largely faces north.

The double-fronted block allowed space for the extension to incorporate a light-well garden, north-facing passive solar living areas and a rear rooftop to accommodate solar panels.

Curling the house away from the southern boundary, and reducing its overall size, prevented the second floor bedroom, bathroom, deck and laundry



Before



After

from overshadowing next door. It also allowed more space for a rear garden.

"I wanted to keep the footprint as small as possible so we could grow as much food as possible," says Glenda. Yet, with floor-to-ceiling windows, it feels bigger than it really is.

The neighbour is happy too, because the smaller footprint allows more sunlight into their home. Upstairs, a stylish bathroom overlooks a deck area and the laundry is neatly tucked into the old roof space.

With the house primarily using rainwater, Glenda enjoys baths after a downpour. "I have a celebration when it rains, my ritual bath," she jokes. Rainwater has served them well. They've never had to buy a litre

of water. It also helps having a grey-water system installed.

A hefty 24,000 litre rainwater tank is concealed beneath the rear deck. Adjacent is a 1,000 litre grey-water system, which provides water to flush the water efficient toilets. Rainwater is collected from all roofs as well as the neighbour's extension. More water is saved with water-efficient shower heads.

Glenda gains more from recycling water than low water bills; it's about being accountable for what she uses.

"I'm the one who cleans the grey-water filter so I very quickly worked out how much is too much laundry liquid," says Glenda. "I think most of us live life

“There’s no carpet, ducted heating or airconditioning to trigger allergies, nor are there any gas emissions”



← Recycled timbers were used throughout the house including recycled jarrah and spotted gum for the kitchen benchtops and Hoop pine for the cabinet doors.

disconnected from the consequences of our actions.”

Bearing this in mind, it’s fitting that materials from the existing house were reused in the extension. The laundry ceiling is lined with floorboards from the original house. Bricks were cleaned and used for the party wall and rear storage room.

The overlay flooring and external decking is recycled tallowwood from the old football stadium at Waverley Park. The blackwood kitchen bench was once a church pew. With a keen eye, you would notice recycled jarrah, spotted gum, ironbark and blackbutt have also been used throughout the house.

The second storey sits on a suspended slab, absorbing winter sun through the strategic placement of windows. Extra warmth and laundry clothes drying when needed, comes from solar hydronic heating.

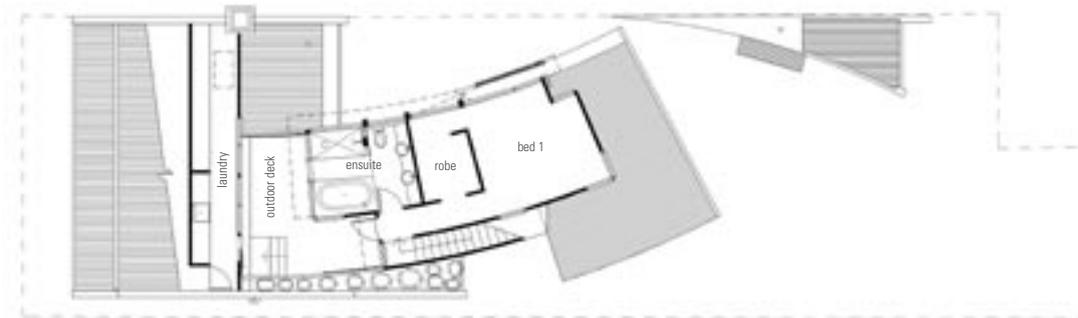
There’s no air conditioning. The house is designed so it doesn’t need it. **Deliberate placement of windows allows cross-flow ventilation and other features such as sliding timber screens on upstairs windows, shade cloth and a fixed eave also help keep things cool in summer.**

Glenda happily throws her doors open to interested people. This includes the planning department of the local council “for planners to better understand

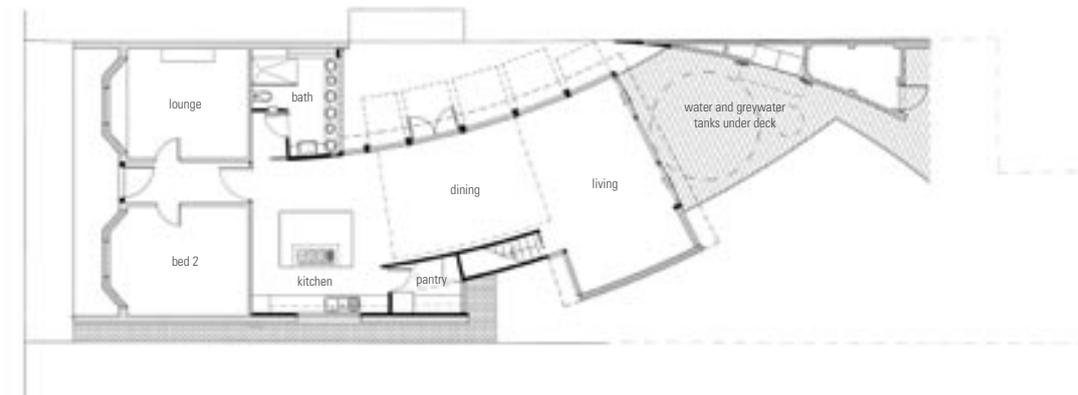
how things work in practice.” She hopes to inspire others to build similar sustainable houses.

“In planning the house’s interior, we also thought about it from a health perspective,” says Glenda. There’s no carpet, ducted heating or airconditioning to trigger allergies, nor are there any gas emissions.

Andreas and Judy Sedorof from Sunpower Design, and builder Grayson Constructions, earned some prestigious awards for the house, winning the HIA National Greensmart Renovation of the Year in 2004 and the Building Designers Association of Victoria Best Heritage Design in 2005. 📌



Upper level



Ground level

AAA rated water efficient appliances and showerheads have been installed and the best available dual flush toilets.



The home has achieved a seven-star energy-efficiency rating, way beyond the minimum five star rating.

"This sort of example is really where it's at. The systems here work beautifully... everything's seamless," says Andreas Sederof.

"If every household in Melbourne did what Glenda's done, our reservoirs would last another 100 years. That's way into the 30th century.

"It operates at another level."

Andreas says that a renovation like this may cost roughly 10 per cent more than one which didn't incorporate sustainable building practices, but it was money not worth arguing about.

"I've never had a client ask me to do a cost-benefit analysis on a granite bench top or a plasma screen TV ... to discuss the issue of costs you've got to ask yourself, what are the lifestyle issues?"

Designer: Sunpower Design

Builder: Grayson Constructions

Location: Melbourne, Victoria

- Features:**
- Recycled materials from original home
 - Recycled tallowwood, blackwood, jarrah, spotted gum, ironbark, and blackbutt timbers
 - 315 litre Edward solar hot water system
 - Greenheat hydronic heating system
 - 950w grid interactive BP Solarex solar power system
 - 22,500 litre poly rainwater tank
 - 1,000 litre Garden Saver grey-water system
 - Moen double-glazed windows and doors
 - Cypress macrocarpa weatherboards and AAC blockwork
 - AirCell insulation
 - ASKO dishwasher and washing machine
 - Water-efficient fixtures
 - Bio Paints, Porters Limewash, Becker Acroma and Tung Oil finishes