

## PROPERTY DESIGN

# Sustainable building gathers pace

Extravagant new developments are not necessarily better for the environment, writes **Ben Hurley**.

Sydney residents Peter and Jess Crabbe are moving house. Literally. They have bought a 40-hectare property in the NSW Southern Highlands. The three-bedroom house to go with it is in Campbelltown, in Sydney's south-west.

The house, which was a display home for developer Stockland, is made from concrete slabs that come apart like a giant Lego set, so it can be transported.

Instructions detailing how to put it together adorn the walls, which suits the Crabbes, who bought it to save on construction costs and out of a desire to take recycling to the next level. "This house has been designed to be recycled and relocated and that was the big attraction," Peter Crabbe says.

The home's designer is architect Eoghan Lewis from Supple Designs, who is among a new generation which believes that reusing materials and reworking existing spaces is the key to environmentally friendly building.

But it's a way of thinking that doesn't always wash in Australia, with its deep-rooted tradition of

wide open spaces, quarter-acre blocks and endless stretches of red-tile suburbia.

A green development can cost more per square metre than a conventional development. This can breed suspicion towards architects paid on a percentage of the budget.

Melbourne architect Andrew Maynard says clients often prefer extravagant projects in the name of sustainability, such as installing expensive

solar power systems or knocking down a house and building a gleaming 6 Green Star pad in its place.

"It's a new type of consumption, I think we've all been fooled into thinking we just need to go and buy some new technology and it's

all OK, but we're just dragging on consumption that way," he says. "We need to want less."

He is completing a project in Melbourne's inner-north suburb of Northcote which involves taking apart and reassembling a 19th century three-bedroom house. Bedrooms were moved to the south-facing front and the living spaces brought to the rear to take in the northerly sun: Thermal mass was added that would heat up during the day  
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The Stockland display centre, designed by Eoghan Lewis, is moving to the Southern Highlands. Photo Ian Tatton

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and radiate heat at night during winter. The work cost about \$400,000 and produced an extra bedroom, which is an expensive renovation by anyone's standards. But it was cheaper than a rebuild and wasted a lot less materials. It also made much better use of the 300 square metre block.

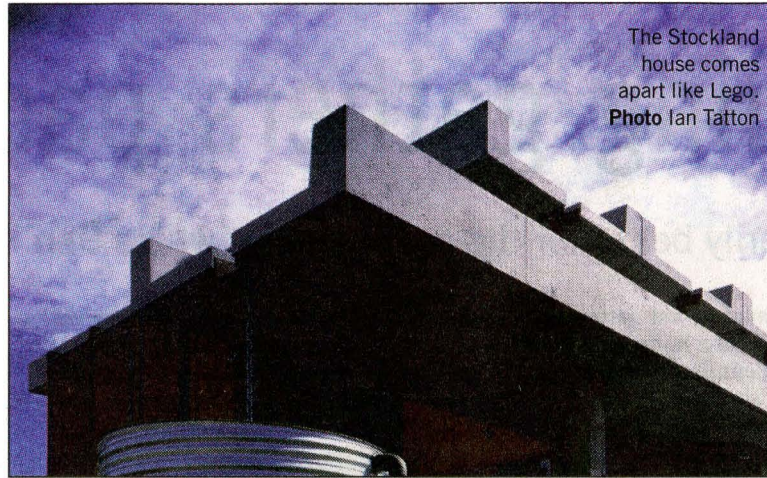
"I want people to start spending more on less building," Maynard says. "Australia now has bigger houses than the United States on average, and there's something obscene about that.

"Cinema rooms, gyms, all these spaces have labels on them but they're really just boxes. Those functions you only use at certain times so we could contain those in a space that adapts and changes to the way you use them."

His is a school of thought that says the greenest homes are found in the middle of the city, not at the edge of a rainforest or on the urban fringe. They are warehouses, silos or church conversions, or other designs squeezed into wasted spaces.

They are close to public transport and the biggest contribution they make to the environment is not inherent in their design but in that they reduce the need for a private car and slow down urban sprawl.

"Part of saving the planet is to not withdraw from the cities but participate in them," says Timothy Hill, director of architectural consultancy Donovan Hill.



The Stockland house comes apart like Lego.  
Photo Ian Tatton

**A house's sustainability measure will soon be next to the number of bedrooms, bathrooms and car spaces on the real estate advertisement.**

It is a story of increasing urban density, something he says resident groups that oppose large developments have yet to grasp.

"Just think about every person in the residents' group who goes for a holiday in Paris, Antwerp, Kyoto, Munich, and the whole buzz of being out and about, all the places they could see and shop and recreate, that all came about because of density," Hill says. "The things we like about cities and all the activities and things on offer are because they have a critical amount of density."

Enthusiasts such as the Crabbes go to great lengths to live green, which can be a little frightening for others who would like to live sustainably in theory but don't want to make it their passion in life.

There is the cost of better insulation, the more efficient

heating and appliances, the rainwater tank and solar panels, all of which are often the first to go when doing the numbers for a new building project.

But there might be some sense yet for the economic rationalists.

In NSW a house's sustainability measure will soon be next to the number of bedrooms, bathrooms and car spaces on the real estate advertisement, as mandatory disclosure laws are set to be introduced next year.

Angus Kell of Archicentre says it will more than likely affect the capital growth of a house.

Mandatory disclosure has been in place in Canberra since 1999, and a 2008 study by the Australian Bureau of Statistics found that if a house's energy rating increased by one star level, its market value typically increased by 3 per cent. That would be an extra \$15,000 capital gain on a \$500,000 house.

When people install solar hot water systems or photovoltaic cells, they typically look at how long it will take before the installation pays for itself. Kell says understanding the link between green measures and capital gain will create a bigger incentive.

"This report is clear evidence to me that there is a link there, and the link will become much more important when this becomes a national initiative and everyone is focused on the sustainability when they buy or sell," Kell says.