



Green credentials

Getting on board with eco-friendly design principles is a smart move for both homeowners and home builders, writes **Robyn Willis**.



Something strange is happening at Sydney barbecues these days. Rather than discussing their choice of kitchen benchtops or the size of their plasma television screens, more homeowners are boasting about their rainwater tanks and grey water systems. Environmentally smart design is becoming sexy.

New wave

Senior research consultant at the Institute for Sustainable Futures Caitlin McGee says there has been a significant shift towards interest in eco-smart design in just the past year.

"Awareness has been growing slowly and quietly for a long time, but it has reached a point where people are getting the message from all different sectors at once," she says. "There is even the aspirational pull of looking at glamorous magazines to see sustainable houses and there has been a lot of conversation on TV."

While momentum may have begun with the introduction of the Building Sustainability Index (Basix) by the State Government just over three years ago, Caitlin says public concern has almost eclipsed legislative requirements.

"People know that things are not going to stay the same – that petrol and energy costs will continue going up," she says. "They are asking themselves what happens then if they have an inefficient house."

"Sustainability is becoming cool."

Budget blowouts

Issues such as the drought and the subsequent water restrictions, as well as rising energy prices, have put the spotlight on rainwater tanks, grey water systems and other conspicuous resource savers such as solar

hot water systems. "I know people get excited about rainwater tanks, but the cost constraints are holding them back," she says.

For most home builders and renovators, she says decisions are still made according to budget, with desirable environmental systems considered where money allows. "Up-front cost is the main hurdle," she says. "You will still get examples of people doing a trade-off. They want solar hot water and a granite benchtop and they go for the granite benchtop."

In addition, the high cost of land in Sydney pushes many homeowners into building larger houses to make the most of their property.

"In Sydney, many people are forced to build to a certain size to realise the capital gain from the cost of buying the land," says Caitlin.

But design and construction director from Your Abode, Darryn Parkinson, says anyone thinking about budget should automatically

incorporate smart eco-design into their home. "A lot of people are scared of eco-smart design because they think it is expensive," he says.

"But people will spend no more than \$5 or \$10 a week on their mortgage with green innovations.

"Hot water consumption makes up 30 to 40 per cent of a house's energy bills, so it is a no-brainer to put in a solar hot water system," says Darryn. "Heating also uses 30 to 40 per cent of all energy costs, so if you can come up with an energy-efficient option, that is also important.

"By default they are big energy consumers in your house and if we are talking about people who do not have a lot of money, then this is what they ought to be thinking about." →6

“You want to get more out of your home than just shelter”



Cell savers

He predicts the next big thing will be the widespread introduction of photovoltaic cells, which are mounted on the roof and convert the sun's rays into electricity. While some are calling for government subsidies to encourage individual homebuyers, Darryn says an overall price reduction is a more sustainable approach.

"With photovoltaic cells, the affordability angle is a few years away," says Darryn. "But the Chinese are steaming along (with their production) and the photovoltaic cells will be out there. The price will come down and become more affordable without government subsidies."

But while more of his clients are comfortable with obvious additions such as tanks and solar hot water systems, Darryn says truly smart design requires a more holistic approach.

"It is about your indoor air quality and the importance of using low emission products in your house," he says. "We need to think about how important the orientation and natural light are for good spaces to be enjoyed. You want to get more out of your home than just shelter."

Community call

General manager of GreenSmart, a Housing Industry Association initiative, Janine Nechwatal, agrees that smart eco design takes in much more than a few tacked-on innovations. However, she argues that renovators and new home builders should not have to carry the can for the rest of the population who live in existing houses.

"Nobody is knocking on my door and insisting I put these things in and that is true for anyone with an existing house," she says. "If you are building a house, you are required to do these things by law, but they are communal issues. There is only one part of the market being targeted through regulation."

She says the most important thing in eco-smart design is to consider the climate. "Queenslanders are built in Queensland to be raised off the ground with casement windows to catch the breeze

using lightweight construction, so they can heat and cool quickly," says Janine. "In Cairns now, they are building with bricks and using artificial cooling systems, because it is cheaper to build than your traditional Queenslander."

To make matters worse, she says too many people fall in love with a house design before they have a block of land to put it on. "We should be encouraging people to buy the best block they can find first and then maximise solar design principles, with living rooms to the north and sleeping zones to the south," she says.

Janine says water-efficient products and insulation will improve the environmental credentials of any house significantly. And even if you move before the innovations have time to pay for themselves, Janine says more buyers are happy to pay a premium for them.

"If you put a lot of money into it and then sell, you are never going to get it back in regards to operational savings, but you may get it back in the increased value of your home," she says. ■■■



Above Queenslanders are cleverly designed to take full advantage of environmental factors

MORE INFORMATION

- **Basix** basix.nsw.gov.au
- **GreenSmart** greensmart.com.au
- **Your Abode** 9973 2756, yourabode.com.au



WISE CHOICES

Darryn Parkinson is passionate about eco-smart design. As part of the Your Abode team with partner Sharon Hamilton, he works with clients to incorporate environmentally friendly design principles into every project. His next project is for clients at Newport on Sydney's Northern Beaches.

"The front of the house is quite dark, so we are trying to get more light into the house and orientate the living spaces to the north," he says.

However, rather than knock down the house, which would waste materials, Darryn plans to retain as much of the original fabric of the house as possible, while still bringing in natural light and good cross ventilation. Plans are also afoot for a 16,000 litre rainwater tank to feed into the toilets as well as the garden.



Above Artist's impression of the Newport home once completed
Left Builder-designers Darryn Parkinson and Sharon Hamilton at Newport



TIPS

- ✓ Choose your land first, then maximise your solar power potential in the house plans
- ✓ install a rainwater tank large enough to feed into the toilets and garden