



This small but effective development showcases practical ideas for saving energy and water, and our environmental impact.

A joint venture between Cedar Woods Properties and the City of Wanneroo in Western Australia has come up trumps.

The two organisations have created two efficient and adaptable duplex homes, located in Tapping, and won the 2012 HIA GreenSmart Townhouse/Villa Development of the Year award for their efforts.

Cedar Woods' state manager, Stuart Duplock says the recognition was testament to the collaboration and commitment to build an affordable, sustainable home.

'Together with the City of Wanneroo, we wanted to showcase practical ideas to save energy, use water efficiently

and minimise impacts on the environment. EcoVision has proven you can live comfortably while still being ecologically sound.'

Known as the EcoVision Demonstration Homes, the two occupy a compact 750 square-metre duplex block within Cedar Woods' *The Kestrels* estate.

'This project is different because it sits within our research and development category,' Stuart says. 'It's not a mainstream product.'

As a demonstration tool, the project is open for homebuyers and renovators interested in taking a free tour. Along the way, it offers innovative yet practical ways for the community to achieve environmental outcomes for water, energy and waste. 'It walks the talk,' Stuart says.

It's also different because it's small, and all the hard work happens behind the scenes. Designed by Arcologic Design, a clever feature of the project is the use of passive spaces as desk areas, and incorporating the laundry into the bathroom, to reduce overall energy use.

The project's first dwelling comprises two bedrooms and the second has three.

WALKING THE TALK

story > Annie Reid



IDEAS ANYONE CAN USE

Position your home for maximum solar gain and install ceiling fans wherever possible to assist with air circulation and thermal comfort – and save on expensive airconditioning. Incorporate the laundry into the bathroom to reduce overall energy use.



CONSTRUCTION DETAILS

BUILDER Cedar Woods Properties Limited and City of Wanneroo
West Perth WA t: 08 9480 1500
www.cedarwoods.com.au
www.ecovisionwanneroo.com.au

ARCHITECT Arcologic Design
West Perth WA t: 08 9322 1985
www.arcologic.com.au

PRODUCTS

- > Austral brickwork.
- > JDS Metal Deluxe door frames.
- > Colorbond roof cladding, gutters, downpipes.
- > CSR Bradford roof insulation, R3.5 and R5.0.
- > Corinthian internal doors.
- > Laminex colour panel in kitchen, laundry and bathroom.
- > Caroma mixers in kitchen, laundry and bathroom.
- > Wall-mounted Caroma LEDA washing machine set 97319C.
- > Modwood 137mm x 23mm alfresco deck.
- > Cork/bamboo in living, kitchen, dining, study nook, entry hall and bedrooms.
- > Rinnai gas-boosted solar hot water system.

PROJECT COST \$500,000

TIME TAKEN TO CONSTRUCT 18 months

ENERGY EFFICIENCY RATING 8 stars

Both are oriented correctly for maximum solar gain, and are built from Austral facebricks with stone cladding and painted, rendered walls.

For energy, the project has a 1.5kW photovoltaic system and inverter, with north-facing panels. One of the homes has a Rinnai gas-boosted solar hot water system too, which although is expensive initially, can provide up to 90 per cent of the houses' hot water needs for free.

IT OFFERS INNOVATIVE YET PRACTICAL WAYS FOR THE COMMUNITY TO ACHIEVE ENVIRONMENTAL OUTCOMES FOR WATER, ENERGY AND WASTE

'Inclusions in the homes people can expect to see are eco-friendly fixtures and fittings such as bamboo floors, water storage tanks suitable for smaller blocks, and a greywater system that utilises waste water from the laundry and bathroom to water the garden,' Stuart says.

Other features include energy-efficient lighting, appliances and ceiling fans

throughout, insulated roof and walls, cross-ventilation and no airconditioning. For outdoor living, the homes offer integrated, north-facing indoor and outdoor living areas. These have blinds, shade sails, and a solar pergola for maximum comfort and temperature control.

To monitor the house's performance, the eight-star rated project features a state-of-the-art energy monitoring system. Importantly, this allows visitors to see in real time how each aspect of the house is measured.

While Cedar Woods is no stranger to winning HIA accolades, this victory was particularly important.

'Even though the project is only small, it's been successful. It does change the way you look at things,' Stuart says. He adds that standards are high in Western Australia, and there is great scope for innovation.

'As we are remote, it does create a lot of competition. This project has increased our knowledge in this area and I think we've developed some intellectual property which will hold us in good stead for the future,' he says. **gs**